In recent years the social media revolution, alongside a rapid expansion in the prevalence of smartphones that offer mobile Internet, has seen the dawn of an ‘age of interruption’ according to some commentators (Friedman, 2006). There is a constant churn of new research and opinion that tells us how Google is making us stupid (Carr, 2008), or that fifty percent of year ten students feel addicted to the Internet (Walker, 2014), or that our attention span is now shorter than that of a goldfish (Microsoft Canada, 2015). While we may be reading more than ever before, many people are concerned that the type of reading we are doing is less focused and more distracted than it may once have been.

In his book *The Shallows* (2010), Nick Carr outlines a trajectory of the transition from an oral culture to a written one. He describes in detail how language shifted from being purely a spoken medium to a written one, and how once the practice of writing took hold, parchment and scrolls gradually gave way to the codex and then, centuries later, to the book. In early writing, it was uncommon to find spaces between words, as the texts themselves often simply consisted of speech written down. The form of *scriptura continua* was guided by the ears of the scribe rather than by grammatical rules. The lack of spaces between words in written text made reading a cognitively challenging activity, as the reader had to try and figure out how and where one word ended and the next began. Written comprehension was less of a concern than the ‘mellifluous metrical and accentual patterns of pronounced text’ (Saenger
1997, quoted in Carr, 2010, p. 62), since it was the cadence of the spoken text that would be the most significant enabler of the transfer of meaning from the reader to the listener.

By the thirteenth century, *scriptura continua* had largely become obsolete as spaces between words and punctuation had gradually been adopted as a way of writing text. The development of generally agreed systems of word ordering and syntax made texts significantly easier to read, and as a result of the reduced cognitive load involved in reading, texts became more straightforward to comprehend. Readers of much lower intellectual capacities than before were now able to read, and read silently, as vocalisation of the text was replaced by grammatical structure as the main way of communicating meaning.

Carr suggests that this created the conditions that would bring into being the possibility of deep reading as we might understand it today. Deep reading, in his view, is not a natural ability. His contention is that the human brain is pre-wired to be in a state of permanent distraction, and that human perception is always in a state of preparedness for the sort of attack our savannah-dwelling ancestors might once have faced. We are predisposed to notice subtle changes in our surroundings, in case such changes might indicate a new risk or aid to our survival, such as a predator or source of food.

The practice of deep reading, and the ability to ‘lose oneself’ in a text, required training the brain to ignore many of the
stimuli that might distract from such absorption. Furthermore, in the deep reader, control over these distracting impulses is conjoined with an active decoding of meaning and an inwardly focused train of association and construction of meaning. To read deeply was to think deeply, to disengage from the flow of the outer world and focus on an internal mental state of emotions and ideas.

Carr writes that craftspeople, hunters, or ascetics might already have trained themselves to develop a similar capacity to apply the sustained focus required to read deeply, but his argument is that the technology of the book was central to the consolidation and democratisation of these capacities over the following centuries. He also raises the possibility that the increase in silent reading brought about a shift in the way that knowledge was brought into being:

The development of knowledge became an increasingly private act, with each reader creating, in his own mind, a personal synthesis of the ideas and information passed down through the writings of other thinkers. The sense of individualism strengthened. [...] Quiet, solitary research became a prerequisite for intellectual achievement. Originality of thought and creativity of expression became the hallmarks of the model mind. (Carr, 2010, p. 67)

Carr’s approach has been criticised as ‘hyperbolic determinism’ (Wellmon, 2012), in that it ignores that other more distracted forms of reading existed at the same time as the development of deep reading. Technological determinism—that is, claims that technologies affect our lives yet are separate and external
to them—seems compelling in retrospect because it allows the nuances of everyday usage to be glossed over in favour of assumed generalised trends. Determinism downplays the social and historical context of the technology, and assumes that technologies act upon us in ways that bypass our agency.

The model mind, in Carr's terminology, is a term that warrants examination. A model mind is by definition a constructed one. We can only identify a model mind by comparing it with criteria that have been constructed by a range of social forces and influences, and a model mind at this historical moment might not share characteristics with model minds of the past or the future, as the social, economic, and technological relations that produce the norm against which the model is judged shift. A model mind can only be considered to be an exemplar in relation to normative practices of its production.

