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Advertising and the consumer in the age of Big Tech: a new moment in the evolution of monopoly capitalism?

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The monopoly capitalism literature has traditionally approached advertising from the vantage point of its role in sustaining the economic order. However, digitalised forms of advertising in contexts dominated by giant digital platform technology companies like Google, Facebook and Amazon are disrupting the existing order through a combination of subsidy and location effects, shored up by the capabilities of the new technology for real-time data collection on users. This poses significant challenges for theory and policy. In both respects the case is made for rehabilitating the earlier approach of Nicholas Kaldor, which emphasises both heterogeneity of advertising forms and questions of subsidy, to complement the dominant approaches of the monopoly capitalism school as exemplified by Paul Baran and Paul Sweezy on one side, and Keith Cowling on the other.

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1. Introduction

Digital platform technologies, when developed, organised and controlled by giant profit-seeking firms, pose many questions for the evolution of the capitalist system. One way of broaching such a complex topic is by considering it in relation to advertising. Writers in the monopoly capitalism tradition have closely identified advertising with secular modification of patterns of consumption and labour supply, as large business corporations build and maintain markets for their products; advertising is also a mechanism that helps create and sustain conditions of oligopoly, if not monopoly. Yet when seeking to apply to digital advertising the lessons learned from past contributions by economists in the monopoly capitalism tradition, a lacuna is apparent. While undoubtedly deeply insightful on advertising's role as a prop to the economic order, less interest has hitherto been shown in those aspects of advertising which come to

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the foreground when appraising the impacts of platform technologies. Of particular interest are what will be called advertising's subsidies question, and its location context.

These themes require a specific focus on advertising as a subsidised activity that sometimes subsidises other activities, and the myriad ways in which its concrete forms of organisation differ not only in how packages of information and enticements are conveyed but also where these are consumed. Although the outstanding contributions to the economics literature on monopoly capitalism remain absolutely essential to understanding the broader terrain, it is fair to say that the preoccupations of this literature have led it elsewhere—an observation which we will illustrate by taking as leading instances the work of Paul Baran and Paul Sweezy, and their followers like John Bellamy Foster, on one side; and an overlapping but distinctive body of work led by Keith Cowling on the other. This does not mean, however, that highly relevant antecedent discussions do not exist. It is an aim of this present article to demonstrate the current value of the earlier, and subtle, thoughts of Nicholas Kaldor on the subject of advertising, to an understanding of the effects of its digital evolution in a world of monopoly capitalism.[1] In this respect, there is a Cambridge contribution to draw on.

Our particular concern in this article is with digital platform technologies as software enabled online infrastructures, and in the dramatic ways in which their use has transformed the generation and distribution of subsidies, and the appropriations of space, as these apply to the world of advertising. Reflecting the undisputed importance of advertising for the organisation of their platform-led business models, we focus on Google and Facebook in relation to the subsidies question for advertising, while for its location context we choose Amazon. Google, Facebook and Amazon are also selected because their market presence, in their fields of commercial activity, is both formidable and international. Google currently belongs to Alphabet Incorporated, a conglomerated holding organisation which has acquired something like 200 different companies (technology focused, but not exclusively concerned with, firms operating internet-based services). For its part, Facebook is now owned by the recently invented Meta Platforms. Each of these firms is identified, in popular discourse, with parts of 'Big Tech'.

One further facet of digital technology that must be confronted is that it allows information about people who consume information about products to be collected in real-time, and stored for use in a variety of ways; the same point extending in well-known ways to people who go on to buy products, or who use free online services, including search engines and the 'personal' networking and communication spaces of social media. After setting out the most essential features of Kaldor's approach to advertising, and demonstrating how this offers a way forward for the further development of the monopoly capitalism tradition as applied to advertising and the new digital technologies, we also consider the Zuboff-thesis that a new form of surveillance capitalism is emerging—possessing its own logic of accumulation and supplanting older forms. We demonstrate grounds for rejecting this argument, while considering public policy issues.

2. Kaldor on advertising

In the earlier stages of his formidable career, Kaldor wrote several substantial papers on subjects relating to imperfect competition, an interest carried forward into

[1] This does not mean that Kaldor himself belongs to the monopoly capitalism tradition.

the assessment of advertising in Kaldor (1950-51), (drawing in places on Kaldor and Silverman's (1948) study of advertising and the press). This adopts a wide-ranging approach, incorporating distinctive elements; while these came to be somewhat overlooked subsequently, they remain highly germane today when considering advertising in relation to digital technologies. In particular, it anticipates the importance of subsidy questions and location contexts. But before considering these specific elements, a brief general overview is merited.

2.1 Advertising as a service

Kaldor observes the twin role of advertising in informing and persuading. In addition, the main identifying features of advertising are that: (i) the supplier of advertising sells the good or service being advertised, an assumption which does not preclude advertising via separately owned mediums (neither does it rule out the hiring of specialist agencies to produce advertisements); (ii) this implicit service is not directly charged to its consumer but is provided free by the seller of the advertised good, who anticipates benefits from sales; and (iii) advertising expenditure by this seller is variable, affecting the amount of information being made available, the number of consumers to whom it is supplied and the 'forcefulness' of its delivery (Kaldor, 1950-51, pp. 2–4). Advertising is described as a complementary—or subsidiary—service and is consumed *gratis* by those exposed to it prior to any decision to purchase (or not) the advertised product.

It follows for Kaldor that the *gratis* exposure of people to advertising vitiates any notion of consumer sovereignty in its delivery. Following point (ii) above, he argues that because advertising is a subsidised service, with price less than the marginal cost of resources absorbed, it is meaningless to suggest supply follows demand: 'advertising, being a subsidised commodity, is not supplied *in response* to consumers' demand; the scale of expenditure on advertising—unlike the scale of expenditure on goods and services which are not subsidised—is not determined by the preferences of the consumers, as registered through the price mechanism' (Kaldor, 1950-51, p. 4, original emphasis). Kaldor thus dispenses with any claim that the profitability to firms of advertising reflects customer 'pull'. Consumer sovereignty is vitiated because advertising is a subsidised complementary service.[2]

Kaldor agrees that consumers, in principle, might willingly pay for advertising's informative components: 'the consumer would be quite willing to pay for the supply of market information' (Kaldor, 1950-51, p. 5). However, what firms actually supply *gratis*, and as a constituent part of their selling strategies, is marred by selectivity and bias and prone to the vice of excessive repetition: 'to influence the behaviour of the consumer, not so much by enabling [them] to plan more intelligently through giving

