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Abstract :

Do uses of digital technologies in the framework of early 21st century capitalism promote or reduce the expression of consumer sovereignty ? This paper addresses this question through the lens of John Kenneth Galbraith's theory of consumption. First, I recall the main stakes of his theory. Second, I highlight the main differences between traditional advertising and online behavioral advertising. Third, I explain how online behavioral advertising strengthens the “dependence effect” and “revised sequence” depicted by Galbraith within the context of the industrial society. Fourth, I discuss some normative challenges raised by digital platform corporations to individual sovereignty. Lastly, I argue that platform capitalism appears as a mature form of the “new industrial state”, one important difference being that digital platform corporations, rather than traditional industrial corporations, largely preside over the allocation of resources in the economy.

Keywords : Consumer sovereignty – online behavioral advertising - digital economics – platform capitalism

Jel codes : B2 – P1 - M3 - L2

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Contemporary societies are experiencing a process of digitalization. All economic activities, whatever the institutional and organizational environments in which they are embedded, are shaped to some extent by that new state of the technological arts. The advertising sector features prominently among the industries experiencing a dramatic transformation under that process of digitalization². In the US, total advertising expenditures averagely amount to 500\$ per capita per year (Lewis and Rao 2015). Whereas advertising accounted for 4% of the GDP in the 1920s, it nowadays represents between 1% or 2% of the US GDP (Silk & Berdt 2020). Yet, these numbers should not be misleading. First, digitalization has generated a drastic reduction in information costs and blurred the frontier between advertising and other marketing or information producing activities. Second, the measurement of digital advertising and that of its return are tricky. Third, digital advertising, which could either substitute or complement offline advertising, represents a growing share of advertising in general. This share of digital advertising rises from 15% in 2010 to 48% in 2018 (Silk & Berdt 2020, 17) and that trend is also observable in political campaigns (Dommett & Power 2019). For the 2014 US mid-term election, 1.8 billion of dollars had been spent on digital media campaign. It represented 20% of total media expenditure. In the 2018 mi-terms, this share rose to 40%. Lastly, digital advertising often takes the form of behavioral advertising, hinging on microtargeting thanks to granular data on consumers. A *digital platform corporation*³ such as Google (Alphabet), which embodies the digital society like General Motors had embodied the industrial society, receives for instance 85% of its earnings from its advertising activities (Helberger & al. 2020, 379). All these numbers suggest that advertising, especially online advertising, still plays an organic role in capitalism, despite the historical mutation from “the new industrial state” (Galbraith 1967) toward “platform capitalism” (Boyer 2021, Marciano & al. 2020, Montalban & al. 2019).

In front of the emergence of online behavioral advertising, which aims at “monitoring people’s online behavior” thanks to the precise targeting of individuals (Helberger & al. 2020, 401), economists have discussed the numerous concerns it raises regarding individual privacy, consumers protection, antitrust laws or human attention in an overload informational environment. But while Goldfarb and Tucker (2019) explain in the *Journal of Economic Litterature* that digital economics “explores how economic models change as certain costs fall substantially and perhaps approach

² Goldfarb and Tucker defined digitalization as “the representation of information in bits” (2019, p. 3).

³ I use the expression “digital platform corporation” for three main reasons. First, following Galbraith, I use corporation, rather than firm, since I refer to large (successful) companies. Second, the label “digital” allows to distinguish corporations whose core activities lay in digitalization from “traditional” corporations, in particular industrial ones. Third, the main digital corporations, such as the GAFAM and BATX, act as platforms.

zero”, the challenges online behavioral advertising poses to consumer sovereignty is barely addressed in economic journals. To see that challenge raised up, one has to turn his eyes toward papers published in journals in the fields of marketing, law, information and big data, even when they are written by economists⁴. However, the notions of consumer sovereignty is often conflated with the notion of consumer autonomy or freedom of choice or consumer autonomy⁵. Working through the lens of Galbraith’s theory of consumption, this paper translates the debates of the marketing literature on the challenge generated by behavioral online advertising into the language of political economy.

The fact that the challenges online behavioral advertising poses to consumer sovereignty are not explicitly treated in economic journals is all the more surprising that such a *notion* is fundamental in economics. The *concept* (positive dimension) of consumer sovereignty means that the allocation of resources is ultimately governed by consumers’ choices, that is to say that the economic system is rather driven by the demand side of the market. The *principle* (normative dimension) of consumer sovereignty claims that the allocation of resources should be determined by consumers’ free choice on competitive markets. This normative conception of consumer sovereignty hinges on three hypotheses. First, the individual is the best judge of his preferences. Second, welfare is accounted for in terms of preference-satisfaction. Third, the individual seeks, in view of the information available to him, to maximize the satisfaction of his preferences and, consequently, his welfare. This principle of consumer sovereignty is a “central normative principle in contemporary assessments of economic policies and systems” (Penz 1987). It has laid at the core of mainstream economics from old welfare economics of the interwar period to contemporary behavioral (welfare) economics (Lerner 1972, Penz 1987, Persky 1993, Infante & al. 2016, Hédoin 2017, Lecouteux 2021).

In front of the new practice of behavioral online advertising, the economist Hal Varian, who operates as Google chief economist, states that his employer performs better than his competitor Bing, showing “fewer, more relevant ads at a lower cost per click”. He also claims that “competition among tech firms is working well” (2021, 3). David Evans, who founded the

⁴ See Darmody & Zwick 2020, Dholakia & al. 2021, Grafanaki 2017, Helberger & al. 2020, de Marcellis-Warin & al. 2022, Marciano & al. 2020, Susser & al. 2019, Yeunk 2020, Zuboff 2015.

⁵ This is especially true in the antitrust literature. See for instance the report written by Marsden et Pozsun (2020), who define sovereignty as “the right to self-determination in important matters of one’s own life” and add that such sovereignty is possible only if “ individuals express their needs and wishes in their most individual way” (2020, 39). Conflating consumer sovereignty with freedom of choice, they argue that the means to improve it are devices to respect privacy, access information and keep the decision-process open.

consulting firm Market Platform Dynamics, also concludes with optimism his literature review for *The Journal of Economic Perspectives*. “After all, the online advertising industry increases the likelihood that consumers will receive relevant ads and decreases the likelihood that they will waste time on irrelevant ads.” (Evans 2009, 57). Is online behavioral advertising generating the Leibnizian best of all possible digital worlds ? John Kenneth Galbraith might have lamented the “culture of contentment” reflected by the aforementioned claimed expressed by economic experts on the matter of digitalization⁶. Among its main contributions, I argue in this paper that Galbraith’s theory of consumption, especially developed in *The Affluent society* (1958) and *The New Industrial State* (1967), constitutes a fruitful starting point for a fresh analysis of the economy of the early 21st century. *The Affluent Society* was one of the first books in post-war economics which proposes to disentangle growth and welfare, since Galbraith’s theory of consumption has been built against the principle of consumer sovereignty underlying welfare economics (Chirat 2020). In this paper, through the lens of Galbraith’s theory, I propose to appraise the notion of consumer sovereignty in the context of the digital society, focusing in particular on the effects of online behavioral advertising⁷. Although Galbraith, like Veblen and other institutionalists, considered that any economic theory is bound to become obsolete in front of historical mutations, its insights can help us answer the following question: do the uses of digital technologies in the framework of early 21st century capitalism promote the expression of consumer sovereignty or reduce it ?

