

Chapter 5

If You Liked That, You Will Love This: On Sameness-Based Algorithmic Recommendation Systems

Echo was a lovely nymph with a beautiful voice who got into trouble with the queen of the gods. According to Ovid, Jupiter had charged Echo with distracting his wife Juno with long conversations so that he could engage in his unfaithful escapades with various nymphs.¹ Unfortunately, Juno discovered the ruse and chastised Echo by taking away her voice, or rather, by making her lose the power to formulate her own thoughts, since the only thing she was thereafter allowed to utter were the last words of whatever was spoken to her. As if this tragedy was not enough, Echo fell in love with the self-absorbed Narcissus, who rejected her (as he did everybody) and caused her to fade away, so her bones turned to stone and the only part of her that remained was her voice. Narcissus did not go unpunished for his cruelty though, since Nemesis condemned him to fall in love with his own reflection in the water, so much so that he wasted away and ended up dying, even if he was changed into a flower by the gods.

This myth is about divine punishment, losing humanity, the despair of repetition and the dangers of excessive mirroring. The stories of Echo and Narcissus also illustrate two complementary sides of algorithmic culture: the tension between the individual and collective dimensions of sameness that will articulate this chapter.

Echo is desperate, condemned to waiting for the sounds that others make, in the hope that she can use their last words to express herself; she has lost her own language, the seductive tongue she was so adept at using. We can understand her frustration just by doing an online search. The algorithms there offer us the echoes of other people's answers, aggregated in massive calculations, whose distilled

¹I am basing this retelling on the English translation of the *Metamorphoses* by Anthony S. Kline (2000), hosted by the Electronic Text Center of the University of Virginia Library. The story of Echo and Narcissus is on Book III: pp. 339–510 (Accessed <https://ovid.lib.virginia.edu/trans/Ovhome.htm> on January 2022).



results acquire the aura of truth. Maybe they can fit our questions too? In social media, our attention is besieged by the whims of a multitude of strangers that share some similarity with us. Maybe they live in our area, maybe they are also women, academics, middle aged, maybe they once liked a video of a baby rocking a puppy to sleep. The machine gives us what lots of them liked: a dress with pockets, an inspirational video about body positivity or a trip to a remote Swedish village. We are not necessarily interested in any of these things; their echoes do not fit us.

Narcissus is lost too (Fig. 1). Ovid writes, ‘unknowingly he desires himself, and the one who praises is himself praised, and, while he courts, is courted’.² His kind of self-absorption is sterile and leads nowhere. The story is also a warning: if we only look at what we already are, we cannot move, we wither. And the dangers of navel-gazing are not just solipsism. Can we evolve if all we look at is our own reflection? A mind that is never challenged, or exposed to something new, stagnates (or so it seems if we embrace current discourses about education which place innovation, creativity and the ability to adapt at the centre of a flourishing life).³ This desire for dynamism seems at odds with algorithmic systems built to give us what we already know and love.

This chapter considers how algorithmic recommendation systems are changing the way we find and enjoy media products, focusing on books as a case study. Even though I am occasionally puzzled, annoyed and at times even angry at the feedback of the algorithms, I am not taking an apocalyptic stance. Methodologically, I will be working with autoethnographic vignettes, but this is not about me, or any other individual user. Personalisation strategies challenge the very notion of taste as well as the social and industrial dynamics through which our cultural desire is awakened, structured and commodified.

Taste: Individual Inclination and Collective Norm

Aesthetic taste is an elastic category that refers to an individual’s ability to appreciate art and culture, with critical implications for the functioning of all sorts of communities. The study of taste is a whole field in itself within aesthetic philosophy, and it carries other meanings related to our bodily and cognitive experience. Taste is of course one of the five senses (historically considered the basest), and it is from sensory experience that the aesthetic development of the concept departs.⁴ Throughout history, taste has had a moral, value-laden aspect, starting, perhaps, with the things we put into our mouths, but then on to other kinds of preferences, artistic and mundane; our taste in clothes or interior decoration. The Romans had a maxim *De gustibus non disputandum est*, with versions in many languages, that points to the fact that it is useless to try to convince others of the superiority of our own taste. There is no universal agreement as to what constitutes great art, or delicious food, and it is extremely difficult to disentangle which

²Ibid., pp. 402–436.

³Crystallised around the notion of *21st Century Skills*.

⁴Rudolph (2017).



Fig. 1. Algorithmic Echo and Narcissus, by DALL-E and me.

qualities might reside in the object and which might be purely subjective or situational. Still, from antiquity on, philosophers continue to disagree about the superiority of certain tastes as if this was an objective matter, and it has been essential in the conceptualisation of beauty and aesthetics.⁵ I argue that the confusion around the notion of taste comes from our usually mixing up two different understandings of the word:

- (1) the personal aesthetic preference of an individual, indisputable and subjective (although obviously formed by whichever access to culture the individual has had)
- (2) the exalted idea of aesthetic taste that a given society considers the pinnacle of civilisation, sophistication and, as we will see, beauty and truth (this notion partly overlaps with the idea of the *canon*)

In order to avoid further confusion in what follows, I propose to call the former *taste*, and the second *Taste*, capitalised, for it is in the struggle within them that my points will become clear.

Classic understandings of Taste are built upon the platonic notion of beauty as truth, which cannot be disentangled from questions of morality. This understanding begins to shift in the eighteenth century, when Hume proposed that beauty is not in the object, but that we ascribe it to the object that produces a pleasurable sentiment in us. Kant expanded upon this notion, highlighting that we are interested in sharing this with others, creating a community of Taste, an

⁵Kivy (2015).

'aesthetic common sense'.⁶ But even as philosophers were leaving moral judgements behind, the older notion of 'Good Taste' as attached to virtuous character has persisted, as part of the ideological project of shifting power elites and the struggles around defining cultural capital.^{7,8}

As aesthetic philosophy has moved from a normative towards a phenomenological position, Taste has lost preeminence as a cultural category, and we now prefer to talk about 'the aesthetic experience'. The nature of this experience is not solely dependent on the formal properties of the object nor exclusively on the sensorial and interpretive ability of a human appreciator, but is rather a combination of both. The aesthetic experience is the result of a meeting or an interaction, that actualises/realises the artistic object. Despite this 'new' understanding of the aesthetic experience and the attempt to throw off the shackles of morality in discussions of art and beauty, I would argue that the idea of Taste as a sort of essentialist faculty to recognise the 'right thing' is still very much operative in everyday life.⁹ Good Taste becomes then a competence to be developed, a mix of education and sensibility, that makes our personal taste magically align with the Taste. Further, having 'bad taste' shows not only aesthetic incompetence, it is also morally reprehensible. In this understanding, Taste is seen as something objective, attached to the object/work of art in ways that everybody can appreciate if they try hard enough. Each culture develops a normative value system to judge itself and its works of art. A whole society can aspire to something, for example by looking at the past as an example of some lost virtue, or by wanting to establish a specific vision of the future. There are many examples of particular moments in time when art forms (and thus the Taste that favours them) are attached to value judgements, for instance being seen as progressive or decadent. Politics and art cannot be disentangled.

Acquiring Good Taste is seen to be part of developing as a citizen and a human being, and is done through exposure to a specific canon of cultural works.¹⁰ This is an assumption that has been behind many a pedagogic and political initiative since the Enlightenment. Countless canons have been produced in different times, countries and across cultural platforms: lists of works essential for everyone with hopes of becoming a cultivated person and a good citizen. However, there has also always been a certain resistance on the part of individuals, as the canon inevitably looks back, and may, therefore, be out of step with society's development. This is an older problem than we might think. In 1914, Nelson A. Crawford complains that the school system was failing in fulfilling the purpose of the study of literature, which is: 'the development of good taste in reading, so that the pupil upon completion of the school course in the subject shall, in some measure at least, recognise the worthy and choose it for his own

⁶Ibid.

⁷See for instance Axelsson (2019).

⁸Guillory (1993).

⁹Most notably since Romanticism.

¹⁰That is, make our taste overlap with the valid Taste of our time.

reading'.¹¹ However, he must sadly admit that this was not happening, and people, fresh out of the school system, preferred to read newspapers and light contemporary novels, having developed an aversion to the canon. 'Most people do not feel the universal appeal in literature unless it touches, in an apparent way, the things with which they are familiar'.¹² Crawford proposes that instead of filling the young minds with information and indiscriminate reading, maybe the canon should be opened up and incorporate contemporary texts that dealt with issues the students cared about. Only then might a love of reading and real discernment be developed. I introduce this discussion here because it feels rather contemporary: taste and Taste pointing in opposite directions. Even today we discuss what should be part of school and university curricula, as society changes and we become aware of how the canon has ideologically shaped us.¹³

Despite the controversies and various canon extensions, the 'oldest' high art would still seem to be the most valued, both by our education system, the art world and the media in general. A sure sign of an elevated spirit, even today, would be to be able to not only recognise but also appreciate a Beethoven symphony, a Shakespeare play or a Matisse painting.¹⁴ Here, two idealised notions converge: the spiritual highness of art with the Rousseauian educated citizen invested in freedom and the community.

