

**The Heart's Content:
Media and Marketing after the Attention Economy**

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Abstract

The Heart's Content: Media and Marketing after the Attention Economy

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Capturing user attention and selling it to advertisers has long served as the basic economic model for online media. In this thesis, I investigate these companies' growing desire to go deeper—to plumb their users' hearts and minds, to transform their emotions into quantifiable data, and to sell those feelings to marketers. To shed light on the recent history of this trend, I take up the website Upworthy as a key case study in online publishers' efforts to negotiate an attention economy in flux. By analyzing the evolving methods Upworthy used to capture, measure, and sell reader attention to clients, I trace their audience engagement and revenue generation strategies along a trajectory from attention to emotion to empathy. As the attention economy becomes more complex, the perceived need to monitor and measure the psychological, emotional, and affective dimensions of user engagement grows. Biometric emotion-detection technology provides a means to examine the ramifications of these proliferating forms of psychological surveillance and datafication, including their potential to reinforce hegemonic emotional norms. Finally, with the possibility of what I call the “empathy economy” on the horizon, I consider empathy's political implications, the intimate data and sensitive technology that such an economy would require, and the forms of emotional commodification, standardization, and optimization it could engender.

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Chapter 1 / Introduction

To say that Facebook had a rough time in 2017 would be an understatement. The months following Donald Trump’s election in the US were marked by continual revelations about Facebook’s vulnerability to fraud, exploitation, and manipulation by malicious actors, be they entrepreneurial Macedonian teenagers or Kremlin-funded professional trolls.¹ The accretion of these stories made the social media platform and its CEO, cofounder Mark Zuckerberg, the target of an array of damning charges, including the suddenly not absurd possibility that the ease of gaming the company’s advertising-and-engagement-dependent revenue model was contributing to the destruction of democracy.² Some of Facebook’s peers in Silicon Valley—especially Twitter and Google—faced similar denunciations, but Zuckerberg’s willingness to publicly agonize over the direction his company and its massive user base is headed appears to be unique (as does the propensity for former employees and associates to just as publicly condemn the company).³

And so, like many of us facing a new year, Facebook promised to change. Instead of splitting society into atomized groups, trapping users in politically polarized filter bubbles where bias-confirming fake news could run rampant, Facebook would seek to bring people closer together. To do that, each user’s News Feed would favor content from family and friends, rather than third-party publishers, especially posts “that spark conversations and meaningful interactions between people.”⁴ Facebook’s concern with the worthiness of user experience on the platform aligned with other recent efforts to demonstrate that the company empathizes with and cares about its users.

Facebook’s interest in user emotion isn’t new. But their most prominent previous foray into studying it proved controversial. An experiment gauging the mood-altering effects of manipulating the content in people’s feeds, which they carried out without informing the

¹ Thompson and Vogelstein, “Inside Facebook’s Hellish Two Years—and Mark Zuckerberg’s Struggle to Fix It All.”

² Ingram, “Facebook Says It Can’t Guarantee Social Media Is Good for Democracy.”

³ Zuckerberg, “Building Global Community”; Vincent, “Former Facebook Exec Says Social Media Is Ripping Apart Society”; Bilton, “‘What Have I Done’: Early Facebook Employees Regret the Monster They Created.”

⁴ Mosseri, “News Feed FYI: Bringing People Closer Together.”

participants, stands as a paradigmatic example of a large tech company demonstrating a shocking lack of empathy.⁵ Striking a less sinister tone, in December 2017 Facebook researchers David Ginsberg and Moira Burke published a summary of academic research about whether or not social media is harmful to its users' well-being.⁶ Somewhat surprisingly, they acknowledge that using Facebook can negatively affect your mental health (of course, the earlier study had implied as much). Perhaps more predictably, they found that the solution was to put more passion into your Facebook usage. Those users who experience negative emotional effects, they contend, are not truly engaging on the platform. Suffering users only passively read or post; they don't interact with their communities. As the coauthors conclude, "our research and other academic literature suggests that it's about *how* you use social media that matters when it comes to your well-being." In other words, according to Facebook, simply *paying attention* to social media may in fact be harmful; the quality of attention matters more than the quantity.

Whether Facebook will maintain this commitment to empathy, emotional well-being, and "meaningfulness" over capturing attention remains to be seen. But there is already preliminary evidence that the announcements and News Feed changes signal a different approach, reflected in a noticeable drop in the amount of time users spend on the platform.⁷ Of course, most corporations have a compelling interest in their customers not thinking their products are destroying society or their own mental health, but Facebook's users are not its customers—advertisers are. The basic business model for Facebook has been that advertisers pay for access to and information about the platform's users. And the fact that Facebook's continuing financial success is dependent on its capacity to bring in advertising revenue makes the company's decision to stop maximizing user attention by any means genuinely risky.

But much like how the antidote to the negative psychological costs of social media is not to cease using it but to use it better, the solution to the unwanted consequences of an attention-centered model of advertising-dependent online media isn't to abandon the practice of attracting attention but to produce richer forms of it. How much better for Facebook to offer their clients the reassurance that the attention their ads receive is generated in a context that users feel good

⁵ Kramer, Guillory, and Hancock, "Experimental Evidence of Massive-Scale Emotional Contagion through Social Networks."

⁶ Ginsberg and Burke, "Hard Questions: Is Spending Time on Social Media Bad for Us?"

⁷ Flynn, "Facebook's Traffic Is down 50 Million Hours per Day as Zuckerberg Demands Fewer 'Viral Videos.'"

about, where they are making meaningful connections with people they care about, and where their experience is emotionally intense but positive. If measuring only how often or for how long a user is exposed to content—whether user-generated, third-party, or advertorial—has pushed society in a dangerous direction, perhaps platforms, advertisers, and content creators should look more closely at what that user is thinking and feeling during exposure. And since advertisers value deeper information about their potential customers, there's no need to assume de-optimizing attention will result in the loss of revenue in the long run.

Facebook isn't the first company to respond to the challenges of the attention economy by pivoting to empathy. The once massively popular online publisher Upworthy prefigures their trajectory, exemplifying a trend in the digital media ecosystem of turning from an overwhelming concentration on attention—registering the conscious presence of a user—to a more holistic interest in consciousness. This switch in focus is represented discursively through the elaboration of concepts like engagement, user experience, emotion, and a growing enthusiasm for empathy. In the next chapter, I delineate this pattern by tracing Upworthy's evolution as they move from the pursuit of mass attention to the cultivation of emotionality and empathy in response to revenue demands and the capricious values of Facebook's algorithms. The perceived need to monitor and measure the psychological, emotional, and affective dimensions of user engagement fuels the desire to perfect and proliferate emotion-detection technology, which is the subject of chapter three. In the conclusion, I ask what might come after the attention economy—could an “empathy economy” be next?

Attention

The idea of an economy organized around attention has a rich history. As James G. Webster has noted, media studies research into the implications of this idea has generally followed two tracks: attention at the individual level and public attention, which encompasses the social and economic aspects of collective attention.⁸ This binary can be useful analytically, but the distinction doesn't hold within the attention economy itself, where the recording of individual acts of attention is incorporated into projects working at the mass level. Google provides a useful example. The uniqueness of individual user data—made from distinctive behaviors like search terms and our

⁸ Webster, *The Marketplace of Attention*.

movements through the physical world—is an important source of profit, but that information is also aggregated into “big data” and put to an expanding and increasingly valuable multiplicity of uses.

Within media studies, those pursuing the individual track have been concerned with what Jonathan Crary identified as a modern “crisis of attention,” brought about by capitalism’s overabundance of distractions competing for humans’ limited time and mental stamina.⁹ These thinkers largely focus on the psychological or neurological aspects of how humans select and process the troves of information available to us. This track is perhaps best represented by N. Katherine Hayles, who advances “the hypothesis that we are in the midst of a generational shift in cognitive styles” from deep to hyper attention that is particularly evident in educational settings.¹⁰ Finding both styles to be helpful in different situations, Hayles avoids the tendency toward moral panic that characterizes alarmist takes on the cognitive effects of new media technologies.¹¹

The study of public attention can take numerous approaches (indeed, one could frame media studies in general as a study of how people allocate their attention) and often takes into account micro-level concerns. Economist Herbert Simon’s 1971 paper “Designing Organizations for an Information-Rich World” is often cited as a key originating point.¹² Simon’s famous observation that in a world where information is abundant, attention should be seen as a limited resource is an elegant summation of the basic conceptual foundation of the attention economy.¹³ Most relevant to my research are critical analyses, grounded in a political economic perspective on communications,¹⁴ of the commodification or exploitation of attention that undergirds the relationship between the media and marketing industries. Dallas W. Smythe’s idea that “the mass media audience is a commodity and that audiences ‘work’” when they spend time consuming media and advertorial content is an important touchstone.¹⁵ Smythe’s theories resonate strongly in the current era of nominally “free” digital media that extracts and sells as much data about its

⁹ Crary, *Suspensions of Perception*.

¹⁰ Hayles, “Hyper and Deep Attention.”

¹¹ See, for example, Nicholas Carr’s *The Shallows: What the Internet Is Doing to Our Brains* (2010).

¹² Citton, *The Ecology of Attention*; Webster, *The Marketplace of Attention*. As Citton points out, Gabriel Tarde’s work at the beginning of the twentieth century is an important and much earlier antecedent.

¹³ Simon, “Designing Organizations for an Information-Rich World.”

¹⁴ Mosco, *The Political Economy of Communication*.

¹⁵ Smythe, *Dependency Road*, 22.

users as possible. Similarly prescient, given online media's burgeoning interest in emotionality, is his argument that the two-fold purpose of media content is a) to attract and keep the audience's attention so that advertisers can access them and b) to "cultivate a mood conducive to favorable reaction to the advertisers' explicit and implicit messages."¹⁶ As camouflaged marketing practices like product placement, native advertising, and sponsored content dismantle the distinction between advertising and non-advertising content, and the prospect of household and personal devices incorporating mood-detecting technology beckons, Smythe's work appears perceptive.

Echoing some of Smythe's apprehensions, legal scholar Tim Wu's *The Attention Merchants* is a polemical account of the history of "the game of harvesting human attention and reselling it to advertisers," illustrating how, over the course of the twentieth century, "each new medium would attain its commercial viability through the resale of what attention it could capture in exchange for its 'free' content."¹⁷ Befitting for a lawyer, Wu is less troubled by structural economics and more by how the terms of this "bargain" are deliberately obscured from the attentive party, by the attention merchants' consistent encroachment into previously sacrosanct private spaces (TVs in the home, laptops at the dinner table, smartphones in the bedroom), and by the lack of institutional protections for our personal resources of attention.

James G. Webster offers a more measured account of how media compete for audiences in the "marketplace of attention," which he conceives of as composed of the interplay of users, media, and metrics.¹⁸ In contrast to a thinker like Smythe, Webster takes pains to resist the determinism that focusing on media power and structural inequity can engender. He turns to sociologist Anthony Giddens and his theory of "structuration" to argue that while media companies do constrain users in structures, media structures also change in response to user actions (and so on in a feedback loop). In the digital media environment, metrics of attention are often the vehicle through which user feedback is communicated.

However, as Jonathan Beller argues, looking at something—paying attention to it, whether a media production or a celebrity—confers value on it, and metrics are key to that process online.¹⁹ Tiziana Terranova contends that applying Herbert Simon's abundance-and-

¹⁶ Smythe, 38.

¹⁷ Wu, *The Attention Merchants*, 6.

¹⁸ Webster, *The Marketplace of Attention*.

¹⁹ Beller, "Paying Attention."

scarcity model to the web reintroduced neoclassical economics to the so-called new economy. Going further, she argues that the attention economy model provided capitalists with a way of rendering the heretofore undefined space of the internet into “an economic medium again, that is, a medium to which all the axioms of market economics can once again be applied.”²⁰ For Terranova, attention has grown beyond its status as a commodity. Thanks to networked computing, attention has become a kind of capital, which, after being measured and massed, can be financialized (e.g., bid for in Google’s ad network).

Cultural theorist Yves Citton warns that the economy metaphor provides a “narrow and distorting perspective” on attention.²¹ Thinking of attention in economic, transactional terms (*paying* attention, *investing* it, *spending* time, etc.) cannot help but cast humans in economic terms as rational individuals who go about consciously allocating their attention at their own discretion. When contemplating how humans decide what to attend to, better to think in more expansive, ecological terms:

The *biophysical* ecology of our environmental resources, the *geopolitical* ecology of our transnational relations, the *socio-political* ecology of our class relations and the *psychic* ecology of our mental resources all depend on the *media* ecology that conditions our modes of communication.²²

For Citton, the concept of an attention ecology bridges the gap between the individual and public perspectives, broadening and recontextualizing the metaphor of attention as a natural resource. At the individual level, attention is limited and competitive—we only have so much of it and we direct it to certain objects at the expense of other objects. At the collective level, attention is familiar and social—we pay attention to objects we recognize, and our attention is drawn to objects that have already captured others’ attention. The two levels feed back into each other in a media ecosystem that we live within and belong to (as opposed to the media doing things *to* us).

Citton’s holistic view is powerful and persuasive, and one could argue that indulging the economic view of attention helps to perpetuate the degradation of attention inherent in its commodification. However, even though the theoretical framework of an attention economy cannot account for the genuine depth and complexity of attention, the abstraction guides the

²⁰ Terranova, “Attention, Economy and the Brain,” 2.

²¹ Citton, *The Ecology of Attention*, 21.

²² Citton, 23.

media and marketing companies that create so many of the objects of our attention and are the subject of this thesis. Indeed, despite his dissatisfaction with the economy metaphor, Citton also maintains that it is vital to understand how attention is regarded by contemporary capitalism. In this age of “attentional capitalism,” he asserts, money and attention flow together and, echoing Terranova, the mass media act as banks and stock exchanges for accumulated attentional capital. As I contemplate a shift from attentional capital to emotional, Citton’s critique of the limitations of the economy model is vital. What will be lost as media and marketing companies attempt to commodify even more intimate and complex aspects of our psyches?

Emotion

In their critique of the attention economy as it is represented in business literature, Patrick Crogan and Samuel Kinsley note, like Yves Citton, that “attention is implicitly figured in all of these accounts as a largely rational, and entirely conscious, capacity.”²³ However, many of the media actors who intervene in the attention economy, including Upworthy and Facebook, explicitly approach attention as frequently involuntary, socially contagious, and emotionally inflected. As Tiziana Terranova puts it, “paying attention in a socially networked environment, then, exposes the paradox of a self-interested, calculative subject who is, however, at the same time also exposed to the inhuman forces of mimesis and contagion.”²⁴ As I will discuss in chapter three, despite economic discourse that frames consumers as dispassionate decision makers navigating the market rationally, marketing practitioners have long lacked faith in the idea that consumers rely solely on reason. To understand the mysteries of how and why consumers consume, the marketing industry has increasingly turned to the work of psychologists and neurologists studying emotion and affect.

Communications researchers have often shared these impulses. As historian Brenton Malin notes, early in the twentieth century, scholars of psychology and communication collaborated on new technologies to study emotion and “worked with private companies and the government to improve the marketing, publicity, and other effects of media.”²⁵ The biometric devices they devised hold the same appeal as today’s networked emotion-detection technology:

²³ Crogan and Kinsley, “Paying Attention,” 6.

²⁴ Terranova, “Attention, Economy and the Brain,” 9.

²⁵ Malin, *Feeling Mediated*, 17.

“The new media technologies made emotions *tangible*, the argument went, allowing them to be captured and transmitted with a new kind of power.”²⁶ This intersection between the power of media effects and the mysterious workings of human consciousness found enduring life through what Charles R. Acland calls “the subliminal thesis,” which posits “that below consciousness is a wild and impressionable creature that can be reached through messages that we cannot perceive.”²⁷ While fears of subliminal messaging may have subsided in this century, similar ideas (or desires) about marketing’s capacity to influence consciousness recur in contemporary neuromarketing, which first garnered popular attention by positing the existence of a “buy button” in the brain.²⁸

Other scholars’ work on affect and emotion connects strongly with the notion of attention as capital in an economy. Sara Ahmed, for example, investigates how emotions are represented and circulated.²⁹ She conceives of emotion and affect as “sticky”—as in, affect sticks to objects and circulates with them rather than is a quality inherent to those objects—an idea that resonates with the process of emotional datafication, where feelings are rendered into metadata and tagged to pieces of media content, online social interactions, offline experiences, and one’s movements through the physical world.³⁰ Mark Andrejevic and Patricia T. Clough have also discussed affect as a form of capital—a resource to be accumulated and managed, particularly by media companies.³¹ More broadly, sociologist Eve Illouz identifies a trend in twentieth-century sociality that she names emotional capitalism, which is “a culture in which emotional and economic discourses and practices mutually shape each other, thus producing what I view as a broad, sweeping movement in which affect is made an essential aspect of economic behavior and in which emotional life . . . follows the logic of economic relations and exchange.”³² Tracing the history of mutually influential psychoanalytical and market discourses, Illouz claims that, in contemporary capitalism, “emotions have become entities to be evaluated, inspected, discussed, bargained, quantified, and commodified.”³³

²⁶ Malin, 198.

²⁷ Acland, *Swift Viewing*, 41.

²⁸ Blakeslee, “Is There a ‘Buy Button’ in the Brain?”

²⁹ Ahmed, *The Cultural Politics of Emotion*.

³⁰ Ahmed, “Happy Objects.”

³¹ Andrejevic, “The Work That Affective Economics Does”; Clough, “Affect and Control.”

³² Illouz, *Cold Intimacies*, 5.

³³ Illouz, 108.

Emotion also resembles attention in that it can be understood at an embodied, individual level or at a social, public level; though they are perhaps more difficult to separate analytically. For Brenton Malin, emotions are always a mix of public and embodied. He writes that, “emotions, as we experience on a daily basis, are not merely tools we employ or states we endure, but a complicated and shifting terrain of bodily and public discourses that situate, reproduce, and disrupt our communicative and cultural activities.”³⁴ These discourses wield power, and Malin borrows the term “emotionology” from historians Peter and Carol Stearns to designate prevailing norms for the expression of emotion (in other words, ideas are to ideology as emotions are to emotionology). Studying emotionology “is thus to interrogate the spaces and possibilities of feeling at a particular historical moment, to understand the emotional standards resonating within and around particular institutions and cultural practices.”³⁵

The structural forces that work to create, disseminate, and support emotionology bring me back to Dallas Smythe and his adoption of the term “consciousness industry.”³⁶ Smythe uses the phrase to designate the amalgamated and mutually codependent mass media and marketing industries whose “product” is demand for consumer goods. According to Smythe, “consciousness is the total awareness of life which people have. . . . It grows and decays with the interaction of doing (or practice) and cognition over the life cycle of the individual in the family and other social formations. It draws on emotions, ideas, instincts, memory, and all of the sensory apparatus.”³⁷ Smythe’s “total awareness of life” resonates with Yves Citton’s ecological perspective, but Smythe isn’t exclusively focused on attention. Thinking of the media and marketing industries together as the “consciousness industry” thus allows for a broader understanding of how they attempt to interpret, influence, and profit from the ways human beings encounter the world and process those experiences. Observing how these intertwined industries search for new ways to plumb individuals’ mental states, affective responses, and social interactions, I find the idea of a “consciousness industry” has taken on fresh relevance and encompasses a fuller range of media and marketing practices aimed at our hearts and minds.

³⁴ Malin, “Communication with Feeling,” 217.

³⁵ Malin, 218.

³⁶ Smythe, *Dependency Road*. Smythe borrows the term from the writer Hans Magnus Enzensberger.

³⁷ Smythe, 271.

Data

For economies of attention or emotion to function, a common currency is required. Data provide the medium of exchange. In the pre-digital model of advertising, advertisers needed proof that audiences were paying attention to their messages; agreeing on the size and demographic characteristics of those audiences was necessary to establish their price. These needs led to newspaper and magazine publishers estimating and tracking circulation figures and radio and television broadcasters developing various ratings systems, such as Nielsen ratings. Under the broadcast model of media dissemination, these audiences were largely constructed through estimations or even intuitions about people's exposure to media products. Newer audience measurement systems (to borrow Philip Napoli's term) take advantage of interactivity to rationalize audience data and provide media producers with a much more detailed view of their audiences, with the result that "the more uni-directional approach to the relationship between media and audiences that took hold during the growth of traditional mass media through the twentieth century [is] being undone."³⁸ Key to this new paradigm is a shift from metrics that merely measure contact to ones that seek to capture a fuller picture of user experience.³⁹

Furthermore, audience data is not just useful as the basis for advertising prices; it also provides insight into consumer preferences and desires, whether it's aggregated and analyzed to define new demographic categories or compiled into individual consumer profiles.⁴⁰ The increasing detail of those profiles has fueled the rise of microtargeting. Political scientist Lance Bennett theorized this development as the "one-step flow" model of communication, wherein media companies, marketing firms, and political organizations have become so effective at targeting individuals with messages directly that mass communication now bypasses social mediation.⁴¹ The monetization of celebrity influence and other phenomena made possible by the rise of large social media networks present challenges to Bennett's model.⁴² Nonetheless, the desire to tailor communications individually, especially in advertising, thrives.

In order to create bespoke advertising, firms must know something about the individuals they wish to target. This need has led to the ubiquity of what is known as *dataveillance*, the close

³⁸ Napoli, *Audience Evolution*, 13.