To answer the question of how some uses of digital technologies in early 21st century capitalism promote or reduce the expression of consumer sovereignty, I propose first to recall the main stakes of Galbraith’s theory of consumption (section 1). Second, I discuss the main differences between traditional advertising and online behavioral advertising (section 2). I then

⁶ I am tempted to add that Galbraith would also warn us, as he did in the industrial society context (1967), of the risk that vested interests of digital platform corporations invade the “Educational and Scientific Estate”. Dealing with that problem of economist(s) capture, Zingales interestingly explains that “one factor that can reduce capture is access to data that is independent from industry” (2013, 2). Digital economics is one of the fields in economics where it is rarely the case, in particular with respect to empirical studies on online advertising. For instance, Lewis and Rao (2015), who published a noteworthy contribution in *The Quarterly Journal of Economics*, were working for Amazon, Netflix and Google for the former and for Microsoft and Booking for the later.

⁷ Thus, this paper also contributes to a literature stressing the contemporary relevance of Ken Galbraith’s economics. Dunn put forward its accuracy with evidence from the Tobacco Industry and the Food Industry (Dunn and Anderson 2006; Dunn 2010). Lamdin (2008) highlighted its empirical relevance, by stressing the positive correlations between changes in advertising expenditures, consumer credit and consumption of goods and services, especially durables. In the framework of a DSGE model of the economy, Molinari and Turino (2018) also observed that an increase in advertising leads, in the long run, to an increase in worked hours, GDP and investment - “the underlying mechanism operating through a work and spend channel”. Lastly, Dutt (2008) recalled that many recent studies have challenged “the fact that increases in consumption and income – at least significantly – affect happiness as evaluated by the consumers themselves” (2008, 236).

explain how online behavioral advertising strengthens the dependence effect and revised sequence depicted by Galbraith within the context of the industrial society (section 3) and stress the normative challenges raised by digital advertising to individual sovereignty (Section 4). Lastly, I discuss some prospects on the importance of digital platform corporations and argue that platform capitalism appears as a mature form of the “new industrial state”, one important difference being that these digital platform corporations, rather than traditional industrial corporations, largely preside over the allocation of resources in the economy (section 5).

Section 1 : Galbraith’s theory of consumption and advertising

This section summarizes the main insights of Galbraith’s theory of consumption⁸. Influenced by the works of Veblen (1923), Clark (1923) and Chamberlin (1933), who shared a common interest for the integration of salesmanship practices and alteration of consumers preferences into economic analysis, Galbraith provides an analysis of consumption, as a social fact, rather than an analysis of consumer behavior, as an individual fact. At the epistemological level, his theory is built on the hypothesis of endogenous preferences, meaning that individual preferences are context-dependent, shaped by patterns and evolving. Often misunderstood, Galbraith’s hypothesis of endogenous preferences explains why he did not reason using the distinctions, which are present in economics, between true/rational/informed *versus* false/irrational/uninformed preferences (Chirat 2020). According to Galbraith, since all preferences are the product of social persuasion, advertising could not be challenged on the simplistic ground that it is mere brainwashing. Moreover, advertising is far from being the only activity in social persuasion, even if it is a paradigmatic one (Galbraith 1982).

At the theoretical level, Galbraith’s theory of consumption is built on three main ideas. The first one is the “dependence effect” (1958, 129). This effect depends on the assumption that some wants are conventionally judged more urgent than others, within a given society. The expression “dependence effect” conveys the following set of ideas. The less urgent wants are, the more preferences to achieve these wants are susceptible to be moulded by advertising. Yet the more affluent a society is, the more unsatisfied wants of little urgency are. Hence the idea that an increasing number of wants “depends on the process by which they are satisfied” in an affluent society. During the six decades between 1958 and 2018, the real per capita standard of living has been multiplied by 3.2 in the US, 3.5 in France and 11.1 in China (Maddison Project 2020). The

⁸ It is based on previous paper, where the complete justification of what follows stands (Chirat 2020).

developed countries have become more affluent in the last 60 years, and many former developing countries are also gradually experiencing opulence⁹. Hence the idea that the dependence effect could be particularly relevant to understand our present times.

Galbraith's second fundamental idea about consumption is the "social imbalance thesis". He argued that "public services have failed to keep abreast of private consumption", so that there is in the US "an atmosphere of private opulence and public squalor" (Galbraith 1958, 191). His analysis of this social imbalance directly derives from the dependence effect, which itself derives from his conventionalist apprehension of wants (Chirat 2020). It is crucial to understand that Galbraith did not dismiss the preferences of some individuals, but rather that he lamented the historical patterns that have shaped them. He considered that advertising targeted towards always more private goods, rather than public ones such as education or health, has generated such imbalance. In *The Affluent Society*, he indeed explained that consumers choices are constrained because advertising enables producers to restrain the products supplied on the market and, consequently, the set of products for which a demand could be expressed. In the context of the fifties, Galbraith argued that the consumer cannot make a choice between private and public good since he can only express an actual demand for what is effectively offered by the supply side of the market. Yet public goods were insufficiently supplied. That is why the *concept* of consumer sovereignty is not an accurate description of how resources are allocated within the industrial society¹⁰. This directly leads us to the third main idea of Galbraith's theory of consumption, which he labelled "the revised sequence" (1967). In *The New Industrial State*, Galbraith went on challenging the concept of consumer sovereignty, arguing that an economic system ruled by large corporations is rather the expression of "producer sovereignty". The supply side of the "market" is the real driver of the economic process. The consumer still has a freedom of choice, but only between the goods that corporations have chosen to produce. He is free to choose among a restricted choice-set, whereas consumers sovereignty had precisely meant, in economics, the power to determine this choice-set.