To understand the reasons behind this unhelpful conceptual blend, we need to go beyond the field of aesthetics and into the sociological understanding of taste, best represented by the influential work of Pierre Bourdieu. He proposes the notion of 'cultural capital' to describe the fact that people appreciate different things depending on their upbringing and social status.¹⁵ There are class patterns to the way different arts and objects are understood and preferred, that is, taste is not just a matter of aesthetic experience, but also a question of belonging. The national context is extremely important in this respect; his notion of 'field' is very much bound to the nation state.

The idea of cultural capital has been empirically tested recently, in a large-scale Australian study, that confirmed that education and occupation are strong factors in determining taste.¹⁶ The elite have been good at building up walls around a

¹¹Crawford (1914, p. 562).

¹²Ibid., p. 564.

¹³These struggles have been specially visible in the American context, with the so-called culture wars and the attempts to open up the Eurocentric literary canon including works from other contexts (Bona, 2017). I can recognize the kind of discussions and arguments also in my native country (Spain) and adopted one (Denmark), with similar clashes between centralising conservative forces and peripheral voices. The contexts are different but the intermingling of aesthetic and ideological arguments is the same.

¹⁴Even though questions about the morality of art resurface regularly, for example when we ask ourselves how was it possible for nazi officers to commit atrocities and enjoy classical music at the same time.

¹⁵Bourdieu (1984).

¹⁶The project has produced several book publications, <https://www.westernsydney.edu.au/ACF>.

palace that few others can enter. Inside the palace, there is Good Taste: the refined, the high, the elegant; outside, bad taste: the vulgar, the low, the tacky. Access to the palace is, as the Australian study demonstrates, a matter of resources and upbringing, but masquerades as a matter of spiritual sensibility. Social class allows for exposure to the forms of art and culture that have value as cultural capital and provides individuals with the necessary literacy to both decode and appreciate them. This process happens primarily at home, in the family and close social circle of each individual, perpetuating a cycle of unequal access.

Enter the Internet. As I have shown above, our idea of Taste has evolved according to different aesthetic considerations variously entangled with moral, normative and sociological notions of class. Has access to culture through the Internet changed this? In the early online days, the democratising possibility of unlimited access to quality content was celebrated, even as some critical voices warned us about the dangers of non-curated cultural distribution.¹⁷ Now, we are in a more pessimistic place, as the Internet is seen as the source of a lot of societal problems allowing ready circulation of fake news, hate speech and harassment campaigns.

Enthusiasts and detractors alike can agree on one thing: there is an unprecedented amount of culture available to be accessed. Books can be downloaded from libraries and e-book sellers, films, series and music can be streamed, and computer games have their own repositories. Everything is available if you can find it, and here we can see the value of curation, for without visibility there is no availability.

This abundance caters to the double understanding of taste as socially valuable *and* personal. Everybody can access the cultural canon and develop the kind of Taste that engenders cultural capital, and everybody can find something to their taste, no matter how narrow the interest. The ‘long tail’¹⁸ has been celebrated, where access to large repositories of items counteracts the culture industry’s tendency to focus on the next blockbuster.¹⁹ To make sense of all this, algorithms help people find what they want, usually based on a sameness principle: what did people similar to you like? What is similar to what you yourself liked in the past?

First Interlude: Personal Taste, the Canon and the Algorithm

My own experience of developing cultural Taste is a mix of aesthetic pleasure-seeking (taste) and adapting to social cues (the canon). This is the story of how I became a bookworm. Growing up in a working-class family, my exposure to books in general and the canon in particular happened at school,

¹⁷See Surowiecki (2005) or Benkler (2006).

¹⁸Anderson (2004).

¹⁹The equalizing effects of this have been more recently challenged, as the algorithmic recommendation systems still seem to favour ‘big stars’ or to be skewed in favour of general categories like gender or geographical location. See fx Ordaining and Nuns (2016), Tan et al. (2017), or Coelho and Mendes (2019).

where we were introduced to the great works of literature through fragments reproduced in our textbooks. For most children in my neighbourhood, this was a necessary evil; nobody read as a pastime. But I liked to immerse myself in books and, wanting more, I started to visit the school library. There I realised that there were all sorts of books; not just the classics, but also more entertaining stories, where I could live other kinds of lives full of adventure and fantasy, leaving the real world behind. Books were a door to wonderland, and I became such a voracious reader that I got a special deal with the baffled school librarian: I was allowed to check two books out every day (which were returned the next day) in exchange for helping to tidy up.²⁰ At primary school, I read all the canonic prescribed texts as well as everything from the children's shelves. Eventually, I ran out of fairy tales, Enid Blyton, Roald Dahl, Michael Ende, Lewis Carroll, Gloria Fuertes and all the rest, so I moved on to the community library and CS Lewis, Tolkien, Jules Verne, Alexandre Dumas, Conan Doyle and on and on I went, in a totally eclectic manner, guided by whim and limited only by whatever the library had acquired. Serendipity reigned supreme, and I had a permanent sense of wonder at the many discoveries I made. There were also 'bad' books I did not enjoy when I began reading them, but I forced myself to complete them for two reasons: (1) it was the only book I had that day and (2) even the most boring book could contain a treasure, a small passage or sentence that made it all worthwhile.²¹ I developed both a wide taste and a sense that the canon was important, so I resolved to systematically educate myself in the great works of literature.²² I would develop good Taste. The method was this: every time I checked out a 'pleasure' book, I also took another clearly marked as 'a classic', say *Dragons of Autumn Twilight*²³ and *Eugénie Grandet*.²⁴ I would read them at the same time and only return for new books when they both were finished. With this method, I covered a lot of ground, making many discoveries and learning to love a lot of the classics. In fact, sometimes the 'pleasure' book was a classic. I also read things which I did not understand and was not ready for, chugging along regardless, like a machine. I wanted to become an educated person, like the ones I read about in the novels; someone who owned shelves of well-thumbed books, went to the theatre and visited museums.

²⁰The rule was otherwise one book a week per student.

²¹Even today, it is hard for me to stop reading a book I do not enjoy. What if there was something wonderful hidden in one of its pages and I wasn't giving its author a fair chance?

²²Or what I gathered were the great works of literature from school textbooks, encyclopaedias and the like. I operated a bit like the Autodidact which Roquentin befriends in *La Nausée* (Sartre, 1938). I do not remember having been directly inspired by him, but who knows.

²³This is the first novel of the trilogy, *The Dragonlance Chronicles*, by Margaret Weiss and Tracy Hickman. It was published in 1984 and was all the rage for us who played tabletop roleplaying games.

²⁴This is one of Honoré de Balzac's most acclaimed novels, published in 1833 and the beginning of his big project, *La Comédie Humaine*.

This account is embarrassingly personal, but I daresay that the impulse behind it is universal: beyond the pure pleasure of reading, there is also a young person who is *outside* wanting to get *inside*, for whatever reasons, probably extremely muddled in my case. Without ever having heard of Bourdieu, I could see that people higher up in the class ladder had more comfortable lives, and occupied themselves with more interesting cultural pursuits. I wanted to belong to that group, mostly because I had the naive hope that I would then finally have someone to talk about books with.²⁵

In this story, Taste formation and its partial overlapping with taste is an assemblage of many different forces at play – personal interest, aesthetic pleasure, the school system, a vague conscience of class, textbooks, the canon, librarians, shelves, a library card, the physical disposition of shelves, the colour and form of book covers, intertextual citations in books – all contributing to discoveries and developments that together account for a colourful reading biography. Sameness and repetition were part of my method: the proximity of the shelves, the classification of books in genres, the things written by the same author or someone in the same period.

There were no recommendation algorithms at that time, I can only wonder what would have happened with that extra factor added to the equation. If I had had the means to buy or download books online, and the algorithm had kept on offering more novels that were *the same as* Enid Blyton. Would I ever have dared read out of my comfort zone? I decided to conduct an experiment: what kinds of texts would the Amazon algorithm recommend if I started with some of the classics like in my story above? Would I encounter similar things and would my taste have had the chance to develop in the same direction? When you browse the Amazon site looking for products, there are three main paths of discovery: ‘Frequently Bought Together’, ‘Customers Who Viewed this item also viewed...’ and ‘Products related to this item’. The two first ones are clearly built on collaborative filtering, while the last one might also incorporate some tagging or curation by Amazon themselves, following categories that are unclear to me. Like Echo depending on the sounds that others make, I decided I would ride the wave of all that was thrown at me, seeing if some of it resonated with paths I had taken as a child. I wanted to explore what kind of sameness would unite the books found by the algorithm.