³⁹ Cherubini and Kleis Nielsen, "Editorial Analytics."

⁴⁰ Turow, *Niche Envy*.

⁴¹ Bennett and Manheim, "The One-Step Flow of Communication."

⁴² Tufekci, "Not This One."

monitoring of our online behavior—for example, what we click on, look at, purchase, or communicate—so that advertisers can serve us appropriate messages (including such “advertising” content as sponsored search results or social media posts).⁴³ With the advent of mobile technology, the distinction between monitoring online and offline behavior has become nearly insignificant. Another new development in microtargeting is programmatic advertising, which entails the software-assisted matching of users with appropriate ads nanoseconds after they arrive to a publisher’s website or page of search results. This process is now automated to such an extent that not a single human might be involved in selecting the ad or choosing what context to place it in; instead, the system relies on coordination among publishers and platforms, advertisers, and third-party advertising networks, all of whom have developed tools to surveil and profile users.⁴⁴ Some scholars are alarmed by the rise of these data collecting regimes, arguing that their increasingly sophisticated and hidden techniques of surveillance, the nonconsensual commodification of user data, and the leveraging of enormous quantities of population-wide data (i.e., “big data”) are all done in order to exploit and control people.⁴⁵

The ideological foundation for these forms of surveillance and marketing is what José van Dijck terms “dataism”—the conviction that anything we do online can be converted into quantifiable data (i.e., *datafication*), and that data is inherently objective if inevitably inadequate.⁴⁶ Better metrics can always be found; human behavior can always be quantified in finer-grained ways. Van Dijck’s work connects with others who take a similarly expansive and critical view of big data’s mythological power,⁴⁷ which is bolstered by the assumption that ideologically innocent data requires interpretation rather than is always already interpreted.⁴⁸

As I will show, both Upworthy and emotion-detection technology depend on and work to support the belief that intangible feelings and mental states can be perceived, quantified, and analyzed—and, crucially, thereby turned to profitable use. For my skepticism of dataism isn’t grounded in humanistic revulsion at the idea of quantifying the unquantifiable, but in awareness that datafication smoothly enables commodification. In their analysis of the affective culture of

⁴³ van Dijck, “Datafication, Dataism and Dataveillance”; McStay, *Digital Advertising*.

⁴⁴ McStay, *Privacy and the Media*.

⁴⁵ Andrejevic, “The Work of Being Watched”; Tufekci, “Engineering the Public”; Zuboff, “Big Other.”

⁴⁶ van Dijck, “Datafication, Dataism and Dataveillance.”

⁴⁷ boyd and Crawford, “Critical Questions for Big Data”; Couldry, “Inaugural: A Necessary Disenchantment: Myth, Agency and Injustice in a Digital World.”

⁴⁸ Gitelman, “*Raw Data*” *Is an Oxymoron*.

emojis, Luke Stark and Kate Crawford contend that, “these graphic forms are exemplary of the tension between affect as liberating human potential, and as a productive force that the market continually seeks to harness through the commoditization of emotional sociality.”⁴⁹ How much more tense will we feel if the market commodifies the spontaneous smiles on our faces, rather than the smiley faces we consciously choose to communicate?

In his landmark text *The Political Economy of Communication*, Vincent Mosco, careful to avoid giving the impression that the abstractions of political economic theory can account for the totality of human life, suggests that intimacy is as an important alternative to the commodification process. Writing in 2009 he states that, “processes based in private life are typically affective ones that center around identity formation, friendship, and kinship. The emphasis is placed on how people and objects, both material and symbolic, are valued as ends in themselves and not for their market value.”⁵⁰ While Eve Illouz would counter that market values began to shape our interpersonal relationships well before the internet existed—though online dating provides particularly compelling proof of the marketization of romance—the datafication of our involuntary, momentary, and unconscious emotions and affects would indeed extend commodification into a new realm.

Thesis Overview

In the next chapter, I examine the website Upworthy as a case study for examining the tactics and strategies digital media producers have developed and deployed in order to succeed within—and to change the parameters of—the attention economy. Upworthy begins with a pronounced interest in attention, claiming that their mission as content aggregators and producers is to spotlight issues and stories that matter. That concern endures, but as their capacity to generate mass attention wanes, their discourse turns to emotionality and empathy. My aim in recounting Upworthy’s history is to shed light on how digital media got where it is today—to trace its recent history in order to understand our present moment. In chapter three, I look to where digital media is headed. Taking the “emotion-detection” technology produced by the firms Affectiva and Emotient as my starting point, I explore the marketing industry’s longstanding but growing desire to collect quantitative data about our mental states. This desire has driven the development

⁴⁹ Stark and Crawford, “The Conservatism of Emoji,” 2.

⁵⁰ Mosco, *The Political Economy of Communication*, 148.

of biometric techniques for consumer surveillance. And, in turn, the availability of these technologies has inspired the corporate imagination to speculate about and pursue new ways of monitoring, measuring, and optimizing our emotions, affects, and moods in a growing range of social contexts.

My study of Upworthy, Affectiva, and Emotient draws on their official discourse as well as on public accounts of their corporate histories and journalists' interviews with their principal managers. Digital media products—whether websites or software—are often highly iterative and tend to shift and rapidly change over time; they can also be heavily personalized. For example, an individual reader could access Upworthy directly on their website—which, as I will discuss, has always used optimization and testing software, meaning there is no “master” version of any of their stories—or through their personalized Facebook or Twitter accounts. This ontological mutability presents a challenge to studying algorithmic media like Upworthy as an object, which the more readily archived and fixed discursive materials help to overcome.⁵¹ Company blogs, press releases, journalistic accounts and interviews, and the disclosures contained within official patent filings can all be subject to analysis to discern these companies' values, goals, and strategies.⁵²

A particularly rich source of data is Upworthy's behind-the-scenes blog Upworthy Insider, which I draw on extensively and warrants additional discussion. Launched in May 2012 (two months after the main website), the blog provides insight into the company's overall strategy for building their audience and gathering data about them and into the specific techniques and metrics they deployed and developed. The Insider began on the free blogging platform Tumblr (upworthyinsider.tumblr.com; all posts through October 21, 2016 remain available at this URL), but it has since moved to another free blogging platform, Medium, (blog.upworthy.com) where posts have slowed to a trickle, with only three being published in 2017. The Insider exists to serve a range of interests: promoting the Upworthy brand in the expected public-relations fashion; expounding on the company's philosophy; reviewing and highlighting successes; explaining changes to the design, shifts in content strategy, and updates to the business model; announcing staff changes, including new hires and lay-offs; responding to negative media coverage of the company; and providing technical explanations of different

⁵¹ Kitchin, “Thinking Critically about and Researching Algorithms.”

⁵² DeVito, “From Editors to Algorithms.”

aspects of the site. Most of the posts do not list an author, making it impossible to determine who wrote them, while others are signed by specific personnel, including the cofounders, editors, and chief data scientist. The tone varies from matching the main website's casual and slangy approach to more formal announcements. In many ways, the Insider represents an admirable embrace of transparency (I certainly couldn't have written this thesis without it), but nonetheless the blog's goal is to promote the company's brand, including burnishing Upworthy's image as an open and honest source of information about the world and an empathetic media company with its heart on its sleeve.

In the concluding chapter I contemplate the potential creation of an “empathy economy,” thinking through the consequences of the proliferation of emotional datafication, which entails and enables emotional commodification, standardization, and optimization. In doing so, I consider critical perspectives on empathy as a political and social value, while acknowledging the benefits that genuinely empathetic communications technology could bring. Exploring what it would mean for the consciousness industry to attempt to produce and sell empathy as it has with attention, I ask what it would mean for users to “spend” empathy on media content and marketing campaigns. What happens when our media and marketing don't just want our attention but want access to the fuller spectrum of our consciousness?

Chapter 2 / Upworthy: From Attention to Empathy

In an appearance at the *Guardian*'s Changing Media Summit in March 2015, Peter Koechley, one of the website Upworthy's two cofounders, issued a somewhat surprising apology.

Expressing regret for the way the media had changed as a result of his company's success, he announced: "We sort of unleashed a monster. Sorry for that. Sorry we kind of broke the internet last year. I'm excited going forward to say goodbye to clickbait."¹ While apologizing for single-handedly breaking the internet could be seen as a quintessential humblebrag, Koechley isn't alone in citing Upworthy as a key innovator and popularizer of attention-grabbing tactics that some critics have found to be at best annoyingly ubiquitous and at worst socially and politically harmful.

But hyperbole or not, what kind of "monster" did Upworthy unleash? And how did a leader of a successful media company find himself in the position of having to apologize for attracting readers? Part of the answer to the latter question is that Upworthy has, from the start, described itself as a different kind of online publisher: one with a higher calling. The company's proclaimed mission has passed through several iterations, reflecting various shifts in their editorial practices and business model, but an abiding concern with attention has remained constant. Founded with the intention of redirecting internet users to spend their limited attention on social and cultural issues of genuine import, the company's enduring mantra is that they seek to aggregate reader attention for the good of their audience and the world.² In this chapter, I will take up Upworthy as a key case study in the recent history of online publishing's efforts to negotiate an attention economy in flux. By analyzing the evolving methods Upworthy used to capture, measure, and sell reader attention, I will trace their audience engagement and revenue generation strategies along a trajectory from attention to emotion to empathy.

¹ O'Reilly, "Upworthy Cofounder Peter Koechley Apologizes."

² Readers interested in an analysis of Upworthy that is more concerned with their influence in the political sphere, should seek out Karpf, *Analytic Activism*. I discuss the site's politics somewhat in chapter four, but overall I analyze them as a for-profit media company. Karpf's research ends prior to Upworthy's full embrace of the marketing-focused business model I detail in this chapter.

Starting Up Upworthy

Calling it “a new social media outfit with a mission,” cofounders Eli Pariser and Peter Koechley launched Upworthy in March 2012 with “a staff of eleven people in eight cities.”³ That foundational mission was to showcase meaningful content that is as entertaining to consume and as compelling to share on social media as the cat videos and memes that routinely garner massive amounts of attention on the internet. Their claims about the company’s goals were lofty, but their initial strategy was a familiar one in the world of online publishing: content aggregation (or “curation” as they called it). Much like other contemporary digital media start-ups, Upworthy’s curators found stories, video clips, and other content elsewhere on the internet and then republished it with a compelling new headline and tools to share the post on social networks. For example, a video created by the Australian social justice nonprofit GetUp! entitled “It’s Time: Marriage Equality” was posted to Upworthy with the more tantalizing, personal headline “If This Video Makes You Uncomfortable, Then You Make Me Uncomfortable.”⁴

Upworthy published its first post on March 26, 2012. Written by Peter Koechley, the post is a statement of founding principles, proclaiming in the sub-headline that Upworthy aims “to help people find important content that is as fun to share as a FAIL video of some idiot surfing off his roof.”⁵ Koechley’s post features several of the characteristic traits that would mark future stories, including a mixture of irreverent humor and earnestness as well as an emphasis on information presented visually; the post contains a pie chart, two lists, a Venn diagram, and a kitten meme. These elements have been chosen for comedic effect, but the visual overkill and the Facebook “share” button that accompanies each graphic function as a declaration of purpose as much as the text does. The substance is serious, but the style is lighthearted, guided by contemporary internet culture’s fondness for bright, colorful, and even wacky visual data. To be more precise, Koechley’s post is somewhere between a parody of and an homage to BuzzFeed, which at the time had seemingly perfected the art of making easily digestible content (including infamously inane material like lists, kittens, and lists of kittens) reach a huge online audience with unprecedented speed.⁶

³ Koechley, “Could This Be the Most Upworthy Site in the History of the Internet?”

⁴ Williams, “If This Video Makes Makes You Uncomfortable.”

⁵ Koechley, “Could This Be the Most Upworthy Site in the History of the Internet?”

⁶ Rice, “Does BuzzFeed Know the Secret?”

The blend of sarcasm and sincerity in Koechley’s post also neatly reflects the two cofounders’ career paths before launching Upworthy. Pariser and Koechley had both worked at the liberal political advocacy group MoveOn.org, and Koechley had been a managing editor at satirical newspaper the *Onion*. Prior to launching Upworthy, Pariser published the book *The Filter Bubble*, an influential critique of digital technology’s increasingly sophisticated ability to provide customized content to individual users based on our behavior and implicit preferences. In other words, according to Pariser, our personalized Google searches and Facebook feeds trap us within information echo chambers or filter bubbles. Upworthy was intended to make content about important issues so enticing it would manage to pass through these filters and thereby reach a large audience.

Eight months after the site launched, *Business Insider* claimed that Upworthy was “the fastest growing media company in the world.”⁷ A little over a year after their initial start, in June 2013, *Fast Company* called them “the fastest growing media site of all time.”⁸ Verifying these hyperbolic claims would be difficult, but nonetheless they indicate an enthusiasm about Upworthy’s launch and growth that speaks to how companies like Upworthy (born online, data-driven, and social media savvy) are perceived by the business press as being analogous to technology start-up firms. In 2014, reporting on venture capital firms’ growing appetite for investing in media start-ups, Adrienne LaFrance wrote that “the shift doesn’t simply reflect a renewed confidence in publishing. It’s also a signal that some online media ventures are finally perceived as being sophisticated and agile tech companies, as well.”⁹ Upworthy is one of the organizations LaFrance points to as an example of this trend, and the company benefitted from two rounds of venture capital funding:

A round of seed funding in October [2012] brought \$4m from a series of investors that reads like a who’s who of the new media world; BuzzFeed co-founder John Johnson, Facebook co-founder and *New Republic* owner Chris Hughes and Reddit co-founder Alexis Ohanian all donated to the Upworthy cause. Series A funding in September 2013 garnered another \$8m.¹⁰

⁷ Shontell, “How to Create the Fastest Growing Media Company in the World.”

⁸ Kamenetz, “How Upworthy Used Emotional Data to Become the Fastest Growing Media Site of All Time.”

⁹ LaFrance, “Why Venture Capitalists Are Suddenly Investing in News.”

¹⁰ Williams, “Upworthy’s Co-Founder Said the Most Amazing Thing about Clickbait.”

Reflecting Upworthy's hybrid identity as both a start-up digital media firm and a somewhat ambiguous actor in the nonprofit and charitable world, that \$8 million consisted of money from the nonprofit Knight Foundation as well as from investment firms, including some with a pro-social mission.¹¹ However, Upworthy suffered a setback after their initial period of success, seeing their traffic drop sharply in December 2013 and January 2014 (from a peak of 88 million unique visitors in November).¹²

Meanwhile, what they had achieved in their first eighteen months was undeniably remarkable as well as potentially profitable, and, as a result, imitators had begun to crop up, increasing the competition for readers' attention and making it more difficult to dominate social media feeds.¹³ Despite no longer being the extraordinary web traffic generator they once were, Upworthy continues to operate.¹⁴ One could take a jaundiced view of the company's narrative, by noting, for example, the fact that they went from winning *TechCrunch*'s Crunchie award for "fastest rising startup"¹⁵ in 2013 to being included, less than four years later, on the same site's list of tech company also-rans alongside Chatroulette and Google Glass.¹⁶ To be sure, Upworthy's story is something of a cautionary tale about the limits of the trend of viral clickbait publishing.¹⁷ However, that trend and Upworthy's attempts to transcend it—the tactics, strategies, and discourses they developed in response to their shifting fortunes—shed useful light on the recent history of the attention economy as well as point to new vectors for its growth.

Capturing Attention: Editorial Strategies

In early 2015, upon beginning her new position at Upworthy, editorial director Amy O'Leary evocatively referred to the internet as a "street fight for human attention."¹⁸ How has Upworthy fought this fight? Their initial, and later somewhat infamous, strategy for attention capture was to

¹¹ Koechley and Pariser, "We Had a Kinda Crazy Idea."

¹² Carlson, "Upworthy Traffic Gets Crushed."

¹³ Marshall, "The Rise of the Upworthy-Clone Economy."

¹⁴ As of October 18, 2017, according to data from web-traffic measurement company Quantcast, 4.3 million total unique visitors visited Upworthy.com at least once during the preceding thirty-day period; 3.4 million were from within the United States. That total placed them at number 584 on Quantcast's ranking of websites by US traffic. Of course, Quantcast cannot account for forms of audience engagement that take place entirely within social media platforms, such as viewing a video on Facebook.

¹⁵ "Upworthy Wins Fastest Rising Startup: Crunchies Awards 2013."

¹⁶ Evans, "The New New Things That Weren't."

¹⁷ Benes, "It Was a Fad: Many Once-Hot Viral Publishers Have Cooled Off."

¹⁸ Koechley and Pariser, "Why This Amazing Woman Is Joining Upworthy as Our Editorial Director."

capitalize on the capacity for the right headline to snag the attention of distracted browsers. In fact, the first Upworthy Insider post summarizes a presentation by Peter Koechley bluntly called “Why the Title Matters More than the Talk.”¹⁹ In this early stage, Upworthy is blunt about their focus on headlines, arguing that “we obsess over headlines because we want our content to go viral—and writing a brilliant headline is the easiest way to make that happen.” The way that obsession plays out is that each Upworthy curator generates twenty-five different headline options, the editorial team shrinks that pool a little, and then they “conduct a bunch of geeky experiments” to figure out the best choice. As they elaborate in a later post, those “experiments” are A/B tests, wherein a small sample of their readership is shown one of two headline options and whichever version convinces a greater number of readers to click through or share the story on social media is then shown to the entire audience (or a second or third round of testing is conducted with other options).²⁰ Upworthy eventually developed their own content-testing system to perform multiple, simultaneous A/B tests on a variety of elements including the headline, images, and, once they began publishing original content, different versions of the body of the story.²¹

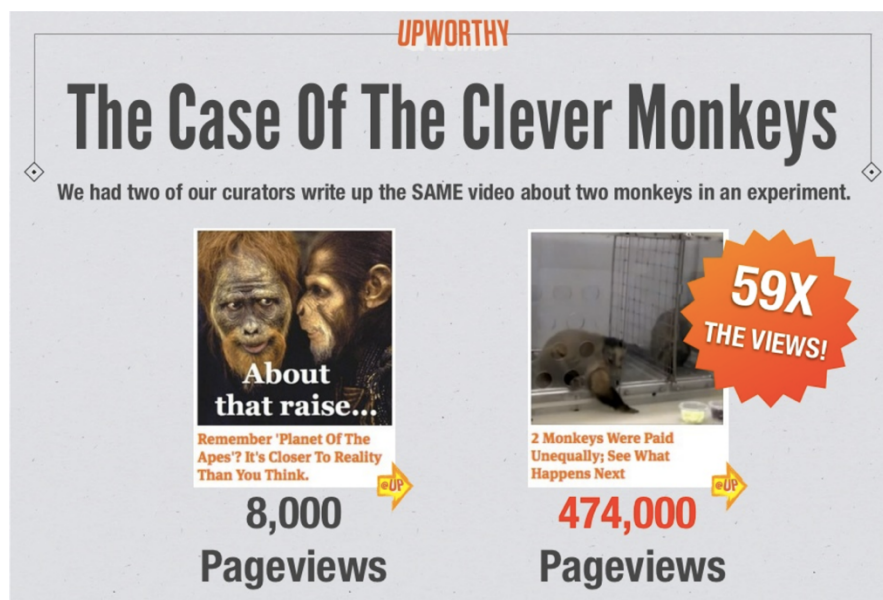


Fig. 1: An example of A/B testing headlines

¹⁹ “Why the Title Matters More Than the Talk.”

²⁰ “Do You Know What It Takes for Something to Viral?”

²¹ Abebe, “Watching Team Upworthy Work.”

What did they learn about writing headlines from these experiments? Their primary finding is the importance of creating a “curiosity gap,” an idea originated by psychologist George Loewenstein whose research investigated the motivating effect of the prospect of discovering missing information.²² Optimal headlines land in the sweet spot between enigmatic and explanatory, providing just enough information to pique the reader’s curiosity but not enough to obviate the need to click on the article (hence the term “clickbait”). For example, the winning headline for an article about the potentially dry topic of US media consolidation was “The Real Reason They Still Play ‘Mrs. Robinson’ on the Radio.”²³ Exploiting the curiosity gap is a simple trick that continues to haunt online media. At their most cynical, clickbait headlines dupe readers into clicking links by withholding a single fact that could easily be included in the headline or teasing a hypothetically shocking turn of events that has not actually taken place. This phenomenon gave rise to antidotes like the Twitter account @SavedYouAClick, which spoils clickbait articles by providing the banal, factual answers to the puzzles created by elusive headlines.²⁴ As the tactic became increasingly widespread, criticism of the method grew in strength.²⁵ Upworthy’s early defense of their headlines was to point to the fact that readers frequently shared their content on social media, which, they claimed, was a better indicator of the enjoyment readers experienced in satisfying their curiosity. As Eli Pariser put it in November 2012: “We don’t mind tricking people into seeing content they’ll love. If they don’t love it, they’re not going to share it. Virality is a balance of how good the packaging is and how good the content is.”²⁶

As clickbait became more widely regarded as pernicious, that attitude toward “tricking” readers changed, and Upworthy’s public pronouncements began to emphasize the latter half of the virality balance exclusively. A December 2013 Insider post aptly describes clickbait as “overselling content with outrageous headlines in order to get people onto a website”—implying

²² Sobel Fitts, “The King of Content.” Pariser also discusses this idea in *The Filter Bubble*.

²³ “Upworthy’s 10 Ways to Win the Internet.”