Whereas traditional microeconomics reasoned with consumers making free choices, it does not take into account, contrary to Galbraith, the space of choices open to them. In the course of building his integral economics to challenge neoclassical economics (Chirat 2022a), Galbraith focused much on the issue of advertising. In post-war neoclassical economics, advertising was

⁹ Obviously, as Galbraith already explained, his concept does not mean that poverty has disappeared in affluent societies.

¹⁰ Galbraith figured among the postwar social scientists who conceptualized the main features, as an ideal-type, of the industrial society. See Chirat (2019).

above all considered as informative rather than persuasive¹¹. As an informative activity, it provides knowledge to consumers and thus allows them to take better informed decisions. Nonetheless, the main representants of the neoclassical synthesis, such as Paul Samuelson (1964) in his *Economics* or James Meade (1968) and Robert Solow (1968) in their reviews of *The New Industrial State*, argued that advertising is a wasteful activity. Advertising competition is considered as wasteful since customers of one firm are attracted to another and *vice versa*, so that the net effect of advertising is considered as very small in terms of market share gains¹². For this reason, Meade and Solow argued that advertising should be taxed. Galbraith challenged both neoclassical points of view on advertising.

First, his concept of the dependence effect provides evidence that Galbraith endorsed the view of his friend Nicholas Kaldor, who claimed that “all advertising is persuasive in intention and all is informative in character” (1950). Moreover, by distinguishing the three levels at which advertising operates, Galbraith challenged the idea that advertising competition is a waste for firms that undertake them¹³. Following Veblen (1923), Galbraith indeed explained that advertising affects the economic system at three levels: at the level of the firm (the one considered by those economists who analyzed advertising competition as a zero-sum game) but also at the level of the industry and at the macroeconomic level. Galbraith stressed that advertising expenditures are prone to increase the demand addressed for the products of an industry at the expense of industries producing close substitutes, as well as to foster consumption rather than saving at the aggregate levels. Because of these effects, advertising plays an “organic role” in an economic system where economic growth is a supreme end. And for corporations, advertising is a mean to reduce market uncertainty regarding the level of demand. It thus helps the technostucture of corporations to achieve the ends of their planning.

¹¹ On the functions of advertising, especially the opposition between information and persuasion, see Kaldor (1950). For a synthesis on more recent developments, see Bagwell (2007). Interestingly, Woodcock (2018) highlights that the US Supreme Court has endorsed this “informative view of advertising in 1976, extending First Amendment protection to advertising on the explicit ground that a ‘free enterprise economy’ requires ‘informed’ consumers” (2018, 2273).

¹²As early as 1923, Veblen explained that advertising is a zero-sum game between competitors of an industry only if the size of the industry market is given. In the context of an infant industry, he emphasized that the first-mover advantage in a market can be enhanced by advertising because a product is then likely to be directly associated with a particular brand. He then explained that advertising expenditures are contained within limits. The lower limit is set by the compositional effect of the competitive behavior of the players. A company cannot lower its advertising budget too far below that of others. As for the upper limit, it depends on the evolution of marketing costs in relation to sales prices, since a firm must maintain a certain level of profit (Veblen 1923, 303-305).

¹³ Galbraith also considers that advertising generates a form of waste, but this waste is not due to a pure economic loss. It is rather due to its consequences on the allocation of resources (the social imbalance).

Section 2 : What is different with Online Behavioral Advertising ?

The substance of Galbraith's theory having been presented, to specify the stakes of our problematic concerning the state of consumer sovereignty in the digital society requires first to understand the nature of the difference between traditional advertising and online (behavioral) advertising. Evans (2009, 38) argues that "online advertising is a two-sided market", but as advertising generally is. Goldfarb (2014) claims that the literature on online advertising does not "suggest a new purpose for advertising". However, he adds that "the fundamental economic difference between online and offline advertising is a substantial reduction in the cost of targeting" (2014, 115). This first difference generates another one. Digital advertising deepened the exploitation of consumers vulnerabilities compared to traditional advertising methods (Susser & al. 2022). Indeed, it "can take on an unprecedented scale with digital technology in so far as the manipulation no longer concerns biases generally present in the population but biases specific to each micro-segment of consumers or even to each consumer" (de Marcellis-Warin & al. 2022, 262). Should these differences lead us to conclude that behavioral advertising is only quantitatively different, in terms of intensity, from traditional advertising? I let this question unanswered yet. It is however certain that advertising is transforming from a rather impersonal social act of persuasion to a highly personalized one.

Two typologies are useful to better understand online behavioral advertising practices (Goldfarb 2014). First, one should distinguish between search advertising (advertising on search engines), display advertising (advertising on online media) and classified advertising (advertising on other kinds of websites). Second, one should distinguish between three main kinds of targeting, namely demographic targeting (based on data related to specific demographic characteristics), contextual targeting (based on data related to online search activities) and behavioral targeting (based on data on past online behavior). If demographic targeting has antedated digitalization, contextual and behavioral targeting, which are used not only for the purpose of behavioral advertising but also search results, were not possible without it. In addition, it is required to distinguish two kinds of corporations. On the one hand, there are the aforementioned digital platform corporations, such as GAFAM, which act as publishers in the advertising industry and sellers of data and prediction. On the other hand, there are traditional corporations, which act as the advertisers. To paraphrase Shoshanna Zuboff, digital platform corporations "sell opportunities to influence behavior for profit", through their mastering of an online environment, while traditional corporations "purchase such opportunities" in order to increase the vendibility of their products (2015, 85).

Since digital economics literature takes for granted that the main difference between online and offline advertisements concerns targeting, not only in terms of cost but also in terms of opportunities and precision, it is legitimate, in line with Galbraith's challenge against post-war neoclassical theory of advertising, to wonder whether online behavioral advertising is mainly informative or persuasive. Regularly, online behavioral advertising is praised by some experts regarding its informative purpose. It would be "more informative" than traditional advertising because of using data "to try to improve the informativeness of advertising" (Tucker 2012, 326). Informativeness refers to the idea that an ad provides information on the material and technical characteristics of the product. But even if targeting advertising could indeed help consumers confronted to an information overload within the digital society, Catherine Tucker's statement remains challengeable. The link between the use of data and the amount of informativeness of the content of advertising is not straightforward. First, data are above all collected by digital platform corporations in order to better target consumers. The amount of informativeness of an advertising is nonetheless not equivalent to the relevance of the information provided to one specific consumer, nor to the relevance of the matching between an ad and a consumer. Second, one can even think, following Woodstock (2018), that the drastic reduction in information cost offered by digital technologies precisely "renders most advertising obsolete as a tool for conveying product information". Consumers can indeed more easily acquire product information online by themselves, so that "advertising remains useful for firms only as a tool for persuading consumers to purchase advertised products" (Woodstock 2018, 2272). Third, empirical studies on the part of digital advertising delivered through social media influencers suggest that the "linguistic style" and the "emotional contagion", rather than the informativeness of the message, impact the efficiency of advertising campaigns (Lee & Theokary 2021; Lou & Yuan 2019, Evans & al. 2017). All these arguments argue in favor of the lasting relevance of Kaldor's (1950) opinion that "all advertising is persuasive in intention". This being so, what can we conclude about the concept and the principle of consumer sovereignty in the digital society framework?