[2] This position is challenged by Becker and Murphy (1993). They propose a model in which the underlying structure of consumer preferences is unaffected by advertising. Advertising then enters, alongside the advertised good, as an argument in the ('meta') utility function of the consumer. Complementary-goods theory is applied: for example, as the price of an advertised good falls, demand for its advertising rises. By this route, a form of consumer sovereignty re-emerges, because even in cases where consumers are not directly charged for their advertising-consumption the firm still bases its supply decision on a profit maximising calculus which, by construction, cannot be indifferent to consumer preferences. Becker and Murphy also infer from their model that advertising intensities should not be expected to rise with industry concentration. While of great interest as a foil, everything hinges on the prior heroic assumption that consumer preferences are unaffected by exposure to advertising. This not only means that advertising does not persuade, it also means that it plays *no* part in helping consumers compare products (one of the pre-conditions for existence of a utility function being a complete preference ordering). What this undoubtedly helps underline is the incompatibility of Kaldor with the standard choice model.

more information, but by forcing a small amount of information through its sheer prominence to the foreground of consciousness' (*ibid.*). To the extent that advertising departs from imparting a pragmatically adequate and useful amount of accurate factual information on products, prices *and* alternative sources of supply, and at a reasonable cost, it falls short of a social utility (*ibid.*, pp. 5–6).

Subsequently, reviewers tended to the view that the important point for Kaldor is that advertising, in practice, is excessive. This became associated with a visual representation in which an aggregate consumers' demand for advertising, based on what they would be willing to pay for different amounts, sits everywhere below the demand curve for the firm which supplies it to them *gratis*—because the latter possesses an added desire to bombard with repetition; see, for example, Steiner (1966, pp. 472–475), Doyle (1968, pp. 580–582) and Koutsoyiannis (1982). Later commentary has sometimes tended to simplify further. A graduate level textbook-cum-survey of industrial economics theory and empirics, Martin (1993, p. 136), introduces Kaldor's article with respect, but principally to establish advertising as a shift-factor for demand; while Bagwell (2007, pp. 1713–14), otherwise exemplary for its historical-mindedness, associates it mainly with persuasion. In fact, the key point for Kaldor is that the information supplied is most typically incomplete, and potentially inaccurate; while 'persuasion' is the joint outcome of an advertising-compound whose mix is decided by its profit-seeking private subsidiser.

2.2 Subsidies and location

Keeping this in mind, there are two other elements in Kaldor's analysis that are of particular interest for our present purposes, *vis-à-vis* digital advertising. The first concerns what we are calling the subsidies question. In addition to being, in and of itself, a subsidised service, advertising is a sometimes source too of subsidies for other services. Advertising becomes a *source* of wider subsidy when it is enacted via mediums rendering a separate service (Kaldor, 1950-51, p. 3), the price of which is reduced because subsidised by advertising revenue. One very important 'indirect' effect of this is subsidy of newspapers (*ibid.,* p. 8). Firms pay newspapers to run their advertisements, and in turn newspaper publishers reduce newspaper prices to increase the audiences which attract advertisers. The same is true for some of the other mediums Kaldor discusses, like magazines and radio. No doubt reflecting place and period, nothing is said about television, although a decade on and it would have been impossible (even in Britain) not to consider advertising's indirect impact on culture formation through subsidies to its programming.

The second concerns what we are calling location context. This requires that advertising be explicitly understood as a diverse set of practices enacted through different mediums. Kaldor (1950-51) certainly makes perfectly clear throughout that 'advertising' is a highly heterogeneous set of activities, with parts distinguished by medium as well as content. In this respect, it possesses spatial qualities. For example, whereas newspapers and radio broadcasts allow home consumption of advertising copy, to consume the information and prompts in a shop display requires being at or in the shop. Likewise, to consume the advertising in a bill-board display requires at least some passing proximity to the bill-board. Moreover, products for sale can be their *own* advertising medium: via their visual display, packaging, price-stamping or tagging. The interior arrangement of price-marked wares in a department store, supported by store-assistants to advise and coax shoppers, is every bit as much an instance of spatially-contextualised advertising as its exterior window display (window shopping is then a pleasure taken in *gratis* consumption of this kind of advertising). At one point, Kaldor (*ibid.*) uses the term 'impact' advertising to denote an advertising form intended to assert itself forcefully upon the attention of its consumer; if we think, by contrast, of such humble forms as price-tagging as the mundane counterpart, then advertising, whether impactful or mundane, denotes a concretised spatial practice.

Custom and practice in the economics profession has since whittled away at how advertising is thought of, editing-down the selection of what gets included. How funds are allocated to the mediums which carry advertisements is no longer well integrated into the analytics of economic models of advertising; any more than the diversity of the forms of advertising in their concretised spatial aspects. The same could be said of the fruits of the econometric revolution, driven as Martin (1993, Chapter 16) usefully emphasises by advances in computing as much as in mathematical statistics, bountiful though this has been. And research biases, more or less obviously, towards impactful advertising (for empirical work no doubt part-reflecting the kinds of data collated by public and private agencies for advertising by television, radio or print-media and, more latterly, online). But it is the omitted elements that we wish now to stress as the most interesting elements in the holistic approach favoured by Kaldor, when it comes to digitalisation.

2.3 The concentration-effect

It would be remiss not to take stock of one other aspect of Kaldor's orientation towards advertising. This is what Kaldor thought of as its concentration effect, conducive to the formation of oligopoly. By heightening any initial disparities in the 'pulling power' of larger firms over small, it causes oligopolistic market structures to form in which the survivors become chary of retaliatory and mutually expensive advertising wars (Kaldor, 1950-51, pp. 13–14). In the case of manufacture, advertising is considered alongside 'techniques of business management, the joint stock company law, the patent law, [and] the invention of new techniques of production' in giving 'greater advantages to larger scale production' by individual firms; and here Kaldor concludes that in some industries, its effect was 'perhaps the dominant one' (*ibid.*, p. 15). From the viewpoint of how capitalism develops, this is a striking proposition, which certainly goes further than most economists do, including those writing in the monopoly capitalism tradition.[3] While a resonant position, there is at this point a difference in Kaldor's interpretation: the concentration-effect of advertising is actually viewed as a positive development *per se* because it helps foment economies of large-scale production.