²⁴ For example, on March 12, 2017, the Twitter account for *Cosmopolitan* magazine teased its followers with a link to the story “Did Miley Cyrus and Liam Hemsworth get married?!” @SavedYouAClick retweeted this tweet and added a curt “No.”

²⁵ Burnett, “This Blogger Found Upworthy-Style Headlines Very Annoying. You’ll Find His Response Utterly Plausible.”

²⁶ Shontell, “How to Create the Fastest Growing Media Company in the World.”

that Upworthy isn't in the business of using such tactics—and again notes their success on social media as proof of the quality of their content. The post's anonymous writer identifies three requirements for high-quality content:

- it must be “substantive, engaging, and maybe even entertaining”;
- exposure to it will make the world a better place;
- and it should pay off the curiosity generated by the headline.²⁷

Along with Koechley's clickbait apology, this shift in emphasis to sharing and content quality can be seen as part of a public-relations effort to mitigate the reputational damage of becoming known for writing gimmicky, overwrought headlines. Eventually, however, this discursive shift was supported by a new staff hire and change in editorial model.

At the start of 2015, Koechley and Pariser announced the arrival of Amy O'Leary as their new editorial director.²⁸ Prior to joining Upworthy, O'Leary had worked at the *New York Times* as a multimedia editor and reporter, and her hiring and background—with “one foot in legacy media and another in digital”²⁹—indicated a new approach for the site: creating original content rather than exclusively aggregating others' work. The move meant abandoning the term “curator” and, less symbolically, laying off several staff members. They also introduced the word “storytelling” to their official discourse, which persists to this day (as of January 2018) when their official tagline is “Because we're all part of the same story.” There is nothing new about a media company talking about telling stories (though one reason Upworthy uses the word is to distinguish their work from traditional journalism).³⁰ But, as the tagline demonstrates, Upworthy gives “storytelling” a great deal of weight, and it serves as the connecting point for an articulation of the key concepts that define the image the company has tried to foster with its readers and corporate clients: attention, emotion, empathy, and data.

In line with the start-up ethos that has been a part of the company's identity from the start, O'Leary framed Upworthy's new direction as an experiment in innovating technologically assisted story *optimization*—i.e., using sophisticated audience data as feedback to adjust the content until it achieves particular, data-defined goals:

²⁷ “What Actually Makes Things Go Viral.”

²⁸ Koechley and Pariser, “Why This Amazing Woman Is Joining Upworthy as Our Editorial Director.”

²⁹ Levy, “Once the Web's Fastest Growing Aggregator, Upworthy Pivots.”

³⁰ Koechley, “Storytelling + Data = More Engaged Readers.”

For me, at Upworthy, there's an opportunity here to take the cutting edge of storytelling even farther—to take centuries-old wisdom about how to capture attention, how to surprise, delight, and satisfy an audience, then share those ideas in a way that makes them stick. And for the first time, be able to experiment and test and see what really works for society-sized groups of people.³¹

Or, as she put it more plainly at the end of 2015: “We’ve taken everything we’ve learned in the last several years of curating stories to engineer super-shareable stories from scratch.”³² Much like Netflix using the data they gathered from their viewers’ watching habits as the knowledge base for producing their own shows and films,³³ Upworthy represented their transition from content-aggregating platform to content-creating publisher as not a switch to a more expensive, labor-intensive, and notoriously challenging business model, but a shrewd capitalization on their existing trove of data and talent.

What’s more, rather than a risky venture into new territory, they framed the pivot to original content as another way to fulfill their founding mission, which new chief data scientist Sean Wojcik reformulated as: “Unless important, serious issues are communicated in a savvy way—employing smart combinations of contemporary data utilization and classic storytelling skill—they just don’t stand a chance versus the cat videos, celebrity gossip, and viral memes that dominate the online media landscape.”³⁴ As Wojcik’s hire attested, Upworthy’s discourses about itself would, from 2015 on, increasingly stress the scientific aspects of their behind-the-scenes work, detailing their quantitative and qualitative methods of data collection and content evaluation (more on this below).

What are Upworthy’s stories optimized for? Reflecting the site’s evolution, they are designed to capture attention at a mass scale, to inspire readers to share the stories with others, and to evoke positive emotional and affective responses. In an Insider post bluntly titled “Storytelling + Data = More Engaged Readers,” Koechley summarizes Upworthy’s optimization process and presents it as the antithesis of clickbait, arguing that their rigorous system compels the right kinds of attention:

³¹ Koechley and Pariser, “Why This Amazing Woman Is Joining Upworthy as Our Editorial Director.”

³² O’Leary, “2015: A New Chapter in the Upworthy Story.”

³³ Hallinan and Striphas, “Recommended for You: The Netflix Prize and the Production of Algorithmic Culture.”

³⁴ Wojcik, “The Gates Foundation Tackles the Toughest Problem of All.”

We select, craft, edit, and engineer our stories to optimize for attention—not clicks. We test our stories before we publish them to our full audience, and if people are clicking on a headline but leaving immediately, we won't publish it until we understand why and fix the problem. What's more, we optimize our content to satisfy both the deep readers and the skimmers.³⁵

As mentioned earlier, Upworthy had been optimizing from the start, subjecting their headlines, thumbnail images, and site design to testing and analysis. But optimizing each piece of content from top to bottom took the approach a step further. Now the process was applied to the most fundamental elements of the story, including structure and even genre—for example, according to the same Koechley post, one story was more successful when published as a substantial article than as an ostensibly more digestible listicle. Their discourse about optimization stays on trend, and their 2017 media kit for potential clients touts Elevator, “our proprietary optimization system, which combines machine-learning and time-tested human know-how.”³⁶

Meanwhile, this discursive appeal to rational empiricism—they don't write stories, they *engineer* them with advanced computer science—was articulated to an intensification of Upworthy's interest in attending to the way readers experienced affective and emotional responses to their content. This concern was not new. Earlier I discussed the initial Insider posts' focus on the craft of headline writing, but they also take up other aspects of the content, especially the importance of its emotional effects. For example, an August 2012 post dissects the runaway success of a recent Upworthy post—“A Tea Partier Decided to Pick a Fight with a Foreign President. It Didn't Go So Well.”—offering various explanations for why it went viral, including the headline's curiosity gap (which foreign president? how did the fight not go well?), which the author claims is one of “two key components to having something go viral.”³⁷ But the second vital factor is the post's emotional resonance, because “emotional arousal causes more sharing of content among the audience,” a theory the author cites as derived from “What Makes Online Content Viral?,” a study by University of Pennsylvania researchers Jonah Berger and Katherine L. Milkman.³⁸

³⁵ Koechley, “Storytelling + Data = More Engaged Readers.”

³⁶ “Right Wrong.”

³⁷ Gidfar, “A Tea Partier Decided”; “Who Wants to Hear a Two-Year-Old Rant of an Irishman Yelling at an American in a Bar? Over a Million People.”

³⁸ Berger and Milkman, “What Makes Online Content Viral?”

Published in the *Journal of Marketing Research* in April 2012, Berger and Milkman's article "examines how content characteristics affect virality. In particular . . . how emotion shapes social transmission."³⁹ The authors belong to the business school's faculty, and the anticipated audience for the study are aspiring viral marketers. But their conclusions are partially drawn from the results of a study of the relationship between emotionality and virality in nearly seven thousand *New York Times* articles, so the appeal of their findings to online publishers is clear. They find that positive news is more viral than negative news; though on average both kinds are more viral than articles that lack any emotional valence. However, arousal—meaning whether an emotion motivates action or not—holds more weight than valence. For example, awe (positive) and anger (negative) will trigger more sharing of content than sadness (negative), which despite being a strong emotion is likely to suppress sharing; in other words, the former are activating while the latter is deactivating. The study endures as an important touchstone for Upworthy, who adopted these categories for their own emotional content testing.

In this phase of their existence, however, Upworthy's theories of emotion, as well as the practical application of those theories, are relatively simple. A June 2013 profile in *Fast Company* mentions that the Upworthy staff think of emotions as data, but "emotional data" merely means that one of Upworthy's curators was moved to tears by a video and this reaction informed his decision to post it to the site.⁴⁰ Their approach to "emotional data" would become more formalized later. In the meantime, emotion became a major component of their public rhetoric in 2015, and, in 2016, empathy took on significant prominence as well. Neither concept took the place of attention in their mission. Instead, (certain) emotions and empathy are represented both as ways to capture attention and as deeper forms of it. According to Upworthy, directing attention to important stories that cause people to feel empathetic toward the subjects makes the reader or viewer feel good and can lead to positive social action. As they contend in a self-promotional video, paying attention to "meaningful stories" leads to "helping us feel, changing perspectives, generating hope, and connecting us."⁴¹

This quote's appearance in video form is not a coincidence, as the discursive shift to empathy accompanied another major editorial change. In early 2016, Upworthy invested heavily

³⁹ Berger and Milkman, 192.

⁴⁰ Kamenetz, "How Upworthy Used Emotional Data to Become the Fastest Growing Media Site of All Time."

⁴¹ Upworthy, *Because We're All Part of the Same Story*.

in video production, laying off fourteen staffers in order to make “a big bet on our video future.”⁴² Following the industry-wide trend of “pivoting to video” contrasts with Upworthy’s former position in the vanguard of online media.⁴³ But, as Koechley and Pariser frankly admit in a letter to their staff announcing the layoffs, “video is the future of digital advertising—it’s where all of the money is going, and an awful lot of the attention is going.”⁴⁴ Nonetheless, while financial pressure and the related need to present your content where and how your audience expects to find it were clearly decisive factors in this decision, producing videos is a logical strategy for increasing empathy. Alison Landsberg has argued that cinema is particularly adept at provoking empathetic responses in its audience, and that it can be used “to teach viewers how to identify with the other especially in the face of difference.”⁴⁵ While it may be a stretch to extend that argument from the sensorially engaging experience of watching a film in a theatre to watching a short video on a smartphone (possibly muted), the cinematic techniques, such as close-ups, that she identifies as potentially empathy-inducing are used across media. But how can Upworthy claim to know that their content inspires something as intimate as empathy?

Measuring Attention: Data and Analytics

In both external and internal accounts of Upworthy’s history, quantitative data is key to their reputation as a technologically advanced media company, and it plays a critical evidentiary role in their discourse. Across numerous Insider posts, gathering and analyzing this data has been central to Upworthy’s discourse about itself from the beginning. The earliest posts frame this concern about the audience as an interest in figuring out why certain pieces of content “go viral,” meaning they are read by and circulated among a rapidly and exponentially growing number of audience members. An August 2012 post states that understanding virality is a “core strategic objective” for Upworthy.⁴⁶ In tandem with the increased emphasis on content quality, later posts mention virality less and instead tackle the problem of gauging the depth of reader engagement. This transition is reflected in the changing ways that Upworthy chose to measure their users’

⁴² Koechley and Pariser, “A Tough Day . . . and the Reasons Why.”

⁴³ A trend that has been quite possibly disastrous; see Moore, “The Secret Cost of Pivoting to Video.”

⁴⁴ Koechley and Pariser, “A Tough Day . . . and the Reasons Why.”

⁴⁵ Landsberg, “Memory, Empathy, and the Politics of Identification.”

⁴⁶ “Who Wants to Hear a Two-Year-Old Rant of an Irishman Yelling at an American in a Bar? Over a Million People.”

responses to content, which break down into four categories: clickability, shareability, attention time, and emotion/empathy. These shifts are not strictly linear, and the pursuit of an increasingly sophisticated understanding of user behavior means that older metrics are not abandoned but folded into an overall picture of engagement.

Each category is linked to a particular quantitative metric and optimizing for that metric roughly corresponds to one of the different attention-capture tactics discussed in the previous section. The first two categories are straightforward and are widely used across online media. Clickability can be measured by counting the number of times a user arrives on a piece of content's webpage—a metric called *pageviews*—and, when optimizing for clickability, the headline is crucial. However, pageviews are simple to a fault. If, for some reason, an individual user visits the same webpage ten times, that will count as ten pageviews. To avoid this kind of distortion, one could instead measure *unique visitors* (or *uniques*) to a website or page, which is usually done by storing an individualized “cookie” on each user's computer in order to track and distinguish repeated visits. However, when applied to an entire website rather than individual pages, uniques essentially punish publishers for cultivating loyal readers. Users who visit a website multiple times in a day will only be counted once in a site-wide unique visitor count. Furthermore, neither of these metrics tell website owners anything about what users do (e.g., reading an article or watching a video) or how they feel after arriving at the site. If only clicks count, there's no such thing as bad publishing.

Shareability attempts to gauge user enthusiasm by counting the number of times a piece of content is posted by users to social media networks like Facebook or Twitter (called *shares*). As I mentioned above, as Upworthy tried to distance itself from clickbait, they began to assert that shares positively correlate to higher content quality and a stronger emotional response, meaning that users only share a piece of content if they enjoy it or are moved by it. This claim is undermined by research showing that a majority of social media users share articles without having read anything other than the headline (at least on Twitter), meaning shares are also liable to being inflated by deceptive clickbait headlines.⁴⁷ Furthermore, the December 2013 Insider post that lays out Upworthy's case for the superiority of shares was published two days after Facebook announced it was changing its News Feed algorithm to promote “high quality

⁴⁷ Gabelkov et al., “Social Clicks: What and Who Gets Read on Twitter?”

content.”⁴⁸ Beyond the more ineffable worries about their brand cited above, Upworthy has a compelling interest in not being labeled low quality by Facebook and thereby losing access to their audience through the platform. Putting aside Facebook’s powerful influence (for now), Upworthy frames elevating shares over pageviews as part of a good-faith project to collect and employ more informative user data that better speaks to the quality of their work. And indeed, their interest in developing better metrics aligns them with a broader movement of media organizations trying to improve user data and analytics in ways that allow them to fight back against the pageview-based model of advertising-supported online publishing. That system led to the growth of audaciously mercenary and user-hostile content like listicles or slideshows spread across multiple webpages. Designed so that a user clicking through one list would yield multiple pageviews (and therefore multiple ad impressions), this kind of exploitative web design preys on readers’ curiosity and completism to generate clicks.⁴⁹ Faith in the pageview system also requires publishers and advertisers to agree that merely visiting a page means that users have paid attention to its advertisements. However, eye-tracking studies of websites have long established that internet readers ignore banner and sidebar ads.⁵⁰

Ultimately, shares, pageviews, and uniques all fail to address a pertinent question for Upworthy: how can they prove that they are fulfilling their mission? None of these metrics truly measure the thing that they claim matters most to them—attention, which several major publishers as well as media analytics company Chartbeat joined them in championing as a better basis for gauging the worth of online content.⁵¹ In Upworthy’s case, desire for better data about user attention led, in February 2014, to a new, homegrown metric. *Attention minutes*, which they calculate by monitoring a variety of user behavior “signals,” such as mouse movements, active browser tabs, and video player usage, are intended to determine which pieces of content keep users actively engaged in reading or watching.⁵² Attention minutes could also be incorporated into Upworthy’s optimization system, allowing them to promote the most attention-grabbing-and-sustaining content or tweak existing content to be more engaging. In June 2014, in a further

⁴⁸ “What Actually Makes Things Go Viral”; Kacholia and Ji, “News Feed FYI: Helping You Find More News to Talk About.”

⁴⁹ Madrigal, “The Pernicious Myth That Slideshows Drive ‘Traffic.’”

⁵⁰ Nielsen, “Banner Blindness.”

⁵¹ For an extensive discussion, see Cherubini and Kleis Nielsen, “Editorial Analytics.”

⁵² “What Uniques and Pageviews Leave Out.”

attempt to shift industry attitudes to metrics, Upworthy made the code for attention minutes freely available in an Insider post that claimed, “the old paradigm of pageviews is giving way to cleaner signals for attention. Our conversations with clients—from brands to advertisers—all point toward a hunger for real engagement measurements that capture whether users are actually tuning in to content.”⁵³

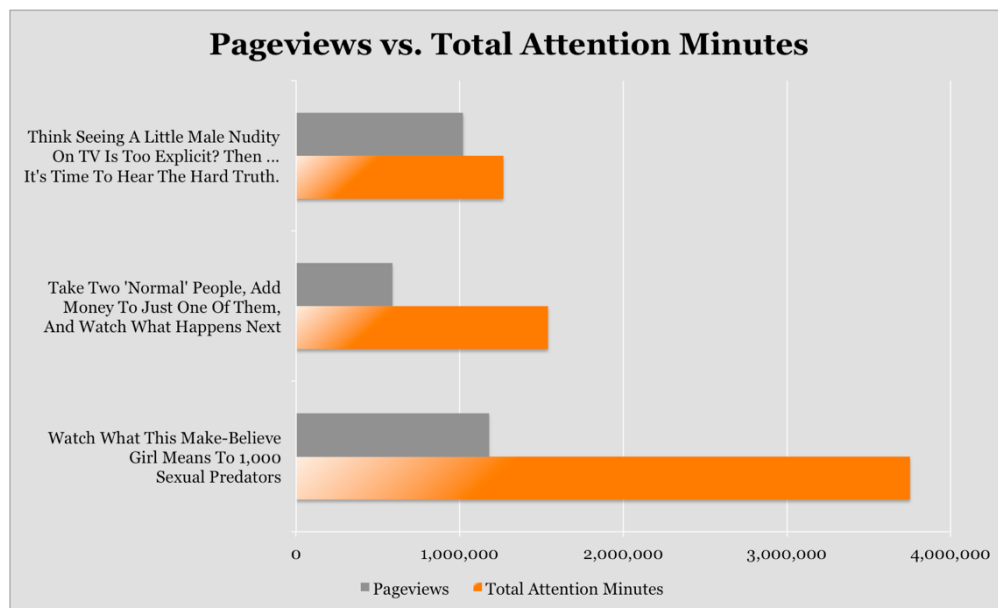


Fig. 2: Pageviews versus attention minutes for three Upworthy stories (n.b., implying that these two kinds of data are directly comparable is misleading)⁵⁴

The opinions of those clients were particularly relevant at this point because two months earlier Upworthy had announced a new revenue strategy: sponsored content and other “collaborations” with brands (see below). In a sign of increasing interest in collecting data on users’ affective experiences and emotional responses rather than just their behavior—for their own benefit and for their clients—the aim of attention minutes was ultimately to know which pieces of content “people really enjoy and find valuable.”⁵⁵ As much as that sounds like public-relations hype, Upworthy has maintained an interest in finding new ways to collect data about their users’ inner states rather than just their outward behavior.

⁵³ “The Code (Literally) to What Lies between the Click and the Share. Yours, for Free . . . Really.”

⁵⁴ “What Uniques and Pageviews Leave Out.”

⁵⁵ “What Uniques and Pageviews Leave Out.”

An early example of the results of this search arrived in August 2015, more than a year after the beginning of their Collaborations program and a few months after the move to producing original content. Detailing his efforts to gauge the success of a collaboration with the Bill and Melinda Gates Foundation, Upworthy’s data scientist Sean Wojcik reviews the methods he used to test the effectiveness of the content. First, he notes that through the series, “Upworthy has brought **over a billion seconds** of attention to the issues of global health and poverty.”⁵⁶ He then poses the question, “are we just capturing people’s attention, or are we really moving hearts and minds on these critically important global issues?” Up until this point in Upworthy’s discourse, attention has essentially been presented as an end in itself. Previous mentions of the emotional quality of their content, or the positive effects that resulted from it, primarily functioned to establish their skill at garnering attention and to justify their tactics for doing so. The guiding assumption was that directing attention to important issues was self-evidently good (since the alternative was distracting junk).

As attention became more and more difficult to harvest at a massive scale, Upworthy began to highlight its psychological dimensions as well as the emotional and practical side effects of consuming Upworthy content. Wojcik goes on to detail his research into “whether all of this attention time has led to real changes in people’s knowledge, awareness, attitudes, perceptions, and behaviors.”⁵⁷ Based on user surveys, he finds that consuming Upworthy content led to increases in knowledge and awareness of a problem, optimism about finding solutions to it, empathy for those affected by it, and motivation to take further action. Perhaps most importantly, Wojcik claims that these increases positively correlate with attention time, meaning that attention minutes can accurately predict the achievement of these social goals. And so, the results of this initial foray into researching user engagement do not undermine the importance of attention to Upworthy’s mission and data model; instead, they reframe attention as the catalyst for optimism, empathy, and action. Nonetheless, attention gradually recedes as the prime motivator for Upworthy’s data collection practices. In a sign that expecting internet users to spend a full minute with a piece of content was overly optimistic, attention minutes were redefined in November 2015 as *active visits*, which, according to Peter Koechley, count “the

⁵⁶ Wojcik, “The Gates Foundation Tackles the Toughest Problem of All.”

⁵⁷ Wojcik.

number of folks who land on the page and read for at least 15 seconds.”⁵⁸ Koechley asserts that Upworthy’s active visits are on the rise, which he credits to their optimization system, while also citing a Chartbeat data scientist’s finding that active visits are declining across the industry on average. The street fight for human attention was getting more crowded and more brutal.

