

# **Learning to Google: Understanding classed and gendered practices when young people use the Internet for research**

## **Abstract**

This article builds on existing research by examining two groups of young people, one from an elite fee-paying school and the other from a vocational college, as they engage with information on the Web about, for example, conspiracies, climate change and immigration. The data include the results of group and individual interviews, digital search terms and web (http) traffic, videos of discussions and downloads of arguments on social media. This study's contribution is to synthesise digital methods and sociological concepts of technology, information and youth with Bourdieu's social theory. By capturing offline and online events and decisions as they are manifested online (and vice versa), this study challenges distinctions between 'the virtual' and 'the real'. It reveals how young people's class of conditions, including their relative position in the United Kingdom's educational hierarchy are played out in the way they use digital technology to produce intersecting classed and gendered practices.

## **Keywords**

Bourdieu, digital methods, digital sociology, discourse, education, Internet, social class

## **Introduction**

During the 2000s, as the Internet became increasingly embedded in everyday life, it was then popularly suggested that young people were 'born digital' (Palfrey and Gasser, 2008). We were led to believe young people were naturalised users of digital technology, who possessed inherent forms of expertise. This pervasive rhetoric was challenged by scholars who problematised the digitally 'savvy' teenager, see Livingstone (2007); Bennett and Maton (2010); Hargittai (2010); and Helsper and Eynon (2010). Intensive and seemingly confident usage, the subsequent research told us, should not be confused with, for example, an understanding of a search engine's commercial priorities or media bias. Alternatively, we were advised to be mindful that, 'many adolescents do not possess the expertise required to search the web efficiently or critically assess the credibility of what they find' (Hargittai et al., 2010: 470). The evidence tells us this is particularly true of young people from low socio-economic status (SES) backgrounds (Gui and Argentin, 2011; Hargittai and Hinnant, 2008; Robinson, 2013) whose 'web know-how' and 'evaluation skills' are 'particularly poor' (Hargittai, 2010: 108). We know this because, for example, these young people fail to query authorship (Hargittai et al., 2010), understand the relationship between domain names and bias (Gui and Argentin, 2011), and they over-trust search engines (Robinson, 2013). SES also intersects with parental education (Hargittai, 2010), gender (Robinson, 2013) and ethnicity (Hargittai, 2010) to militate against effective use of the Web. Robinson (2013) goes on to explain why members of her Californian research cohort lacked skills, for example, 'unskilled

students face a dearth of learning opportunities at home, in school, and among peers' (p. 15).

This rhetoric and the research it stimulated may be familiar to readers. The key contribution of this article is to raise the theoretical and methodological stakes of this discussion: to focus on the value of applying social theory to our research questions, methods and analysis in an age where its obituary has been written by advocates of the big data revolution (see, for example, Anderson, 2008). I operationalise a Science and Technology Studies (STS) approach to technology, a Foucauldian approach to information and apply a Bourdieusian framework to the resultant data. This approach helps signal a new way forward for Sociology, first, by showing how accumulated micro events in the digital realm can scale-up to challenge and disorientate our view of social events, and second, by showing how these micro events are a product of their social contexts. I begin by conceptualising digital technology, information and youth to show that researching them together is often less straightforward than we acknowledge.

First, following an STS approach, it is clear that digital technology affords 'interpretive flexibility' (Pinch and Bijker, 1989: 163) because its multiple potential uses are influenced by the technical and social conditions of practice. Therefore, as time passes (in a mutually affective and evolving synthesis of demands, learnt behaviours and customisations), technology and users co-produce digital practice. In a typical example of this process, users of Google's search engine have a tacit, socially constructed idea of how it works that influences how they use it and interpret its results. Google's engineers have also programmed its search engine's algorithms to learn (from previous cached searches and aggregated search terms) to pre-empt what users are looking for with automated suggestions (Baker and Potts, 2013). Thus, when users engage with such computer systems there is 'a triad of intentionality at work' (Johnson 2006: 202). This triad includes 'the intentionality of the computer system's designers, the intentionality of the system, and the intentionality of the user' (Johnson, 2006: 202). Therefore, technologies are inseparable from 'the social arrangements of which they are a part; the activities that produce them and the cultural notions that give them meaning' (Johnson, 2006: 198). Continuing this reasoning, the practice of using digital technology needs to be understood in context because it operates 'in particular places at particular times in relation to particular users, institutions, and social purposes' (Johnson, 2006: 198). Shared practical understandings of digital technology (which are often parcelled into terms such as 'skill') don't emerge in isolation; they have to be accounted for within the field of practice.