I would start with one of my favourite books from my early discovery days at school: *Don Quixote*, by Miguel de Cervantes. Since this 1605 work is one of the foundations of the western canon, I assumed it would yield many connections. I was curious to find out if the engine would just point to all manner of old canonical titles (Taste) or if it would ever move into more modern or genre literature (taste). I have not ever purchased this book through Amazon, and I usually do not buy Spanish literature through them, so I thought my slate would be relatively ‘clean’. I also wrote the title in English. The system would probably

²⁵It was only much later than I realised that good Taste is not a ticket to the middle class and that there are not many in the middle class who talk a lot about books anyway...

attempt to relate this book to my purchase history, which is mostly contemporary fiction in English across a wide span of genres. I established that I would observe through four levels of recommendations. Since a lot of the connections offered are often to works by the same author, I decided that I would never pick a book by the same author I ‘came from’, and instead choose the first variation that took my fancy (to imitate my serendipitous shelf-hopping as a child), conflating the three categories ‘Frequently Bought Together’, ‘Customers Who Viewed this item also viewed...’ and ‘Products related to this item’ as one, limited to what one can see on one page (that is, I would not activate the arrows that allow you to find more products in any of the single categories). This is what happened:

I input *Don Quixote* in the search function and it presented me with various editions of the same work (Fig. 2). I picked a random one and then it suggested:

Level 1. Other editions of *Don Quixote*, *Crime and Punishment* (Dostoevsky), *1984* (Orwell), *The Count of Montecristo* (Dumas), *Frankenstein* (Shelley), *Candide* (Voltaire), *Little Women* (Alcott), *Wuthering Heights* (Brontë), Edgar Allan Poe’s selected works.

Not surprisingly, the suggestions are all part of the canon, even if we have moved away from Spanish literature. I decided to explore two avenues by opening two links in different tabs, to give two distinct search branches: a Russian one (*Crime and Punishment*) and an English one (*1984*).

Level 2. The *Crime and Punishment* tab suggested lots of books by Dostoevsky until the ‘Customers Who Viewed this item also viewed...’ offered me *War and Peace* (Tolstoy) and ‘Products related to this item’ pointed to *The Trial* (Kafka). On this second level I am also presented with *The Great Gatsby* (Fitzgerald), *Pride and Prejudice* (Austen), *Dubliners* (Joyce), *The Hound of the Baskervilles* (Conan Doyle), *The Adventures of Sherlock Holmes* (Conan Doyle) and *Macbeth* (Shakespeare), as the algorithm steadily pulled me into English literature. I selected *War and Peace* and *The Trial* to move on.

The *1984* branch was satisfyingly different, taking me immediately to a selection of more dystopian novels and other parts of the canon that are closer to suspense and adventure, although still pretty traditional: *Animal Farm* (also Orwell), *Lord of the Flies* (Golding) *Brave New World* (Huxley) *The Sign of Four* (Conan Doyle), *At the Mountains of Madness* (Lovecraft), *Moby Dick* (Melville), *The Great Gatsby* (Fitzgerald), *Around the World in Eighty Days* (Verne), *Little Women* (Alcott), *Dubliners* (Alcott). I continued this branch with *Lord of the Flies* and *Brave New World*.

Level 3. *War and Peace* took me back to Dostoevsky with a few editions of different works, and then as a novelty, *The Iliad* (Homer), *Wuthering Heights* (Brontë), *War Lord* (Cornwell, this is the first book that I had never heard of), *War of the Worlds* (Wells), *The Strange Case of Dr. Jekyll and Mr. Hyde* (Stevenson), *Little Women* (Ascott). *The Trial* (Kafka) took me back to *1984* (Orwell), more Dostoevsky, *The Great Gatsby* (Fitzgerald) and a few new things, some of which seemed to be latching on to the word ‘war’: *War of the Worlds* (Wells), *The Art of War* (Tsu Zu), *The Prince* (Machiavelli) *The Scarlet Letter* (Hawthorne), *The*

Customers who viewed this item also viewed

Page 1 of 9

This screenshot displays a series of book recommendations on an Amazon page. At the top, a navigation bar shows 'Customers who viewed this item also viewed' and 'Page 1 of 9'. Below this, a horizontal carousel of book covers is shown, with navigation arrows on either side. The books featured are:

- The Count of Monte Cristo (Penguin Classics)** by Alexandre Dumas père. 5,768 ratings, Paperback, \$7.29, \$14.57 shipping. Labeled as '#1 Best Seller in Classic Action & Adventure'.
- Don Quixote** by Miguel De Cervantes. 2,504 ratings, Paperback, \$14.59, \$13.75 shipping.
- War and Peace (Penguin Clothbound Classics)** by Leo Tolstoy. 2,359 ratings, Hardcover, \$15.49, \$15.99 shipping.
- Crime and Punishment (Penguin Clothbound Classics)** by Fyodor Dostoyevsky. 2,020 ratings, Hardcover, \$24.60, \$14.27 shipping. Usually ships within 2 to 3 days.
- Don Quixote (Signet Classics)** by Miguel De Cervantes. 223 ratings, Mass Market Paperback, \$7.29, \$12.68 shipping. Only 6 left in stock.
- Paradise Lost** by John Milton. 938 ratings, Paperback, \$7.99, \$13.13 shipping.

Customers who bought this item also bought

Page 1 of 16

This screenshot displays a series of book recommendations on an Amazon page. At the top, a navigation bar shows 'Customers who bought this item also bought' and 'Page 1 of 16'. Below this, a horizontal carousel of book covers is shown, with navigation arrows on either side. The books featured are:

- The Count of Monte Cristo (Penguin Classics)** by Alexandre Dumas père. 5,768 ratings, Paperback.
- Crime and Punishment (Penguin Classics)** by Fyodor Dostoyevsky. 2,020 ratings, Paperback.
- Paradise Lost (Penguin Classics)** by John Milton. 4,058 ratings, Paperback.
- Wuthering Heights (Penguin Classics)** by Emily Brontë. 21,473 ratings, Paperback.
- Ulysses (Wordsworth Classics)** by James Joyce. 1,939 ratings, Mass Market Paperback.
- The Divine Comedy (The Inferno, The Purgatorio, and The Paradiso)** by Dante Alighieri. 2,674 ratings, Paperback.

Fig. 2. Screenshot From Amazon.com Recommendations After I Chose Don Quixote (In the Penguin English Edition). Source: © 2023, Amazon.com.²⁶

Jungle Book (Kipling), *The Adventures of Huckleberry Finn* (Twain). For the next level, I dug deeper through *The Iliad* and *War of the Worlds*.

In the other branch, the suggestions now took a more adventurous turn, as a lot of Conan Doyle and popular fantasy and dystopian science fiction began to sneak in: *To Kill a Mockingbird* (Lee), *The Catcher in the Rye* (Salinger), *Animal Farm* (Orwell), *The Hound of the Baskervilles* (Conan Doyle), *The War of the Worlds* (Wells), *The Colour Purple* (Walker), *The Sign of the Four* (Conan Doyle), *The Art of War* (Tzu), *Return of the Dragonborn: the Complete Trilogy* (Howell), *Fahrenheit 451* (Bradbury), *News of the World* (Jiles), *The World Walker* (Sainsbury), *Shadow World* (Kos), *Magical New Beginnings* (Trim), *Selfsame* (Wolfe), *Viridian Gate* (Hunter), *Scienceville* (Gibson). This selection looks a bit like the ‘pleasure’ books I used to check out. I decided to continue with *Fahrenheit 451* and *News of the World*.