While Upworthy would continue to brag about how much attention they were able to capture whenever the opportunity arose, future public discourse about their data collection work shifts in emphasis from quantity of attention to quality. According to a mid-2015 profile by Nieman Lab, “time spent . . . is still one of the critical metrics Upworthy uses to measure its content, but [Amy O’Leary] said it’s part of a larger mix of information to get a three-dimensional view of user behavior.”⁵⁹ That more complete view would stress the importance of emotion, uplift, optimism, and empathy. While devising data instruments capable of measuring these qualities might seem ambitious, Upworthy is not alone in attempting to formulate ways to measure the impact—rather than mere consumption—of their stories. Federica Cherubini and Rasmus Kleis Nielsen note that, in the United States, some philanthropic institutions and nonprofit media organizations have also begun tackling this problem:

The Bill and Melinda Gates Foundation and the John S. and James L. Knight Foundation are founding the Media Impact Center at the University of Southern California to create new ways to measure the impact of media. The Knight Foundation has also given \$35,000 to NPR (National Public Radio) in order to build Carebot, a tool that aims to measure whether people really cared about content they used. . . . Other US-based nonprofits, like the Investigative Reporting Workshop and ProPublica, are also working on metrics for impact.⁶⁰

Recall that Upworthy was partially funded by the Knight Foundation and has worked with the Gates Foundation as a client. In fact, Wojcik’s aforementioned research measuring the success of their Gates Foundation collaboration served as the launch point for moving into studying emotion more deeply.

⁵⁸ Koechley, “Storytelling + Data = More Engaged Readers.”

⁵⁹ Lichterman, “How Upworthy Is Using Data to Move beyond Clickbait and Curation.”

⁶⁰ Cherubini and Kleis Nielsen, “Editorial Analytics,” 39.

In a September 2016 post to Insider, Wojcik delves into the scientific theories and research methods he uses to gauge the emotional impact of their content.⁶¹ He begins by again citing Jonah Berger and Katherine Milkman’s study of the links between emotion and sharing content on social media, reiterating the two-dimensional (valence and arousal⁶²) theory of emotion and providing this chart as illustration:

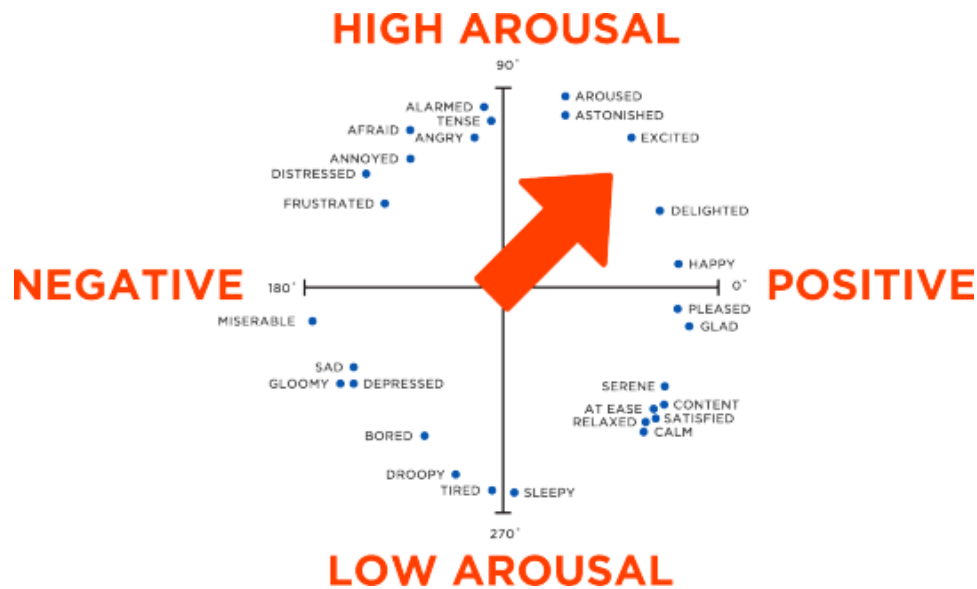


Fig. 3: Various emotions plotted by valence and arousal

He goes on to explain that he borrowed Berger and Milkman’s research design to study Upworthy content:

We’ve recreated the studies and expanded on them in a number of ways—by asking Upworthy visitors to indicate how our stories made them feel using free-response survey questions, multiple-choice lists of emotions, colloquial exclamations (e.g., “Meh . . .”), and even emojis. We administered user feedback surveys across our site, assigning participants at random to report their emotional feedback in one of these four formats. We then cross-referenced each reaction with scientifically validated linguistic databases to code emotional reactions along the core emotional dimensions of valence

⁶¹ Wojcik, “The Science That Helps Upworthy Encourage Our Audience to Share Stories on Tough Subjects.”

⁶² Posner, Russell, and Peterson, “The Circumplex Model of Affect.”

and arousal, along with a third dimension of empowerment (or what scientists call emotional “dominance”).⁶³

Wojcik doesn't cite a source for empowerment being the third dimension of emotion, though it appears to be derived from the work of psychologists Albert Mehrabian and James A. Russell, who were also influential in developing the valence-arousal model of affect.⁶⁴ Wojcik's results echo Berger and Milkman's—Upworthy content that is more positive and arousing is more likely to be shared on social media. The effect is even more pronounced for content that makes users feel empowered, leading Wojcik to conclude that “our stories leave people feeling positive, inspired, empowered, and ready to share those stories with others. For us, emotional impact isn't a vanity metric—it's a sign that what we're doing is good science, good for business, and good for the world.”⁶⁵ Given its relation to shares, emotional impact initially looks like a step backward for Upworthy. Purportedly, Upworthy's audience feels empowered, but the only result of this feeling is posting links on Facebook. Hoping to establish the motivating strength of their content, Upworthy reverts to an emphasis on the importance and meaningfulness of shares, which is the only social action their user behavior monitoring system is capable of counting.

Perhaps recognizing the thinness of these claims to empowerment, Wojcik published the results of a more in-depth “empathy impact study” of Upworthy video content in November 2016.⁶⁶ For this study, Wojcik's research question was, “does exposure to Upworthy's empathy-inducing videos lead to enhanced awareness, knowledge, perceptions, and intentions to take action?” Just over one hundred participants were divided into an empathy group and a control group. The former group watched an Upworthy video about an earthquake in Nepal, while the latter watched a “neutral” control video; both groups completed surveys after watching. The empathy group reported increases in each of Wojcik's categories, and, unlike in the emotional impact study, the identified actions are more concrete and more closely resemble the goals of charitable or activist organizations:

⁶³ Wojcik, “The Science That Helps Upworthy Encourage Our Audience to Share Stories on Tough Subjects.”

⁶⁴ Mehrabian and Russell, *An Approach to Environmental Psychology*.

⁶⁵ Wojcik, “The Science That Helps Upworthy Encourage Our Audience to Share Stories on Tough Subjects.”

⁶⁶ Wojcik, “Want to Get People to Care? Learn about the Power of Empathy. With Science!”

ANALYSIS AND RESULTS: TAKING ACTION

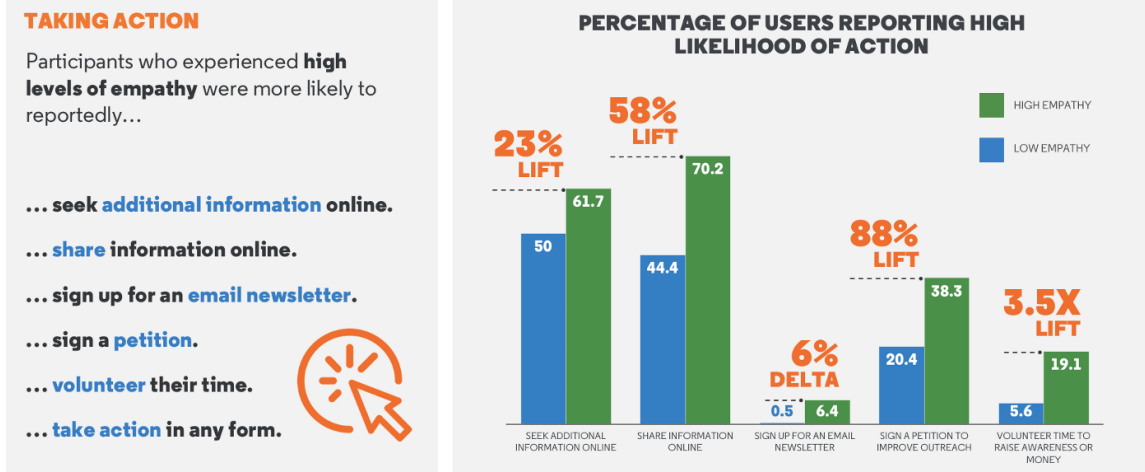


Fig. 4: Sean Wojcik’s slide detailing the empathy impact study

By the end of 2016, Wojcik claimed that “we look at over 11 billion data points and all engagement metrics. A lot of this work involves measuring how people are feeling and responding to content, as well as engaging with it in real-time.”⁶⁷ While the first emotional impact study’s reliance on shares shows that it is important to remain skeptical of these claims to user omniscience, Upworthy is clearly invested in collecting data about their audience’s emotions with empathy emerging as a particular point of focus. Indeed, they have staked their business on it.

Selling Attention: Business Models

Why does Upworthy want to generate empathy? Or, returning to their roots, what does Upworthy do with the attention they aggregate? As their mission has long contended, they direct attention to important stories, issues, and causes. But, as is the case for many if not most other for-profit media companies, they also sell it. Indeed, their investment in user data is a key component of their revenue strategy as Upworthy’s increasingly sophisticated metrics are the crucial means by which they sell the attention they attract. As Yves Citton writes, “attention, which is always particular, only becomes a currency (*Währung*)—which may be exchanged on a market,

⁶⁷ Elkin, “Upworthy Digs Deep on Mission-Based Storytelling with Data Backing.”

accumulated as capital and invested according to the logics of finance—thanks to a translation operation which homogenizes and standardizes it so that it can be entered into a system of equivalence.”⁶⁸ In other words, the attention of individual users is a valuable resource that clients would like to purchase from Upworthy, but it is only through quantifiable, standardized measurements like pageviews, shares, or attention minutes that the exchange can be made comprehensible.

Like their attention-capturing tactics and their attention-measuring metrics, Upworthy’s approach to profiting from their audience’s attention has been iterative. In the early days, with a cushion of investment capital, they eschewed traditional display advertising and instead took money from nonprofit or activist organizations to help them add to their databases of interested users, performing what Eli Pariser called “lead gen for causes.”⁶⁹ According to the *Atlantic*, upon receiving their second round of investment funding in 2013, this low-key approach was abandoned in favor of partnering with corporations and nonprofits to post sponsored content.⁷⁰ In order to justify new investment, Upworthy had to prove that they had a plan to generate profit and that they could match their spectacular growth in web traffic with growth in revenue. Announcing this new round of funding on the Insider blog, Peter Koechley and Eli Pariser recounted their success at attracting attention to important issues, while also claiming that their audience doesn’t just “come and watch stuff,” they “actually do some pretty wondrous things” as a result.⁷¹ Each of these “things” is quantified and each revolves around money: donating to a charity, purchasing “a toy set that encourages girls to become engineers,” and helping to crowdfund a documentary. While ostensibly congratulating themselves on their ability to advance good causes and their audience on their generosity, these examples point the way forward for Upworthy’s business model: getting their audience to feel good about how and where they spend their money.

If Upworthy cares so much about social causes, why is it a profit-seeking business? According to Koechley and Pariser’s public statements, the answer is scale. In a very early profile of the website, journalist David Carr quotes Pariser framing the growth of their audience as key to the success of their mission: “We try to get stuff that matters into the information

⁶⁸ Citton, *The Ecology of Attention*, 53.

⁶⁹ Shontell, “How to Create the Fastest Growing Media Company in the World.”

⁷⁰ Greenfield, “How Upworthy Makes Money.”

⁷¹ Koechley and Pariser, “We Had a Kinda Crazy Idea.”

stream, and to do that, we have to scale.”⁷² In an April 2014 Insider post, the cofounders reiterate the importance of achieving the proper scale and cite it as a justification for being a capitalist enterprise:

To really accomplish our mission, though, we’ll need to operate at a much more significant scale. That’s why we started Upworthy as a business. But building a revenue strategy isn’t something you rush into, and we like iterative learning—so we began to test and learn.⁷³

(At that time, Upworthy had a monthly audience of 50 million visitors—down from their peak in fall 2013 but with much steeper declines yet to come.) The revenue strategy that this post announces is “Upworthy Collaborations,” a substantial expansion of their sponsored content program. There is a straightforward attention economy logic at work in this decision: Upworthy’s mission is to capture mass attention and direct it toward important content. In order to achieve that goal, the company needs money to hire more staff. An established way to make that money is to sell the attention they have captured by directing it toward paid-for content. Pariser and Koechley write that “we think there’s an amazing opportunity to work with both brands and nonprofits in a symbiotic way—underwriting our work to draw attention to the most important topics.”⁷⁴ In what will prove to be a recurring theme in their discourse about Collaborations, they assert that they will not work with just any client (“Upworthy won’t be a fit for every brand—and some brands won’t be a fit for Upworthy”) and that all collaborative content will be clearly marked, rather than deceptively made to look like normal editorial content as is the case with “native advertising.”



Fig. 5: A promotional content disclosure from an Upworthy article published on February 21, 2017. This banner ran at the top of the webpage.

⁷² Carr, “Two Guys Made a Website.”

⁷³ Koechley and Pariser, “Our Mission Is Huge. Here’s How We’re Building the Business to Support It.”

⁷⁴ Koechley and Pariser.

When it launched in 2014, Collaborations offered three different programs for clients: sponsored content, promoted posts, and content consultation. Sponsored content consists of standard curated content that Upworthy will “optimize, frame, and deliver to our community on a partner’s behalf.”⁷⁵ Essentially, sponsored content is regular Upworthy content with advertising or some form of visually identifiable branding. Promoted posts are “original, advertising content that comes from our partners directly that we help optimize and frame.” The post says almost nothing about content consultation, but, based on later developments, it would appear to involve Upworthy acting as creative consultants for a brand’s advertising or other marketing material. The new program does appear to have spurred growth for the website in terms of content. In an interview with *TechCrunch*, Koechley tied the development of specific site sections—referred to as *verticals*—to their pursuit of sponsored content opportunities, saying “we think a number of these sections that we might want to delve more deeply into are sections that people might want to underwrite.”⁷⁶ And, indeed, shortly thereafter the site began publishing a new vertical (since eliminated) dedicated to global health and poverty that was funded and sponsored by the Bill and Melinda Gates Foundation.⁷⁷

Initial collaborations included working with “the GUESS Foundation on a campaign against sexual violence and norms of consent, with Unilever’s Project Sunlight on making the world better and more sustainable for our children, and with COVERGIRL on female empowerment” as well as UNICEF, Virgin Mobile, Nestlé, and the Gap.⁷⁸ Three months into the program’s existence, branded content was, according to a July 2014 Insider post, significantly more popular and engaging than non-branded (see fig. 6). In the wake of this success, Upworthy’s claims about their audience desiring meaningful and engaging content that addresses vital social issues began to encompass advertising. Now they began to contend that “there’s a real hunger in our society to connect with brands on a meaningful level, to see their advertising rooted in something purposeful and important.”⁷⁹

⁷⁵ Koechley and Pariser.

⁷⁶ Brooke, “Video Site Upworthy Closes \$8M Round.”

⁷⁷ Thompson, “Upworthy: I Thought This Website Was Crazy, but What Happened Next Changed Everything.”

⁷⁸ “Look Ma, Upworthy Is an Actual Business Now.”

⁷⁹ “Look Ma, Upworthy Is an Actual Business Now.”

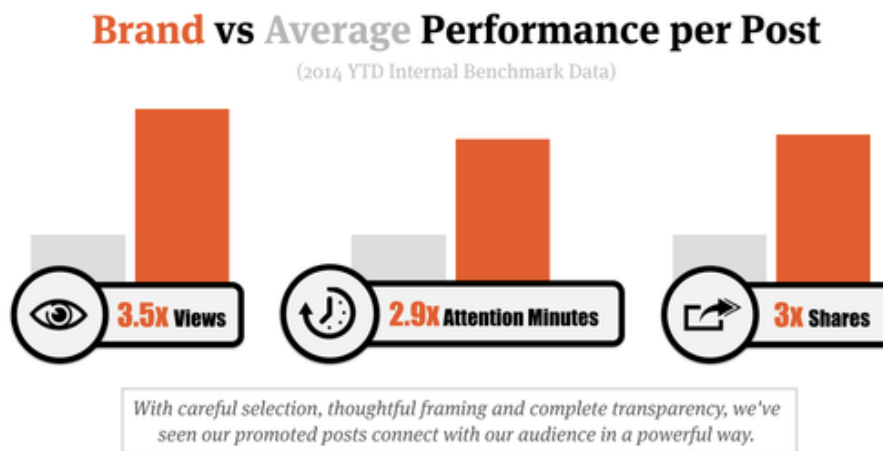


Fig. 6: Branded content versus non-branded

From Upworthy’s perspective, one could interpret this as an extension of their founding mission—human attention is limited, so, if we are going to spend it on ads, they should be worthwhile and for socially responsible brands. Nonetheless, moving from a mission of directing attention to issues like climate change, civil rights, and poverty to directing attention to even the very best commercial messages aligning those issues with the work of massive transnational corporations represents a transformation of their founding principles.

A little over a year after Collaborations launched, it seemed to be paying off; a June 2015 Insider post announced three new hires, all of them on the business rather than editorial side.⁸⁰ In step with their data collection efforts, their pitch to brands began to focus on emotion. Positioning Upworthy as well suited to satisfy client needs, Ben Zagorski, the new Chief Revenue Officer, claimed that “as brands and organizations rapidly shift to great storytelling highlighting their core values, Upworthy holds a particular advantage in creating credible emotional connections with purpose-driven Millennials.” This quote sheds light on the motivation for Upworthy data scientist Sean Wojcik’s otherwise puzzling emotional impact metric: it is designed to appeal to clients with particular demographic and branding requirements. While the development of new impact metrics can be and is motivated by a desire to develop an alternative to the clicks-above-all pageview system, Upworthy’s emotional data simply reframes the company’s appeal to advertisers now that they can no longer guarantee massive quantities of

⁸⁰ Pariser and Koechley, “Storytelling + Data Is Powerful. Especially When Paired with These 3 New Business Leaders.”

pageviews. Rather than sell themselves as a platform for aggregating mass attention, Upworthy can now present themselves as skilled fomenters of emotional investment, capable of channeling young consumers' passions in specific directions.

This strategy became even clearer as Upworthy moved toward selling not just emotionality but, specifically, empathy. Upworthy aren't alone in choosing empathy as a selling point. With the emotional trauma of the US election still fresh, an early 2017 article in *Ad Age* offered "A Brand's Guide to Empathy: Marketing's Latest Buzzword":

Empathy isn't something that as a brand, you can ever hope to be, or own. Empathy is something you give. And brands that understand that will be the brands that are appreciated and embraced; these are the brands that will connect, ultimately rising to the top in the hearts and minds of Americans this year.⁸¹

Upworthy lays out their own pitch as empathy gurus in a twenty-four-page media kit called "Who Cares? (Find Out Why You Should)." The document begins by saluting "the power of empathy" and recapitulating their mission; it then moves on to explain why advertisers should care about empathy:

We've built our brand on empathy for another important reason: because it works. Our in-depth research shows that when it comes to motivating action, *how people feel is more important than what they know*. We see it in several ways: They share our content more on social media; when their attitudes about a brand or issue change, they stay with them longer; and they take action far more than people who haven't seen our content [emphasis added].⁸²

Upworthy's value proposition is that they can persuade their audience to care about brands and connect brands with people who care more than your average consumer. The members of their audience are highly desirable because "the people who care so deeply about our stories can drive your clients' brand messages further—and with more authenticity—than practically any other group."⁸³ Happily, Upworthy attracts "the most important audience for advertisers today: smart, affluent millennial women."⁸⁴ According to Upworthy, this demographic cares a lot about the moral and ethical values of the businesses they support, and their strong feelings about those

⁸¹ McKeon, "A Brand's Guide to Empathy."

⁸² "Who Cares? (Find Out Why You Should)," 3.

⁸³ "Who Cares? (Find Out Why You Should)," 7.

⁸⁴ "Who Cares? (Find Out Why You Should)," 8.

businesses are contagious, influencing their peers. Indeed, the idea that the members of Upworthy’s audience constitute powerful nodes in a larger network is one of Collaborations’ major selling points.

Caring engenders sharing, and Upworthy’s skill at making their audience care means that, according to their media kit, their “partners’ content spreads across social media via word-of-mouth referral after being amplified by Upworthy’s subscribers across their massive distribution networks.”⁸⁵ This assertion suggests that Upworthy’s interest in and conception of virality has broadened in light of their changing business needs and goals. Rather than just a measure of socially determined online popularity, virality now also signifies the spreading of contagious feelings. Empathy fuels this process of contagion, enabling viral content to spread more quickly and effectively by inspiring users to infect other users and by causing the content to linger in its host’s consciousness. In applying these insights to the creation and dissemination of advertorial content, Upworthy’s socially beneficial mission feels distant. And, reading through their media kit, I find it difficult not to conclude that they’ve quietly pivoted again, transforming into a camouflaged marketing agency for brands that want to cultivate a reputation for sensitivity, warmth, and caring, to forge an emotional bond with their customers, and to see data that proves that bond exists.⁸⁶

Governing Attention: Platforms

Upworthy’s relationship with social media platforms connects their evolving editorial approaches, data models, and revenue strategies. Given their mission, a useful perspective on Upworthy’s relation to platforms is to think about how attention works on them. In a study of Facebook’s power to shape user attention, Taina Bucher argues that attention can be understood as a sociotechnical construct “rooted in and constrained by” particular media.⁸⁷ The interplay between users and a given technology or platform’s constraints gives rise to *local* economies of attention. Facebook’s proprietary algorithm, Bucher contends, “augments, supports, and governs attention by simulating the cognitive function of attention, as a process of selecting

⁸⁵ “Who Cares? (Find Out Why You Should),” 19.