Second, although when searching for and evaluating information young people may often find it very difficult to find and accurately evaluate information, we should be careful to attribute this problem primarily to a straightforward lack of skill or ability. Young people, like all of us, may stop searching when they have their misapprehensions confirmed by new, apparently trustworthy information. This is because what counts as information can be distorted by any individual's epistemological lens (Hjørland, 2002). For example, Schulz-Hardt et al. (2000) found

individuals with strong beliefs selected information sources consistent with their own views and rejected information sources that were in opposition to these views: so called 'cultural cognition' (Kahan et al., 2011). In this context, rather than a stable category that young people may fail to identify through a lack of critical thinking skills, misinformation becomes something that is rejected by an individual who is situated in a community or in-group that shares their epistemological values. To help access and capture the social processes that could influence young people's thinking in this way, I turn to Foucault's concept of discourse. Foucault (1980) called discrimination between various forms of information an 'exclusionary practice' that within discourses reflect a community's common ways of seeing and its power structures. These discourses are spun out to 'legitimate certain kinds of constructs, subject positions, and affective states over others' (Thrift, 2005: 26). In globalised economies that sustain mass broadcast and social media, these discourses also operate as 'metalanguages' (Thrift, 2005: 33) that tell us about a culture's ascendant ideologies. An analysis of their discourse therefore gives us access to young people's normative definitions of misinformation and simultaneously directs us to the social communities that cultivate these exclusionary practices as well as the debates in wider national and international culture that young people may engage with on the Internet.

Third, when operationalising age, we should acknowledge 'the developing child' in indivisible from 'the sociological child' (James et al., 1998). The 'developing child' is a reoccurring presence in existing research into youth online. It is characterised by bio- physical descriptions of developmental stages (e.g. presented by Eastin, 2008) that suggest, with correct interventions, young people can overcome the limits of their SES as they are organised into a linear march to the sovereignty of adulthood. Once, however, young people have passed this biological threshold, their ability to think critically is enshrined in law, for example, in the right to vote. Alternatively, contemporary sociological research has 'highlighted the blurring of boundaries between youth and adulthood and the destandardisation of the life course' (Reisinger, 2012: 96). Adulthood becomes something young people practise, perform and achieve at different times in their lives. The 'sociological child' is engaged in the nonlinear but constant process of becoming. This is not an entirely chaotic process; young people are guided by the affordances, constraints and logics of digital technology as it is mobilised in particular fields of practice. The problem becomes accounting for the influence of these fields of practice and how young people respond to it.

## **Methodology**

To operationalise my sociological concept of youth, I focussed on 16 to 18 yearolds who were about to cross the legal boundaries into adulthood. Most of the research cohort was classified by the study's ethical protocol as children. However, a few students were legally adults who could sign their own consent forms. To operationalise SES, I located my research at two contrasting embodiments of the United Kingdom's class system: a state funded higher educational college with a primarily White working class intake from a city on England's south coast (which I

will call Calshot College) and a prestigious private school that has been in central London since the mediaeval period (which I will call the Chancery School). While there were some scholarships available to students with, for example, musical talent, the Chancery School provides an education to children whose parents can afford the school's fees. Fee-paying schools represent 7% of all schools in the United Kingdom. However, they supply 44% and 38% of the Oxford and Cambridge intake, respectively (Social Mobility and Child Poverty Commission, 2015). This system is historically entrenched and therefore situating this research in the context of the United Kingdom's educational system plugs it into centuries of institutionalised class relations. SES was intersected by gender because at Calshot College the group I worked with was a mixed gender class of 14 (who were studying a vocational qualification – BTEC Media – that is equivalent in value to 'A' levels, which are the standard academic qualifications required by universities). And, at the Chancery School, I worked with an ethnically mixed group of 10 young men (all of whom were doing 'A' levels). For each student's parental education and occupation (this offers further, more granular signifiers of the cohort's SES) and their gender and ethnicity, see Tables 1 and 2.