Level 4. *The Iliad* took me to *Metamorphoses* (Ovid), *The Odyssey* (Homer), the *Aeneid* (Virgil), *The Cypria* (Smith), *The Secret Garden* (Hodgson Burnett), Edgar Allan Poe’s *Selected Works*, *Macbeth* (Shakespeare). Had I clicked on *The Great Gatsby* (Fitzgerald), I would have got *To Kill a Mockingbird* (Lee), *1984* (Orwell), *Pride and Prejudice* (Austen), *Adventures of Sherlock Holmes* (Conan Doyle), *Frankenstein* (Shelley), *A Tale of Two Cities* (Dickens), *Macbeth* (Shakespeare), *Gulliver’s Travels* (Swift), *Emma* (Austen). If I had clicked *War of the Worlds* (Wells), instead, I would have got some of the same things, which surprises me: *1984* (Orwell), *To Kill a Mockingbird* (Lee), *Grimm Tales*, *A Christmas Carol* (Dickens), *Around the World in Eighty Days* (Verne), *Twenty Thousand Leagues Under the Sea* (Verne). And suddenly, a lot of adventure stories: *Moby Dick* (Melville), *Alice’s Adventures in Wonderland* (Carroll), *The Great Gatsby* (Fitzgerald), *Great Expectations* (Dickens), *The Jungle Book* (Kipling), *The Adventures of Huckleberry Finn* (Sawyer), *20,000 Leagues Under the Sea* (Verne).

The 1984 branch continued to expand its suggestions, and even though there is a lot of repetition of titles (more than in the other branch), I was definitely connecting now with works outside the canon, mostly in crime fiction: *Go Set a Watchman* (Lee), *War Lord* (Cornwell), *Journey to the Centre of the Earth* (Verne), *Frankenstein* (Shelley), *Her Majesty’s Will* (Blixt), *Animal Farm* (Orwell), *The Picture of Dorian Grey* (Wilde), *Anna Karenina* (Tolstoy), *Catch-22* (Heller), *Franny and Zooey* (Salinger), *A Bird in the Hand* (Cleeves), *A Day in the Death of Dorothea Cassidy* (Cleeves), *A Bend in the River* (Naipaul), *The Colour Purple* (Walker), *Witch Fire on the Levels* (Hodges), *Poison in the Pond* (Blake), *Around the World in Eighty Days* (Verne), *A Clockwork Orange* (Burgess), *Where the Crawdads Sing* (Owens), *A Gentleman in Moscow* (Towles), *The Colour of Lightning* (Jiles), *Enemy Women* (Jiles), *Simon the Fiddler* (Jiles), *Lighthouse Island* (Jiles), *The Power of the Dog* (Savage), *This Tender Land* (Krueger), *Whispers of the Walker* (Holmes), *Goodbye to Budapest*

²⁶I have taken this screenshot more than a year after the experiment, so it is not exactly the same list of recommendations, although many are.

(Morris), *Dark Fire* (Sansom), *The Illuminati Conspiracy* (Rees), *The Dry* (Harper), *The War Planner Series* (Watts). I did not know any of the last 14 mentioned titles and had to investigate them. This last branch puts my sameness prejudice to shame: the algorithm did indeed take me to other places.

I started with *Don Quixote*, a story that makes fun of an excessive love of fiction (among other things) and ended with modern dystopias thematising evil or great fantasy conspiracies. Still, most of the recommendations were books that certainly would count towards developing Taste, maybe that was the heart of the sameness pursued by the algorithm in this experiment. In my field notes, I wrote: 'are people buying complete syllabus for introductions to literature all around the world?' My recommendation journey seemed like a literary version of the 'Six Degrees of Kevin Bacon' game, where all paths will take a reader to the *Iliad* or *The Great Gatsby*. It is in this respect interesting that the collaborative filtering did not have an eye for diversity. But how can this be? I do not understand how my own previous purchase history might have influenced this particular set of recommendations, but I am surprised that the algorithm steadily holds on to the canon, mostly English, masculine, white; since my own purchases are much more mixed. I take this as a sign that all of us book buyers are seeking to walk the same steps as so many before us. To repeat the same readings is to become an educated person, like I did perusing physical shelves marked as 'classics' at the local library. Or maybe it is just that another component of the algorithm is to recommend titles published in the same collection, like Oxford World's Classics. One could of course argue that these are not really reading recommendations, since they are not based on people having read or enjoyed the books, but on purchases or shared publishing houses.

To sum up, if I had followed the Amazon algorithm as a child, I would have been able to acquire quite a good knowledge of the canon, to develop Taste. However, I was not tempted to buy any of the unknown books that were recommended, which is rather disappointing considering the delight I have always had in book discovery. Maybe the context was at once too thin and too overwhelming, and it was hard to forget how artificial the whole experiment was. I was also most likely resisting the fact that someone else had made the connection for me. I do not like being explicitly told what to do. There is an inherent normative pressure in the way that the recommendations are built upon what similar subjects have liked, suggesting I might want to be like them, and I refuse to let the algorithm discipline me.²⁷

The algorithm's selection was not more random than shelf placement in my community library, but I lacked the motivation to follow through and buy them. I learnt that I was less motivated than I usually am at a bookstore or library because the physical books were missing. It worked more like a nostalgic exercise where I could perceive the connections between works I knew and the taste/Taste I have developed over many years of reading and submitting to the canon.

²⁷Cohn (2019, p. 8).

How Recommendation Systems Work

Recommendation systems are algorithms that push content to us based on an aggregated calculation of other users' choices and/or our previous choices, following a principle of sameness or closeness and usually claiming that their recommendations are specifically tailored for us.²⁸ Phrases like 'best choices for you', 'top picks for you', 'uniquely yours', want to bridge the intimate space between us and our machines. Netflix, Amazon or Spotify suggest they know me even better than I know myself. How else could they offer me what I do not yet know I want? One could argue that the marketing industry always has used similar rhetoric, trying to awaken in us the desire to acquire something that makes us happy, first creating an artificial need and then fulfilling it, but this is different. Unlike market segmentation techniques, recommendation systems are not defined by pre-established categories linked to the identity of the users (age, gender and so on), although sometimes parameters like location can play a role. They are not selling specific lifestyles or versions of happiness. They do not need to imagine how these products might have a role in our lives in order to push them at us. Instead, these platforms register all user activity, including our own, and detect affinities that are likely to predict successful engagement. These affinities can be between similar objects (Spotify: the song you liked shares characteristics with this new song); or they can be between people (Amazon: others who bought that book, also bought this book). Netflix does a combination of this, and films are offered to you based on your previous viewing habits, and in relation to those of other users ('top 10 films in Denmark today').

This is really not so different from analogue search-find strategies like asking your librarian for another crime novel set in the Cotswolds or watching a film which your friends are raving about, even if these two examples allow for much more agency on your part and a nuanced negotiation of your taste and preferences. The difference is in scale and filter. The library has certainly many books, but even if the librarian was not there, you could conceivably browse the 200 crime novels on display until you found one that took your fancy. Your friends see many films, but they will only talk to you about those that made a real impression. Someone has already curated content to reduce it to a manageable amount, and you have the means to ask them about those decisions and narrow your focus even further. Sure, these strategies can fail, and there are bad recommendations and terrible reading experiences because we were seduced by a beautiful cover. But we also learn whose recommendations to trust and whose to avoid.

However, when a platform contains all the books and music in the world (at least it feels like that), idly browsing is going to be frustrating and most likely fruitless. That is why we grasp at structures offered to us to help us navigate the sea of content. The recommendations and the categories built upon them suddenly become appealing, but that does not make them 'uniquely suited' to us.

²⁸Of course, the algorithms of different recommendation systems work differently, but this could be applied to most.

There is by now a solid body of work dedicated to scrutinising the most popular recommendation algorithms. One of the common worries in these texts is the kind of manipulation that they can subject us to.²⁹ Critics assume users are passive, subject to the whims of the machines, and that ‘production and consumption will be in the hands of semi-autonomous algorithmic technologies’.³⁰ They will choose both the content and the way to present it to us, and we will have no way of knowing how those choices were made, since the opaque algorithms are black boxes that do not reveal their inner works to us. It is implied that algorithms are probably not working to serve our interests, but their own, even if they can sometimes overlap.

A case in point could be the Netflix recommendation system (NRS), which has become a domestic companion for many people around the world.³¹ It is powered by machine learning and combines content-based filtering (the user’s past interaction data), catalogue data (where each item has been manually tagged according to genre, category, actors and so on, plus a taxonomy of tags) and collaborative filtering (data from other users grouped into global taste communities).³² Niko Pajkovic set out to find out how effective NRS personalisation really is, so he made four archetypical personas to interact with the NRS, choosing and consuming content according to a set of fixed parameters.³³ After letting the experiment run over two weeks, he found that their splash screens became radically different, as the NRS adapted to give each of them more of what they had selected previously. He analysed the surface grid that was offered to each persona and concluded that the algorithm assumes that consumption of something is an ‘authentic taste performance’.³⁴ If you have watched a few romantic movies, it assumes that this is your innermost preference, and adjusts the grid to show thumbnail after thumbnail of couples kissing or about to kiss.