⁸⁶ At some point after I wrote this sentence in late 2017, Upworthy added a “Brand Studio” link to their website’s footer that takes you to the Collaborations section of the site.

⁸⁷ Bucher, “A Technicity of Attention,” 4.

information.”⁸⁸ The same could be said about Upworthy’s optimizable website and content (which is designed, tested, and automatically tweaked to get attention), but Facebook’s attention governance is more sophisticated and their attention capture is exponentially greater. Furthermore, in many ways Upworthy occupies the role of a user of platforms like Facebook, struggling against the platform’s “threat of invisibility,” as Bucher puts it.⁸⁹ Facebook tightly controls its own local economy of attention, while Upworthy’s content must pass through or satisfy the platform’s black-boxed system of reward and punishment. While clearly some publishers are more powerful than individual Facebook users—those invited to negotiate access to the platform’s Instant Articles program, for example⁹⁰—they are nonetheless subject to Facebook’s algorithmic control. Amy O’Leary’s vivid “street fight” metaphor speaks to the degree that attention matters to Upworthy and on the internet as a whole, but it doesn’t take into account publishers’ reliance on social media platforms to find attentive humans. These platforms do provide a competitive venue for users’ attention, but unlike street fights they are governed by rules.

On Facebook those “rules” are the algorithms that control users’ News Feeds. As Scott Lash has observed, algorithms are generative:

In a society of pervasive media and ubiquitous coding, at stake is a third type of rule, algorithmic, generative rules. “Generative” rules are, as it were, virtuals that generate a whole variety of actuals. They are compressed and hidden and we do not encounter them in the way that we encounter constitutive and regulative rules.⁹¹

Facebook’s hidden rules have generated some major “actuals” in Upworthy’s case; changes to these rules have influenced many of the company’s decisions. While Facebook’s influence is industry wide, part of the reason for Upworthy’s dependency is that they have consistently, even eagerly, viewed Facebook as a critical path to reaching an audience. In 2012, Eli Pariser claimed that “we take Facebook much more seriously than many of the other social networks. . . . The time and attention most sites spend on [perfecting] their homepages is probably what we spend

⁸⁸ Bucher, 8.

⁸⁹ Bucher, “Want to Be on the Top?”

⁹⁰ Ingram, “Is Facebook a Partner or a Competitor for Media Companies? Yes.”

⁹¹ Lash, “Power after Hegemony: Cultural Studies in Mutation?,” 71.

on Facebook.”⁹² Upworthy have persisted in publicly adopting a conciliatory attitude to the platform. In Amy O’Leary’s words, “we believe that high-quality, mission-driven, data-informed storytelling that works with platforms, not against them, is a truly exciting and defensible new frontier. And we have the data infrastructure to do this in a serious new way.”⁹³ Essentially, Upworthy touts their data-informed mastery of Facebook’s attention marketplace as another selling point to brands.

The platform’s sway over publishers is and has been immense, creating dramatic upheavals in web traffic almost whimsically. In August 2013, Facebook announced they were changing the algorithm that controls how users’ News Feeds display content from outside publishers: “Now organic stories that people did not scroll down far enough to see can reappear near the top of News Feed if the stories are still getting lots of likes and comments. . . . For Page owners, this means their most popular organic Page posts have a higher chance of being shown to more people, even if they’re more than a few hours old.”⁹⁴ As BuzzFeed reported based on their own internal data, these changes had a dynamic effect, leading to a “massive new surge of traffic” to publishers’ sites.⁹⁵ A few months later in December, Facebook changed the News Feed algorithm again. This time their vaguely defined rationale was to promote quality within users’ feeds: “Why are we doing this? Our surveys show that on average people prefer links to high quality articles about current events, their favorite sports team or shared interests, to the latest meme.”⁹⁶ This second round of changes dealt a severe blow to Upworthy, resulting in their traffic being halved and the turn to attention time as their preferred metric.⁹⁷

Proclaiming a new set of changes to the News Feed in August 2016, Facebook was explicit in their desire to rid users’ feeds of clickbait.⁹⁸ By this point, however, Upworthy had long since gotten the message and had begun responding to a different algorithmic nudge: toward video. As Nieman Lab reported, “the impetus for [Upworthy’s] shift, beyond the higher ad rates attached to video, is Facebook. The platform has put a premium on video in the News Feed,

⁹² Shontell, “How to Create the Fastest Growing Media Company in the World.” One of Upworthy’s imitators, NowThis, took this idea to its logical conclusion by creating a “homepage” that initially consisted exclusively of links to the company’s social media accounts.

⁹³ “Our Next Phase.”

⁹⁴ Backstrom, “News Feed FYI: A Window into News Feed.”

⁹⁵ Warzel, “Facebook Drives Massive New Surge of Traffic to Publishers.”

⁹⁶ Kacholia and Ji, “News Feed FYI: Helping You Find More News to Talk About.”

⁹⁷ Carlson, “Upworthy Traffic Gets Crushed.”

⁹⁸ Peysakhovich and Hendrix, “News Feed FYI: Further Reducing Clickbait in Feed.”

sparkling a gold rush among publishers looking to get in the Facebook algorithm’s good graces.”⁹⁹ Granting the algorithm quasi-human agency and powers of discernment makes sense—Upworthy are ultimately creating content for an audience comprised of human readers and software, including their own internal data analytics. By engineering their content to achieve an optimal result, whether within their own data analytic system or Facebook’s, they seek to elicit particular signals of attention or engagement rather than strictly to communicate meaning to their audience. Ganaele Langlois has identified “a genealogical turn (in Foucault’s sense) in the production and circulation of meaning, one in which meaning ceases to be a mysterious human process and becomes a machinic process that can be taken over for political and economic purposes.”¹⁰⁰ While founded explicitly to produce and circulate meaningful, humane content, Upworthy now exemplifies this turn to the machinic. In a reversal of the Turing test, Upworthy has developed an artificially intelligent system that, to a certain extent, works to optimize their content to meet the approval of Facebook’s artificially intelligent News Feed. Since they cannot reach an audience without Facebook, as much as Upworthy talks about engaging and affecting the people in their audience, Facebook’s algorithm is their most important “reader.”

Despite Facebook’s clear and significant power to shape Upworthy’s fortunes, Upworthy has refrained from publicly attacking the company. In interviews and media reports, staff often take pains to not blame Facebook for declines in traffic; for example:

[Upworthy], Pariser said, is more interested in creating high-quality pieces than in gaming the algorithm. “The danger is, algorithmic changes are sort of like weather,” he told me. “You can either start a cargo cult where you try to deconstruct what’s causing the weather, or you can say, I’m just going to focus on getting up and producing really great work that you can tell measurably is great . . . and trust that platforms will see those signals as well.”¹⁰¹

Given Facebook’s power over publishers there is, of course, little to gain by badmouthing them in public. But Upworthy remained positive enough about Facebook to embark on a six-week collaboration with them in 2016, which was so successful Upworthy uses it as a case study in

⁹⁹ Bilton, “A Year into Its New Original Content Strategy, Upworthy Is Focusing on Do-Good Videos Instead of Clickbait.”

¹⁰⁰ Langlois, *Meaning in the Age of Social Media*, 5.

¹⁰¹ Lichterman, “How Upworthy Is Using Data to Move beyond Clickbait and Curation.”

their pitch to brands.¹⁰² The purpose of the campaign was to show that, as Eli Pariser told *Ad Week*, Facebook “helps make the world more open and connected.”¹⁰³ Coming from the author of *The Filter Bubble*, this is a surprisingly generous characterization of the effects of social media. Pariser’s argument in that book is essentially the opposite: that Facebook’s algorithmically controlled feed encloses users within bubbles and disconnects them from people with different views. However, my point isn’t to assail Pariser for hypocrisy—what the irony of his shilling for Facebook indicates is the extent to which the platform dominates online publishing.

Earlier in this chapter, I mentioned Upworthy’s greatly reduced website traffic as measured by Quantcast. However, as I mentioned in the footnote, Quantcast cannot account for audience engagement outside of a publisher’s website, which means excluding their social media presence from the equation. For all publishers in 2018, and especially those like Upworthy with an intense focus on reaching audiences through social media, web traffic metrics are becoming decreasingly relevant or, at least, just one piece of a larger and more complex (not to mention murkier) picture. I have only Upworthy’s own assertions to draw on, but assuming they are not exaggerating or falsifying their data, they continue to be successful at reaching an audience on Facebook.¹⁰⁴ In addition, Facebook’s decision to work with Upworthy indicates that the platform has confidence in Upworthy’s reach. Upworthy may not be the failed has-been some observers suggest—instead, it might be something relatively new but increasingly common: a media company whose existence depends almost entirely on Facebook. As a May 2017 profile in *Wired* put it, Facebook is Upworthy’s “main distribution platform.”¹⁰⁵ One could call this state of affairs a choice only by ignoring the gravitational pull of Facebook’s massive power. For a company whose mission and revenue model compel it to go where the attention market is, focusing on Facebook is obligatory. If Upworthy is in a street fight for human attention, Facebook doesn’t just make the rules—it owns the street.

¹⁰² “Who Cares? (Find Out Why You Should).”

¹⁰³ Main, “Why Upworthy Was the Perfect Match for Facebook’s Inspirational Branded Content.”

¹⁰⁴ McNamara, “Thanks to All of You, Upworthy Has 200 Million Reasons to Celebrate.”

¹⁰⁵ Karabell, “Upworthy’s Quest to Engineer Optimism for an Anxious Age.”

Conclusion

Throughout their short history, Upworthy's mission has evolved as the company responded to pressure from Facebook's algorithm and the need to generate revenue. Upworthy's initial intervention into the attention economy is blunt; they want to capture attention at a mass scale. For a year and a half, they prove to be remarkably adept at doing so, perfecting the art of clickbait that people like to share on social media. To keep the lights on and grow their business, Upworthy does what media companies have been doing for at least a century: they decide to sell this aggregated attention to advertisers. Meanwhile, Facebook, a much more powerful company intent on dominating the attention market, notices Upworthy and its competitors' success and attacks their ability to divert attention away from Facebook. Over time, this change forces Upworthy to recalibrate their editorial and business strategies, abandoning clickbait in favor of fine-tuning their attention capture to focus on fostering emotion and empathy. Again, to generate revenue, they package these aggregated feelings for clients. In order to sell such immeasurable qualities to advertisers, they devise ways to turn them into data, helping to create a market for optimism and empathy.

By helping to build a market for empathy, Upworthy assert themselves as canny attentional capitalists skilled at deploying a somewhat depoliticized, uplifting version of progressive politics to capture attention and recruit users into conferring value on their content. In moving along a trajectory from attention to empathy, Upworthy has opened up new pathways for attentional capitalism, exploiting a narrower but richer vein of attention. Upworthy and their clients tap into consumers' desire to consume—both media and commercial goods—ethically. As media content is used as a vehicle to create empathy between consumers and corporations, value is found not in merely *paying attention* to corporate messages but in *caring* about them. In the current attention economy, empathy operates as a sophisticated and passionate form of attention, one that is prized for its psychological depth. And so Upworthy can now sell their accumulated attention to advertisers on the basis of both quantity (pageviews; shares; attention time) and quality (depth of engagement; emotional impact).

Upworthy's trajectory demonstrates a transformation of the relatively simple economic model of the audience commodity into something else. Beyond the fortunes of one particular media company, Upworthy's story suggests that we are in the midst of a transition from Tim Wu's attention merchants, for whom the quality or variety of attention ultimately did not matter

nearly as much as its quantity, to something more multifaceted, where types and degrees of attention add nuance to and create new markets within the attention economy.¹⁰⁶ Attention merchants continue to exist (“cord-cutting” aside, ad-supported broadcast television hasn’t died). But having captured nearly three-quarters of the entire digital advertising market in the US, Facebook and Google are close to the only ones who matter online.¹⁰⁷ Their duopolistic domination of the attention market constitutes a significant shift in corporate media power, but, beyond that, their success indicates that the nature of advertising has changed.

The bargain offered by attention merchants—“free” information or entertainment in exchange for consuming ads—is simple compared to these platforms’ ever-expanding business model. Between them, Facebook and Google offer a staggering array of enticements to use and engagement that, thanks to ubiquitous networking and mobile technology, have the potential to infiltrate essentially every minute of our waking lives (and you can download a sleep app if your nights feel suboptimal). In the conclusion to their article arguing that digital media reconfigure the analogue world to more readily allow data mining and the feeding of predictive algorithms, Fenwick McKelvey, Matthew Tiessen, and Luke Simcoe speculate that “it wouldn’t be too far-fetched to suggest we’ve become more valuable to the internet and its scanbots as aggregate (meta)data inputs than we ever were as consumers of banner ads.”¹⁰⁸ Indeed, in a few short years, I contend we’ve reached the point where this suggestion no longer requires a disclaimer. Digital media giants like Facebook and Google, governed by shareholder demands and the capitalist logic of perpetual growth, face the reality that producing bigger audiences for ads isn’t a growth industry. Instead, much like Upworthy, they need to find new ways to mine their users for value. Deeper veins with richer lodes must be located. As clickbait revealed, attention can be had for cheap.

I have chosen Upworthy as a case study for delineating some of the forces that have shaped the recent history of online media and its relation to an evolving attention economy. During that history, digital media’s relationship to marketing has been decisive in influencing editorial, data collection, user surveillance, and revenue-seeking practices. In the next chapter, I will closely consider some data collection and surveillance practices used by marketers

¹⁰⁶ Wu, *The Attention Merchants*.

¹⁰⁷ D’Onfro, “Google and Facebook Digital Ad Marketshare Growth.”

¹⁰⁸ McKelvey, Tiessen, and Simcoe, “A Consensual Hallucination No More?”

themselves, while I anticipate the arrival of a more complex (post-)attention economy, further exploring the connections among technology, datafication, and the emotions as exemplified by a new biometric marketing technology: emotion detection.

Chapter 3 / Emotion Detection: The Attention Economy Gets Intimate

As I have outlined, Upworthy's desire for data drove them to monitor and analyze the most minute signals of their audience's behavior, including, most recently, attempts to measure the emotional effects of their content. The company's commitment to competing in the marketplace of attention fueled their development of practices of intensive user surveillance and the datafication of user behavior in order to optimize their content and to track and share what they learned about their audience with their clients. As Upworthy's approach to the economy of attention evolves into one that looks on emotion and empathy as sources of value and commodities to be exchanged, it follows that they must now attempt to surveil, analyze, and datafy their users' mental states.

Despite the scientific patina of their rhetoric, however, Upworthy's emotional impact metrics currently lack the credibility of their attention-measuring efforts. Unobtrusively monitoring "signals" like mouse movements, browser usage, and video consumption can create a reasonable proxy of individual attentiveness that contrasts with Upworthy's more direct attempts to gauge emotional reactions, which have largely taken the form of brief, optional surveys. Nonetheless, the company's discursive commitment to emotional data indicates the idea's importance to them—and to their clients. Upworthy has become increasingly reliant on their advertising and content marketing work on behalf of brands to stay financially viable. The company appeals to these clients by claiming to create emotional connections with their readers and by providing evidence for that connection in the form of quantitative data. Taking Upworthy's experiment with using "emotion-detecting" data analytic software to measure the effects of their content as a cue, in this chapter I will further investigate the connections among the datafication of emotions, engagement-driven surveillance, and the marketing industry.

To an extent, Upworthy's turn to emotion indicates that digital marketing is catching up to the rest of the industry's longstanding investment in the culture of branding and moving on from unsophisticated techniques like banner and pop-up ads. Of course, display ads persist. But rather than serving as the online equivalent of billboards, they are more properly understood as the most visible evidence of a technically complex system that combines personalized microtargeting with online and offline behavioral tracking. Like all advertising, this system is designed to bring attention to products and services, but increasingly its primary purpose is to

learn about and influence consumer consciousness. As online analytics rationalized the measurement of attention, affective technologies like emotion detection offer the promise to marketers that they can finally measure the deeper psychological effects of their branding campaigns.

Upworthy's emotion-detection software was likely made by one of two companies—Affectiva and Emotient—who market biometric products that scan subjects' faces to generate data about their emotions in real time. Both companies were spun off from academic research and began with noncommercial, altruistic goals. But, like Upworthy, when these venture capital-backed startups faced pressure to earn revenue, they turned to the corporate marketing sector as a solution. As a result, their products have primarily been adopted by marketers with a desire to measure the emotional impact of advertising campaigns and consumer goods as well as other, less traditional “products” like political candidates. In this chapter I will explore the intellectual roots of this technology and trace some of the ways that the desire for emotional data—by marketers, publishers, social media platform operators, and a range of technology firms as well as employers and the state—is reaching into other social contexts. While its adoption is emergent, emotion-detection technology has already been used in outdoor advertisements, retail outlets, mobile applications, and other public, uncontrolled spaces, linking it to the proliferation of facial recognition systems, big data-driven sentiment analysis, programmatic advertising, and various forms of surveillance. Finally, I will discuss how the marketing industry's desire to detect consumers' unfiltered affective responses and psychological processes is helping to fuel the datafication and commodification of emotion and to transform the attention economy into something more probing and intimate.

Detecting Emotion

In November 2016, Upworthy wanted to study the empathetic effects of their content as part of a collaboration with the healthcare corporation Cigna. An article in *MediaPost* describes one of the methods they used: “Participants were monitored with facial-recognition software that mapped emotional reactions while they watched different pieces of video content. Within a few minutes, their empathy score flashed on a big screen.”¹ While the post does not specify what software

¹ Guaglione, “Readers Prefer Sharing Positive Content.”

they used in their “Empathy Lab,” the description corresponds with products offered by Emotient and Affectiva. Prior to Emotient’s acquisition by Apple in January 2016, both companies sold data analysis and visualization software that displays subjects’ emotional states in a familiar, legible, eye-catching dashboard presentation.² Put to use by marketers, these so-called emotion-detection technologies use machine vision-enabled cameras to record people’s facial “micro-expressions” and then convert these responses into analyzable data. One of a host of biometric techniques adopted by the growing neuromarketing industry, this technology views the face as a rich and legible source of market research data, enabling its owners to instantaneously and imperceptibly mine consumer sentiment without the interference of language or even cognition.

Emotion detection’s increasing ease of use and ability to be connected to other biometric technologies, automated optimization systems, and the Internet of Things suggests that its significance and presence in everyday life will likely grow. Indeed, Apple’s recent release of the iPhone X with its biometric Face ID feature indicates that the normalization of face-scanning technology (and, therefore, the face as a source of numerous kinds of data) has already begun. A future where advertisements, digital media, and various personal technological devices compete not just for our attention but are explicitly programmed to sense, respond to, and influence our emotions beckons.

Observing Unobservables

While neuromarketing can be understood as a discrete historical phenomenon, marketing firms and corporations have long sought ways to know as much about the thoughts, feelings, and intentions of consumers as possible. Instead of scanning faces, agencies of the past might have employed experts in psychoanalysis or body language to detect the unspoken feelings or irrational impulses behind consumers’ choices. Nonetheless, provided one accepts the scientific claims that serve as its foundation, neuromarketing represents a significant advance beyond the older indirect methods for those who desire to open up the black box of consumer consciousness. Much like user analytics transformed online media by revealing to publishers and their advertisers what content readers were actually paying attention to, neuromarketing promises to give corporations unprecedented data about consumers’ opaque inner workings. Writing for the

² Byford, “Apple Buys Emotient, a Company That Uses AI to Read Emotions.”

Journal of Advertising Research in 2015, Horst Stipp claims that contemporary interest in the practical application of neuromarketing techniques began in earnest around 2010, “fueled by advances in neurological science and by technological advances in neuroscience methods and tools. In short, they were becoming more conclusive, more practical, faster, and more economical.”³ Beyond the fact of technological improvement, Stipp argues that the tools held particular appeal for marketers due to their ability to address one of the profession’s long-standing concerns about market research: its over-reliance on test subjects’ cognitive processes. Through neuromarketing, market researchers could finally *directly* access the unconscious and the emotions in real time.

Neuromarketing operates from the conviction that by circumventing language and reading the body, marketers can uncover consumers’ precognitive, affective responses without the corrupting influence of verbal communication, the subconscious, social pressure, or culture. As branding expert Martin Lindstrom writes, we all have “irrational minds, flooded with cultural biases rooted in our tradition, upbringing, and a whole lot of other subconscious factors.”⁴ Simply put, in the words of marketing scholar Leon Zurawicki, technology that has the ability to penetrate people’s discursive façades allows marketers to discern the “differences between what people do and what they say.”⁵ According to these neuromarketing advocates, techniques like brain scans and biometrics will rationalize marketing, saving practitioners from the expense and uncertainty of imprecise tools like focus groups and surveys, even as they help to elucidate, account for, and anticipate the fundamental irrationality of consumer behavior.