To operationalise a socio-technical concept of digital technology, I began, at each site, with a semi-structured group interview about each group's digital practices, ideas about technology and the topics that interested them that I could subsequently use in my next methodological stage. For example, I asked them to describe the difference between the Web and the Internet, how Google works, and topics in the media they discuss on and offline with friends and family. During my next visit, the students were taken off timetable. I gave them questions to research and discuss that would allow them to engage with 'the social' and 'the technical' simultaneously that were guided by my analysis of their group interviews (I will discuss these questions in more detail in the next section on discourse). To enable me to focus on digital technology's interpretive flexibility, I informed the students they were free to choose their device and search engine and write their own search queries. I then enabled them to discuss with their peers (online and offline) their search strategies, the content they found and their answers to my questions.

I used a mix of methods of data capture to allow me to record what was happening within both modalities. So, while the students were researching their questions online, I used a camera and audio recorder to capture their offline discussions (how they suggested search terms to each other or drew each other's attention to websites and videos etc.), I used a proxy server to record all the http traffic from their laptops or workstations and I captured their browser histories (to look at what was simultaneously happening online), and I created a customised social network news feed that I encouraged the students to use to further discuss my questions. These methods created multidimensional data. For example, before they started using the Web during the study, I asked the students specifically how search engines retrieve and prioritise their results. I then asked them to research, discuss and give me their definitive answers and I recorded the students' search queries and deliberations. When I then looked at their search history, I could see how their understanding of the technology informed their practice.

I operationalised discourses by finding out, in the group interview, about the politicised and controversial issues that interested individuals or groups within the cohort. I carefully worded the questions to encourage the students to engage with discursively constructed truths and their counter-claims circulating online. For example, I asked them the following questions: Is there *any* evidence 9/11 was a conspiracy? Is there reason to doubt the scientific consensus on global warming? Should we have more or fewer restrictions on immigration? Can the last Labour government be blamed for the last economic crash? I also added my own questions to investigate how the students engaged with contested science such as, does aspartame cause cancer? These questions helped me broaden my definition of education to include the informal learning that happens within the interstitial spaces of the formal curriculum in school or college and also at home, among peers and family: offline and online. To get their 'ground truth' judgements and add another dimension to the data, I asked the cohort to answer the questions on paper without consulting their peers. I then asked them to answer the questions again by accessing the Web and to record the sources they considered the most credible. For my research's final stage, at the end of the year, I interviewed all students individually about this research, their digital practices outside school or college and the next stage of their lives. This combination of methods helped me address the social contexts online and offline that simultaneously affect digital data. And, because they offered different perspectives on the same subjects of enquiry, these methods allowed me to critically reflect on how each method shaped the data.

## **Findings**

The data clearly confirm, as well as youth, technology and information, class and gender are not fixed; they all emerge from practice in complex, often intersecting ways that do not transcend their structural contexts. For the purpose of this article, I will focus on class and gender. This is because the data show a theoretically agnostic conceptualisation of SES (which is usually applied in digital inequality research) lack explanatory potential, and I initially underestimated gender in my methodology. This is not a straightforward comparative case study. I was unable to contrast, for example, young women from affluent professional backgrounds with the young women from Calshot College. Nevertheless, the data show the practice of using the Web, attitudes to social media and the utility of web applications; and, engagement with information on the Web often follow the contours of class and gender. The discussion often focuses on social issues such as immigration rather than the Internet usage. This is deliberate; we are unable to understand how people use technology unless we appreciate the political and cultural contexts of their digital lives.

The Calshot students took on average 11 minutes to answer all their questions and the Chancery students on average seven times as long. The first 30 minutes of the Calshot video shows the students sat at their workstations, concentrating on their screen, apparently applying themselves to the task. The proxy logs, however, show during the session most students had multiple tabs (sometimes over 30) open simultaneously as they answered the questions before they went on a game such as

Candy Crush, on Facebook, the Daily Mail's website or YouTube to pursue their own interests. The proxy logs and history files show the students copied and pasted my questions into Google and then copied or paraphrased the answer or even just posted the URL onto their answer sheet. There were exceptions: Sarah, for example, was left behind doing research while the others went to buy snacks (Sarah's presence in the data also has implications for the next section on gender).