This is consistent with a similar preoccupation in Kaldor (1935) on excess capacity in imperfect markets, which worries about firms settling on a steeper portion of the long-run average cost curve than would be the case were there fewer of them. And with his later views, including as a policy advisor, inspired by insights gleaned from Allyn Young on increasing returns as a dynamic process, generated by the articulation of market demand with accumulation processes incorporating technical advances; as well as compatible contributions from the likes of Roy Harrod, Gunnar Myrdal and Petrus Verdoorn (here we follow closely the summary of Kaldor's career in Harcourt (1992, p. 326)). Thus, in commenting on advertising we find him enthusiastically

[3] Kaldor roots this in nineteenth century developments, following Hawtrey (1920). By contrast, scattered remarks by Baran and Sweezy, whom we consider in the following section, attribute concentration to the history of mergers and (for the USA at least) centralisation by finance interests.

citing Schumpeter (1942) on the advantages of monopoly production (Kaldor, 1950-51, p. 15).[4] Hence, and despite hints of a preference for achieving production at scale through socialised means, the somewhat paradoxical conclusion that Kaldor reaches is that this part is all for the good, so that while meriting commination for its shortcomings as a utility, the concentration-effect is nonetheless advertising's saving grace. While in this article we argue that Kaldor raises issues for the study of advertising that are germane to the monopoly capitalism tradition today, and in light of the challenges posed by digital technologies, this is a difference that should not be lost sight of either.

One related item, which lies well beyond the scope of the present article to consider in any depth, is Kaldor's view on how advertising not only engenders processes of industrial concentration but maintains it while securing the profits of incumbent firms against entry-threats. Kaldor (1950-51, p. 20) proposes a simple limit-price model wherein incumbents set a price that 'just fails' to cover entrants' production cost when calculated gross of the normal expectation of profit once account is taken of the extra entry cost needed to overcome the goodwill barrier created by the industry's past advertising expenditures. From today's perspective, Kaldor can be fairly criticised for failing to distinguish the pre-entry price set by incumbents from the post-entry price calculated by entrants when they know that their arrival may change incumbents' behaviour (although oddly enough the importance of the expectations which potential entrants form in this regard is earlier flagged up as crucial in Kaldor (1935, pp. 40–41)). By contrast, in later limit price models, incumbents signal that they enjoy low costs, or operate in small markets, through price-advertising decisions that are consistent with even lower costs or smaller markets, to make entry appear unprofitable; but entrants are aware that post-entry prices diverge pre-entry prices (a game-theoretic approach developed some decades after Kaldor's effort: see Martin 1993, pp. 151–155).[5] Although the literature on advertising and entry has evolved, it is nonetheless interesting to see the anticipatory quality of Kaldor's instincts with respect to this branch.

3. Advertising and monopoly capitalism

In its contemporary forms the critique of monopoly capitalism, typically undertaken from a Marxian or radical perspective, is closely identified with the view that the system disposes towards problems of chronic underconsumption.[6] In this connection,

[4] It is interesting to compare with Dobb (1946), where Schumpeter is criticised for understating monopoly's 'retarding influences'. Dobb finds himself more in tune with Sweezy (1970 [1942]), a book whose title is part tribute and part rejoinder to Schumpeter's earlier work (ibid, pp. 275–276; and the related comments in Dobb, 1946, pp. 322–325). This Dobb-Kaldor division echoes the earlier Sweezy-Schumpeter divide (on which see Foster, 1999) at Harvard.

[5] Such models contrast with the older 'barrier to entry' approach, in which context Kaldor stands as something of a half-way house, with the distance between his limit price and competitive price measuring the size of the impediment (barrier) to entry by new competitors. A good sense of how the literature has evolved can be obtained by comparing the treatments in Doyle (1968); Koutsoyiannis (1982); Martin (1993) and Bagwell (2007), amongst many other surveys.

[6] This has not always been the case. Dobb (1946) (see also footnote[4]) focuses rather on how output restrictions and excess capacities retard investment rates under monopoly; although he does, in passing, intimate that a shift in distribution from wages to profit may also retard consumer demand, and recalls large-scale advertising campaigns which he describes as a 'growing vogue' during the depression years of the 1930s (*ibid.*, p. 322). Kaldor (1950-51, p. 11 [point 19]: see more generally *ibid.*, pp. 8–12) also records depression era advertising campaigns and speculates about the effect on demand. In his later book on theories of value and distribution, Dobb (1973, pp. 212–13, 221–25) links development of a theory linking monopoly pricing to income distribution and demand to Michal Kalecki; also acknowledged, alongside Josef Steindl, by Baran and Sweezy (1966, p. 56) and Cowling (1982, p. 1). But he does not revisit, in this connection, his own earlier views on the 'monopolistic age'.

advertising has come to be seen as essential to its viability. Here we reprise two different, but essentially complementary, approaches, the first dominating North American discourse and the second associated with a Western European strand. For brevity, we focus on leading influences. We do so to provide a context from which to subsequently judge the developments that are needed in light of the challenges posed by digital platform technologies; at which point we will turn once more to the work of Kaldor—himself neither an advocate nor supporter of the monopoly capitalism schools. In the sketches which follow, we highlight the most significant contrasts in approach.

3.1 Advertising as a prop to the system

The best-known single study devoted to the critique of monopoly capitalism remains Baran and Sweezy's (1966) opus. For writers in their tradition, this remains 'the most comprehensive foundational work on modern advertising' (Holleman *et al.*, 2009, paragraph 2). It identifies with the demand side of the picture, and the view that oligopoly and monopoly squeeze the income shares of wage earners whose families make up the mass of consumers, so that potential surpluses of revenue over cost in the private business sector face problems of realisation in the market. Advertising, as part of the corporate sales effort, helps forestall this, both by acting as a direct vent for surplus and as a mechanism for generating insatiable wants amongst consumers. The proposition that advertising budgets help vent potential surplus, thereby becoming part of the realised surplus, is part of a now distinctive literature (a good overall sense of which can be obtained from Foster and Szlajfer (2009) and Foster (2014), and the collection on Baran and Sweezy's legacy 'fifty years on' published in a special July 2016 edition of *Monthly Review*, for which Foster (2016) provides contextualisation). This approach, which uses something like a representative model of a large corporation, provides insights into the macroscopic properties of the system while highlighting at the same time some of its most irrational and socially wasteful features. One of the most entertaining things in Baran and Sweezy's (1966) book is its account of the ploys contrived by what had become a booming American advertising industry—like the campaign for George Washington Hill, 'the great tobacco manufacturer', which boasted on behalf of each of its cigarettes, 'It's toasted!' (p. 129).[7]