Neurologist Antonio Damasio’s claims that the emotions play a major role in reasoning and decision making—and are linked to those processes neurobiologically—are often cited as a key discovery for marketing’s turn to neuroscience.⁶ Neuroscientists’ mapping out of the areas of the brain responsible for the production of emotion eventually led to the development of functional magnetic resonance imaging (fMRI) technology to scan brains and collect physiological evidence of emotional responses. This desire to make visible the physical symptoms of internal emotional processing resonates with the research of psychologists into facial expressions that underpins emotion-detection technology. But, by focusing on the face

³ Stipp, “The Evolution of Neuromarketing Research,” 120.

⁴ Lindstrom, *Buyology*, 18.

⁵ Zurawicki, *Neuromarketing*.

⁶ Mileti, Guido, and Prete, “Nanomarketing”; Damasio, *Descartes’ Error*; Zurawicki, *Neuromarketing*.

rather than the brain, these psychologists paved the way for technologically assisted emotion detection that wouldn't require sticking subjects into expensive, immobile brain scanners—nor would it require their consent.

In the sciences, the systematic linking of emotions to distinct facial expressions originates with Charles Darwin, who conducted cross-cultural studies of the relation of certain (evolutionarily determined) behaviors to emotional expression.⁷ Building on Darwin's work in the 1970s, psychologist Paul Ekman catalogued numerous examples of human facial expressions from different cultures to develop the Facial Action Coding System (FACS), a taxonomic method for describing visually observable facial movements, that, he claims, indicate distinct, universal emotions.⁸ Looking for a way to incorporate the study of ostensibly undetectable emotions and feelings into behavioral psychology's strict emphasis on empiricism, Ekman framed emotional expression in terms analogous to the classic Shannon-Weaver model of communication theory.⁹ As in standard communicative exchange, one's face sends emotional signals to a receiver. To justify the importance of his research on facial expressions to his colleagues in behavioral psychology, he writes: "The face itself is a legitimate focus of study [for all psychologists], and if one wants to learn what information can be derived from this multisignal system, then it is important to determine all the different kinds of information—messages—these signals can provide."¹⁰ In her introduction to a collection of research papers using the FACS, Erika L. Rosenberg asserts that, prior to Ekman, "the Zeitgeist of behaviorism and its blatant rejection of the study of 'unobservables' such as emotion certainly contributed to the dearth of research on facial expressions for several decades."¹¹

Rosenberg represents FACS and its turn to emotional expression as something of a departure for behaviorism, but the system's conceptualization of facial expressions as observable signals merely broadens the idea of what constitutes behavior. Like neuromarketers, behaviorists view human consciousness as a black box.¹² But rather than advance an epistemological critique of the idea that affects and emotions are beyond the purview of scientific observation, Ekman

⁷ Darwin and Ekman, *The Expression of the Emotions in Man and Animals*.

⁸ Ekman and Rosenberg, *What the Face Reveals*.

⁹ Shannon and Weaver, *The Mathematical Theory of Communication*.

¹⁰ Ekman and Rosenberg, *What the Face Reveals*, 605.

¹¹ Rosenberg, "Introduction," 11.

¹² Galison, "The Ontology of the Enemy: Norbert Wiener and the Cybernetic Vision."

and his colleagues compiled a large enough quantity of observable behavioral evidence of emotional responses to stimuli (i.e., facial expressions) to argue that those responses can serve as external proxies for unobservable internal processes. While FACS does require a belief in the existence of internal emotions and affects, theories of the mind and neurological explanations for why humans experience emotions are equally irrelevant. Psychologists working with the system disassociate facial expressions from consciousness, cognition, and verbal processing. In other words, if you can observe your subjects smiling, there is no need to verbally verify if they *think* they are happy. And if smiling is a universal indicator of happiness, it doesn't matter if you don't speak the same language as your subject—or if, like a computer, you don't fully understand human expression.

Sensitive Machines

Ekman's FACS provides theoretical and practical support for Affectiva and Emotient's products, while research into how humans interact with technology, especially computers, served as the impetus for their development. The desire to effectively communicate with computers is as old as computers themselves, though most efforts have focused on designing software that can pass the Turing test (i.e., software that can communicate naturally in human language). An important turning point in the history of human-computer interaction was the publication in 1997 of *Affective Computing* by Massachusetts Institute of Technology engineering professor Rosalind W. Picard, who later founded Affectiva. Picard's book is a groundbreaking argument in favor of exploring the potential benefits of “computing that relates to, arises from, or deliberately influences emotions.”¹³ Her case hinges on two related claims: 1) that, after Damasio, emotion is now seen as a critical component in human reason and intelligence and 2) that machines will never be able to successfully communicate with humans unless they understand and display emotion, because “affect recognition and expression are necessary for communication of understanding.”¹⁴ For example, if a friend tells you a piece of good news and you stare at her blankly, she will likely assume you didn't hear or comprehend what she said; conversely, if you smile in response to her words, she'll know that you did. Likewise, according to Picard, for computers to interact with humans successfully, they need to be able to read and take into

¹³ Picard, *Affective Computing*, 3.

¹⁴ Picard, 15.

account our nonverbal emotional responses and cues, especially our facial expressions (in a sign that the standards of the Turing test may need updating, some psychologists argue that preteens' heavy usage of screen-based technologies damages their ability to interpret these same cues¹⁵).

Picard founded Affectiva—which has developed a range of technologies, including but not limited to Affdex, their emotion-detection software product—as an outgrowth of her work at MIT's Media Lab in 2009.¹⁶ Like Ekman, Picard conceives of the face as a producer of signals that can be received and decoded, in Picard's case, by computers. Combining their ideas, the face acts much like a keyboard or a microphone that can input information to the computer with the FACS as the knowledge base that the computer uses to interpret, for example, raised eyebrows and an open mouth as “surprise.” To accomplish this feat of interpretation, computers need to be able to “see” faces the way other humans do, and emotion-detection technology could not work without the development of machine vision. Emotient originated in the Machine Perception Laboratory (MPL) at the University of California, San Diego, in 2012.¹⁷ All four of the company's cofounders were UCSD researchers in a range of fields, including automatic facial analysis, computational neuroscience, cognitive science, computer perception, and machine learning; Paul Ekman later joined the company's board.¹⁸ Combining Ekman's insights with the MPL team's research on machine perception and learning, Emotient developed software that can detect “joy, sadness, surprise, anger, fear, disgust, and contempt,” blends of multiple emotions, attention, and positive or negative sentiments.¹⁹ Both Affectiva and Emotient use machine vision-enabled cameras and algorithms based on FACS to analyze faces, detect and interpret their expressions, and display the resulting data to users in an analytic dashboard.

While computerized emotion-detection has noncommercial, often medical applications (for example, Affectiva's initial aim was to develop a tool to help people with autism read others' emotions²⁰), both Affectiva and Emotient have focused on commercial uses. As Emotient's website puts it, “[our] cloud-based services deliver direct measurement of a customer's unfiltered emotional response to ads, content, products and customer service or sales

¹⁵ Uhls et al., “Five Days at Outdoor Education Camp without Screens Improves Preteen Skills with Nonverbal Emotion Cues.”

¹⁶ Bray, “Waltham Firm Helps Computers Learn Empathy by Mapping the Human Face.”

¹⁷ “Emotient.”

¹⁸ Kharif, “A Technology That Reveals Your Feelings.”

¹⁹ Emotient, *Emotient FACET SDK Demo Video*.

²⁰ Murgia, “Affective Computing: How ‘Emotional Machines’ Are about to Take over Our Lives.”

interactions.”²¹ Emotient’s software’s ability to detect unconscious or even unwanted emotional reactions holds great appeal to marketing researchers looking for deeper insights into their customers.²² And the software doesn’t just tell corporations what their customers think of their products, it can supposedly anticipate emotionally driven consumer decisions. For example, “P&G’s Tide detergent was able to more accurately predict intent to purchase across three different types of detergent fragrances using facial expression recognition while the traditional survey the client fielded at the same time, could not.”²³ The Emotient API’s camera-based utility means that this kind of product research can even occur in the wild, allowing “software-enabled cameras”²⁴ in retail outlets to gather data on shoppers’ unprompted feelings about products outside of the artificial setting of a focus group. The software has also been used to analyze the reactions and attentiveness of an audience watching a political debate and of spectators attending a basketball game.²⁵

On a more interpersonal level, one of Emotient’s earliest projects was to create a “sentiment analysis” app for Google Glass so that “salespeople who wear Glass can use it to measure how customers respond during their interactions and then get feedback that can help tailor their responses.”²⁶ In other words, the app would allow retailers to emotionally optimize in-person sales interactions in real time. Likewise Affectiva—who have also worked with companies including Coca-Cola, Unilever, and Hershey to do market research—have patented “a new offering that can watch users as they watch TV, and use their reactions to suggest different shows and movies they might like,” optimizing the viewer’s experience emotionally.²⁷ These forays into the world outside of the marketing lab suggest a range of new uses for emotion detection that combine the ability to turn emotions into data with the possibilities offered by an expanding Internet of Things.²⁸

Apple has been characteristically silent about their intentions behind acquiring Emotient, but the purchase triggered speculation in the technology trade press in 2016. Looking for clues to

²¹ “About Emotient.”

²² Schultz, “Facial-Recognition Lets Marketers Gauge Consumers’ Real Responses to Ads.”

²³ Weisler, “Emotient: Facial Expression Recognition ‘Trumps’ All.”

²⁴ Wall Street Journal, *Why New Technology May Know How You Feel*.

²⁵ Weisler, “Emotient: Facial Expression Recognition ‘Trumps’ All.”

²⁶ Lunden, “Emotient Raises \$6M.”

²⁷ Bray, “Waltham Firm Helps Computers Learn Empathy by Mapping the Human Face.”

²⁸ Mok, “The Rise of Emotionally Intelligent Machines That Know How You Feel.”

a larger pattern, the Verge noted that Apple also acquired two related companies: “Faceshift, a motion capture startup focused on facial analysis, and Perceptio, a company with deep-learning image recognition technology designed for mobile processors.”²⁹ Cade Metz of *Wired* placed the purchase of Emotient in the context of growing tech-industry interest in deep learning—the big-data driven approach to artificial intelligence that powers facial analysis—which is an area heretofore dominated by Apple’s rivals Google, Facebook, and Microsoft.³⁰ However, Metz noted, Apple also recently “acquired a startup called VocalIQ, which uses deep neural nets for speech recognition,” possibly hinting at a plan to develop a more sophisticated, even empathetic, digital assistant. The subsequent release of the iPhone X in fall 2017 suggests that some of these predictions were close, and while Apple has not said that the new phone detects its users’ emotions, the device is programmed to unlock when its owner looks at it, even in the dark.³¹ In other words, the phone constantly monitors users’ faces to determine if they are paying attention to it. And even if the iPhone X isn’t currently compiling emotional data about its users, the fact that Apple owns Emotient’s technology means that it could.

Patent applications that rely on automated emotion-detection capabilities provide further evidence of what corporations desire to do with this technology and the data it generates. Using the specialty search engine Google Patents, I searched for and analyzed patent applications that significantly relied on facial-expression-analyzing, emotion-detection technology. I limited my search to patents that explicitly invoked Affectiva or Emotient, including ones filed by the two companies (Affectiva is far more enthusiastic about patents than Emotient), though many of the applications call for connecting face-scanning cameras to other physiological or visual monitoring systems. The most pertinent results included applications that rely on emotion-detecting technology to:

- Share information about one’s mental state through a social network³²
- Evaluate the mental states of a group of individuals to establish a “norm”³³
- Predict customers’ intent to purchase³⁴

²⁹ Byford, “Apple Buys Emotient, a Company That Uses AI to Read Emotions.”

³⁰ Metz, “You Might Not Be Able to Hide Your Real Feelings from Siri for Much Longer.”

³¹ Clover, “Apple’s New Face ID Biometric System Works in the Dark and When Your Face Is Obscured by Hats and Beards.”

³² Kaliouby, Sadowsky, and Wilder-Smith, Sharing Affect across a Social Network.

³³ Kodra et al., Mental State Analysis for Norm Generation.

³⁴ Kodra et al., Predicting Purchase Intent Based on Affect.

- Estimate the probability a video will go viral based on a test audience’s emotional responses³⁵
- Recommend video content based on a user’s affective responses to just watched content³⁶
- Automatically optimize media, such as advertisements, based on a user’s mental state³⁷
- Collect affective data from users of a video game system and modify the game experience in response³⁸
- Evaluate attentiveness to and emotional engagement with a display or device³⁹
- Recommend products to customers within a retail environment⁴⁰
- Collect affective data from multiple mobile devices⁴¹
- Monitor well-being holistically⁴²

Combining a few of these ideas, Microsoft submitted an application to patent an “emotionally intelligent system,” or, in other words, a digital personal assistant that can evaluate a user’s emotional state and then recommend appropriate content to consume or a nearby activity to do.⁴³ With this emotionally sensitive version of Microsoft’s Cortana installed on a phone, the user’s emotional state is conceived of as a generator of continuously harvested metadata to be tagged to every piece of content viewed on the device along with geographical location, time, other biometric data collected from health apps, and so on.

Correlating these applications reveals some of the desires at work in the proliferation of emotion-detection technology. Corporate actors seek to understand and predict consumer decisions, to improve product and content recommendation systems, to automatically optimize media and marketing experiences to achieve desired emotional outcomes, and to enhance surveillance systems to monitor and analyze not only our external actions and appearances but also our internal affects, emotions, and mental states. The desire for more penetrating forms of surveillance animates many of the applications, including those for tracking a user’s affective

³⁵ Kaliouby et al., Mental State Event Signature Usage.

³⁶ Kaliouby, Mahmoud, and Turcot, Video Recommendation Using Affect.

³⁷ Kaliouby et al., Optimizing Media Based on Mental State Analysis.

³⁸ Kaliouby et al., Affect Usage within a Gaming Context.

³⁹ Kaliouby et al., Image Analysis for Attendance Query Evaluation.

⁴⁰ Faulkner and Morris, User-state Mediated Product Selection.

⁴¹ Kaliouby et al., Collection of Affect Data from Multiple Mobile Devices.

⁴² Kaliouby and Bender, Mental State Well Being Monitoring.

⁴³ Czerwinski et al., Emotionally Intelligent Systems.

state across different devices, monitoring the mental state of individual attendees to events, and combining emotion detection with other biometric techniques to deliver a fully nuanced picture of subjects' overall mental health.

These visions of affective monitoring and optimization illustrate what Mark Andrejevic has called “drone logic.”⁴⁴ Inspired by military drones—contemporary icons of automated surveillance—Andrejevic uses the term to describe “the deployment of ubiquitous, always-on networked sensors for the purposes of automated data collection, processing, and response.”⁴⁵ This notion of a network of ubiquitous sensors collecting market research data appeals to marketers, but unsurprisingly they prefer a different term—nanomarketing—so named due to the possibilities presented by nanotechnology and the arrival of “miniaturized, portable, nonintrusive, and wireless” devices that can be added to numerous household or wearable products and used to monitor consumers' mental states in their everyday lives.⁴⁶ Unsatisfied with the amount of feedback that current technology is able to generate, emotion-detection enthusiasts seek to extract data from each and every micro-expression and affective response prompted by our media and marketing saturated environments. Neuromarketing in general is driven by a desire for deeper, richer consumer data, but, unlike facial-expression-based emotion detection, it is largely confined to the lab. Marketers cannot, yet, scan the brains of shoppers in a grocery store,⁴⁷ but they can easily point a camera at them, which is significantly cheaper than techniques like MRIs and can be carried out on a much larger scale. Emotion-detecting cameras thus take neuromarketing into new territory, allowing market research to be conducted without the consent or even awareness of its subjects. While emotion-detection technology has yet to be implemented at a mass scale, I suggest that it is not difficult to foresee it being adopted widely. As Andrew McStay notes in his research on a marketing firm's experimental trial with an emotion-detecting, responsive, and interactive billboard, advertising practitioners “see use of data and emotions collected in public spaces as inevitable.”⁴⁸

⁴⁴ Andrejevic, “Theorizing Drones and Droning Theory.”

⁴⁵ Andrejevic, 21.

⁴⁶ Mileti, Guido, and Prete, “Nanomarketing,” 665.

⁴⁷ Of course, the desire to develop technology that can read consumers' minds exists, but it is currently in the wishful thinking stage; see Grush, “Those ‘Mind-Reading’ EEG Headsets Definitely Can’t Read Your Thoughts.”

⁴⁸ McStay, “Empathic Media and Advertising,” 2.

Amazon's recent opening of the heavily automated, camera-saturated grocery store Amazon Go provides a peek into the future. Inside the store, cameras track consumers' movements with such precision that, despite the lack of human cashiers and anti-theft devices, shoplifting is nearly impossible, and purchases are matched to the accounts of individual shoppers with the appropriate mobile application.⁴⁹ Amazon Go is a bold leap forward for offline consumer surveillance, but, despite its science-fiction aura, it isn't an aberration. Joseph Turow summarizes the current push to turn bricks-and-mortar shopping into as data-rich and personalized an experience as the online version:

A new generation of merchants . . . is working with a set of technology organizations to build a new future for physical retailing. They are reorganizing shopping to capture data about us through the very media we carry, even wear (such as a Fitbit). The goal is to routinely track us, store information about what we buy and when, and score us based on that and other information. . . . Retailers are already using increasingly sophisticated electronic monitors, which show up first as experiments and then become ordinary elements of shopping.⁵⁰

Emotion detection could be one of those experiments, and, unlike discount cards or on-the-spot digital coupons, it could remain invisible to customers. If Amazon hasn't already, adding emotion-detection software to their camera system would not be difficult. Doing so would allow them to enrich their own customer profiles and to sell emotional data back to the product makers, meaning the digital marketing process would continue up to the point of purchase (and possibly beyond, if the product in question is equipped with its own nanomarketing sensors). For beyond its mere ease of implementation, what makes emotion-detection technology ripe for proliferation is that Emotient and Affectiva process their data into manageable form, making it as legible, shareable, and exchangeable as other forms of personal data.

Emotional Data

Collecting data about people's feelings and sentiments about consumer goods, cultural productions, or political issues has an extensive history. An immediate antecedent to emotion-detection technology's quantitative approach is big data-driven sentiment analysis, which also

⁴⁹ Wingfield, "Inside Amazon Go, a Store of the Future."

⁵⁰ Turow, *The Aisles Have Eyes*, 3.

involves the technologically assisted evaluation of data in order to discern underlying sentiments.⁵¹ Unlike emotion detection, sentiment analysis is limited to the analysis of text (or, more recently, emojis), such as a corpus of tweets about a brand or Facebook posts about a political issue. Thus, despite its pedigree as a big data tool and the fact that it mines data from freely voiced rather than elicited opinions, sentiment analysis is still vulnerable to the same charges of textual ambiguity as the traditional market research that neuromarketing advocates seek to replace. As a form of artificial intelligence, sentiment analysis can be fairly limited, rendering unsophisticated verdicts about where public opinion falls on a binary scale of positive or negative and failing to account for the slippery nature of discourse on social media, where, as Helen Kennedy puts it, “what appears as sentiment may in fact be its performance.”⁵² In a discussion of how software makes meaning, Ganaele Langlois argues that software currently struggles with interpreting human language (sense); better to circumvent it and gather affective data (sensation) instead.⁵³ The inherent, irresolvable polysemy of textual data poses a problem for artificial intelligence that emotion-detecting cameras supposedly solve by treating faces and bodies as machine-readable and, according to the psychological theories on which they are based, unambiguous.

Once collected, this data is valuable in multiple ways. As made evident by the patent applications, contemporary capitalism hungers for feedback. The perceived utility of sentiment- or emotion-detecting tools reflects the marketing industry’s deep investment in the idea of an emotional connection between customers and brands. In a mutually constitutive process, affective and emotional consumer surveillance is both a product of and a support for that belief, providing marketers with quantitative evidence of the bond they seek to instill in consumers as well as emotional feedback they can use to develop or refine their products or campaigns. Thus, emotions become an input for an iterative product development process organized around our affective responses. Products are designed to exert an ever-strengthening “affective grip” on consumers, and techniques to measure and analyze that grip’s effectiveness are folded into the logic of production.⁵⁴ In this new affective economy, Nigel Thrift writes, “what is being attempted is continuously to conjure up experiences that can draw consumers to commodities by

⁵¹ Kennedy, “Perspectives on Sentiment Analysis.”

⁵² Kennedy, 438.

⁵³ Langlois, *Meaning in the Age of Social Media*.

⁵⁴ Thrift, “Re-Inventing Invention.”

engaging their passions and enthusiasms.”⁵⁵ But this notion of passion creates a problem. Since affect is ineffable, advertising agencies and marketing professionals, much like online publishers, need to be able to prove they are accomplishing the goal of engaging consumers. Emotional data provides a means for legitimating their claims and making them accountable and helps to create guidelines along which to optimize the next iteration.

More importantly, as Upworthy’s trajectory makes plain, emotional data has value to corporate marketers and is subject to the same process of commodification and exchange as other forms of personal data. The end goal of marketing surveillance is the creation and elaboration of increasingly detailed customer profiles, which initially only used basic demographic facts but during the 1980s began to incorporate psychological dimensions as well, in order to nurture personal relationships with consumers.⁵⁶ For the most part, this psychological data has been generated by surveys or inferred from patterns in our purchases or online behavior. And so, given these profiles’ importance to the industry, one can easily grasp the appeal of an automated and scientifically legitimated emotion-detection system that promises to reveal consumers’ true feelings.