The students' response could have been exceptional because they just were not interested in my research. I told them the proxy server was monitoring their clicks but this did not seem to matter. Equally, I was often left alone with the students as their tutor busied herself with admin duties in an adjacent office and, as the video shows, when I left the room there was no change in their behaviour – if they were on a game when I was absent, they were also on a game when I was observing them. To add another analytical dimension to the data, I interviewed the students' course tutor who had worked with them for over a year. She said it was typical for them to go off task and work with lots of distractions. She complained to me of her difficulty motivating the students and keeping them on task. By the end of my research, a couple of students had dropped out of the course. Their tutor told me it was a constant struggle for her and her colleagues to keep the majority of students up-to-date with their attendance and assessments. She was therefore continuously grappling with her students' apparent loose commitment to their course. She commented that their approach to my study was entirely consistent with any of the formal tasks she gave them to progress towards their qualification. Her students, she said, were loquacious in groups but within directed individual activities such as research online, they would aim to do the minimum necessary to meet the task's basic assessment objectives. This would include copying answers from sites such as Wikipedia that satisfied the question's requirements. In the individual interviews, all the Calshot students said how they had learnt to use search engines in school. They said they were given questions and told to find the right answer to achieve the summative assessment grade. The majority of students at Calshot (whether they were conscious of it or not) were 'gaming' the system. But this also meant they were being trained to depend on Google for answers to sometimes complex normative questions.

I turn to Bourdieu's theory here because it gives me the explanatory potential that simply categorising young people from certain SES backgrounds fails to offer. Bourdieu has been criticised for being too deterministic (Jenkins, 1992; LiPuma, 1993; Goldthorpe, 2007). However, such criticism is based on a misreading of his work, particularly his later explanations for educational inequality (see Atkinson, 2012, for a full exposition). His theory helps describe how educational inequality (and subsequent social inequality) is reproduced without characterising young people as passive and predestined to underachieve or simply lacking in certain normatively defined skills. According to Bourdieu, social relations emerge in two forms. First, reified as sets of objective positions that persons occupy (institutions or fields) and which externally constrain perception and action. And, second, they are deposited inside individual bodies in the form of mental schemata of perception and appreciation (whose layered articulation composes the 'habitus') through which we

internally experience and actively construct the lived world (Wacquant, 2013: 2). A field's history, culture, norms and discourses shape its 'logic of practice' (Bourdieu, 1997) or the rules or codes of conduct that we must accommodate into our strategies of social interaction within the field. We operate in a field with an understanding that the struggles for ascendancy in that field are worthwhile. And, fields are 'only fully viable' if this understanding is 'durably embedded in our dispositions, in mostly unconscious ways' (Bourdieu, 1986: 101). This means our on-going tactic commitment to the logic and values of the field is 'layered' into our habitus. Social groups that share similar habitus and trajectories are united by a shared doxa, which has a 'unanimity effect' (Bourdieu, 1997: 110). Doxa also refers to a more field-dependent theorisation wherein doxa is 'commitment to presuppositions – doxa – of the game' (Bourdieu, 1997: 66). In *Distinction*, Bourdieu (1984) continues to see doxic modality as the 'sense of limits' but 'an act of cognition' rather than 'mechanical reflection', it remains 'an act of misrecognition, implying the most absolute form of recognition of the social order' (p. 471). In the discussions in *Invitation to Reflexive Sociology*, different types of doxa characterise different fields, acting to orientate appropriate modes of perception (Bourdieu and Wacquant, 1992: 74). Additionally, Bourdieu also states doxa as the appropriate 'feel for the game' (when habitus and field mutually reinforce one another). Our commitment 'to the game' is contingent on what Bourdieu (1986) calls our 'illusio': a belief the game is worth our investment. Our illusio could be relatively fixed, conditional, transitory, weak or absent depending on how we read or misrecognise our chances of success within the field's struggles for ascendancy.