But this is not all there is to the NRS. It will also adapt the advertisement of big new releases to present them in ways that might be attractive to all profiles. Pajkovic compares the artwork personalisation behind the releases of the series *Outer Banks* and the film *La La Land*. The ‘sports fan’ got a thumbnail of people running with surf boards and dancing, the ‘hopeless romantic’ got thumbnails of people kissing (in both of them) and the ‘culture snob’, solitary figures that looked defiantly at the camera.³⁵ Netflix has invested big sums in these works and wants

²⁹Crawford (2016).

³⁰Pajkovic (2021, p. 214).

³¹According to Statista, Netflix has 223 million subscribers worldwide by the end of 2022. <https://www.statista.com/statistics/250934/quarterly-number-of-netflix-streaming-subscribers-worldwide/>.

³²Ibid., pp. 216–217.

³³The four personas are Die-Hard Sports Fan, Culture Snob, Hopeless Romantic and Disruptor. His method included choosing films that appeared to cater to these personas tastes (which he had defined in advance) and then letting the film run so the NRS thinks they have ‘watched it’ and can use the information to build future recommendations upon.

³⁴Ibid., p. 231.

³⁵Ibid., p. 223.

to promote them as much as possible. But truly, these works do not really fit the taste of everybody, and the adapted posters are just a falsification attempt, a way to make users think that the new content fits just them. In this system, it does not matter whether we choose to watch the offered movies or not, the important thing is that we get the impression that Netflix is filled to the brim with offerings that cater to our specific taste. This exaggerated self-confirmation is the incarnation of the Narcissus nightmare, a mirror where we can gaze at ourselves endlessly, and which justifies keeping our subscription. It may, however, serve to change the way we think about our own taste, as it is so clearly reflected back at us. Pajkovic argues that 'taste, like the operations of algorithms, is performative and transformative, it exists and functions in a constant state of revision, where its cultivation and purpose is negotiated among the various actors involved in its becoming'.³⁶ The algorithm shows us that what before perhaps was subconscious, as we are invited to 'perform taste through consumption and interaction'.³⁷

The NRS is not all-powerful, of course. Its agency is only partial, among other 'traditional' constructors of taste, including other media, critics or blogs. In fact, the position of algorithms should perhaps be characterised as that of a new kind of cultural intermediary (to continue with Bourdieu). Jeremy W. Morris has proposed the term '*infomediaries*: organisations that monitor, mine and mediate the use of digital cultural products'.³⁸ While traditional intermediaries traditionally represent the tastes of the petite bourgeoisie, producing and exerting cultural capital, infomediaries are not specifically invested in any ideological position. Their only function is to maximise engagement, and the actual content we engage with is inconsequential to them. Infomediaries are iterative, they live on sameness and repetition, riding upon the content produced by others, like parasites. They might even be the carrier of future 'diseases', for like Morris notes, they 'fuel a recursive loop of future cultural recommendations. When every skip, rewind and pause feeds into a process of intermediation that curates what we view, hear and read next'.³⁹ I can certainly recognise this. Sometimes I click on something on Netflix just to check it out, for example because my child is watching it. I am careful to then delete it so it doesn't haunt my 'continue watching' strip. However, I wonder if those 6 minutes that I watched will have any influence on how the algorithm shapes its future recommendations, since it cannot know why I sometimes click on shows that are so far from my regular profile. The algorithm cannot distinguish between my motivations for engagement, its pragmatic statistics caught in the paradigm of the 'good enough rationalism'.⁴⁰ My algorithmic persona is not me, but the NRS always assumes that what we watch is who we are – a very limited understanding of taste, which is bound to have a lot of blind spots.

³⁶Ibid., p. 230.

³⁷Ibid.

³⁸Morris (2015, p. 447).

³⁹Ibid., p. 460.

⁴⁰Finn (2017).

Second Interlude: Letting the Algorithm Seduce Me

My second experiment wanted to test how the Amazon recommendation system understands users, and how it tries to cater to the taste which it ‘thinks’ the user has. In order to interrogate the quantitative operationalisation of my taste, I decided to reverse engineer Amazon recommendation engine in the same way that Pajkovic did with Netflix. I was curious as to what it would latch on to; what it would think I wanted. This required to go against my regular practice, as I have always tried to protect myself from the algorithm’s prying eyes by purposefully ignoring any recommendation thrown at me. This has meant never writing any reviews or using Goodreads with a profile that cannot be linked to the email I use with Amazon. There is no rational reason for this other than I do not want ‘them’ to know what I am doing, or worse still, what I am thinking. Good books are something I really want, however, and I appreciate recommendations in other settings. I keep a list of ‘interesting books’ with notes about books I want to buy or borrow. In this, my sources are never algorithmic recommendations, but rather reviews in outlets I trust, personal recommendation by friends or mentions in other works. I curate this list fiercely, to avoid it becoming too rampant, since I already have too many books.

Amazon recommendations are built using what Amazon calls *item-to-item collaborative filtering*, which scales to massive data sets and produces high-quality recommendations in real time. ‘Rather than matching the user to similar customers, item-to-item collaborative filtering matches each of the users purchased and rated items to similar items, then combines those similar items into a recommendation list’.⁴¹ This sounds like it could really be a good idea with books, even though it does not work so well with the rest of the products which Amazon sells.⁴² Item-to-item filtering is what makes Amazon recommendations so special, and is behind both their personalised recommendations and regular browsing on their site, which I tested in my previous experiment. Now, I would work with their recommendation emails.

Amazon recommendation emails come every couple of days, sometimes every day, but I have always just deleted them without reading them. I cannot remember if I ever have signed up to receive them. Maybe they are just sent automatically to anybody who has bought books on their site. For this experiment, I decided I would read the emails and jot down a few notes every time as to how their perception of me as a user affected me, specially if I thought the recommendations were interesting or made me want to buy something. This experiment, like any story, has a three-act structure.

⁴¹Linden et al. (2003, p. 78).

⁴²I once bought a watch and got recommendations for lawnmowers and puzzle games as possibly related purchases.

The Beginning: Introduction and Enthusiasm

The experiment starts really well, I feel. The first few emails recommend works that are either by authors I like, or that I had thought of buying anyway. *Klara and the Sun* by Ishiguro gets written on top of my 'to buy' list. I rejoice at how well the algorithm seems to know me already, as it recommends *Piranesi*, by Susanna Clarke, which I just have finished reading and love. Another email reminds me of author Keiichiro Hirano, whom I had once sought but forgotten I wanted to read. Also, I get notified when there is a new price for an item in my wish list. Sometimes I also get recommendations for books that I have browsed for but then acquired by other means, like *Media Life* by Deuze. This seems extremely useful, and I am a bit mortified that I have never paid any attention to these emails before. I am now very satisfied that the machine seems to see me, to know why I am sometimes aimlessly browsing even if I do not know it myself. Even in cases where the algorithm offers me a book for the wrong reasons (a YA novel I once browsed for a birthday present), I still salute its ability to remember my past actions. This positive vibe continues for a couple of weeks, where I also buy some of the suggestions, waiting to have accumulated four to five so I can make an order where the shipping costs are justified. This has no effect on the emails that arrive only from [Amazon.com](https://www.amazon.com). I wonder if my positive attitude has to do with the pleasure of feeling that the machine sees me. I realise with surprise that I really want the machine to know me.

The Middle: Complication and Annoyance

Halfway through the experiment, something happens. The field notes start turning more critical. Sarcastic comments about the recommended titles or the ineptitude of the machine begin to appear. I find a note that can illustrate this animosity: 'You precede your emails with a "we found some items we think you might like", pretending to be people, pretending to be a group of people! Like a friendly literary salon circle that cares about what I like. This provokes me. You do not even bother to explain why these things should interest me. There is just a picture of the item and a button (SHOP NOW), so subtle... not. But I do not know any of these authors, and I do not like the covers, so I will not click'. What is going on? Is it because I would prefer the emails to be more sincere? Perhaps headed by a phrase like: 'our machine found these patterns in your shopping behaviour, crossed them with other people's patterns and maybe you can be tempted with their choices?' I feel betrayed by the pretence: *we* found, *we thought* you might like. The whole thing is wrong. *You* are not thinking, *you* are parsing. *You* are not even *you*.

However, the experiment must go on, and even though there are still some items that match my preferences once in a while, I have become hyperaware of the rhetoric of emotional connection, and this interferes with my immersion in the project. I realise that my attitude is not very productive, so I force myself to click through some of the unknown titles with unappealing covers to give this a chance. The email of the day seems to be made up of a lot of bestsellers or books that are

nominated to different prestigious prizes; the new canon is on its way. All books are accompanied by hype, accolades from well-known newspapers and media outlets. This disturbs me. I thought I was well versed in books, but these titles are unknown, how could they get past my radar? Can this praise be real? One of the titles catches my attention, *Migrations*, by Charlotte McConaghy, about a woman who follows the last migration of a bird species on the brink of extinction to Antarctica. I make a note to buy it when the Kindle price becomes more reasonable.