The collection of personal, emotional data fits into a larger pattern of companies tracking our behavior online to build up what John Cheney-Lippold calls “a database of intentions.”⁵⁷ Cheney-Lippold is concerned about the ways that these databases reify essentialist categories of identity by storing algorithmically inferred, rather than freely granted, personal information without our knowledge. The entities with access to our profiles are then capable of both discriminating against us and reinforcing cultural norms by algorithmically shaping our online experiences, including consumption, accordingly. Indeed, Leon Zurawicki celebrates neuromarketing’s capacity to bolster our assumptions about existing demographic categories and to provide evidence for new ways to sort consumers psychologically:

1. The findings from neuroscience support demographic classifications and concepts used so far. In doing so, however, the emphasis shifts from the gender/age-related needs to gender/age-related thinking and feeling.

⁵⁵ Thrift, 297.

⁵⁶ Turow, “Audience Construction and Culture Production”; Turow, *Niche Envy*.

⁵⁷ Cheney-Lippold, “A New Algorithmic Identity,” 168.

2. Neuroscience suggests additional, better discriminating criteria of clustering consumers while taking into account the buyers' attitudes, decision making styles and receptivity to communication.⁵⁸

Earlier I mentioned Upworthy's use of emotion-detection technology to evaluate their content. The results speak to the ways the combination of biometric technology and emotional datafication could reinforce existing gender stereotypes as well as create new bases for discrimination: "Upworthy found that women—especially young women—had significantly higher empathy scores overall than men. In addition, the average empathy of parents was significantly higher than non-parents."⁵⁹ Reifying the assumption that women are more emotionally labile than men—not to mention reinforcing the primary assumption that gender difference is biologically determined—could be considered harmful in itself. But what if high empathy is considered to be less a positive trait that facilitates political progress (i.e., how Upworthy would frame it) and more a sign that a consumer is particularly susceptible to emotionally inflected, empathy-arousing marketing campaigns (how Upworthy's clients would see it)? Zurawicki's mention of "receptivity to communication" seems innocuous, but recent revelations that Facebook tracked teenagers' emotional states to figure out when they are most vulnerable reveals how emotional data could be leveraged against consumers' best interests, particularly when applied to targeted political advertising.⁶⁰

More broadly, emotional data has the potential to be used as a tool of discipline or control. Inspired by sentiment analysis's perceived utility as a consumer research technique, corporations have begun using the same computerized textual data-crunching tools to uncover their own employees' sentiments. While some companies have used sentiment analysis to aggregate patterns in responses to employee surveys, IBM has gone a step further by data-mining their own in-house social network. According to journalist Kaveh Waddell, "an internally developed sentiment-analysis tool called Social Pulse monitors posts and comments for trends and red flags."⁶¹ Nonetheless, like their colleagues in marketing, corporate managers are aware of the limitations of computer-processed linguistic data, and Waddell concludes his report by noting a recent project that used facial scans to detect employees' emotions as they entered the

⁵⁸ Zurawicki, *Neuromarketing*, 178.

⁵⁹ Guaglione, "Readers Prefer Sharing Positive Content."

⁶⁰ Nunez, "Facebook Handed over Data on 'Insecure' and 'Overwhelmed' Teenagers to Advertisers."

⁶¹ Waddell, "The Algorithms That Tell Bosses How Employees Are Feeling."

workplace each morning.⁶² Among the patent applications I compiled, one filed by Dell Products for “security breach prediction based on emotional analysis” hints at one of the anxieties motivating emotional workplace surveillance: preventing corporate malfeasance perpetrated by employees.⁶³ Through this hypothetical product, “protection is provided by a security system that monitors and analyzes user activity, estimates emotional states of users, and determines the likelihood of an attack.” Part of that monitoring system would include facial expression analysis. For future employees of companies that purchase Dell computers, it may no longer suffice to spend their day in front of their monitors—they will have to look contented while they do it.

As Dell’s paranoia implies, emotion-detection technology holds appeal for agents of state surveillance as well, especially given the existing infrastructure for monitoring and analyzing faces. Indeed, the fact that Paul Ekman has worked with “the CIA, the Department of Defense, the Department of Homeland Security, and others to help develop both people and machines that read faces for emotions and help stop disastrous events on all levels” offers a clear example of how emotion-detection technology might lend itself to reinforcing unequal power structures.⁶⁴ Ekman’s model of emotion claims to be universal and free from cultural biases, but its biologically essentialist perspective completely ignores the complexity of the social.⁶⁵ Simone Browne has dismantled the idea that biometric technologies, especially those directed at the surfaces of bodies, can somehow circumvent the history of racial discrimination and oppression within which they originated.⁶⁶ And Affectiva has already had to adjust their algorithm to account for a perceived difference in the way smiles function socially in Japan. While the company claims that machine learning can solve the problems inherent to the FACS model,⁶⁷ the potential for emotion-detection technology to perpetuate or increase discrimination will require critical attention in the future.

In *The Filter Bubble*, Eli Pariser lucidly observes that “personalization requires a theory of what makes a person—of what bits of data are most important to determine who someone

⁶² Subhashini and Niveditha, “Analyzing and Detecting Employee’s Emotion for Amelioration of Organizations.”

⁶³ Gates, Security Breach Prediction Based on Emotional Analysis.

⁶⁴ Randall, “Human Lie Detector Paul Ekman Decodes the Faces of Depression, Terrorism, and Joy.”

⁶⁵ I can’t do justice to the sociological literature about emotions here, but for a landmark text that builds on the foundational work of Erving Goffman, among others, see Hochschild, *The Managed Heart*.

⁶⁶ Browne, *Dark Matters: On the Surveillance of Blackness*.

⁶⁷ McStay, “Empathic Media and Advertising,” 3.

is.”⁶⁸ Pariser is concerned that the behavioral data that companies like Google and Facebook collect and interpret to personalize our usage of their platforms do not provide an accurate representation of who we really are. But, by shaping how we access information about the world or interact socially, these theories about how to deduce our preferences and personalities exert real power. Upworthy provides an illuminating example of how data puts theory into practice. Even at their most expansive, Upworthy’s metrics only consider attention in N. Katherine Hayles’ “hyper” mode, quantifying user behavior exclusively at micro scale.

The inferences supporting emotional data likewise rely on a particular model of how emotion works—one that is grounded in specific psychological theories. Should the FACS model of emotion take hold as an industry standard, those who draw on its insights will be limited to the system’s seven emotions. Addressing a different, “genetic-centered” model of emotion, Brenton Malin notes that these kinds of biological explanations for emotion exclude more complicated, culturally variable, and yet equally common feelings like jealousy, embarrassment, and love.⁶⁹ In light of the work of Sara Ahmed and Sianne Ngai, I would add irritation, anxiety, paranoia, hate, and shame to the list of culturally important emotions and affects not comprehended by the FACS.⁷⁰ Part of the difficulty with detecting some of these feelings is that, as with attention metrics, the FACS model only counts fleeting moments of bodily expressivity: widening eyes, raised eyebrows, sudden smiles. Should the FACS be reified through emotion-detection technology, this “hyper” model of affect would gain in strength.

In addition to these questions about the legitimacy of the FACS and Ekman’s theory of universal emotions, the transposition of these theories into a user-friendly software interface has ramifications. Affectiva and Emotient both present their data in dashboard-style interfaces, and as Rob Kitchin, Tracey Lauriault, and Gavin McArdle have argued, dashboards are not transparent, ideologically neutral instruments.⁷¹ Data dashboards draw epistemological parameters around their subjects. In the case of emotion, these dashboards serve to establish and define emotional norms, much like Upworthy aimed to do for attention by devising metrics like

⁶⁸ Pariser, *The Filter Bubble*, 113.

⁶⁹ Malin, “Communication with Feeling.”

⁷⁰ Ahmed, *The Cultural Politics of Emotion*; Ngai, *Ugly Feelings*. Speaking personally, an emotion-detecting personal device that cannot account for irritation, paranoia, or anxiety would, if nothing else, miss a great deal of my feelings about it.

⁷¹ Kitchin, Lauriault, and McArdle, “Knowing and Governing Cities.”

attention minutes and active visits. Andrew McStay notes that currently the main barrier to widespread adoption of emotion detection is the lack of an accepted industry-wide standard for the data.⁷² And as Adrian Mackenzie reminds us, “prediction using machine learning assumes the existence of relatively stable classifications.”⁷³ Thus, the desired-for spread of emotion-detection technology, emotional data, and emotional optimization would require standardization, while the establishment of markets for emotional data would create hierarchies of value among different emotional styles. In short, the practices of emotion detection and emotional datafication would be powerful *emotional* forces, and their discursive power would be bolstered by their supposed basis in unemotional science and technology. As Simone Browne points out, biometric technology already marginalizes those who do not fit easily into existing categories.⁷⁴ There is a cruel irony that technology that was originally developed to assist people living with autism or other forms of neurodiversity may now be put to work delineating the boundaries of a desired emotional normativity.

Conclusion

The broad structural effects of emotional datafication would necessarily take place at a level of high abstraction. However, news that the Dubai police force has begun deploying a robotic police officer that can “detect a person’s emotions and facial expressions . . . [and] use its facial recognition software to help police officers identify and catch offenders” suggests that the notion of policing emotional normativity might become more concrete soon.⁷⁵ But while we wait for sensitive robocops to begin patrolling streets closer to home, the prospect of marketing and media companies scraping our hearts and minds for data raises more immediate concerns about individual privacy and the uses to which personal data are put.

When discussing technologies that involve facial analysis, protecting the identities of the people whose faces are scanned is often the primary concern. But the lack of ethical clarity around emotional data leads to defining privacy rights down to exclusively mean that collected data must be anonymized and a given practice is only excessively intrusive if it is linked to your identity. However, even a savvy technology user who understands that, by using a particular

⁷² McStay, “Empathic Media and Advertising.”

⁷³ Mackenzie, “The Production of Prediction,” 441.

⁷⁴ Browne, *Dark Matters: On the Surveillance of Blackness*.

⁷⁵ WAM, “Dubai Police Gets First Robot Policeman.”

online service or personal device, she is agreeing to the capture of information about her user behavior—what she likes, the videos she watches, or maybe even her activity elsewhere on the internet or actual physical location—might still balk at the idea that her use of, for example, a television entitles the manufacturer to deduce her inner, unexpressed or even unconscious feelings.

In light of this ethical lag, Andrew McStay argues that our conceptualization of privacy needs to be expanded to include considerations of intimacy.⁷⁶ Whether or not emotion-detection technology genuinely detects our true feelings, attempts to do so are undeniably invasive and may frequently be unwelcome, particularly if they are made without consent. Furthermore, these privacy concerns become more urgent when emotion detection is included within systems of automatic optimization and machine learning. Consider, for example, a recent Stanford University artificial intelligence experiment that was able to identify human subjects' sexual orientation with high accuracy solely through an analysis of their facial characteristics.⁷⁷ The problem with emotional data isn't only the prospect of it becoming another piece of highly personal data whose value is appropriated by corporations, but also how this data could be leveraged to infer intimate details about our emotional lives, guarded aspects of our personalities, privately held beliefs, and so on.

Advertising-dependent Facebook offers a clear example of a powerful corporation with a massive user base, low concern for privacy, and an appetite for personal data. Facebook has frequently proven to be invested in tracking, studying, representing, and influencing its users' emotional states—whether through their notorious mood-manipulating “emotional contagion” study,⁷⁸ the introduction of emoji reactions, or the aforementioned fact that they monitored the emotional states of teenagers to determine when they felt insecure or anxious.⁷⁹ Facebook's new artificially intelligent suicide-prevention tool attests to the level of sophisticated and deeply intimate insight into its users the company can generate.⁸⁰ The company's willingness to intervene in this problem is in many ways to be commended. Rather than feigning the kind of

⁷⁶ McStay, “Empathic Media and Advertising.”

⁷⁷ Sulleyman, “AI ‘Can Tell If Someone Is Gay’ Just by Looking at a Picture.”

⁷⁸ Kramer, Guillory, and Hancock, “Experimental Evidence of Massive-Scale Emotional Contagion through Social Networks.”

⁷⁹ Nunez, “Facebook Handed over Data on ‘Insecure’ and ‘Overwhelmed’ Teenagers to Advertisers.”

⁸⁰ Ginsberg and Burke, “Hard Questions: Is Spending Time on Social Media Bad for Us?”

disingenuous, hands-off neutrality that Tarleton Gillespie has identified as characteristic of many new-media platforms, Facebook has begun to acknowledge some of the enormity of their social power.⁸¹ However, as essayist Jenny L. Davis notes, “the company’s altruism is inextricably bound up with its business model,” and the company’s solution to suicide prevention is also its solution to how to make money: the constant monitoring of user behavior and an ever broadening approach to the collection and analysis of data about that behavior.⁸² In the good name of suicide prevention, Facebook can justify paying extremely close attention to its users’ emotional states, storing those observations in databases in perpetuity, and selling them to advertisers.

As others follow Facebook’s lead, our marketing profiles will include more and more detailed emotional and psychological information. However distant this data is from an accurate representation of our inner lives, it will be operationalized in our marketing, our media, our personal technology and, therefore, in how we learn about the world, how corporations and political parties try to influence us, and how we interact with each other and our environments. Optimizing for emotion or, as it’s more euphemistically put, “engagement” is already here, but technologies like emotion detection promise to accelerate and alter the process by providing credible, exchangeable data. Rosalind Picard’s belief that empathetic technology is better than the alternative may hold some truth, but what if that technology isn’t designed to be sensitive but manipulative? If clickbait was the pernicious end result of a consciousness industry focused on optimizing for attention, where will increased investment in emotional optimization lead? I will take up these questions in the conclusion, considering the ramifications of the creation of a market for empathy, the datafication of emotion, and a media and marketing system designed to engage and extract our emotions.

⁸¹ Gillespie, “The Politics of ‘Platforms.’”

⁸² Davis, “Here to Help.”

Chapter 4 / The Empathy Economy

“Once you change your metaphor of what the market consists of, then everything else changes.”—Philip Mirowski¹

Facebook’s impact on mental health and the public sphere, Upworthy’s dwindling stock of attention and commitment to social causes, computers that can’t understand or properly communicate with humans—empathy has been presented as the solution to all of these challenges. While disparate, these problems also all connect to their companies’ bottom lines. Mark Zuckerberg, Eli Pariser, and Rosalind Picard’s promotion of empathy is purportedly grounded in the desire to make our technologically mediated world more humane. But this empathy is governed by market rules, logic, and language. Can empathy solve these political, economic, social, and technical problems? Should it? In this conclusion, I will consider the potential arrival of an economy of empathy, exploring the ramifications of a consciousness industry that seeks access to our intimate thoughts and feelings in order to profit from them.

I use the phrase “empathy economy” expansively and with some provocation. As Upworthy’s trajectory shows, there is a narrow sense in which an economy of empathy could be conceived as the production and selling of empathy, meaning the circulation of feelings of connection, compassion, and care from subjects to objects. This economy would function similarly to the attention economy but would present some new concerns. More broadly, an “empathy economy” captures the idea that creating a market for the exchange of emotional, affective, and psychological data requires a commitment to the idea that these interior states can be externalized, measured, circulated, and commodified—our consciousness is not irreducibly ours but can be comprehended by others, including or even especially by empathetic machines. This logic lies behind both Upworthy’s claims that reading a story about someone’s suffering allows me to experience it myself and the proposition that they can deploy their content to generate positive feelings within their users and transpose them to clients. The attention economy led media and marketing firms to pay extremely close attention to their audiences; the empathy economy would reproduce and extend that pattern into new dimensions. A turn to empathy

¹ This quotation is from Lash and Dragos, “An Interview with Philip Mirowski.”

would mean that these companies would hold and act on a theory of mind, supplanting the old synecdoche of attracting “eyeballs” with more comprehensive and invasive attempts to account for our inner lives. In other words, an economy organized around user emotion, experience, and engagement requires the consciousness industry to look upon its subjects empathetically.

Marketing Empathy

The attention economy metaphor relies on the idea that attention is a resource limited by time and human neurology. What Upworthy’s history and the rise of emotion detection show is that, to those participating in this economy, attention is not just scarce but thin. Attention’s exchange value has outpaced its use value, even for companies like Facebook that have proven to be immensely effective at producing it. To those who find the attention economy increasingly inadequate—including the likes of Upworthy’s editors, Dove’s brand managers, and Mark Zuckerberg—clickbait represents a distillation of its flaws (or its principles, depending on how jaundiced your view is). The pursuit of eyeballs above everything has led to dispiriting tactics not far removed from Bart Simpson’s campaign sign: “SEX! Now that I’ve got your attention, vote for Bart!”

Those disillusioned with the attention economy have begun trying to find out what’s happening behind our eyes. However, it is only the “attention” part of “attention economy” that the consciousness industry has found wanting. The hegemonic logic of neoliberal economic theory means that the best solution to flaws in the attention market is to create new and better markets, hence the push for an empathy economy.² This new market could conceivably be called an emotion or engagement or experience economy. While there are differences among these terms (empathy and engagement, for example, can conflict) that could be productively pursued, the connecting principle is that the semantic richness and psychological complexity of the exchange between audiences and their media should be made more evident and, thereby, more valuable.

In critiquing the ahistorical character of some formulations of the attention economy, Yves Citton points out that the need to attract the attention of prospective customers existed prior to the internet and that, despite the term’s common association with networked technology, the

² Mirowski, “The Neo-Liberal Thought Collective.”

basic elements of the attention economy don't belong to any one medium.³ Upworthy's attempt to market empathy starts a bit closer to ground zero. Empathy's value isn't as immediately obvious as attention's, and so Upworthy's media kit must work to establish the value of empathy itself as much as the publisher's empathy-creating skills. If they continue to attempt to monetize empathy, their work will be aided by the tendency for digital media to create new markets out of human meaning-making. As Ganaele Langlois writes:

The third paradox of semiotological software is the predominantly corporate context within which it is deployed problematically links the economic, cultural, and psychological values of meaning: the attribution of meaningful values serves to create markets as much as it is an essential human activity.⁴

Upworthy's efforts to create a market for empathy are further supported by the history of empathy's valorization in corporate culture. In Carolyn Pedwell's words, empathy "has become part and parcel of being a self-managing and self-enterprising individual within the neoliberal order."⁵ In her account of the history of "emotional capitalism," Eve Illouz argues that "whereas Victorian culture had divided men and women through the axis of the public and private spheres, the twentieth-century therapeutic culture slowly eroded and reshuffled these boundaries by making emotional life central to the workplace."⁶ Through this process, empathy became a skill necessary for professional success and a form of emotional labor expected of most workers.

Caching Feelings

The idea of an empathy market is still nascent, and, as Upworthy's efforts make clear, the datafication of emotion it would require to function has not been developed yet. However, digital media have helped to create new affective markets and forms of affective data before. A key precedent is the "reputation economy," which developed out of web 2.0's capacity for individual users to rate, rank, and review.⁷ Like empathy, reputation can be seen as a more refined way of understanding attention, and the economy based around it similarly strives to quantify the intensity of consumer affect rather than its mere existence. The voluntary labor of internet users

³ Citton, *The Ecology of Attention*.

⁴ Langlois, *Meaning in the Age of Social Media*, 17.

⁵ Pedwell, "Economies of Empathy," 286.

⁶ Illouz, *Cold Intimacies*, 16.

⁷ Hearn, "Structuring Feeling."

ranking and rating creates real value, even if the only entities to profit from it are what Alison Hearn calls “feeling-intermediaries,” who belong to new professions such as “social media intelligence specialists or ‘listeners,’ information measurers and aggregators, and statisticians.”⁸ As emotion detection makes plain, newer forms of datafication dispense with the question of consent (“listening” has become, at best, “eavesdropping”), and part of the technology’s promise lies in automating the labor of extracting affect.