The marketing literature on online behavioral advertising has focused on this issue of consumer sovereignty through the issue of consumer's autonomy. On the one hand, there is a set of arguments supporting the idea that digitalization allows an empowerment of consumers. Kucuk (2016) for instance stresses how some digital devices and practices improve the rights of consumer as defined by the 1960 Consumers' Bill of Rights, namely the "right to be informed", the "right to choose", the "right to be heard" and the "right to safety" (2016, 519). Regarding autonomy, Helberger & al. (2020) claimed that "consumers in the computational advertising ecosystem are not only media content receivers and target audience of ads but also take more active roles, namely,

the role of the advertiser or creator and active distributor of ad content”. The system of consumers’ recommendations, which is fundamental in the functioning of platforms as various as Airbnb, Amazon or Google, illustrates the active role that consumers can play in the digital society. Nowadays, consumers provide their comments and recommendations not only to their close circle of personal relations but potentially to every consumer in search of online information. Helberger & al. (2020) add that consumers are also “more influential than before because the implicit and observed data they generate, which are inferred from observed behavior rather than data supplied by consumer themselves, are critical input and enablers for the algorithmics process and feedback loops that help to adjust advertising to personal preferences” (2020, 380). That is why some experts support the thesis that targeted advertising enhances consumer sovereignty, since it benefits consumers’ welfare by improving both the quality and the relevance of the information they receive, thanks to the attention digital platform corporations paid to consumers’ past behaviors and experiences.

Such a vision of an active consumer is nonetheless challengeable. First, the targeting process relies on the appropriation, aggregation and evaluation of data by digital platform corporations, which raises the question of respect for consumer privacy. This concern is even more notorious as preferences for privacy are highly context-dependent (Acquisti et al. 2015; Yeung 2017). The infringements on individual privacy as well as the opacity of Google’s algorithms are such that Zuboff (2019) diagnosed the emergence of a “surveillance capitalism”, which “aims to predict and modify human behavior as a means to produce revenue and market control” (2015, 75). Second, the shift from an industrial society with mass advertising to a digital society with mass targeted advertising is not necessarily synonymous with greater autonomy. Targeted advertising can indeed reduce “choice and awareness of competing products and services that are not being recommended, making it difficult for providers of alternative services and products to reach consumers” (Helberger & al. 2020, 380). This is all the more relevant with the development of the Internet of objects and “algorithm consumers” who “simply replace humans in making such [consumption] choices” (Gal & Elkin-Koren 2017, 313). Third, high personalization generates feelings of alienation and heteronomy (Boerman & al. 2017; Plangger & Montecchi 2019). Fourth, if it is true that “targeting works when subtle” (Lewis & Reiley 2014, 21), then the effectiveness of online behavioral advertising is inversely correlated with consumers’ knowledge and autonomy. Following Susser & al. (2019), one might consider that online behavioral advertising is a manipulative practice *par excellence*¹⁴. Fifth, even search advertising, which requires active requests

¹⁴ “Whereas persuasion and coercion work by appealing to the target’s capacity for conscious decision making, manipulation attempts to subvert that capacity. It neither convinces the target (leaving all option

emanating from consumers, impairs consumers agency since search platforms can control or influence the result of the search process itself (Goldfarb & Tucker 2019). In light of these observations, Galbraith's concepts of "the dependence effect" and "the revised sequence" appear still relevant to understand how resources are allocated in the digital society.

Section 3: Behavioral online advertising and consumer sovereignty: a reappraisal from Galbraith's institutionalist political economy

The dependence effect, namely the idea that an increasing number of wants "depends on the process by which they are satisfied", appears all the more relevant in the digital society, since this process hinges on the data collection by digital platform corporations generated by the satisfaction of past wants. In a context where many economists argued in favor of taking preferences for given and exogenous¹⁵, Galbraith emphasized that advertising can alter wants in order to satisfy corporations' objectives. Such an issue is prominent with the effect of online behavioral advertising on consumer sovereignty. That is why this latter has been addressed by resorting to the concept, popularized by Richard Thaler and Cass Sunstein (2008), of nudge (Yeung 2017, Frischmann 2021, de Marcellis-Warin & al. 2022). Recently, Sunstein has redefined nudge as "private or public initiatives that steer people in a particular direction but that also allow them to go their own way" (2020, 6)¹⁶. This is precisely what traditional advertising as well as behavioral advertising do. Yet, since online behavioral advertising relies on a continuous feedback, Yeung (2017) claims that it corresponds to an "hypernudge" : "by configuring and thereby personalizing the user informational choice context, typically through algorithmic analysis of data streams from multiple sources and claiming to offer predictive insights concerning the habits, preferences and interests of targeted individuals", online behavioral advertising enables to "channel user choices in directions preferred by the choice architect", namely digital platform corporations (Yeung 2017, 119). Moreover, targeting also opens the way toward personalized pricing policy mediated through algorithms design to segment demand (Danaher & Thornton 2018). Such discriminatory pricing

open) nor compels the target (eliminating all options but one). Instead, it interferes with the target's decision-making process in order to steer them toward the manipulator's ends" (Susser & al. 2019, 17).

¹⁵ See for instance Lerner's paradigmatic defence of consumer sovereignty (Lerner 1972).

¹⁶ This catch-all definition of nudge erases the idea of nudge as a paternalist device promoting the wellbeing of the nudged agent. Advertising is a nudge used in the interest of the nudging agent. For these reasons, the term "sludge" or "dark nudge" has been used to refer to it. See for instance de Marcellis et al. (2022).