I unwillingly continue to pay too much attention to how the recommendations are framed. For instance, a mail is entitled: 'Looking for something in Science Fiction and Fantasy books? We have some suggestions for you'. I have never told Amazon I like these genres, I have never made a review or rated a book, but of course they can infer this from my purchase history. I get some recommendations that I do not recognise, an old title by Asimov (which I didn't enjoy a long time ago), and four novels by Jeff Vandermeer, whose name I have noticed before but whom I have never read. I get lost in reading various reviews of his oeuvre in other websites, and find several books that look like something I might enjoy. Still I am paralysed by indecision and resolve to note his name in my 'to buy' list and wait for clearer indications of where to begin reading. Meaning: maybe a review will pop up in some of the media outlets I trust, or on one of my friend's social media postings. This browsing seems to encourage the algorithm, so the next few days I keep getting recommendations for space novels. I hate space novels, incidentally, so I cannot be cajoled. And just how much time do 'they' think I have? If I had to read all these books, I would not be doing anything else. Still, I try to half-heartedly follow some of these recommendations. I am amused by the title 'Tentacles and Teeth'. Unfortunately, this turns out to be an earnest YA novel and not a lovecraftian parody as I had hoped. The failures follow each other. The 'We found some items we think you might like' line feels like mockery when the recommended items turn out to be a bunch of crime novels (three supernatural and one Icelandic). I detest crime novels and have never bought one, so there is no way this can be built upon my own behaviour. In my mind, I picture the algorithm as desperate because I never buy anything as a result of my clicking through the emails, so it is attempting to profile me according to the fact that I live in Denmark, nordic noir and all that. I imagine my case being turned over to a human *recommender* whose job is to bypass the algorithm and manually look for ways to connect to recalcitrant readers. No doubt a delusion of grandeur, since my spendings on Amazon are hardly of key importance for the survival of the company. Even when the emails accurately identify my preferences, like when I get suggestions for David Mitchell novels, I get unreasonably irritated: how dare 'they' suggest something like that when I already have read them all? I have gone in my notes from 'the machine' of the beginning to a distant 'they'. I must still long for the algorithm to know me, for otherwise I would not be angry. It feels like when we expect a lover to understand us without us having to explain anything. It showed so much promise, claiming to work just for me, but this was obviously a lie. At this point, the experiment is going off the rails, and the field

notes are shorter, bad-tempered and irrational. The Easter break arrives and I decide to be offline for the whole week, hoping it will clear my mind.

The End: Resolution and Despair

On the other side of the holiday, I have to review six Amazon recommendation emails that have accumulated in my absence. This is overwhelming and I wish I was not doing the experiment and could just delete them all. There are ups and downs, a lot of recommendations that do not really interest me and the repetition of some of the early successes, like emails that push items and authors that have won big literary prizes, the Nobel, Pulitzer, Booker. . . I get a reminder again that I want to buy *Klara and the Sun*, but somehow, because it is in that email, I resist doing it even though I want to.

Even when the algorithm seems to get it right, I find fault with it. An email proposes that I buy three academic textbooks that I have used before in my teaching. This is a pleasant surprise until I remember that a few weeks ago I had searched for each of these titles because I was making the syllabus and it is often quicker to find the publication date and place through Amazon's 'look inside' feature than through our library's website. Or when an email asks (again) if I am looking for recommendations in Science Fiction and Fantasy, and lists ten of Ursula K Le Guin works. I own these books and love them, that is not the problem, but I feel provoked, as if the algorithm had reduced her to a mere genre drone.

The last few weeks of the experiment arouses more disappointment than anything else, as I convince myself that this is not a way for me to get inspired to discover new relevant literature. There are a few highlights that end up in purchases, generally fuelled by my desire to compensate the algorithm when it does something good, as if it was a puppy in training. For instance, the day when I got a recommendation for *The Shakespeare Requirement*, a novel by Julie Schumacher that is the continuation of the hilarious *Dear Committee Members*. I am pleased that Amazon has picked up on this, somehow. I had discovered these novels through a colleague a few years back and had enjoyed them both, seeing myself mirrored in the ridiculousness of university life. The email reminds me of the laughs I had while reading them, and I browse Schumacher's books looking for a distraction from the many student essays that need to be graded. I end up sending myself a free Kindle sample of her latest novel: *The Unbearable Book Club for Unsinkable Girls*, which I will later buy for my summer holidays.

The field notes show that I feel relief that the end of the experiment is approaching. Actually I have become so aware of these emails that I now wish to unsubscribe from all Amazon communications, as ignoring them will not be enough any longer. In the last few days, I observe an upsurge of recommendations of fairy tales anthologies, YA literature and romantic novels. It takes me some time to realise that this is the kind of materials that BookBub has been pushing to

me, since both services are connected.⁴³ When I click on BookBub's links, the Amazon algorithm interprets that I am interested in the items. However, I most often click to find out what the items are, and sometimes even to gloat over terrible cover design. Now the emails begin to get more personal, the algorithm has smelled blood, 'Still thinking about this book?' But I was never thinking about that book. Conflating browsing and clicking with wanting really *is* a problem. Amazon's quantitative profiling of me only maps a small part of my taste as a book reader. If the engine should really know me, it would also need to have access to all the other qualitative reasons for affinity and relevance. I know rationally this is impossible, so I do not really expect it from the machine, but the way its rhetoric pretends that there is a 100% correspondence between its profiling and my taste is extremely off-putting.

You really do not get me, Amazon. I must leave you. It is not me, it is you.

How Much Do You Really Know Me?

A lot of algorithmic culture criticism presupposes that the user is passive, but this does not correspond with my own experience or that of the people around me. We all have strategies to qualify the algorithmic recommendations. We look for the new Netflix series review in our favourite newspaper and on *Rotten Tomatoes*, we ask a jazz enthusiast friend to share a good Spotify playlist with us, we download a book that an author we like is posting about in Goodreads. It is not about great acts of resistance, but just the process of algorithms becoming integrated into whatever network of routines we already have. I have yet to meet a person that shuts out all the other information channels and decides to just go along with the algorithms.

In this respect, I am inspired by the strong user perspective of David Mathieu and Pille Pruulmann-Vengerfeldt's work about the 'data loop'.⁴⁴ They oppose the common assumption that all-powerful media colonise passive media audiences, and they foreground user agency in relation to datafication processes. The data loop is 'a circuit model in which media actors and audiences interact, in a relation of mutuality, throughout digital interfaces of data collection and retroaction'.⁴⁵ That is, media producers have specific images of the users in mind as they design the way their algorithms should curate content and collect user data to adjust their offer. In the same way, users do not just passively let themselves be guided by the recommendations, but 'use the inputs from data retroaction to imagine and understand themselves as audiences', including ideas about their own selves.⁴⁶ Here, datafication is not invisible, but becomes an agent which users relate to, as in Tanja Bucher's concept of the 'algorithmic imaginary', where she documents how users see the algorithm whenever there are breakdowns/faulty predictions.

⁴³BookBub is the object of the third experiment, below in the chapter.

⁴⁴Mathieu and Pruulmann-Vengerfeldt (2020).

⁴⁵Ibid., p. 119.

⁴⁶Ibid., p. 124.

Mathieu and Pruulmann-Vengerfeldt go a step further and suggest that this exchange with the algorithm is a formative process of discovery, a mirror for self-reflection.⁴⁷ In my second experiment I was frustrated that the reflection Amazon presented to me in the mirror was not as faithful as I had hoped for; the algorithm made me question my taste and its manifestation.

Along the same lines, Emanuele Arielli suggests that we can apply the metaphor of an ‘external mind, in which search and storage of information is handed over to mechanisms outside our minds’, following a double logic of externalisation and automation.⁴⁸ Like the ‘technologies of the self’ proposed by Foucault, recommendation algorithms let us see our own reflection.⁴⁹ She notes how the reinforcement and repetition of the same patterns can have the effect of recommendation systems becoming a sort of self-fulfilling prophecy, that is, the algorithms also cultivate our taste to maximise our engagement.⁵⁰ The more of the same kind of thing we encounter, the more will we come to like it, or so they hope. Recommendation algorithms attempt to fulfil our desires but of course only to the extent that it means engaging with the products they have in their archives. Arielli therefore insists that profiling is never just descriptive, but transformative. Ideal users, codified in the way the algorithm works, are not random explorers letting themselves be guided by serendipity and curiosity, but ‘preference maximizers, transparent in their cultural consumption and inclined to share their data with the system and the community of other users’.⁵¹ This is a false picture which we cannot but struggle against as users, I argue, as we relate to sameness and repetition in different ways.