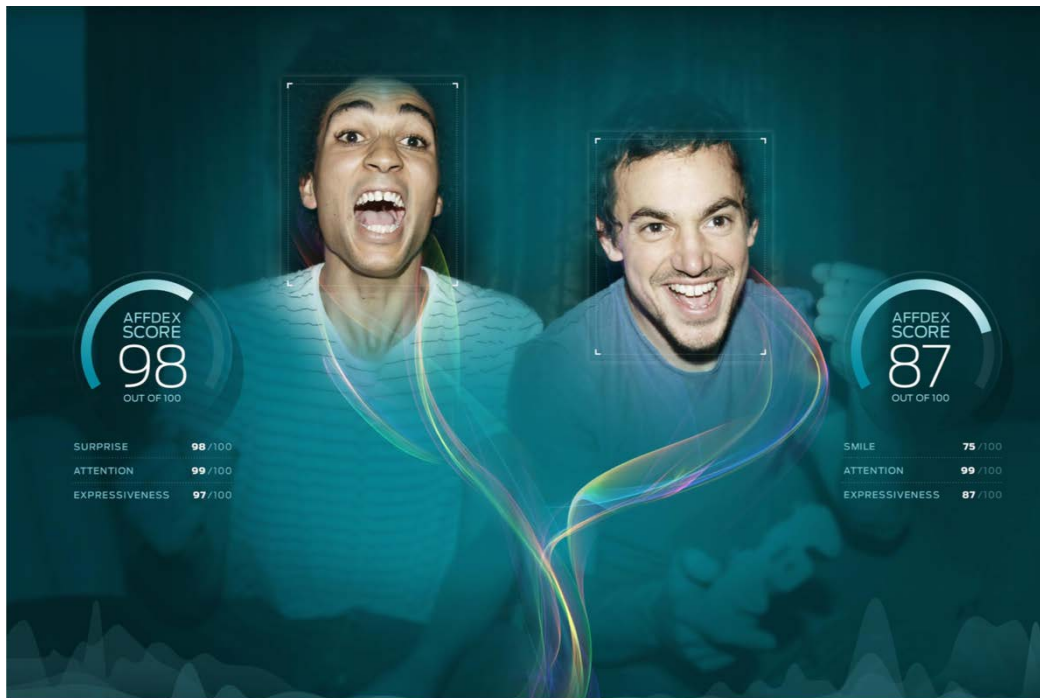


Fig. 7: Promotional material from Affectiva highlighting the Affdex Score

Scanning facial micro-expressions to detect our emotions diminishes the subtlety and complexity of human psychology through a bluntly behavioristic empiricism. This reductive vision is clear in emotion-detection software’s analytic tools, which can summarize emotional data in a stark, easily communicable and configurable *score*. For example, at the end of Upworthy’s “Empathy Lab” experiment each participant was shown their “empathy score.” Scores are a common end product of data collection initiatives whose goal is to sort people into predictive categories based on their past behavior, numerically rating people’s creditworthiness, likelihood for recidivism, and possible health outcomes (the fact that Upworthy’s empathy lab

⁸ Hearn, 422.

was a collaboration with the healthcare corporation Cigna is queasily apt).⁹ These discursive proxies wield real power over individuals' lives. As frivolous as Upworthy's or Affectiva's scores may seem, they belong to a long history of social stratification grounded in the conviction that individuals deserve the structural inequities they are born or forced into. As Marion Fourcade and Kieran Healy put it, "with access to our most intimate and unconscious behavior, new digital tools make a new economy of moral judgment possible."¹⁰ And in the empathy economy, the behaviorist definition of "behavior" would prevail as affective data collection tools would count even our internal bodily responses to stimuli, not just revealing search terms or impulse purchases.

Here we can see the power of dataism to reduce all phenomena—no matter how subjective or invisible—to counting, which is followed ineluctably by commodification. Through this veneration for quantification, the attention economy boils down our intellectual engagement with culture, politics, and society into statistics about pages viewed and minutes spent. An empathy economy would advance this process, rendering the deeper, more complex aspects of attention into another form of ratings. Customers who were *happy* watching X also watched Y. The familiarity (and occasional helpfulness) of these kinds of algorithmic recommendations helps to normalize dataveillance, and the incorporation of psychological profiling and biometric surveillance into everyday life is well under way. While attention may have lost some of its appeal as the primary basis of the online economy, we haven't escaped the logic of the attention market. Competition within that market led to the intense surveillance and datafication of our attention. With that data in hand, media companies optimizing content for attention sailed into the shallows of clickbait. Emotionally manipulative media has likely existed since media existed, but it can now be optimized and personalized with the feedback generated by affective surveillance and datafication.

Despite some publishers and advertisers' dissatisfaction with the pageview-based system, it has not been abandoned nor is its doom inevitable. However, as the "pivot to video" showed, if a powerful player like Facebook decides to invest in a different metric, the effects can be felt quickly. A new arena for asking questions about the relations among attention, emotion, and data recently arrived when Apple released analytic software for podcast creators who publish to

⁹ Fourcade and Healy, "Seeing like a Market."

¹⁰ Fourcade and Healy, 24.

Apple’s podcasting application.¹¹ What will podcasters armed with real-time, as-microscopic-as-you-want data about their audience’s listening behavior do next? How will the arrival of analytics affect the medium creatively and economically? While the means to access podcasts and the options for playback have generated excitement, as an audio-based medium often supported by advertising revenue, podcasts have not yet strayed far from their connection to traditional broadcast radio. But with several weeks of data under its belt, the medium, *Wired* suggests, promises to become a leader in the empathy economy:

Podcasters and advertisers alike have long suspected that their listeners might just be a holy grail of engagement. The medium is inherently intimate, and easily creates a one-sided feeling of closeness between listener and host—the sense that the person talking into your ear on your commute is someone you know, whose product recommendations you trust, and whose work you want to support.¹²

While I feel confident in predicting that the consciousness industry’s “grail quest” will go on, in an empathy economy “intimate” media optimized to create a sense of connection and caring—with data to back those claims up—may indeed become ascendant.

If optimism is the belief that we live in the best of all possible worlds (to gloss Leibniz), then optimization is the belief that, while we might not be living in that world yet, with enough data we can engineer it. The ideology of optimization proceeds from a commitment to the supremacy of reason coupled with the fetishizing of mathematical methods. With sufficient data and the right algorithms, we can organize messy emotions and channel them productively and efficiently. Orit Halpern, Robert Mitchell, and Bernard Dionysius Geoghegan sum up the rationalist momentum and demand for surveillance behind emotional optimization:

Optimization fever propels the demand for ever-more sensors—more sites of data collection, whether via mobile device apps, hospital clinic databases, or tracking of website clicks—so that optimization’s realm can perpetually be expanded and optimization itself further optimized. Smart optimization also demands the ever increasing evacuation of private interiority on the part of individuals, for such privacy is

¹¹ Perez, “Apple Launches Its Podcast Analytics Service into Beta.”

¹² Katz, “Podcast Listeners Really Are the Holy Grail Advertisers Hoped They’d Be.”

now often implicitly understood as an indefensible withholding of information that could be used for optimizing human relations.¹³

Ubiquitous, mandatory, and increasingly invasive surveillance; the scoring and classification of our emotional value; reducing the mystery of human consciousness to numbers—I have painted a bleak picture of what an “empathy economy” could entail and signify. A similar view of the attention economy would emphasize how it encourages finding and profiting from ways to hijack our attention, exploit its weaknesses, and addict us to distraction. Faced with the prospect of the consciousness industry turning to our emotions next, one might wonder if the problem is that the “empathy economy” isn’t empathetic enough. Could empathy provide a defense against this kind of bending of individual subjectivity to the will of powerful structural forces?

Empathetic Media

Noting the rhetorical recurrence of empathy across the twenty-first-century political spectrum, cultural studies scholar Carolyn Pedwell wryly suggests that, “empathy is now everywhere and is viewed, by definition, as positive. . . . When empathy is lacking or deficient we need to nurture it. Where there is oppression or violence empathy can heal.”¹⁴ Skepticism of panaceas aside, she acknowledges that feminist and antiracist theorists have maintained that empathy “might be cultivated in order to augment moral skills and promote ethical relations between people across social and geopolitical boundaries.”¹⁵ Upworthy exemplifies the popular conception of empathy’s power, and it’s worth returning to their story to reflect on how they frame empathy’s relation to politics.

In November 2012, Business Insider asked Eli Pariser to outline the secrets of Upworthy’s impressive success.¹⁶ Given the company’s idealistic mission, his first lesson is surprising: ignore politics. Pariser reveals that the 2012 US presidential election was the main incentive for starting the site, but they discovered that content tied directly to electoral politics wasn’t popular. However, as David Carr noted in an earlier profile of the site, “their version of citizenry tilts left,” and he quotes Pariser identifying their audience as “people who believe

¹³ Halpern, Mitchell, and Geoghegan, “The Smartness Mandate,” 119.

¹⁴ Pedwell, “Economies of Empathy,” 280.

¹⁵ Pedwell, 283.

¹⁶ Shontell, “How to Create the Fastest Growing Media Company in the World.”

global warming exists and gay people should be able to get married.”¹⁷ At that time, those two beliefs inarguably aligned Upworthy with the American political left (in the broadest sense of the term) and, more concretely, the Democratic party. This attempt to engage in progressive political action without mentioning the political process sometimes leads to an evasiveness in their content reminiscent of the curiosity gap, but instead of leaving out explanatory facts political signifiers are excluded. Responding to a query about writing headlines on question-and-answer site Quora, Upworthy curator Adam Mordecai is explicit about this tactic, flatly advising aspiring viral headline writers, “don’t use terms that overwhelm, polarize or bore people. I never use Social Security, The Environment, Immigration, Democrats, Republicans, Medicare, Racist, Bigot, etc. . . . You can talk about issues without giving away what they are.”¹⁸

There have been exceptions to this coyness, and a notable one arrived in late October 2016. In an Upworthy Insider post, senior editor Rebecca Eisenberg revealed why, in a break from their normal approach, Upworthy had decided to directly criticize Republican presidential candidate Donald Trump, who is “the antithesis of everything Upworthy’s mission stands for.”¹⁹ Before laying out the case against Trump, Eisenberg updates that mission:

We tell stories that counter cynicism with empathy, stories that remind us that we *can* change the world for the better. We work every day to advance this mission by sharing powerful, empathetic stories about the human experience and by elevating the voices and perspectives of people who don’t often get to speak for themselves.

Eisenberg allows that Upworthy is clearly invested in issues that are political—she mentions climate change, the civil rights of transgender people, that “black lives matter,” and the sexual harassment of women by powerful men—“but we resist attaching ourselves to a specific political party because we believe the issues that matter transcend political parties.” According to Eisenberg, members of Upworthy’s audience “identify with a wide spectrum of political beliefs,” and some people “are here because [they] enjoy the uplifting, hopeful, positive stories.” But, she elaborates, trying to find positive angles on Trump’s hate-filled campaign would be impossible and, given the gravity of the threat he represents and the size of Upworthy’s audience, irresponsible. Despite this turn toward the negativity of electoral politics, Eisenberg reiterates

¹⁷ Carr, “Two Guys Made a Website.”

¹⁸ Mordecai, “What Tools Does Upworthy Employ to Test Its Headlines?”

¹⁹ Eisenberg, “Why We’re Doing Something Different This Election.”

Upworthy's overarching commitment to uplift, reassuring her readers that "our stories will be, as always, empathetic, shareable, and emotional."²⁰

In recent interviews, Eli Pariser has advocated for empathy as a solution to the embittered political polarization that some claim has recently infected political discourse in the US (and elsewhere), telling the *Guardian*, "I really believe that understanding and empathy are a critical pre-condition of action. And really of democracy."²¹ Commenting on a new collaboration with the oral history nonprofit StoryCorps, Pariser, Peter Koechley, and StoryCorps founder Dave Isay assert that "asking questions and listening intently to other people's stories is a powerful force for good."²² While this specific articulation is tied to StoryCorps' mission, it's in line with Upworthy's discursive efforts to present (empathetic) storytelling as socially meaningful and useful. This theme recasts their mission while aligning with Upworthy's changing identity in the face of their audience shrinking. Rather than making challenging issues go viral, Upworthy now claims to connect people through stories. Reflecting their move from curation to creation, this new iteration of their mission emphasizes the social benefit of sharing stories in contrast with curation's power to amplify issues of concern.

One social benefit is making their audience feel positive and hopeful. Sean Wojcik asserts that, "thanks to Upworthy's empathetic style of storytelling—which humanizes even big, difficult, and otherwise inaccessible global issues—we actually see an overwhelming majority of our visitors come away from our stories feeling good."²³ Wojcik's discussion of the activating and empowering aspects of viewers' emotional responses to stories links Upworthy with the constructive or solutions journalism movement, which argues for reportage that leaves readers informed about a problem or issue but also optimistic that something can be done about it.²⁴ If scrolling through one's gloom-laden social media feeds can lead to paralyzing pessimism in the face of so many intractable problems, then Upworthy's goal of fostering empathy and uplift might count as a legitimate political intervention. Theories of a well-informed public sphere are grounded in Enlightenment beliefs in the primacy of reason, but if ostensibly dispassionate

²⁰ Eisenberg.

²¹ Jackson, "Eli Pariser."

²² Isay, Koechley, and Pariser, "#WhoWeAre."

²³ Wojcik, "The Science That Helps Upworthy Encourage Our Audience to Share Stories on Tough Subjects."

²⁴ Gyldensted, "You Will Not Believe What Upworthy Can Teach the Media about Sustainability."

presentations of facts and information are dispiriting, depressing, or demotivating, then perhaps, to be truly useful for democratic citizens, our news should be empathetic.

Empathy, as Rosalind Picard argued, might also help us address some of the problems inherent to the technology we increasingly use to get news and talk about it with each other. Examples of the harmful consequences of Silicon Valley's general disinclination toward empathy abound, and virtually every major technology company has a cautionary tale to tell about designing products without considering their potential for emotional damage. If the developers of Microsoft's notorious failed chatbot experiment Tay had cared about its capacity for offense, it couldn't have been manipulated into advocating Nazism. If Twitter cared more about the emotional effects of abuse, it might be a less divisive and hostile platform for social interaction. If YouTube cared more about what kind of engagement its recommendation algorithm optimizes for, conspiracy theories and political extremism might not have flourished on the platform. And if Facebook had cared about its users' well-being from the beginning, we might not have to wonder belatedly if social media can cause depression or fascism. Assuming they weren't motivated by an urge to better manipulate us,²⁵ tech engineers and entrepreneurs taking into account the psychological consequences of their products would be a positive step forward from dubious, self-serving claims to clear-eyed logic and the purity of reason.

The Trouble with Empathy

That our digital media and technology don't care about our well-being is a problem. That people with greater power and privilege ignore the suffering they cause to those with less is a far worse one. But is empathy the solution? Sara Ahmed argues that empathy can act as a kind of cynical emotional alchemy:

The 'anger' and 'sadness' the reader should feel when faced with the other's pain is what allows the reader to enter into a relationship with the other, premised on generosity rather than indifference. The negative emotions of anger and sadness are evoked as the reader's:

²⁵ A possibly naïve assumption to be sure. Consider, for example, the company Dopamine who recently developed artificially intelligent optimization software (named Skinner after the founder of behaviorism) to make mobile apps more addictive. Shieber, "Meet the Tech Company That Wants to Make You Even More Addicted to Your Phone."

the pain of others becomes ‘ours,’ an appropriation that transforms and perhaps even neutralizes their pain into our sadness.²⁶

Having been personalized, this communicable feeling of sadness exhausts itself, counteracting the positive sense of connection it is meant to instill. Ahmed elaborates, “in this way empathy sustains the very difference it may seek to overcome: empathy remains a ‘wish feeling,’ in which subjects ‘feel’ something other than what another feels in the very moment of imagining they could feel what another feels.”²⁷ Mediated empathy is a form of emotional arrogance that assumes being moved by an experience provides as much insight as having it. Psychologist Paul Bloom takes a different, even dimmer view:

Empathy is a spotlight focusing on certain people in the here and now. This makes us care more about them, but it leaves us insensitive to the long-term consequences of our acts and blind as well to the suffering of those we do not or cannot empathize with. Empathy is biased, pushing us in the direction of parochialism and racism. It is shortsighted, motivating actions that might make things better in the short term but lead to tragic results in the future. It is innumerate, favoring the one over the many. It can spark violence; our empathy for those close to us is a powerful force for war and atrocity toward others.²⁸

The similarities between Bloom’s case against empathy and Upworthy’s case for it, as well as the practices they use to cultivate it, are striking. These qualities include

- Attention: empathy is a way to draw attention to particular stories, and objects of public empathy must succeed in the attention market
- Scale: empathy works best with individual rather than collective objects; it connects us to other individuals but not to communities, such as political parties or organized social movements
- Emotionality: empathy triggers an emotional response, which spurs us to action rather than deliberation

Upworthy’s investment in storytelling connects these three aspects of empathy. As Upworthy exemplifies, narratives are a powerful tool for cultivating empathy. But stories favor individuals,

²⁶ Ahmed, *The Cultural Politics of Emotion*, 21.

²⁷ Ahmed, 30.

²⁸ Bloom, *Against Empathy*, 2016, 9.

clear protagonists, and the unusual (Upworthy’s kit for aspiring freelancers states that they prefer “surprising stories”²⁹). These features are good for capturing attention, but they don’t necessarily serve politics well. For example, dramatic and extraordinary events like mass shootings attract more public attention and empathy than the constant accumulation of less remarkable instances of gun violence in the US.

Empathy focuses political thinking at the level of the individual—a refugee crisis is only real, and only responded to with compassion, when its effects are embodied in a single child with a name. Needing to inhabit someone else’s shoes in order to address political problems creates obstacles for complex global issues. When thinking about climate change, should we empathize with the coal worker whose livelihood has been destroyed or the coastal resident whose house is threatened by the rising sea level? Even if one feels comfortable choosing to focus on helping the latter rather than the former, empathy is not useful in making that decision. Empathy brings suffering nearer, but emotional distance might be the better option. Social media exacerbates this problem by flattening the world and bringing everything, including the visceral pain of others, much closer. Eli Pariser was partially inspired to write *The Filter Bubble* (and to found Upworthy) by a comment of Mark Zuckerberg’s that, “a squirrel dying in front of your house may be more relevant to your interests right now than people dying in Africa.”³⁰ This solipsistic perspective does indeed exhibit an appalling lack of empathy, but I’m not convinced that Facebook presenting you with an endless stream of images and stories of human suffering would be more empathetic. Paul Bloom notes that feeling what others feel can lead to “empathetic distress,” which can cause actual trauma.³¹ In other words, empathy can result in spreading pain as much as raising awareness.

And what happens when our empathy is used to trick us? The circulation of fraudulent journalism designed to whip up partisan rage is a well-established (perhaps overblown) problem, but the *Guardian* recently suggested we may be ignoring another trouble spot: “Many of us, including news outlets, are becoming aware of fake news when it is of a political nature, but fewer checks and balances seem to be in place when it comes to viral feelgood stories.”³² While the dissemination of uplifting stories that turn out to be bogus is perhaps rightfully less of a

²⁹ “Welcome to Our Freelance Program!”

³⁰ Quoted in Pariser, *The Filter Bubble*, 1.

³¹ Bloom, “Against Empathy,” August 20, 2014.

³² Parkinson, “How Very 2017: The Trial by Media of 11-Year-Old Keaton Jones.”

concern than fabricated news accounts taken as real, the latter could easily start imitating the former. A cynic might accuse Upworthy of having created a blueprint for emotionally manipulative, demurely partisan content. Upworthy fact checks their articles,³³ but their imitators have already proven capable of taking their tactics and running with them. Furthermore, while Upworthy didn't originate the idea that "how people feel is more important than what they know,"³⁴ this axiom guides the emotional intensification of information flows on social media platforms where less scrupulous media outlets embrace hyperbole, manipulation, and fraud. Letting "user engagement" act as a gatekeeping mechanism has been a grand social experiment whose results currently look less than promising with our media dominated by stories designed to incite maximum emotion.

Feeling Spent

As Dominic Pettman argues, the problem with the emotionality of our information streams might not be that we're all getting too worked up, but that we're all doing it on our own. Pettman questions the narrative that, thanks to social media, "we are all synchronized to the same affective networks and moments."³⁵ Instead, he sees social media as producing "deliberate dissonance" and "staggered distraction" in that while we might all respond to the same story, we do so individually and at different times, making it difficult to translate our empathetic responses into something more productive than distress.³⁶ In an empathy economy, where, how, and why we "spend" our empathy matters. As Upworthy's pitch to advertisers implies, empathy can be understood, like attention, as a limited resource. Much like with our personal reserves of attention, Upworthy's content and Facebook's (and Twitter's and Google's) algorithms govern and ration our exhaustible stock of empathy, channeling it in particular directions at the expense of other options. And so, whether or not one agrees with Bloom's argument, Upworthy's explicit desire to package and sell empathy raises concerns. Directing empathetic attention to social problems could be undertaken ethically, but it is difficult to discern a social benefit in guiding it toward brands. If our attention and empathy have limits, then harnessing social media to funnel

³³ Savener, "Why We Fact-Check Every Post on Upworthy."

³⁴ "Who Cares? (Find Out Why You Should)."

³⁵ Pettman, *Infinite Distraction*, 29.

³⁶ Pettman, 29.

our limited resources toward the fictional self-representations of corporations leaves the world distracted from and indifferent to genuinely pressing concerns.

If the consciousness industry can externalize empathy, render it as something to be counted, exchanged, assigned a budget line, and watched over by a brand manager, it will cheapen. Observing the enthusiasm for empathy within business literature, Carolyn Pedwell writes that, “it is clear that what is valued above all here is not care, ethics, or morality per se but rather, how empathy, as an affective technology for ‘knowing the other,’ can be mobilized to extract increased profits.”³⁷ In emotion-detection I see the dream of a profitable affective technology for knowing the other made real—and, even better, it can be automated. But digital technology cannot truly have empathy. The empathetic capabilities of artificially intelligent computers are an impressive demonstration of their capacity to *learn* not to feel. And we have frequently taught computers to learn to achieve optimal ends without consideration for means. YouTube wasn’t designed to indoctrinate people into conspiracies, but the AIs charged with maximizing engagement on the platform learned that those pieces of content achieved its engagement targets and the conspiracy theorists profited. Empathetic media reproduce emotional norms unpredictably and poorly, and they may break them in undesirable ways (normalizing racial hatred, for example) as much as reinforce them.

Part of the reason for the volatility of automated emotionology can be expressed bluntly in terms familiar to the engineers creating this technology: garbage in, garbage out. In this thesis, I’ve examined how emotional datafication expedites commodification, standardization, and optimization. The thread connecting these three processes is the reductive nature of emotional data, which takes the profundity of emotion and strips it of complexity, isolating it in discrete moments in time and framing it as essentially homologous from person to person. Datafying emotion thus impoverishes human feeling at the same time it seeks to profit from it.

³⁷ Pedwell, “Economies of Empathy,” 287.

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