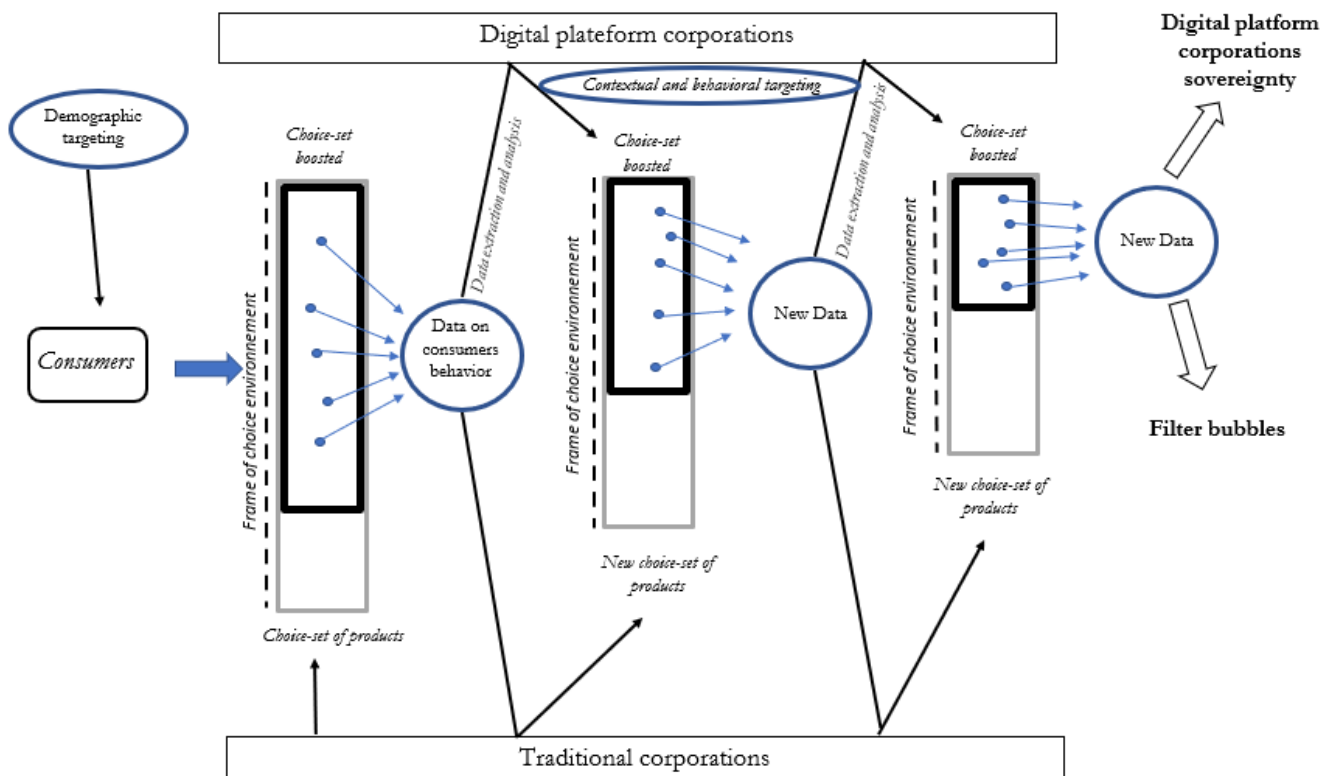
policy might impair consumer welfare because of corporations being enabled to confiscate consumer surplus (de Marcellis-Warin & al. 2022, 262)¹⁷.

Galbraith's theory of consumption led to the conclusion that the consumer has a freedom of choice among a given choice-set in the affluent society, but that they were not sovereign, since sovereignty precisely means the power to determine such choice-set. This power lied in the hands (traditional) corporations. What is happening in the digital society? To what extent consumers are more or less sovereign compared to the industrial society? First, the choice-set is still determined by traditional corporations. But then digital platform corporations operate a double selection (Dholakia et al. 2021), not only as advertising publishers but more generally as information producers¹⁸. They determine the choice-set presented to consumers (boosted choice-set) and discretionary design the presentation of that set (frame of choice environment). About such framing, Lynch and Ariely (2000) early demonstrated in the online wine market that price becomes a less important determinant of consumers' choice if price does not rank among the information immediately available to consumers. Whereas mass advertising sustains corporation sovereignty through the determination of the available choice-set, mass personalized advertising enables digital platform corporations to reshape the choice-set made available by traditional corporations, as illustrated by the figure 1.

¹⁷ The important costs of exit in platform capitalism might also impair consumers welfare, since they do not benefit from "the central mechanisms of competition in free markets: free choice among alternative offers" (Marciano & al. 2020, 349).

¹⁸ Not all the results provided by Google as a search engine are advertising in the usual sense of the word. But the list of results, which is determined by Google's algorithm, is nevertheless based on commercial considerations in the production of information. Therefore, these two activities of Google, as an ad publisher and a search engine, forms one single system, all the more because these two activities generate mutually reinforcing data.

Figure 1 : the dynamics of the consumers' space of choice in the digital society



The activities of digital platform corporations, which act as information producers, generates a process of selection of a sub-set of the available choice-set produce by traditional corporations. As illustrated by figure 1, they present a specific sub-set (black box) of the choice-set of products (grey box) supplied by traditional corporations. Moreover, they select the presentation frame of such boosted choice-set (discontinuous line). The satisfaction of wants thanks to consumption generates data (arrows) on consumed products (point in the black box), which are used by traditional corporations in order to better target their future choice-set of products. Meanwhile, digital platform corporations, through data extraction and analysis, exert contextual and behavioral targeting in order to select the choice-set they boosted and how they frame it. This process based on continuous feedbacks is consequently prone to generate a reduction of the space of choice open to consumer (narrower boxes). Because of consumer targeting, digital platform corporations eventually seem prone to generate “filter bubbles” (Pariser 2011)¹⁹. Studying online news consumption, Flaxman & al. (2016, 318) observed for instance that “articles found via social-

¹⁹ “When you enter a filter bubble, you’re letting the companies that construct it choose which options you’re aware of. You may think you’re the captain of your own destiny, but personalization can lead you down a road to a kind of informational determinism in which what you’ve clicked on in the past determines what you see next—a Web history you’re doomed to repeat. You can get stuck in a static, ever narrowing version of yourself—an endless you-loop” (Pariser 2011, 14).

media or web search engines are indeed associated with higher ideological segregation than those an individual reads by directly visiting news site”. But they also stressed that online news consumption increases the exposition “to opposing perspectives”. It is often stressed that the consumer of the digital society has potentially access to a wide range of both products and information on products than before. This is also the *raison d’être* of digital platform corporations as information producers since the opening of the space of choice through the removal of physical constraints on consumption generates a demand for reducing it. This is also the very reason why Woodstock (2018) diagnoses that advertising has become obsolete as a provider of information. However, being as autonomous as possible online requires spending incredible time online to gather, process and check information²⁰. Besides, this process does not free the consumer from both the power of digital platform corporations who control the results of search engine, thus filter the informational content presented to consumers, and who discretionary frame its presentation so as to exploit consumer’s cognitive biases, at a very personalized level. That is why digital platform corporations, in last resort, exert sovereignty over the allocation of resources meanwhile providing an incentive structure that discourages consumers to exert their freedom of choice.