Jonathan Crary (2000) approaches this topic in detail. He argues that the nineteenth century saw a reconfiguration of the field of attention and distraction, of the relation between a subject and the visual field. As reorganisations of capitalism brought new information sources, stimulations, and distractions into being, models of discipline were developed that formed normative standards of attention. Failures of attention were considered to be a danger in the industrialised settings of the factory floor, and inattentiveness was pathologised as sociopathic behaviour by some writers of the time. These and other developments formed the model of an ideal attentive
subject along lines that were compatible with the sorts of labour that nineteenth century mass industrialisation required. Crary contends that the emergence of distraction as a problem in the late nineteenth century is an effect that is inseparable from attempts to construct an attentive subject.

Mark Weiser, the technologist who coined the term *ubiquitous computing* in the early 1990s, envisioned a future of computing very different from the one we currently inhabit. Ubiquitous computing is a conception of the way that digital technologies would be designed that differed greatly from the digital technologies of the pre-Internet age, and made modifications to the metaphors we would use to understand technology. Rather than multiple users sharing a single ‘mainframe’ computer, Weiser envisaged multiple computers that share us – a plethora of devices that we would carry, wear, or would be embedded in everyday objects. He uses writing as an example of a technology that was at first remarkable, but is now ‘found everywhere from clothes labels to billboards’ (Weiser, 1996), and anticipates that computing will spread in a similar way until almost every object will have computing capacity. This idea has been described more recently as the Internet of Things (IoT).

Weiser saw that the ever-reducing size of electronic components and their decreasing cost would lead to sensors being embedded in all kinds of everyday devices, some more
useful than others. Recent prototypes for IoT products range from those that reduce the complexity of drudging tasks (such as the Amazon Dash Button, a single button device that will instantly reorder household supplies\(^1\)) to those that offer ever dafter and more niche services (such as smart wine bottles, 'personal skincare companions', and smart cooking utensils\(^2\)). Computing would become a background operation, and wouldn’t require the degree of attention that computing in the 1990s commonly required. Weiser described this as calm technology. (1996)

Calm technology, in Weiser's formulation, is distinguished as such by its ability to easily move from the periphery to the focus of attention and back again. By inhabiting the periphery of attention, the user can be aware of the technology and the information or data it produces without these dominating their attentional field. Weiser uses driving as an example to explain this: the driver’s attention might be focused on the road, and s/he might not be explicitly focusing on the sound of the engine – although if the engine makes an unusual noise, this will be spotted immediately. As with Carr’s description of the distracted savannah-dweller, Weiser’s driver uses their peripheral attention to remain alert to what’s happening, and what might be about to happen.

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1. See [https://www.amazon.com/oc/dash-button](https://www.amazon.com/oc/dash-button) for more about Amazon Dash.
2. An entertaining list of IoT projects that have sought and often failed to receive funding can be found at [http://weputachipinit.tumblr.com](http://weputachipinit.tumblr.com).
When we think of today's social media landscape, we might well ask why it is that the challenges that Weiser outlined in the early 1990s seem to have been ignored. Why has calm computing become so distractingly hyperactive and edgy? This is not a question that can be answered in general terms. Different social media platforms operate in subtly different ways, and provide different affordances. Moreover, different users participate in social media in wildly varying ways, from hyper-connected over-sharing to silent lurking.

Nevertheless, one thing that many social media platforms have in common is the organising metaphor of the 'feed' or 'stream'. In the early world wide web of the 1990s, web pages were discrete files that existed as single entities that could be contextually hyperlinked together to create complex interrelated networks of information. Individual users typically hosted web pages on their own servers, such as the now defunct GeoCities. Each of these web pages was an individual file, usually containing text-based information, and despite containing hyperlinks that extend to other sites, the pages themselves were finite. They were similar to newspaper articles or books that could be read sequentially from their beginning to their end. As social media platforms became more prevalent after 2007, their page designs began to be organised differently: as a list of entries ranked by newness, with the most recent at the top. The recentness of the information became the criterion for its presentation, with feeds now updating a stream of fragmentary, user-created content in real-time. A
consequence of this was a transition in design from the finite web pages of the 1990s to a continuous, unending stream (Madrigal, 2013, Derakshan, 2015).