The most distinctive empirical outcome of their approach has involved efforts to quantify different elements making up the economic surplus, beginning with tables compiled by Joseph D. Phillips for Baran and Sweezy (1966) (see *ibid.*, Appendix) to provide estimates of realised annual surpluses for the USA over the period 1929–63, calculations later extended to 1988 by Dawson and Foster (1992). While always

[7] The toasted cigarette wheeze, proffering a generalised industry manufacturing practice as though the defining merit of George Washington Hill, is more recently familiar as the one given to fictional television character Don Draper in the first ever episode of *Mad Men*. A brand of toothpaste was similarly marketed on grounds that 'it' removed film from teeth. Holleman *et al.* (2009) relate a quip from a real-life adman connected with the story: 'make people think the silver dollar in my left hand is much more desirable than the silver dollar in my right hand' (*ibid.*, paragraph 17). Scope for humour notwithstanding, the seriousness of what Hill and McDonagh (2021) call the 'dark side' of advertising should not be overlooked. Tobacco consumption is positively associated with advertising exposure: the World Health Organisation (see, e.g., World Health Organisation, 2017), has come to favour a global ban. Nairn *et al.* (2007) describe the insidious qualities of advertising targeting adolescents and children in the formative stages of their social development; Cruz *et al.* (2019) and Papaleontiu et al. (2020) study tobacco consumption effects, and with specific regard to the pre-adult stage. On the disastrous implications for climate and the environment of advertising-fomented consumption, the conclusion reached in Kasser's (2020, p. 20) review of the literature is that advertising industry practices must be 'reined in' and 'changed'.

interesting, limits on the types of data available means that it is not always easy to get a clear sense of which parts belongs to what types of advertising. But what is not in doubt is that in the USA, a particular haunt of this literature, expenditures on 'impact' advertising categories are massive: Wren (2016) shows advertisers' revenues increasing fourfold here, at constant prices, in the fifty or so years since the first publication of Baran and Sweezy (1966); while WARC (2021) presents per capita data on impact advertising showing it three times higher in the USA than Germany, six times than France and twenty-four times than China.

The second strand of the literature begins with Keith Cowling. In the 1970s, Cowling led a team commissioned by the British government to make an independent study of the economic effects of advertising. Its findings, published in Cowling *et al.* (1975), were described at the time as being 'probably the most extensive work ever carried out in the United Kingdom' (Reekie, 1976, p. 624). Seven years later and drawing on his further original contributions to the modelling of price-cost relationships in oligopolised industries, Cowling (1982) set out to re-develop the monopoly capitalism approach to take account of ongoing developments inside the field of industrial economics. Easily the single most important European contribution influenced by Baran and Sweezy, this commences with a model of an oligopolised industry (by contrast, Baran and Sweezy work from a model of a representative ideal-type corporate form) in which the degree of monopoly grows as demand becomes more inelastic, the industry more concentrated, and (or) collusion between firms more effective. The degree of monopoly is inversely related to the workers' wage-share (for the degree of monopoly see *ibid.*, pp. 6–8, 33–34; and for the wage share *ibid.*, p. 23, pp. 106–107). In this connection, advertising raises the degree of monopoly, from which it follows that it also acts to depress the realised value of workers' wage-shares.

Perhaps the most distinctive feature of Cowling's approach is the confidence shown in the practical as well as critical value of econometric work. The work in which he was involved had found significant positive associations between advertising and profit-sales ratios in a highly disaggregated set of British industries; by which point too, American studies, riding the wave of the larger scale econometric investigations that were now becoming possible because of advances in computing-technology, were linking advertising positively and significantly to industry rates of return and profit-ratios (on which see Martin, 1993, chapter 16). While not conforming precisely to Cowling's now preferred modelling approach, he nonetheless felt able to infer support for the thesis that as advertising intensities increase, the degree of industry monopoly rises (Cowling, 1982, pp. 13–15).[8] This conclusion, it is worth repeating, is a subtle one: it implies that advertising depresses wage-shares.

The effect of advertising on aggregate consumption is likewise considered. One of the original studies published in Cowling *et al.* (1975) – Peel (1975) – found evidence of a significant positive effect from press and television advertising in Britain on both autonomous and marginal aggregate consumption expenditures; consistent once more

[8] Occasional studies, like Pagaloutas and Sorenson (1986) and Rizzo (1999), have been able to establish that advertising reduces the (absolute) price elasticity of demand in the industries they consider. Such studies are comparatively rare, compared to those deploying profit-sales ratios or rates of return as their dependent variables; and largely for technical reasons, relating to problems with endogeneity as well as omitted variables bias, together with difficulties disentangling industry and firm level effects. But they are clearly also consistent with Cowling's thesis, which also allows for effects on the degree of monopoly running via concentration and collusion.

with the findings of the first American studies.[9] Cowling (1982, pp. 62–63) interprets this as vindicating Baran and Sweezy's thesis that advertising offers a part-solution to the structural realisation problems of monopoly capitalism. This can be compared with Mattick's (1966, paragraph 46) view, offered in criticism of Baran and Sweezy and rooted in a refusal to concede any distinction between actual and potential surpluses and so the practical relevance of realisation problems, that it is (literally) impossible for advertising to change overall consumption propensities. It is interesting to note that in his own survey of advertising, Kaldor, (1950-51, pp. 8–9; see also footnote[6] above) speculates on whether it might reduce unemployment by raising the economy-wide average propensity to consume, while doubting this could be empirically tested.