Obviously, this does not mean that consumers are deemed to be the puppets of digital platform corporations. In *The powerful consumer* (1960), George Katona, a pioneer of behavioral economics together with Herbert Simon, already challenged Galbraith’s thesis regarding consumption behavior in an affluent society. Katona’s idea of a “powerful” consumer refers to the latitude he has to use his income. With abundance, Katona believes that consumer choices are more likely to depend on their willingness to buy, and thus on their discretion, since their consumption behavior is less constrained by biological necessities²¹. Katona opposed Galbraith’s representation of the consumer as a rather passive agent. In the digital society, one might argue that the consumer is even more powerful since standards of living has raised and information costs have dropped down. In addition, some consumers with significantly high numerical literacy are able to use devices – such as adblocker, VPN , careful tracking choices – in order de moderate the effect of behavioral advertising. These consumers strategies to countervail platforms’ power being mentionned, it remains nonetheless that the spread of behavioral advertising raised several other normative concerns.

²⁰ Of course, informational cost are inherent to a world plagued by imperfect and incomplete information. But ironically, this is the potential increase in the choice-set generated by digitalization, especially by removing physical constraints, that could be used to justify the targeting activities which precisely contribute to reduce the available choice-set to consumers.

²¹ On Katona and Galbraith relationship, see Edwards (2009) and Chirat (2022a).

Section 4: Normative concerns raised by behavioral advertising

The digitalization of the economy is transforming economic, social and political structures. Yet, there is no reason to take the legitimacy of that new cultural complex as granted. For economists who adhere to the principle of consumer sovereignty, the test of legitimacy of an economic system is simple: does it allow the best possible satisfaction of individuals' preferences and therefore of their welfare? In this paper, we have seen that the relevance of this principle within the digital society was questioned, because of the very reasons Galbraith rejected it in the industrial society context (endogenous preferences, dependence effect, revised sequence). This led Galbraith to look for alternative normative criteria. In this section, I wish to recall these criteria and inquire whether they can still constitute useful benchmarks.

Joan Robinson once argued that Galbraith's economics "lacks the moral beauty of the old orthodoxy" (1952, 928). The fact that he did not provide a criterion as clear as the Pareto-principle explains her judgment. In *American capitalism* (1952), the broad lines of Galbraith normative stance are however identifiable, namely reaching a balance of power between industrial corporations enjoying tremendous market power and other economic agents such as small businesses, unions, farmers and consumers. In the industrial society context featured by concentration, anti-trust laws have been often advocated in order to curb the power of oligopolies. Galbraith has however manifested a deep skepticism toward their efficiency (Chirat 2022a). Oligopoly being the rule rather than the exception, he considered that anti-trust laws are an "anachronism". If they can be useful, they were perceived as insufficient and had to be completed, as it has been during the New Deal and the World War II periods, by a direct "social control of business" (Rutherford 2015).

Within the context of digital society, the part of the economic system composed of digital platform corporations is oligopolistic and holds under its dependency traditional corporations as well as small businesses. For this reason, anti-trust laws have already been mobilized several times. Yet, Google, Amazon, Facebook, Apple and Microsoft and some others still enjoy vast market power. Such market power has already generated measures of social control, such as the establishment of the GDPR in Europe and Google's condemnation in order to protect consumers' and citizens' privacy (European Commission 2020, 57-58). One can claim that such a measure is largely insufficient to compensate the asymmetry of power between digital platform corporations and individuals. But for those believing in gradualism and reformism, this is a step toward a more balanced relationship. The recent proposal, made by de Marcellis-Warin & al. (2022), of using

“counter-algorithms” to re-equilibrate “the informational balance to benefit consumers without aggravating their informational overload” directly echoes Galbraith’s will to build countervailing powers. However, a question remained unanswered yet. Who would create and manage these counter-algorithms?²² The emergence of countervailing powers might face a specific problem in the digital society: whereas in the industrial society, Galbraith explained that big unions have often emerged spontaneously in front of the original power of industrial giants, none countervailing force seems to emerge and, more importantly, to organize itself, within the digital society. The various movements of contestation against digital platform corporations has yet not given birth to organizations as powerful as worker unions in the Fordist context, where workers and managers reached “social compromises” (Galbraith 1967, Duménil et Lévy 2018). Put differently, there is yet no social group united in their opposition to the activities of digital platform corporations which would be able to form a “dominant social bloc” (Amable et Palombarini 2022).

When countervailing power did not emerge spontaneously in front of the original power of corporations, Galbraith (1952) urged the State either to foster the building of countervailing powers or to directly regulate the activities of corporations. Yet, throughout his trilogy (Galbraith 1952, 1958, 1967), he gradually departed himself from the liberal view of the State, which is common to many American institutionalists, to endorse a more radical view, inherited from Veblen (Chirat 2023). This change happened because of his analysis of the bureaucratic symbiosis between industrial corporations and public agencies. Taking into account the persistency of this symbiosis in “market-led platform capitalism”²³, countervailing actions undertaken by an administration would directly depend on both the asymmetries of power in its relationship with digital platform corporations and the social bloc on which its legitimacy would have been acquired.

Chicago economist George Stigler’s (1954) never ceased to challenge each book of Galbraith and once denounced the equivocal nature of such principle of countervailing power. In a letter, Galbraith answered to Stigler that his “value criteria involve minimization of social tensions rather than maximization of consumer real income.”²⁴ He believed that the neoclassical normative criterion was appropriate for a world of widespread poverty. “Increased real income of consumers was the simple test of improved welfare.” But he claimed this was no longer the case since “an

²² This problem also applies to Gal & Elkin-Koren’s suggestion that algorithmic consumers might balance algorithmic supplier (2017, 327). Indeed, both might be produced by digital platform corporations.

²³ Here, I refer to Boyer’s expression of “market-led platform capitalism” in order to distinguish US platform capitalism from Chinese platform capitalism, which is led by a State-party. For more details, see Boyer (2020).