In Bourdieusian terms, the Calshot student's conditioned response to the logic of practice of the educational field was manifest in their habits and dispositions. By 'gaming the system', I mean their doxic response to the educational field translated into enough engagement to remain enrolled on their course but beyond this their illusio was weak; they did not believe the game's rewards were worth the effort of doing anything more than mechanically meeting its assessment criteria. 'College work' required staged conformity in return for some vague promise of monetisable credentials. This was often revealed during the individual interviews, particularly when I asked them about their post-college plans; many were unconvinced their future lay in education. This echoes Willis' *Learning to Labour* (Willis, 1977) alluded to in this article's title. The difference here was there was no monochrome antagonism to education and Calshot students had, unlike Willis' cohort, achieved good exam results; they were now just doing enough to maintain their current lifestyle somewhere in a zone between the institutional demands of the college (such as attendance and assessment targets) and a fulltime job. So while the reference to 'Learning to Labour' helped gain a more memorable title for this article, Brown's (1987, 1990) concept of 'alienated instrumentalism' of young people doing relatively well in education yet refusing complete commitment is more apt. This is a tactical commitment to the rules of the game tempered by a tacit but considered assessment of their chances of social mobility.

The Calshot students had learnt to use digital technology in this space defined by the tensions between their in/out investments in the educational field: their true doxic investment often lay elsewhere. For example, Craig blogged about gymnastics and tweeted about current affairs, Lizzy used Instagram to curate and display her amateur photography, and Nathan used the Web to participate in a music subculture. Operationalising the 'sociological youth' allowed me to see how young people managed their competing priorities. The Internet's default function for the Calshot students, especially during college hours, was as a customisable media channel supplying information about celebrities or sports that they could discuss offline. Many of them admitted to having Twitter, Facebook and The Daily Mail's website open while they were working and had their smartphones constantly within reach. As Alfie said, 'I mainly have Twitter and Facebook open all the time – when I'm working or whatever I just flick back and fore to check up dates or whatever'.

If they watched documentaries on YouTube or read newspapers or discussed topics on social media, this was learning guided by a curiosity the students withheld from their college work. Our response to the logic of practice of a field is generated by our tacit sense of where we fit within that field. As my different methods substantiated, this, and the way the Calshot students approached the whole exercise, was an expression of their doxic investment in the logic of practice of the field of education as they experienced it.

Given none of the Calshot students said they had ever been classified as top set high achievers, this is unsurprising. The distribution of material resources and immaterial commodities within a field, and how people within the field strategically respond to this distribution of assets within the field is the most powerful arbiter of each field's logic of practice (Bourdieu and Wacquant, 1992). The perceived unequal distribution of ability shapes the educational field's logic of practice in important ways. It is operationalised in schools within curriculum planning, lesson preparation, streaming and setting and so on so that it is naturalised in the logic of practice of the educational field and rarely challenged. Following Bourdieu's theory, this would manifest in young people's dispositions and practices, including their use of digital technology. So, while the logic of practice of the educational field is represented materially, for example, in the stratification of students into ability groups, it also exists immaterially in the minds of individuals: in this case, in the Calshot students' low expectations for my task and their capacity to complete it.

In contrast, from the beginning of my fieldwork, the Chancery students were manifestly invested in the logic of practice of their educational field. They treated the research exercise as they would an exam. There is very little chat on the video and its soundtrack, which is dominated by the sound of keystrokes. Their answers are formal and they use structured arguments, such as Ryan's answer to the question, 'Can be the last Labour government be blamed for the debt crisis? Use evidence from the Web to support your arguments'. The following is an extract from an answer of over 500 words:

Had Labour not recapitalised the banks, there would have been a catastrophic global depression, causing much higher levels of debt and, indeed, destitution as people



would have lost all their savings. Therefore, the last Labour government is not to blame; rather the deregulation of the financial sector and the failure of the neoliberal economic model to provide adequate employment. Despite this unequivocal fact, right wing politicians have sought to blame 'dependent' people on welfare for our debt woes, thus moving society even further in the direction of capital.