Cowling also takes a final step and argues empirical evidence for the proposition that advertising acts to maintain the length of the working week, encouraging fore-gone leisure time so that workers earn more to consume while forestalling what would otherwise be a long-run crisis of labour shortages for capitalism. Here Cowling (1982, pp. 115–120) anticipates Brack and Cowling (1983), which utilises US data on the length of the average working week to show that the average employee worked 27% more hours per annum in 1976 than they would, had advertising expenditures not increased by the amount that they did from 1919. This was a favoured theme of Cowling, and he returns to it, making full use of ongoing advances in econometric technique, in Cowling *et al.* (2011), deploying a co-integrated vector autoregression (VAR) to again investigate the USA.[10] What this body of work, in which Cowling was an active pioneer, shows is how it is possible to suggest answers to questions that previously could only be framed. As another historical example, Edward Chamberlin (1946, p. 153, note 11), for instance, took the view that deductions should be made from any increase in production caused by advertising to the extent this reflected an induced sacrifice of leisure, but did so at a time when it was impossible to do more than posit a likely connection.[11]

3.2 A lacuna in the literature

However, when considering these canonical contributions to the monopoly capitalism literature is it apparent that there is little attempt to address the variety of advertising

[9] An apparent difficulty arises, given Cowling's view that advertising acts to depress wage-shares at industry level. In as much as workers have a higher propensity to consume from wage-income than capitalists do from profit, and disregarding other classes of consumer, a shift in distribution from wages *to* profit should *reduce* rather than raise the economy-wide propensity to consume. One solution to this difficulty would be that advertising increases the propensity to consume of both workers and capitalists to such a degree that its net effect on spending is still positive, although the existence of other classes of consumer is liable in practice to be significant too. In so far as the volume of aggregate consumption is concerned, it must not be forgotten either that advertising is a prompt to reliance upon credit-lines and borrowing. Holleman *et al.* (2009, paragraphs 20–28), for example, describe how advertising for finance, insurance and real-estate services in the USA surged prior to the great financial crisis of 2008, especially advertising pitched—sometimes racially targeted—at accelerating private household indebtedness.

[10] Fraser and Paton (2003), also utilising developments in time series techniques to account for endogeneity issues and non-stationarity in the data, find a positive impact on hours worked by male and female workers in the UK using a VAR model for 1952–97.

[11] Molinari and Turino (2018), this time using a dynamic stochastic general equilibrium (DSGE) model, find that for the period 1976–2006 in the US advertising induced (rounding to one decimal place) a 6.8% increase in aggregate consumption and an 11.0% increase in number of hours worked, making 'households unambiguously worse off because the overworking effect more than compensates for the expansion in consumption' (*ibid.*, p. 2107). Within their particular different methodological approach, they also find a 1.9% rise in average price-cost mark-up.

mediums, as a subject matter in its own right. This is perhaps most so in the case of Cowling, where advertising is a shift-factor: moving demand for a product, the position of the aggregate consumption function and the supply of labour services. And although an unpublished chapter demonstrates that they did at one point intend to address developments in forms of communications (see Baran and Sweezy (2013) and for discussion, Foster and McChesney (2013)), in the event the iconoclastic contribution of Baran and Sweezy on the sales effort lies rather in how it addresses the generation, disposition and realisation of economic surplus, with its accompanying discourse on social waste—hence for advertising their interest in hard-selling and the crafts of professional huckstering. So it is that in neither of these seminal contributions is advertising studied for the heterogeneity of its forms, *vis-à-vis* the mediums employed and what this means for its subsidy patterns and the location contexts of its consumption.

This is the lacuna which in Kaldor, writing in an earlier period, is filled out, at least as an opening sketch and in a preliminary way. Advertising is broached as a subsidised and complementary service, that frequently acts as a subsidy to other services and which varies in form; encompassing the mundane as well as the impactful, there are consequently different concrete possibilities, depending on its form, as to where and how it is consumed. As we have already taken care to emphasis, Kaldor stands apart from the monopoly capitalism school—famously critical of the tack taken by Baran and Sweezy; albeit in a way which showed that he tended to conflate their potential economic surplus with the realised gross profits of industry, a non-identical category (on which see Baran and Sweezy, 1966, pp. 75–76, and the second section of the introduction to Baran, 1968). Moreover, he was willing to tolerate private monopoly as necessary, provided it helped reap the benefits to be gleaned from economies of scale, putting him wholly at odds with the criticism that the potential surpluses thus generated conduce rather to problems of realisation and tendencies towards stagnation and social waste. Conversely, there is no echo in the monopoly capitalism school of Kaldor's evanescent thoughts on limit-prices as a deterrent to entry, with both Baran and Sweezy (1966, pp. 39–40) and Cowling (1982, pp. 17–22, 130–131), for instance, emphasising instead the retaliatory power of monopoly capital when defending its interests.[12] But such obvious differences aside, there is much that the monopoly capitalism tradition can learn from the weight Kaldor gives to subsidies and concrete forms.

4. Advertising and digital platform technologies

The technology sector, broadly defined, is a large arena; and the giant firms generally thought of as 'Big Tech' display considerable diversity in their business models and operations. As indicated, our concern in this article is with the subset of the genus in which advertising, via digital platform technologies connecting users to producers and acting as mediums of information exchange, as well as facilitating the buying and

[12] Retaliation could include the sales effort: Cowling was sympathetic (see Cowling and Tomlinson 2012, p. 306) to Smiley's (1988) finding that US brand managers view advertising capabilities, alongside general marketing and distribution, as retaliatory weapons. Geroski and Mazzucato (2003), and with an eye on Cowling's work, explore entry-related advertising spikes.

selling of goods and services, is critical to the organisation of the core business model.[13] In this section we demonstrate the abiding relevance of Kaldor's insistence on the importance of subsidy questions, and his implicit attention to location contexts, for the exploration of monopoly capitalism in relation to digital forms of advertising, taking as selected cases Google and Facebook for subsidies and Amazon for location. This is preliminary to the final section that turns to consider, again from a monopoly capitalism perspective, the claim that the basic logic of accumulation is changing.

4.1 The subsidy question

Starting with the effects of the subsidy patterns associated with digital advertising, targeted spending to place digital adverts by businesses was projected for 2019 at something in the region of US $333 billion, of which more than half when combined accrued to Google (at 31.9%) and Facebook (20.7%). Digital advertising is here defined so as to include all tailored advertisements appearing on desktop or laptop computers, mobile phones, tablets and other internet-connected devices and spanning a range of advertising formats.[14] Sticking with these two leading sellers of advertising space, the business model evolved in each case relies on offering fully subsidised services, free at the point of access and use, to the general public: this garners audiences for advertisers to exploit. Since the advertisements to which these audiences will be exposed are supplied to them *gratis*, these cases represent ideal types for the Kaldor subsidy question.