²⁴ Letter from Galbraith to Stigler, 24th November 1953, John Kenneth Galbraith personal papers, Series 3, Box 9.

opulent society can afford to sacrifice material well-being for social contentment” (1954a, 2-3). Hence, in *The Affluent society*, his emphasis was on the social imbalance among public and private goods. While Galbraith stressed that such a disparity was “no matter of subjective judgement”, he explicitly lamented this imbalance by introducing a normative distinction between human needs in terms of their relative urgency (Chirat 2022). As mentioned before, Galbraith manifested a conventionalist approach of needs (Penz 1987), namely that basic needs are those whose social conventions stipulate that without them, one cannot live with dignity. Following this line of thought, one can think that to be morally acceptable, (market-led) platform capitalism should, as a necessary but not sufficient condition, provide such basic needs. This normative stance however raises two problems of its own.

The first problem is to reach an agreement on how to determine the wants that are judged urgent to be satisfied within the digital society. The second problem is to make the means to satisfy them available. I have shown how digital platform corporations have the power to alter, through boosting and framing, the choice-set panel we are confronted to as consumers. Did the GAFAM favor the satisfaction of urgent wants or not? Obviously, answering this question depends on the list of basic needs that are established. So my point is solely to highlight, as Galbraith did for industrial corporations, that digital platform corporations exert, *de facto*, a social responsibility. This positive statement (as opposed to a normative statement) does not mean that they act for the general interest – if at all the notion of general interest can have a positive meaning. It means that the activities of digital platform corporations, as a matter of fact, determine the social ends that are pursued in the framework of the digital society. This point is put forward by Cédric Durand who convincingly argues that “Big data” are “institutions”, that is to say that digital platform corporations mastering big data extraction and analysis generate rules and conventions in order to “pursue their own ends, unrelated to those that might be pursued by the affected communities” (Durand 2020, 126-127)²⁵.

Because of the aforementioned similarities between the practice of targeted advertising and the concept of hypernudge, Yeung argues that behavioral online advertising go into contradiction with the “core liberal idea of personality articulated with personal autonomy” which “demands that individuals be allowed to choose and pursue their different plans or paths of life for themselves without interference from others” (Yeung 2017, 129). Since preferences are endogeneous, the behavior of digital platform corporations might be condemnable on moral grounds regarding the

²⁵ In this regard, online behavioral advertising is one of the most salient part of the algorithmic management of consumers by digital platform corporations. Moreover, this latter kind of management is exerted on individuals not only as consumers but also as workers and citizens.

means employed in order to interfere with individual preferences - notwithstanding the predatory means used by digital platform corporations to take over “behavioral surplus” (Zuboff 2019) and their consequences on individual and social learning (Frischmann 2021). The very process of microtargeting indeed contradicts the liberal ideal of autonomy and liberty. Recalling Galbraith’s view in terms of endogenous preferences, I have explained why social persuasion is a necessary fact of life. This being, the rationale behind Galbraith’s emphasis on the analysis of the formation of preferences, rather than taking them for granted²⁶, is that he considers that the more aware of the causes that determine his behaviour an individual is, the freer he is. But such awareness requires to investigate the political economy of platform capitalism, on which I discuss some prospects through the lens of Galbraith’s political economy.

Section 5 : Prospects on the political economy of platform capitalism

To produce his “integral economics”, Galbraith merged his theory of consumption with his institutionalist theory of the corporation as a planning unit ruled by a technostructure (James Galbraith 1984, Chirat 2022a). He argued that the mature corporation aims at reducing market uncertainties. Administered prices and hierarchical (rather than market) coordination figured among the main means to limit uncertainty and thus achieve its production plans. A major component of a firm’s environment generating uncertainty is expected demand. This explains why the technostructure of corporations supported state regulation of aggregate demand at the macroeconomic level and attempted to condition specific demand at the industry and firm levels through advertising expenditure (Galbraith 1967). In the digital society, conditioning demand through online behavioral advertising goes on playing an organic role to limit the effects of market uncertainty. We have seen that digital platform corporations lie at the heart of this process, through the extraction, aggregation and commercialization of data. The very business of digital platform corporations finds its origin in the will of all economic actors to curb uncertainty. I would even argue that the whole historical process toward modern civilization is a process of attempting to reduce uncertainty. And this trend will not stop. In this regard, platform capitalism appears as a mature form of the “new industrial state”, one main difference being that digital platform

²⁶ Cass Sunstein (2017) proposed his own reformulation of the notion of consumer sovereignty and political sovereignty. He precisely argued that consumer sovereignty implies that “individual tastes” are “fixed or given”, whereas political sovereignty does not. Since Sunstein’s suggestion that the digital society is not at odd with consumer sovereignty but only with citizen sovereignty rests on such a challengeable definition of consumer sovereignty, I did not discuss it here.

corporations rather than traditional corporations preside to a large extent over the allocation of resources in the economy.

Traditional corporations, as advertisers, and digital platform corporations, as content publishers, could have diverging interests. Levin & Milgrom (2010) stressed that advertising platforms might have an interest in withholding granular data from advertisers in order to reduce the differentiation between consumers, then to increase the audience they target so as to increase their revenues. In addition to this asymmetry of information, digital platform corporations also benefit from an asymmetry of power. For instance, Google sometimes refers at the top of the results provided by its search engine its own services in other sector of activities, as for instance its price comparison tools rather than the ones provided by competitors (Calvano & Polo 2021)²⁷. Moreover, two advertisers spending the same amount of money to a publisher would not necessarily reach the same number of targets. For instance, Facebook uses a “pay to play” (rather than “pay to click”) model for targeted advertising which is combined with an auctioning model prioritizing “content which is more engaging” (Dommett & Power 2019, 263). The power of digital platform corporations exercised over traditional corporations, but also small businesses, is also revealed in *Prediction Machines* (Agrawal & al. 2018). The authors emphasize how firms within the digital society are dependent on the analysis of data collected by digital platform corporations to exert an effective control over expected demand. Firms which do not collect data should buy “the prediction that the data generates” so as to “identify high-value customers” and “avoid advertisement to low-value customer”. Not doing so would penalize them in the competitive struggle. This is all the more required for a newcomer in any industry, since access to vast quantity of data is essential in order to improve its services (Agrawal & al. 2018, 175-177). Exploiting a vast quantity of data was precisely what made Google’s success as a search engine : “more users produce more exhaust that improves the predictive value of analysis and results in more lucrative auctions” (Zuboff 2015, 79).