Since the stream has no end, the sense of being able to apprehend it in its entirety is lost. It is in a ‘permanently unfinished’ state (Eno, 1995, quoted in Madrigal, 2013) and has the potential to create a compulsion to try and finish it, to keep checking it in case newer, more important postings have been missed.

Despite the sense that social media is hyperactive and overwhelming, some social media technologies have been described in not dissimilar terms as Weiser. Kate Crawford (2009) refers to something akin to calmness as she outlines particular responses to Twitter in its early incarnations. She recounts an experiment by Jay Rosen in which users of Twitter were asked why they used the platform. A common response was to describe Twitter as being similar to radio – that is, experienced more like an auditory medium than a textual one. She conceptualises this experience of Twitter as ‘background listening’ (Crawford, 2009, p. 528), as a way of keeping in touch with what’s going on by ‘tuning in’ to the chatter and scanning it less attentively at other times. The conversation taking place on Twitter is part of the periphery of attention, only occasionally stepping out of its ambient status into the attentional focus. Crawford suggests that allowing Twitter apps to notify the user of new tweets amounts to a relinquishing
of control on the part of the reader of them, and necessitates a less attentive response. These notifications are distractions that move the experience of Twitter from the periphery to the centre of attention, and must be assessed for importance before being relegated to the periphery once more. This way of attending to notifications would seem to be a coping strategy: the sheer quantity of chatter, distraction, and updates might be overwhelming if it was all attended to in full.

It should be noted that the social media platforms under discussion here are not neutrally owned public services, nor are they personally owned websites maintained by their authors, as were the GeoCities sites of the 1990s. They are operated as large-scale businesses that seek to profit from enabling their users to communicate. As Clive Thompson has noted, social media services have business models that are built on advertising, and he suggests that this might be why they have been designed to ‘peck at us like ducks’ (Agger, 2013). The more these sites nag at us, the more we are taking in the advertising messages they carry, even if only peripherally. This indicates that the data that gets transmitted between users and devices is not carried on ideologically neutral wires.

Additionally, current Internet of Things application programming interfaces (APIs) are mainly owned and operated by proprietary, privately run companies. Services like IfThisThenThat (IFTTT) make it easy to control hardware such as Philips Hue Personal
Wireless Lighting systems or Nest thermostats from emails, tweets, or other existing online services. Of course, the processing of this conversion happens on IFTTT’s servers, and they are, to an extent, harvesting the data that passes through their systems in a similar way to other social media platforms. Developer resources such as Temboo work similarly, offering more detailed and technical methods for device interaction for a fee, or without charge for a limited amount of usage and in return for the data a user might generate.

While these services permit the exchange of data with fewer obstructions than before, this comes at a cost to our privacy and our security. If an Internet-enabled door locking system is hacked, the consequences are fairly obvious, but the privacy consequences of private companies inserting monitoring devices in our homes are less clear and more uncomfortable (Crossley, 2015). These are consequences of social media and the Internet of Things that we are being invited to ignore, instead revelling in our delighted seduction at their tricksy life-simplifying powers.

Contributing to a feed involves sharing information of some sort. Evgeny Morozov (2012) discusses Facebook’s adoption of the idea of ‘frictionless sharing’, noting that the social network is keen to get us to share as much information about ourselves

3. See https://ifttt.com/channels for their extensive list of controllable ‘smart things’ and a list of recipes that can be used to do so.
4. See https://www.temboo.com for more about Temboo’s API.
as possible, and is reducing barriers to sharing to the extent that in many cases, sharing becomes automatic. There are clear assonances between ‘frictionlessness’ and the invisible information exchanges that IoT devices conduct beneath the thresholds of our attention.