Building on this, it is proposed in Alleman *et al.* (2019) that business models of the type informing the practice of Google and Facebook are best understood using the metaphor of a *two-sided market*: one market for the firms which bid for advertising space, and another for the public which uses online services. However, from a Kaldorian perspective this would be misleading: it would be equally misleading to apply a market metaphor to the supply of free services like the Google search engine or Facebook's social media pages as to the free supply of advertisements which are consumed by their target audiences *gratis*. The same writers assert that charges levied by Google and Facebook on advertisers get passed on ultimately as higher prices for advertised products. However, while Kaldor (1950-51) is ambiguous, because touching on alternative pricing models; and while Baran and Sweezy (1966) are not wholly explicit; a clearly stated counter-example to this assertion can be derived from Cowling (1982) – where such advertising levies would be an overhead expense for the advertising firm, deducting from gross profit yet leaving product price unchanged.

[13] For example, we would not include here Apple, which is not classed as an online service provider even though it is responsible for the design and manufacture of iPhones and iPads. The practice, which is a commonplace in business journalism, of deploying group acronyms to encompass the largest Big Tech firms, notwithstanding their diversity—acronyms like FAANG, GAFAM or MAMAA (formed in each instance by selecting relevant first letters from the names Amazon, Apple, Facebook [Meta], Google [Alphabet], Microsoft and Netflix) – is mainly of interest because of what it signifies about prominences achieved in the public consciousness through size. Providers of technology (software) enabled digital platforms are sometimes classed by the uses to which customers put their sites. Thus Webb (2020) associates Google with search engines, Facebook with social media, Amazon with product sales, Quora with knowledge and Netflix with entertainment and media. However, the core activities set for a company like Amazon extends backwards into logistically complex vertical chains of activity, entailing such things as procuring, handling, warehousing and despatching, a depth that again should not be lost sight of.

[14] This figure is sourced from eMarketeer (March, 2019). This calculation excludes text-messaging, whether in the form of short message servicing (SMS), meaning text only, or multi-media message servicing (MMS), meaning accompanied by pictures or videos.

Less ambiguous is resource diversion away from competing mediums like newspapers, heavily impacted by lost advertising revenues. This has proved a complex arena for competing large commercial interests, each with its own considerable powers of lobbying and influence over state actors. For example, in July 2020 the Australian Competition and Consumer Commission proposed to force the US tech giants to contribute more for shared news content. Google responded by threatening to remove its search engine from Australia, while Facebook temporarily blocked news sharing; both arguing that a fully subsidised public access experience, for platform-mounted services and materials, already allows news organisations posting on their pages to monetise this presence by sharing in advertising revenue and building up subscriptions (for some relevant details see BBC News, 2021 and Financial Times, 2021). Central to this dispute, on the other side of the picture, was the Murdoch News Corp Group, with ownership of national, metropolitan and suburban newspapers. What such examples demonstrate is that, in a monopoly capitalism world, disputes may involve parties on every side operating from within concentrated market structures.[15]

Another issue is a fall-off in investment in local journalism. In the case of Britain, a government report estimates that 6,000 such jobs were lost between 2007 and 2018, and with further job shedding in the pipeline (see DCMS, 2018); while academic research, supported by the trade union representing journalists, has found that rising, but unevenly distributed, digitally-circulated news revenues still fall well short of those lost from print-format advertising (MRC, 2017). As with the Australian example, monopoly looms on both sides, with local newspaper ownership in Britain concentrated amongst a small number of large companies.

It follows that the social interest is a complex one. McChesney (2008), an introduction to the political economy of media and journalism sympathetic to the monopoly capitalism tradition, also makes clear that dependence on corporate sponsorship through advertising is not in any case healthy for journalism. Looking back, the otherwise decisive Kaldor (1950-51), keen on commercial advertising's concentration-effect and willing therefore to over-rule his criticisms of it, holds back a judgement on whether the advertising subsidy helps in practice to promote 'a free and independent press', or 'jeopardises' it (*ibid.*, p. 8).

4.2 The location context

The redirection of advertising revenues from one medium to another need not entail a change in where advertising is consumed. Readers of print newspapers or magazines might be (almost) anywhere when imbibing advertising copy; a similar portability applies to internet-connected phones or tablets. But in one very important area digital technology has significantly affected location context. Online shopping, with its pre-cursors in earlier spatial innovations like home-delivered postal order catalogues or dedicated home-shopping television channels, has transformed 'the where' as well as 'the how' of the mundane end of advertising. Rather than physically visit a retail or wholesale unit to shop, details on product descriptions, availabilities and price can be obtained online. Information thus advertised, and advertised information

[15] The Murdoch News Corp Group has recently (see The Straits Times, 2020) been the subject of an anti-monopoly petition by an Australian ex-Prime Minister. The transnational presence on this side must not be overlooked either: Murdoch holdings include Fox Corporation and Wall Street Journal.

thus consumed, is the most important digitally-led change in location context, fuelling direct purchase deliveries.

In this context, the case of Amazon is especially instructive, because while it does include amongst its expanding set of ventures an online advertising business (capturing now about a tenth of the revenues of Google and Facebook combined), it launched initially as an online bookstore. Today this part of the organisation, which remains lucrative, charges suppliers who wish to do business via the site and takes a share of the list price of books sold. Where possible, an effort is made to include a *precis*, publisher's details and author's page, as well as an image and reviews of products and suppliers, to prompt sales, all of which are elements in what is clearly an online advertising package for the book in question; as too the unsolicited advice the website offers on which other books conform with the inspection patterns of the online customer-cum-browser (the product advertising service this offers as a supplement to trade is again fully-subsidised). While its employment practices, like its acquisition strategies, attract comment, the starting point for Amazon's vertical organisation and the most fundamental signifier of its business model lies in a spatial reconstruction of mundane[16] advertising.

5. Logics of accumulation and the public interest

The argument has been made, notably by Shoshana Zuboff, that digital technologies are changing capitalism's qualitative character. Zuboff (2015) suggests a scheme, running from the twentieth century into the twenty-first, which starts with mass production capitalism, evolves into financial capitalism and is now progressing into an information-based form of surveillance capitalism.[17] It is relevant to consider how this thesis stands from the viewpoint of the monopoly capitalism tradition, whose own historical periodisation in many ways also starts from the mass production era, and its antecedent development; but which subsumes in its arguments the development of increasingly complex financial forms as part of the ongoing articulation of capitalism *within* its monopoly phase (a point pressed from an early stage by Paul Sweezy; see Foster, 2016). The question then is whether what Zuboff (2015, p. 75) calls surveillance-capitalism represents a departure from, or a further articulation of, the monopoly system.