The quantity of data required to improve the value of predictive analysis and targeted advertising provided by digital platform corporations raise the fundamental question of returns to scale and market power. In line with Chamberlin (1933) and Schumpeter (1942), Galbraith argued that the nature of competition had changed since the last decade of the nineteenth century. Price competition has been gradually replaced by monopolistic competition, that is to say an oligopolistic market structure combined with product differentiation (Chirat & Guicherd 2022). Galbraith

²⁷ Hence some condemnations in Europe for “abuse of dominant position”, by the European Commission (2017, 2019) and the *Autorité de la Concurrence* in France (2021).

(1967) was convinced that the productive superiority of the mature corporation was due to some extent at least, to returns to scale, which sustain its market power as a means to reach out technostructure's objectives (Baudry et Chirat 2018). There is nowadays a wide consensus in digital economics to claim "that large data bases can lead to natural economies of scale and network effects, which potentially generate market power" (Goldfarb 2014, 125). Besides, since the effectiveness of online behavioral advertising is above all based on the quantity of data collected and analyzed, "companies with larger (and unique) customer bases will increase their advantage over time without any new innovations beyond effective use of an increasingly larger database" (Goldfarb 2014, 125). However, it should be recalled that traditional advertising already created entry barriers (Bain 1956), caused by two kinds of returns to scale: "lower prices paid for advertising message" and "greater effectiveness of a larger volume of messages in terms of its impact on potential buyers, which may be due to the increased impact of repeated messages" (Comanor and Wilson 1979, 467). Online behavioral advertising leverages these features of traditional advertising.

The economic system of the digital society ultimately experiences a double process of concentration. First, the online advertising industry is highly oligopolistic. In 2020, Google represented more three quarters of search advertising and Google and Facebook accounted together for more than 50% of all kinds of digital advertising (Rauch 2021, 149). Second, the use of online behavioral advertising favors established corporations that have the means to be big advertisers or publishers, since the more return from experience and the more data collected, the more efficient targeted advertising will be (Lewis and Rao 2015). This channel explains the often-mentioned "superstar effect" (Elberse & Oberholzer-Gee 2006), together with "a certain level of polarization in consumption choices" (Helberger & al . 2020, 382). Increasing returns to scale and concentration on both the advertisers and the publishers sides have mixed theoretical effects on mark-ups and thus prices (Eeckhout and Veldkamp 2022). In the industrial society context, Tibor Scitovsky (1962) argued that returns to scale and oligopoly "destroy the main merit of the market economy", as described among others by Milton Friedman (1962). This merit was the satisfaction of consumer preferences even if those preferences are in minority. Such a neglect of minority preferences might be reinforced by the use of data and behavioral online advertising since these means are used to reallocate production toward the more profitable goods and services only. Thus, the functioning of the economy within the digital society directly runs counter the possibility of implementing the principle of consumer sovereignty, which has been the cornerstone of welfare economics and the main argument to legitimate free-market economy (Chirat 2022b)²⁸.

²⁸ This claim contradicts the "long tail" effect diagnosed by Anderson (2006) regarding cultural industries. Discussing the empirical relevance of Anderson's thesis, Benghozi & Benhamou (2010) reach the conclusion that "the wealth of

The effects of oligopolistic market structure on innovation are a complex issue. Contrary to Schumpeter, Galbraith never amalgamated the disappearance of the entrepreneur's figure with that of its innovative function, which falls in the hands of engineers among the technostructure (Baudry & Chirat 2018). According to Galbraith, large industrial corporations foster innovation because of their market power, which allows them to spend money on R&D. Because of the profits they generated, GAFAM or BATX might go on shaping the technological and organizational future. But they might also be victims of the laziness and routinization that some economists attribute to monopolies. The course of history remains open. What is certain however is that the innovations that gave birth to the digital society were developed by government's agencies or in close relationship with them, as explained by Mazzucato in *The Entrepreneurial State* (2013)²⁹. The analysis of the "bureaucratic symbiosis", especially of the industrial-military complex in the cold war context, between private corporations and public administrations, is at the heart of Galbraith's analysis of 20th century American capitalism. Such a symbiosis had to be taken into account to understand the success of digital platform corporations, such as Google's success thanks to the support of military and intelligence services in the geopolitical context of the post 9-11 war on terrorism (Zuboff 2019).

Conclusion

The activities of digital platform corporations lead us to conclude that consumers did not preside over the allocation of resources within the economic realm of the digital society. Their sovereignty might be even more reduced by the fact that not only traditional corporations but also digital platform corporations contribute to the determination of the available choice-set. In order to conclude, I want to stress that the aforementioned bureaucratic symbiosis between digital platform corporations and governments extends to the political realm too. This appeared clearly through the tight relationship between the Obama Administration and Google's technostructure (Zuboff 2019) as well through the Cambridge Analytica scandal (Susser & al. 2022). Thus, for the same reasons that digital platform corporations infringe consumers sovereignty, they also infringe citizen sovereignty. Digital platform corporations indeed control in their hands tools that are able

diversity on offer can lead to a narrowing of the range of choices, as consumers turn away from the vast number of choices available". The increasing use of online behavioral advertising might explain this tendency. Interestingly, recent empirical studies on music streaming corroborate the idea that digital platform corporations alter consumers choices (Aguar & al. 2021), even if the effect on diversity appears mixed for this particular market (Bourreaux & al. 2022).

²⁹ On the mutation from Galbraith's new industrial state to Mazzucato's entrepreneurial state, see Nogueira-Centenera (2020).

to alter the result of elections or referendums³⁰. Mounk (2018) argues that their involvement in the political realm have reinforced the long-run tendency of polarization and democratic deconsolidation observed in Western countries. Like online targeting of consumers, which is prone to generate a polarization of consumer choices through filter bubbles, online targeting of citizens is prone to favor political and ideological polarization and/or impair the functioning of the democratic process. Taking for granted that preferences are endogenous, as Galbraith did, political propaganda could no longer appear as an imperfection of democracy. It is one of its constitutive features (Chirat 2022b). However, the very business model of corporations such as Google and Facebook fosters a particular kind of propaganda. Being “sensitive to popularity but indifferent to truth”, Jonathan Rauch (2021) convincingly claims in *The Constitution of Knowledge* that their activity participates to the erosion of the “modern liberal epistemic order”.

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³⁰ Referring to some empirical studies, this power of altering political outcome is presented as nonexistent by Mercier (2020, 139). The treatment of the effects of behavioral advertising in general are however too slight to be fully convincing, especially when Mercier argued that “if advertising effectiveness is so difficult to measure, it is not for technical reasons but because ads have small effects at best” (2020, 141). The issue of the effects, at least in the economic realms, of targeted advertising cannot be treated in isolation and at the individual level only, as shown by Galbraith’s political economy.

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