The young men took pride in their academic aptitude. My research offered opportunities for them to demonstrate this expertise: to show their ability to think critically and define their epistemological boundaries, and show me that, for example, they knew the difference between scientific facts and pseudoscience. They therefore interpolated my research into the logic of practice of their educational field. This logic of practice defined the utility, value and practical understanding of how to use digital technology. They used digital technology if it helped them in their continuing project of academic self-improvement. For example, Celeb, Tariq and Saul all used Duolingo to improve their language skills and Omar used Quora, Stackoverflow and YouTube tutorials to develop his computer programming. Daniel was earning passive income from tutorials he had uploaded to YouTube; however, he was blasé about its relative importance to his career.

In fact, the boys often rejected normative constructs of a digitally literate young citizen. The evidence suggested these young men were not going to participate in our idealised future of civically engaged networked publics spreading social capital. For example, there was no interest in Twitter; it was referred to as a waste of time and possibly narcissistic. Many of the boys had Facebook accounts, which they used to keep in touch with friends and organise gatherings, but generally they told me it was frivolous distraction from their work. They implied their educational field dominated their digital practices: if it wasn't helping secure a place at an elite university, it wasn't worth doing. This meant some of the students hardly used the Web at all. Tom, for example, who studied Classics, said he relied on books and used the Web for a narrower range of purposes than Omar studying computer science. Without more ethnographic data, I had no way of verifying the young men's domestic practices. If the young men were telling me what they thought I wanted to hear, then they had assumed my values reflected their logic of practice of the educational field. Either way, this logic, was, for these young men, a powerful influence on their attitudes to digital technology.

Because the Chancery students had intuitively or strategically synchronised their habits and dispositions with the logic of practice of their educational field, many of them would experience a natural, frictionless transition from school to an elite university that valued exceptional subject knowledge, a strong work ethic and a commitment to the epistemologies of their academic discipline. They possessed all necessary forms of capital that, in combination, would secure their place at an elite university. Within this logic, there was often little or no imperative to understand or engage with digital technology. This suggests a disjoint between the logic of practice of an elite education that many of our politicians, policy and lawmakers receive and what we are told are the prerequisites for informed digital citizenship.

Would any of the young men be responsible for their self-imposed digital exclusion be disadvantaged by it? This is difficult to say without longitudinal data, but by the end of my research, all the young men had secured places at, for example, Oxford, Cambridge, Princeton and Imperial London (see Table 1). Contrastingly, none of the students in Calshot had believed it was worth their effort applying to a Russell Group university (a self-selected association of 24 public research universities situated in the United Kingdom). The typical approach at Calshot was to semi-commit to another vocational course or apprenticeship and wait and see what came-up. While some of the Calshot students had ambitions to, for example, work in the media or music industry, there was no clear trajectory mapped out for any of them. They could, as one of them did during my research, just as well leave college and begin working in a shoe shop. This, the relative volatility of the two cohorts' prospects, goes a long way to explaining how and why they engaged with digital technology.

The students' response to information on the Web was also discursively constructed through the lens of class. For example, individuals in the Calshot cohort assembled a mosaic news stories, social media memes, and anecdotes and inventions shared by their families and peers to build a discursive, if not always, coherent story that positioned themselves as the indigenous victims of a liberal socio-political conspiracy that privileges immigrants by giving them free mansions. For example, William said, 'We can't afford houses yet we pay for their big houses in Westminster and central London', and Liam said 'There's this like single woman from wherever, I dunno where's she's from, she's from Afghanistan or wherever like that, she got eight children she lives in a four million pound mansion in London'.

Meanwhile, as many of their parents were beneficiaries of the free movement of labour, the Chancery young men saw immigration as a public good that benefits the economy. For example, Ryan argued that 'in the EU it greatly aids business'. He added, 'An immigration cap would slam the door in the faces of skilled workers who help our economy and further scientific progress'. When I asked the Chancery students about conspiracies, particularly throughout history, they often cited examples on the Web that related to their parents' ethnic origin. A Jewish student, for example, described the crisis in Palestine. What both cohorts looked for and evaluated as credible online therefore often chimed with their ethnocentric worldview. Their views about immigration show the information they interacted with and shared online reflected their understanding of how society 'works'.