A central theme for Zuboff is how surveillance capitalism objectifies the entirety of the human population, as its data-resource and target of intent. Big Data is described as both the 'condition' and the 'expression' of its apparatus: information about individuals, extracted whenever users go online for their own social (non-market) or market purposes, is monetised in the commercial sphere. The same applies to the siftings of surveillance machineries, sensors connecting the network of things and corporate and government databases. Data brokers work secretively, outside of subject-knowledge and beyond whatever lagging legal protections exists, to composite individual profiles. Within the surveillance-system, Google is the biggest of the Big Data businesses, formally indifferent to its targets for anything beyond the data they provide (all of the

[16] The distinction between the mundane and the impactful is very important. For example, the valuable study by Latcovich and Smith (2001) of advertising, as an endogenous sunk cost, and market concentration, in the online versus traditional 'bricks and mortar' book trade, shows its significance to a firm like Amazon (in its start-up phase) in attracting customers. This seems to pertain to advertising of the impact variety, undertaken to attract customers to the browsing experience; but the 'browsing experience' is also user-friendly delivery of the mundane type.

[17] These arguments are expanded in Zuboff (2019).

above points are drawn from the expository summary in Zuboff, 2015, pp. 77–79). In this, the concept of formal indifference is an important one: 'formal indifference' is the 'decisive' characteristic of the 'emerging logic of accumulation', and has as its corollary the 'absence of dialogue or consent' (*ibid.*, p. 79). What Zuboff means is that Google, like Facebook, or any other data-extractor, is not *per se* interested in its service-users but only in the data it extracts from them.[18] This implies an absence, in its dealings with them, of social reciprocity: 'the absence of structural reciprocities … lifts Google, and other participants in its logic of accumulation, out of the historical narrative of Western market democracies' (*ibid., p.* 80). Formal indifference, and the absence of reciprocal social relations, is the basis of a new logic of accumulation.

Other features which Zuboff highlights for Google are how it seeks to maximise gains by encouraging growth in the number of search-engine users, to obtain more of the material which it monetises; its proprietary processes of analysis of data, obtained as the 'exhaust' generated by use of its search engine, and packaged, with the aim of raising the value of the tailored advertising opportunities that are sold to advertisers via its 'Adwords' auction; and the Google diversification strategy into other Big Tech businesses, like robotics, artificial intelligence, nanotechnology, smart devices, facial recognition and drones (see *ibid.*, pp. 79–80). A compellingly chilling account emerges of privacy-loss across multiple spheres. The language of invasion is invoked when describing Google's incursions into 'legally and socially undefended territory until resistance is encountered', and the 'explosive social consequences' of Google-invested technologies is stressed (*ibid.*).

In considering this, perhaps the first point to make is that it is not historically novel to grow an advertising-subsidised service, in this instance a search-engine service, in order to attract more revenues from advertisers. We have already touched upon this in relation to traditional news media; and indeed, the reality of such practices, in the past, are integral to Kaldor (1950-51) conceptualisation of advertising as a subsidised service that subsidises other services. The second is that agencies have long existed which specialise in data-collection, on behalf of third parties, and for purposes that certainly include targeted advertising. Neither of these elements in the Google business model is historically novel; any more than its strategy of diversification, its application of science, or aggressive profit-seeking. Moreover, on the question of 'formal indifference' to the target population, the advertisers which bid via auction for information and audiences retain just the same intense interest in their prospective customers as they did before. From their viewpoint, what Google—like Facebook—represents is access to something they want, and what they want is no different from what was wanted fifty years ago. The historical novelty lies *not* in the separate parts of the business model, but in the advertising-subsidised technology, which builds up an audience for advertisers while simultaneously collating data, for those advertisers, on that audience.[19]

While recognising the profound shift in the ability of data extractors to obtain data, and the easy suppression of informed consent *vis-à-vis* this process, it is still unclear that the system could be said to have evolved a new logic of accumulation, as opposed to more intrusive technologies inside its existing logic. This is easier to see when focusing on the pivotal role of advertising, and seeing this in the terms highlighted as

[18] Zuboff draws heavily, if very critically, on the account provided by Hal Varian (2014); selected not only for his undoubted ability but also for his role as Google chief economist.

[19] The closest thing to this in Kaldor's (1950-51) world of print mediums, radio and static forms of display are mail shots serving as advertising-cum-customer order survey mechanisms.

integral to the commercial phenomenon by Kaldor. From this vantage point, and as with financialisation, this suggests an articulation—via new technologies—of an existing system-logic, rather than a departure.[20]

Be this as may be, and even if the view were taken that such a system is amenable to effective internal reform, which not all writers in a monopoly capitalism tradition would accept, public policy thought is needed elsewhere too. Here the advertising subsidy-question, and its location context, again matter. For the first of these themes, a highly concentrated Western news media is challenged by the loss of advertising revenues to digital platform giants. On the plus side, at least for those preferring diverse ownership structures for news media, digitalisation has enabled smaller-scale independent journalism to establish an online presence, a 'fringe' competition in monopoly terms. New financing models for journalism, even if legislative-enforcement were agreed, will appeal differently, depending on content, to media-group oligopolies habituated to control than to a burgeoning independent competition: requiring Google or Facebook say, to pay news providers directly for content, is a different policy from subsidising not-for-profit journalism via levies on the same tech firms.[21] The monopoly capitalism critique suggests that the entire question of ownership structures be addressed alongside the funding models that enable free and independent journalism.