Third Interlude: The Narcissistic User of BookBub

More investigation is needed in order to relate the algorithm’s recommendations to the user’s own identity work. If Mathieu, Pruulmann-Vengerfeldt and Arielli are right, there must be constant negotiation between the user and the recommendations they are presented with. I will, therefore, record that negotiation to get a picture of how a user relates to the mirror that the algorithm throws back at them. This time it is not about what the algorithm thinks I am, but about what I think of what the algorithm thinks I am.

For the third experiment, I made an account in BookBub, a free book discovery service that helps users find e-book deals in their favourite genres or related to specific authors – a perfect case to test my own data loop. BookBub monitors many platforms and is connected to Amazon’s Kindle. My plan was to read the daily emails and the weekly compilations for two months and to download the books that took my fancy (free or not). I would also attempt to read as many of

⁴⁷Bucher (2017).

⁴⁸Arielli (2018, p. 78).

⁴⁹Foucault (1998).

⁵⁰*Ibid.*, p. 86.

⁵¹*Ibid.*, p. 89.

these books as possible. BookBub's selections are a mix of curated content by specialist editors, paid advertisement from publishers and authors, the user's own preferences and whatever is on sale at any given time. *Bub* is slang for brother or buddy. This is an account of the way I related to BookBub's way of seeing me, an attempt to make explicit the algorithmic imaginary that emerged in our 'relationship'.

I set up a profile and am immediately asked to choose my favourite genres. Even though there are a lot of options, it is difficult to find labels that are adjusted to what I often read. I ended up only ticking 'literary fiction', which is the fluffiest of all labels and could in reality contain all others. So I forced myself to pick up a few more, 'science fiction' and 'fantasy', even though I knew I would regret this because there is a lot of science fiction and fantasy that I do not like. I also ticked a few favourite authors, although BookBub did not present me with an extensive list. Already from the start, I felt that the platform does not give me enough opportunities to make a profile that really represents me.

My first few days are a bit disconcerting because I receive a lot of recommendations about authors and books I have never heard of. I am sure I should know Eric Maria Remarque 'From the author of *All Quiet on the Western Front* comes the profound story of a doctor living in Paris after fleeing Nazi Germany', but I do not. Maybe this is a classic case of cold start, I reflect, where an algorithm simply does not have enough information about my tastes yet to suggest anything I can recognise as relevant. I must be patient.⁵²

There are good recommendations of old classics like *Rich man, Poor Man* (Shaw), if only I hadn't read it. The emails are sometimes thematised, for instance, all the books in one email have become successful film adaptations. There are also quite a few historical novels and a few romances. I become irritated by this, but I know it is my fault for having ticked 'literary fiction', which is the same as say: send me anything. I wish there also was an opportunity of filtering categories out, it would be easier than choosing them.

The first success comes after a couple of weeks. I get an alert about an anthology that includes a short story by Neil Gaiman which is one of the authors I marked. It only costs \$1,99 on Amazon. When I log in, the price goes up for me to \$2,49. I guess it is because I am doing this from Europe, but am irritated that BookBub does not take it into account. Still I decide to buy the book, but I have some credit card trouble on the site and it takes a couple of days for the transaction to go through. I notice that in these two days, the book has now become the number 1 bestseller in the category of fairy tales. I deduce that BookBub has a real effect on sales if a lot of people like me have clicked through to purchase.

I have a few experiences where prices are very low in the email, but go spectacularly up when I log on to my Amazon profile (from \$1,99 to \$8, for example). I browse strange titles and covers and download quite a few free samples or very cheap books, wondering if I will ever read them. At this point, it actually feels like the 'external mind' of the algorithm knows that I am stimulated by curiosity and novelty. Before continuing, I resolve to read one of the things I randomly

⁵²Seaver (2018, p. 2).

downloaded, *Unlovely*, by Celeste Conway, which is a horror story about a young woman fleeing her abusive parents and moving into a faraway cottage where she starts getting involved with a man who lives in the world behind her mirror. . . It is actually pretty interesting in a claustrophobic sort of way, so I gather new strength to continue the experiment. I may not have time to read everything now, but if I just collect things, future good reading experiences await.

After this purchase, I start getting many suggestions for horror literature, which I did not select as one of my favourite genres, but maybe it is my true inner self that is this way presented to me. I give it a chance. I buy a few more titles with good prices and intriguing stories tending more towards the fantasy and science fiction genres. The borders are not clear. I also get recommendations for classic works, but I avoid them, this is not that kind of experiment. My notes reveal that I see BookBub as a good instrument to enjoy literature as entertainment, much more attuned to personal taste than in the other experiments. I follow this pattern for a while: buy intriguing things, avoid classics, romance and historical fictions, so much so that I worry that I might not have time to read all that I have bought.

Halfway through the experiment, the field notes begin to focus a lot on the language of the emails I receive. I personify BookBub and see it as a conversation partner. When all the suggestions are unknown, I rely on the description lines to assess if I am interested in the title. I notice a hyperbolic language that abounds in adjectives, modulating what we must think of the work, even before we have read it. BookBub speaks like a car seller, I am not sure I am comfortable with that.⁵³ In the genres of science fiction and fantasy, the verbs are about conflict, the adjectives inflated, in an effort to arouse excitement (my italics):

- When neuroscientist Amira Valdez is given a *controversial* human cloning assignment, she *must contend* with all who *want to put a stop* to the project – and *confront* an *unthinkable* secret.
- In a New York rife with *paranormal* activity, *immortal* adventurer Ace Dante grudgingly *undertakes* a mission for his ex – only to *stumble* into a conflict between two *powerful, ancient* gods. . .

In literary fiction, however, the descriptions are low key, insisting on recognition, on character lives that are just like our own. The books offer a unique framing that will give us deeper understanding and appreciation. These descriptions are often endorsed with quotes from reputable sources, and are not so much focused on what the story is (like the genres above), but on what the story does to us as readers (my italics):

- From a *New York Times* bestselling author comes ‘a *soothing* slice of small-town life’ (*People*): When a group of friends decides to start a monthly

⁵³Actually, upon reflection, I do not know who writes these blurbs. It could be the editors at BookBub, but it could also be Amazon, the publisher, an AI . . . In the auto ethnographic notes I assume it is BookBub.

supper club, they soon find themselves sharing their secrets, insecurities, and regrets alongside dinner. 'Bright and *fascinating*'.

- In this NPR Best Book of 2019 and 'definitive work of millennial literature' (*The New Yorker*), 30-year-old Millie struggles to escape from a life defined by her meaningless job. 'Butler made me laugh and cry enough times to feel completely reborn' (*The Paris Review*).

This makes me think of BookBub as a sneaky, multiple personality individual, able to find just the right thing to whisper in my ear and make my finger hit the purchase button. But that is nonsense, it must be humans writing the individual descriptions, even though they are so formulaic at times that one could be in doubt. BookBub puts together its emails by pulling different items from a huge database. I notice that a lot of these descriptions attempt to point to similarities of the unknown new work to other books which fans of the genre would no doubt recognise. A book called *Crimson Tempest* is described like this: 'Calling all fans of dragons and Jane Austen (RT Book Reviews): Sparks fly between headstrong Aliza Bentaine and a haughty dragonrider as Merybourne Manor is beset with monsters! A spellbinding fantasy remix of *Pride and Prejudice*'. Jane Austen and dragons might not seem like the most appropriate combination, but if you think deeper, it is a good pairing. Jane Austen has been the model for a lot of distilled expectations as to how exciting romance occurs. Genre literature cannot get enough of the trope of the 'headstrong' lady and 'haughty' hero that hate each other at the beginning and no doubt will be together in the end. Jane Austen has also been the source of several remixing efforts that pair her work with contemporary entertainment genres.⁵⁴ This is an interesting question in relation to the theme of sameness: what part exactly of Jane Austen will we recognise in the new work? What is being repeated? I have encountered Austen in every corner of this book project, it cannot be coincidence.