## **Gender**

Because my methods revealed performative modifications in personas and behaviours, I found class intersected with gendered responses to digital information. There were what Butler (1990) calls 'compulsory frames' evident in what the young Calshot women were permitted to say and do. The video and social network show the girls were able to respond to outlandish conspiracy theories online but only if these were suitably credulous overreactions, and in groups, they were more likely to be talked over or interrupted by the boys. Jessica, for example, was relatively quiet during the group interview and willing to defer to confident,

garrulous males such as Jake, Liam and William. When she contributed, she was hesitant and she only made fairly frivolous comments about how she liked to shop online. The proxy logs show just over 8 minutes into the research exercise, Jessica went off task and started to play Candy Crush. She returned to the exercise to look at number of sites about conspiracy theories in response to William's claims about the power of a secret network called the Illuminati. Further evidence from the other proxy logs, the video and audio recordings of the session show that other students were simultaneously looking at similar sites: especially YouTube. Along with other girls such as Alex and Mel, Jessica can be heard making cries of amazement. She voices her astonishment, for example, that celebrity couple Jay-zee and Beyoncé are apparently active members of the Illuminati. She appears to be deliberately over-emoting to prompt a reaction from her peers. At one stage, on the video, she wheels her chair over to Liam, the group's self-appointed resident expert on online conspiracies, to draw his attention to something she found about the Illuminati. Similarly, on the simulated social network, her contributions are hyperbolic (e.g. Figure 1: Jessica's final comment on the social network).

Only certain behaviour from the girls, such as these above, were permissible, otherwise they invited sanction and reproach – or what Bourdieu calls 'symbolic violence' (Bourdieu and Wacquant 1992: 170). Such, symbolic violence exposes the temporal differences between types of femininity, the practice of femininity and the different values attached to different forms (Skeggs, 2004). Sarah, one of the group's outsiders, experienced the most punitive enforcement of these compulsory frames. Sarah was shy, self conscious, conscientious and invested in her education. But, this contributed to her isolation and very narrow use of digital technology. She told me, 'I use Google for research. BBC for news that's mainly college related. I don't use Facebook or Twitter; I use emails to contact people'. She attributed her reluctance to use social media to anxiety and a lack of confidence. Despite this, on my simulated social network, she challenged Liam about his theory that the World Trade Centre's collapse was a controlled explosion (see Figure 1, Sarah's voice is the first comment which says Liam's claim is 'rubbish'). However, on the video Liam and William round on and attempt to humiliate Sarah before I intervene to prevent any further harm. This prompts a third respondent to say on online, 'Guys don't fight'.

The group situations in Calshot produced an apparent consensus that the Illuminati are real. In private, however, only a few of the Calshot students, especially Liam, told me they sincerely believed that such conspiracies had at least elements of truth. While recognising the limits of the design of this research, I believe some of the responses were gendered and included a performative dimension because Mel, Lizzy and particularly Jessica in her individual interview revealed a more sober and thoughtful persona. She said she did not really believe the Illuminati were a secret, powerful organisation of celebrities. In private, Jessica's other views, especially on social security and immigration, also contradicted the apparent group consensus. I asked her, for example, about coverage of Benefits Street on Twitter (a reality television series about people living on welfare). Jessica said,

I don't think people understood the programme was showing a minority of people in one road there's a lot more people who claim benefits in this country who need to in order to survive otherwise they'll be below the poverty line. People weren't putting that into perspective – they were seeing that and saying that's how everyone is on benefits and we should stop benefits.

In appearing to validate the young men's anti-immigration discourse, many of the other students, including Jessica, read stories about immigration on the Daily Mail's website (Jessica's proxy log data support this). Yet, when I asked her if the Daily Mail's website had convinced her immigration was a threat to English people's jobs (as many claimed in the group interview), Jessica said no: 'People say they are taking our jobs but they are jobs that need doing and there's nobody willing to do them. Especially the dirty jobs no one wants to do' (Jessica had a nighttime cleaning job with her mum). There is of course the possibility that Jessica had carefully configured her responses to what she believed were my ideological sensibilities. She was, however, unaware of my views. The removal of the threat of symbolic violence allowed Jessica to speak more freely; she interpellated this threat into her behaviour. 'Symbolic violence contributes to the "gravity" of a young person's trajectory' (France and Threadgold, 2016: 625). Young people in disadvantaged positions 'consistently show that they reflexively understand their lowly status in social space and make plans to negotiate this' (France and Threadgold, 2016: 625).