On the location question, the impact of the explosion in online ordering, overlapping the subject matters of urban planning and social geography, poses similarly difficult questions for policy thought. The effects of the transformation previously described, in 'the where' as well as 'the how' of the mundane end of advertising, has allied with prior developments in multiple areas (including the key facts of automotive technologies and complex logistics capabilities) to change the spatial organisation of marketing modes. For example: while the status of the town-centre, as a place for shopping and social exchange, is not everywhere the same, in Britain, this has recently been important as a nexus for activities which include, and indeed have been underpinned by, day-time shopping; and the condition of these local high streets has not been improved by the redirection of the traffic of custom to online purchasing for home delivery. Suggestions on what to do about it, within the existing structure of economic relations, have ranged from rethinking, or repurposing, dilapidated centres, to more assertive positions on political intervention, requiring taxes, subsidies and regulation.[22] Here the

[20] Zuboff starts with a relatively sympathetic view of the commercial world prior to the appearance of Big Data businesses, emphasising equalities before the law and the social sanctity of the contract. An important element is that personal data 'extracted' is data not directly paid for or volunteered, thus violating the reciprocal-norms of an exchange principle. Another difference is that what for Zuboff is being accumulated is personal data that is in some sense stolen. This is not quite the same thing as the accumulation of capital—and the gathering of information to that end—that is the natural starting point for a historical study from a monopoly capitalism perspective. It is important to also take such differences in conceptual framing into account. Part of Zuboff's concern, moreover, is with the surveillance state, which lies beyond our article's scope.

[21] In the same way there are considerable differences between interested parties over whether platform providers should be re-designated as publishers and subject to regulatory control. Recent US Congressional social media hearings are in large part focused on the 'legal shield' which protects platforms from liability for users' posts and allows them to moderate content.

[22] This need not entail direct suppression of the possibility of online shopping and home-delivery, tending instead to be pitched at changing the commercial viability of competing modes. By contrast, the repurposing school of thought leans towards replacement activities, leisure, arts and culture, health and social services (see, e.g., House of Commons, 2019), washed in green. The emergence of the Maker movement, 'fablabs' and the growing demand for co-working spaces, also look towards repurposed premises: see, for example, Fiorentino (2019) and Howell (2022).

monopoly capitalism critique, when faced with the Amazon-warehouse and logistics method of online marketing, conduces, at least for some, towards a fuller re-appraisal of the structures of social ownership and control.[23]

It is a paradox of detachment worth noting that neither the subsidy question nor the changing location contexts of advertising are reducible *per se* to the dominant market positions of the likes of Google, Facebook and Amazon. At an early stage in the growth of the internet some economists hoped that online services, competing with other forms of delivery and with better-informed market participation, would yield beneficent outcomes—or, as one sceptic put it, 'perfect competition made real' (Graham, 2001, p. 149). The reality has proved more complex. While the economics of internet-carriage is characterised (capacities permitting) by low marginal cost, the fixed cost of installing and maintaining infrastructure is high, pointing towards concentration of activity in this part of the industrial structure. Revenue from online advertisers is ultimately one of several sources of funding for this, mediated by intervening layers of business activity. The pole position of the likes of Google and Facebook *vis-à-vis* online advertisers is predicated not just on competitive ruthlessness but also the efficacy of their operations in simultaneously building up and extracting data from audiences for advertisers; and, like Amazon, they also enjoy economies of scale and scope. This again would be sufficient to account for concentrated activity (on all of which, see Varian and Shapiro, 1998; Graham, 2001 and Varian *et al.*, 2004). However, even had the industry evolved with a less consolidated set of ownerships, both the subsidies question, and the spatial impacts, would still have arisen.[24]

For this reason, these raise problems that are not identical to those traditionally considered to be the domain of competition policy, where there have been many cases to investigate. Some of these cases relate to misuse of digital technologies and e-commerce—as when the European Commission recently informed Amazon of its objections to the use of non-public business data on independent sellers who trade on its marketplace to the benefit of its own retail business (EC, 2020); but this is not always so, as with a parallel investigation of its logistics and delivery. In Europe the Commission has proposed a Digital Services Act (DSA) and Digital Markets Act (DMA) to create a single supra-national regulatory framework with enforcement mechanisms. The prospective framework is an *ex-ante* rule, one possibility being a 'no self-preferencing' rule, one of the areas where the Big Tech companies are prone to fall short on competition law. This approach can be compared with the *ex-post* antitrust redress philosophy of the USA. For its part, in Britain the UK Competition and Markets Authority is looking at a Digital Markets Unit. Yet, all of this is about establishing rules of the game, within which the transformative consequences of Big Tech will be allowed to work through. While concerned to promote competition, it stops short of treating the major digital platforms as public utilities, let as alone something akin to natural monopolies.[25]

[23] This leans in towards Marxian analyses of space, where David Harvey is perhaps the best-known example of a social geographer opting for a more transcendental mode of thought.

[24] The failure, as critics would see it, of the 'liberating potential' of the internet to fully assert, as a consequence of tendencies towards monopoly capitalist-structures, is sometimes thought of as a paradox of the internet, although its two-sided possibilities remain real. What we are calling a paradox of detachment references a separation between this and what might in any event have been strongly felt effects accruing to the emergence of online forms of advertising.

[25] A utility-perspective would of course still invite debate: were the view taken, for instance, that this requires digital licensing with responsibilities for 'product liability' and a fiduciary 'duty of care' to users, and their data, there still remains much scope for dispute over what this means.

6. Concluding Comments

Our principal points of interest are the consequences of this disruptive class of technology as it impacts upon the subsidy patterns of advertising and the location contexts of its enactment and consumption. Advertising constitutes a major unifying theme for some of the most important consequences of the digital platform revolution, with its direct technological overspill into the forbidding terrains of social surveillance. We have argued that these developments do not represent a break with the past logics of accumulation of a monopoly capitalist system, so much as the articulation of new technologies within that logic. Yet the traditional hierarchy of interests and concerns within the monopoly capitalism perspective does require a rethink, because some of the issues looming largest for the new technological potentials depart from these traditions.

Although unsympathetic to a monopoly capitalism approach, the early thoughts of Nicholas Kaldor on advertising, as a heterogeneous set of concrete activities, enacted via diverse mediums and differentiated in their implications for patterns of subsidy and places of consumption, remains as relevant for digital platform technologies today as they did in a world still dominated by print media, radio and a variety of visual forms of static display. Kaldor's insistence that advertising is not to be treated as though it were entirely an affair between the sellers of advertised goods and the consumers of their advertising remains critical: advertising is a subsidised service, which plays an important role in subsidising other services. And its remit includes the most mundane elements as well as the most impactful. Although advertising remains the social mechanism which acclimatises the individual consciousness to the dominant part played by the large business corporation as a purveyor of the standards of the quality of life, from this starting position a monopoly capitalism analysis of cases like Google, Facebook and Amazon is greatly assisted. It not only highlights issues that are of crucial importance, it also separates out more clearly what is, and what is not, novel about the ensemble.

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