Like the grinding gears of a faulty engine, friction grabs the attention. If a user has to go through various steps to share information about his/her music listening preferences, films s/he has watched, or books s/he has read, the process takes longer, and this introduction of time and effort into the process increases the risk that s/he might not bother. This risk is minimised if the sharing is done via a single click, or better, automatically. This type of design approach has been used in more or less ethical ways, for example in the deployment of ‘dark patterns’ to trick users into unwittingly sharing information, or spending more than they intended to (Brignull et al., 2015). This emphasis on sharing as a key factor in how the world is experienced contrasts sharply with Carr’s model mind or Crary’s attentive subject, for whom quiet, unconnected solitude was a prerequisite for deep thought.

Many smartphones and mobile devices have a feature sometimes called ‘flight mode’ but more often described as ‘airplane mode’. This is a way of switching off the functions in the device that use radio technologies, such as Wi-fi, Bluetooth,
and cellular network connectivity, so that there can be no chance of interference with the navigation devices found in commercial aircraft. While there is debate about whether the short-range signals created by cell phones actually do have a bearing on the safety of the radio systems on aircraft, airplane mode offers a way of disconnecting the device from the network and removing the possibility of distraction arising from text messages, emails, or social media updates.

If used when not in flight, airplane mode is a way of fully withdrawing from the online world, and on the face of it this might seem like an attractive idea. Many of the articles that are written about our seemingly information-overloaded state urge us to return to the real and to forego the virtual. The idea of ‘digital detox’ has gained traction (see, for example, Chatfield, 2015 or Collins, 2014), and we are often led to believe by its proponents that by reducing our access to digital devices, something lost will be regained, some sense of authentic realness that virtual interactions lack will bring us back to a feeling of relaxation and wholeness. We will once more enjoy real conversations with real people, and will be able to find our ‘true’ selves again.

This viewpoint ignores the fact that our everyday interactions occur both online and offline, and that the fabric of our everyday communicative landscape comprises both these modalities. To see online and offline communication as separate is to engage in what has been described as digital dualism (Jurgenson, 2012).
If connected and online communications are considered to be qualitatively lacking in reality, then this leads to a fetishisation of offline life:

The man with the IRL fetish rubs himself up against the exposed brick wall of a loft in order to feel something. At 5 PM he makes a show of ‘logging off,’ heads out into the world where he aims to cop a feel of the authentic. (Kieles, 2015)

‘Copping a feel of the authentic’ presupposes that there is a clear and unbridgeable distinction between authentic offline and inauthentic online experience, rather than taking into account the possibility that the two have an interrelated, symbiotic existence. Jurgenson (2012) writes:

We have come to understand more and more of our lives through the logic of digital connection. Social media is more than something we log into; it is something we carry within us. We can’t log off.

Entering into a permanent state of airplane mode, then, is not unlike entering airspace itself. The process of airport check-in and security, which in the 1950s was so light-touch that you could walk straight onto an aeroplane with your baggage, has gradually accrued more and more staging posts, and is now subject to ever-greater friction. To pass through this process is to submit to the searching, checking and authorisation of possessions, documents, identities, and bodies. The essential freedoms that come with citizenship are temporarily curtailed in the police state of air travel. In order to feel safe, we
permit ourselves to be temporarily placed into a condition of subjection, and for authoritarian power to be exercised upon us. We check out of everyday life, and into a condition that has a different set of controls and compromises to our agency and freedom.

Similarly, full withdrawal from the connected world is a brute exercise of power that denies us all of the conveniences, affordances and freedoms of digital communications. Instead, we can and do engage in a range of ‘disconnective practices’ (Light, 2014) that allow us to enjoy different shades of distance from the distractions of social media at different times. These practices might range from ‘unfriending’, to the temporary suspension of an account, to deleting a profile, to simply not replying. It is perhaps in these gradations of disconnection, and in our ongoing play with the affordances of digital devices and social media, that the value of distraction can be found. Perhaps it is a way in which we can exercise our power to dart between the multiplicity of our mediated interactions, deploying varying depths of reading, and perhaps this approach to the management of our attention might qualify as a new and valuable type of readership.
Bibliography


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