Habitus can be classed and gendered: the young women made tacit modifications in their behaviour in different methodological contexts depending on their interpretation of the compulsory frames. In contrast, the boys' views were more consistent across methods. Liam and William in particular dominated conversations; their body language and tone gave the impression of authority, and they were afforded monologues. Therefore, in this local setting, the boys were allowed to dominate classroom relations. The boys were afforded 'the bearing of masculinity' (Lovell, 2000: 17). Their only concessions were to the liberal boundaries or 'political correctness' my presence may have represented. In emulating his favourite Tweeter, Joey Barton, Liam liked to be regarded as a controversial figure who would, as Liam said, 'tell it like it is'. Liam's identity was therefore developing around notions of Englishness – pride in his English identity – that was calling for him to be bold when confronted with 'establishment' thinking and his working model of masculinity was unafraid to issue some home truths. The boys took their fashion cues from men like Barton too: luxury labelled casual sportswear and manicured hair.

This form of masculinity was a world away from the Chancery boys whose haircuts and eyewear suggested they had little regard for trends. However, their masculinity was about a different form of mastery. The Chancery school was adorned with gilded portraits of successful patriarchs, sporting trophies and coats of arms that linked the school mediaeval professional guilds. The sixth formers wore business suits. If the school had what (Reay et al., 2001: location 1.3) was called 'institutional habitus', it was embodied in the boys' mastery of themselves, their academic knowledge and their future careers.

We can see therefore how class and gender and digital technology intersect. At Chancery, the logic of practice of the educational field was synchronised with their masculine achievement culture. Digital technology was either something the boys could effectively co-opt into this project or a frivolous waste of time. At Calshot, they used digital technology to negotiate with the logic of practice of the educational field. For example, they used it to satisfy their tutor, they were meeting their learning objectives. Meanwhile, with a few notable exceptions, they used digital platforms to explore their real interests and identity outside college.

## **Conclusion**

As a consequence of this negotiation, the working class young people in this study relied more on Google for answers than their peers whose parents were from the professional class. This problem was compounded within this study because the majority of the working-class students made little or no effort to verify sources that provided them information. This partly because these students had been conditioned to accept Google's authority but more importantly the information they found took on a social life of its own. The discourses young people encountered didn't respect any boundaries between offline/ online or between different devices and platforms. Information that had a digital source would be shared by word of mouth around college, between friends and family outside of college, by private phone messaging services such as Snapchat, or on Facebook and Twitter. In which case, it would seem pedantic to check information given to them by trusted friends and family. There was no incentive to check sources when the information validated social bonds and in-group status. Moreover, many of the young women in this study received unsolicited directions from young men on how to 'read' such sources. The young women, such as Sarah, therefore had to make an extra effort to then assert their agency by challenging a source's credibility and thereby risk public humiliation.

Alternatively, because they were so invested in the logic of practice of education, the young men at Chancery treated my study as assessment of their ability to think analytically. Their knowledge was, however, highly specialised and attuned the demands of an elite university's selection procedure during which their subject knowledge and cognitive skills would be put to the test. So, they could explain in detail how WiFi works by electromagnetism, but they had no knowledge of how PageRank worked or any knowledge of the Google's other search algorithms such as Hummingbird, Panda, Pigeon, and Pirate. These are widely discussed in the search engine optimisation (SEO) community but, problematically, they remain unavailable for public scrutiny. Ofcom (2016) found recently fewer young people aged 12–15 years trust the BBC than they did last year, and more young people trust Google to deliver facts and news. Yet, despite their impact on many young people's gateway to knowledge, Google's algorithms are rarely, if ever, mentioned in educational contexts.

So if digital practices follow the contours of class and gender, what does this mean? It means, as I suggested in the introduction, Sociology has an opportunity for renewal by redefining the relationship between the micro, meso and macro.

Algorithms, executables, searches, clicks, posts, tweets, likes and so on are micro events that have social consequences at scale of what Bourdieu (1984: 170) calls 'structuring structures' such as class and gender (and, while beyond the scope of this article, this includes race). When Sociology synthesises digital methods capable of capturing these micro events with its sophisticated theories of society and power, it is uniquely equipped to study the architecture of these socio-technical structures.

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