I am however increasingly irritated by the many self-help like suggestions, where I realize that BookBub sees me as just another middle-aged woman. A lot of literature is aimed at this particular demographic, books about friendships, divorce, career burnout, the death of a close person or cancer. A subset of this genre is when the female struggle is set in another time period. I resist the rhetorics of the 'must-read', of how will this inspire me and comfort me in my life. I do not remember if I revealed my age and gender when making the profile or if there just is a lot of this fiction, a thriving genre that makes its way into everybody's lists. But it makes for an odd mix with the gruesome supernatural mysteries, the books that remind you of the *Hitchhiker's Guide to the Galaxy*, the books about warriors against Satan or 'born-mage' people. Midways, I am still buying quite a few books, but not really having the time to read through them all (Fig. 3). I am

⁵⁴Most notably, *Pride and Prejudice and Zombies*, first a book by Seth Grahame-Smith and then adapted into a film. Also, *Sense and Sensibility and Sea Monsters*, by Ben H. Winters. Both books were published by Quirk books, and are mash-ups that reproduce the original text by Jane Austen and interlace it with extra paragraphs that turn the story into a horror book according to the tropes of genre literature.



Fig. 3. The Author and Her *tsundoku*, by DALL-E and me.

mostly buying good deal of books I already knew by other means, a lot in the speculative fantasy genre, (which will tilt the Amazon algorithm as explained above).

Towards the end of the experiment, I feel real BookBub fatigue and start putting off reading their emails, so that a few accumulate and then it makes for an even more overwhelming experience. Now I see BookBub as a false friend, someone you talked to too much during your first week at work, and now you are stuck with them for the rest of your life, even though you have realised they are shallow. As for me, I am a bad friend too, for not responding, for ghosting BookBub. I keep procrastinating and putting off reading BookBub emails, so I always come too late to the good deals, which last only for 24 or 48 hours. As if they know I am drifting away, I get an email urging me to rate more books to improve my recommendations. I do it, to see if I can train the algorithm better, to make it work for me and not the other way around. However, a lot of the items to be rated are the ones I bought during the last few weeks, which I haven't even opened yet. I leave the site, the project unfinished.

My field notes get shorter, tedium ensues. I wonder if their emails are accelerating, sometimes more than one will come on the same day. I begin to dread the 'list emails', like your ebook bargains for Saturday, or Reese Witherspoon's 19 favourite books. I feel that the generic lists do not see me at all, as they are pushed to everybody with whatever current bestsellers are at the top. My field notes increasingly record how I am not interested in any of the pushed topics. I am inflamed by the kinds of praise that are peppered all over each email: 'impossible to put down, irresistible, riveting, absorbing, enthralling, the genre at its very best, dark and glorious *tour de force*, her best yet, page-turning, elegant and delightful, thrilling, intense, heartrending, like *Interview with the Vampire* but better.' How

can so many books, dozens every day, be so exceptional? How many new George R. Martins can America spawn every week? How can romance sneak into every single other genre?

I now doubt how BookBub labels work. I had assumed that the category of 'literary fiction' would not include genre fiction, but a lot of the novels which get pushed to me are sentimental love novels, or historical novels. The borders between the genres are not always clear, and there are of course works that are complex, but this puzzles me, and it makes me distrust recommendations, no matter how many endorsements the come with.

I have no faith that BookBub has any real clue of what I enjoy, I open their emails without enthusiasm. I have stopped buying, now sure that I cannot ever catch up to the huge reading list that I have built myself in my Kindle. The last straw is a promotional email that makes me finish the experiment a couple of days before time. BookBub invites me to access their new platform for audiobook deals, called Chirp. The email is enthusiastic about this new possibility: 'I love listening to audiobooks while cleaning up around the house, while cooking in the kitchen and even while exercising. With Chirp I can binge audiobooks and discover new authors without breaking the bank. The best part is that there's no subscription fee or commitment, and new deals are added daily!' More books! BookBub, how could you? Now you see me as a hyperactive *hausfrau*, effectively cleaning *and* listening to podcasts! But that is not me at all. I can't stand other people's voice reading books aloud. I appreciate the silence of everyday activities, a rare opportunity for thinking my own thoughts. Your rhetoric of bingeing, of excess, of every single minute of my day occupied with books, the words of others in my head, fills me with dread. I do not want to turn into that person. So I stop.

Coda

I started this chapter with the myth of Echo and Narcissus, as a way to thematise both excessive mirroring and the frustration of being formed, we could now say aggregated, by other people's voices. A leading question was if algorithms, based on pursuing sameness, had fundamentally altered our idea of Taste/taste and the way we find culture to consume. I have used the case of book recommendations to explore these questions dialogically through three autoethnographic experiments aimed at dissecting my ambivalent relationship to the algorithms in relation to the development of taste and Taste, the way algorithms profile us and our own identity work in response to the algorithms.

I found that sameness works in strange ways, not erasing our previous practices around finding and curating cultural consumption, but complementing them with more data, that we, as users, do not just seem to take at face value. Sameness still pursues the canon, but also adds an alternative one made of the sum of many people's choices. The algorithm that sometimes sees us and sometimes misses the mark completely is a parasite, a bug that we can allow to infect us, as it tries to keep our attention trapped into the specific database that it works for. There is a sort of mutual domestication; for us, a guide through the maze of many products

is useful, for the algorithm, it is useful to know what we like in order to keep us inside their specific fence. But the algorithm does not ultimately care about aesthetics, only about retaining us. It treats cultural products (books, music, films) as commodities, and maybe here is where the gap is.⁵⁵

To me, as an avid reader, books are instead works of art, portals to other worlds, sources of wonder at language use, plots, characters, ideas, beloved aesthetic experiences, deeply imbricated with my idea of who I really am. I have been bothered by the simulation of intimacy performed by the machines, first taking it at face value, wanting to be seen, and then reacting with disappointment when I realised I was not. They only pretend to care about books, to make me buy them.

In terms of affordances, recommendation algorithms offer us a familiar path to traverse an infinite, unknowable forest of content. This very familiarity is also their weakness, for they can give us a false sense of totality and control: *this is all there is for me*. Typically, this is conceptualised as a filter bubble, where we only get confirmation of our previous opinions and are never challenged. But there is something that this argument misses, for I found that the algorithm does not understand what our opinions really are. It might be a bubble, but it is not exactly our bubble.

There is another dimension to this false comfort: a sort of dysphoria, where we feel that what the algorithm is throwing at us, insisting that it is tailored specifically for us, is at odds with our inner voice. We, like the machine, can come to confuse momentary taste performance with some kind of deeper truth. We can be kept in a permanent state of pre-elation, where what we just picked was almost right but not quite, so we need to find another thing (book, song, film), like the dark design pattern of infinite scrolling, where we keep on going and going, waiting for the thing that will be just right, if we can stay a little bit longer.⁵⁶

According to Nick Seaver, it was not always like this. Recommendation systems were born to help us find our way in vast information repositories. However, at some point, developers realised they could not really predict people's taste; how they would rate items was impossible to pinpoint, so they switched to attempting to capture our attention, or engagement:

'Instead of predicting explicit ratings, developers began to anticipate implicit ones, and with this came a plainly captological approach to design: using traces of interactions recorded in activity logs, developers designed their systems to elicit more interactions. The prototypical recommender system was no longer a support for finding information, but a trap for capturing fickle users'.⁵⁷

⁵⁵Pedersen (2020, p. 87).

⁵⁶Dark patterns are design 'instances where designers use their knowledge of human behavior (e.g., psychology) and the desires of end users to implement deceptive functionality that is not in the user's best interest' (Gray et al., 2018). It is widely acknowledged in design literature that infinite scrolling is a dark pattern of design (Monge Roffarello & De Russis, 2022).

⁵⁷Seaver (2018, p. 10).

This is the key to an even greater problem than filter bubbles: the death of aesthetic desire. Recommendation algorithms have become push machines to keep our attention engaged in a constant stream of desirable cultural products. A push machine does not wait for a user to interact, it addresses the user itself. It attempts to give me exactly what I like *even before I know I want it*, in fact, it will teach me that I want it. But in order for desire to be born, there must be a gap, both in time and in accessibility, a moment where we can be conscious that we cannot have something. If I can get anything as soon as I see it for the first time, there is no room to develop any form of longing. This explains why I was predominantly paralysed in my book recommendation experiments. I did not want them enough. Total abundance and constant push of nearly-right content engenders indifference. Maybe that is why Narcissus rejected all his would-be lovers.

But I do not wish to end on too pessimistic a note. Yes, recommendation systems are traps, but they are not totally closed. This would imply that users are prisoners who cannot seek cultural products by other means. As this chapter has shown, there are many other factors at play that affect our taste formation, how we relate to Taste in our social context, and how we manage our lifelong engagement with cultural products. We might not yet be very good at articulating how exactly algorithms work, but there is no doubt that algorithmic literacy is already in the making.