

# minimum

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# mimesis

Human-centered digital profiling visual identity

A thesis presented in partial fulfillment of the requirements  
for the degree Master of Industrial Design in the Department  
of Industrial Design of the Rhode Island School of Design,  
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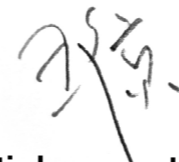
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*Digital profiling is the process of gathering and analyzing information that exists online about an individual. Platforms who provide services always have control of this powerful tool. As a result, I used Twitter API as the principle medium to conduct 'digital profiling' as a third party. The visual identity of the new digital profile is not an ads interest list anymore, but a graph that stores personal information that could be used as an avatar. On top of the new visual identity, I speculated several possible applications of the new visual outcome. The idea put forward in this thesis is that shifting the purpose of digital profiling toward being human-centered rather than advertising-driven may draw worthwhile arguments about the practicality and policy issues. This thesis is a speculative design project, an avatar design project, a UX design project, a generative design project, and an information design project. My point is multiple mediums to demonstrate my future vision or wish for this technology and propose a mutually beneficial strategy for tech companies.*

**Mimesis:**

Mimesis is a term used in literary criticism and philosophy that carries a wide range of meanings which include imitation, nonsensuous, similarity, receptivity, representation, mimicry, the act of expression, the act of resembling, and the presentation of the self. <sup>1</sup>

Mimesis is the deliberate imitation of the behavior of one group of people by another group as a factor in social change. — Anthropology

**Digital profiling:**

In information science, profiling refers to the process of construction and application of user profiles generated by computerized data analysis.

**Confirmation bias<sup>2</sup>:**

Confirmation bias is the tendency to search for, interpret, favor, and recall information in a way that confirms or strengthens one's prior personal beliefs or hypotheses. It is a type of cognitive bias. People display this bias when they gather or remember information selectively, or when they interpret it in a biased way. The effect is stronger for desired outcomes, for emotionally charged issues, and for deeply-entrenched beliefs.

**Surveillance capitalism<sup>3</sup>**

Surveillance capitalism has a number of meanings around the commodification of personal information.

**Data exhaust<sup>4</sup>**

Data exhaust refers to the data generated as trails or information byproducts resulting from all digital or online activities.

**Reciprocity**

late 16th century: from Latin *reciprocus* 'moving backwards and forwards'.

In this book, reciprocity means the relationship between coporate and users.

1: Culture—Art—Society  
— Gunter Gebauer & Christoph Wulf

2: Coined by Peter Wason

3: Since 2014, social psychologist Shoshana Zuboff has used and popularized the term.

4: Coined by Paul Kedrosky

Design is empowerment. The design's outcome is tools, as well as the extension of humans, both virtually and physically.

This thesis set out from researching generative design. There are two reasons that the topic is exciting and unique to me. First, generative design is the prerequisite of customization, even technology democratization. For example, there are many interesting programs about machine learning on GitHub but they require a level of understanding of GitHub and coding. However, RunwayML exposes more designers, artists, and practitioners to machine learning because it requires a few simple clicks. Second, it requires designers to upgrade their role in a design project. "The process itself is the goal of the designer."<sup>1</sup> They are needed to become the structure and system builder, which is much more challenging to me.

I love Legos, but I never follow the 'Outcome image' on Lego instruction. Different Lego pieces are like variables in a generative system. By only changing a few parameters, the system could generate unexpected results. The fun of Legos is hidden in the possibility of the infinite outcome.

Thus, within whatever system, there should be other substitutes for how it runs. The necessity for change is hidden in the network. The primary methodology to find out the need is Deconstruction. According to Derrida's theory about Deconstruction, there are two important notions: undecidability and context.<sup>2</sup> Identifying the variables such as placeholders and nodes in the system is the first step. Identifying the reciprocity between each placeholder and the relationships between each node is the next step. The goal of

1: [Designing in Liquid Times: Generative Graphic Design in an Age of Uncertainty](#)  
— Marlies Peeters

2: "First, it suggests that all language is subject to undecidability. The play of the trace is a kind of deforming, reforming slippage - an inherent instability which language cannot escape.... The assurance of context...."  
— Jeff Collins & Bill Mayblin  
-Introducing Derrida

the project (human-centered profiling system) drives me to ignore norms, traditions, and regulations. It challenges the curation of new reciprocity hosted in a new context.

After diving deeper into system research, I found out that it is a field with a lack of user control, lack of transparency in data collecting and processing, and lack of feedback loop for confirmation bias. In my research, I discovered that there are technologies under development such as blockchain-based digital identity and project: Solid (Social Linked Data).<sup>1</sup> I can't help but envision a utopian world in which there's an established structure balancing users, policy, governing algorithms, and surveillance economy.

However, the use of blockchain technology and biometrics as a means to ensure the 'unicity' and 'singularity' of identity' sounds like an iridescent dream bubble that will be burst by the noncompliant big tech companies. Tracking, collecting, and analyzing data is significantly vital to these companies. From web-beacons and cookies<sup>2</sup> to Like buttons, these simple, but useful, features are designed to serve the purpose of monetizing traffic. Joe Kaeser(CEO of Siemens) said, "Data is the oil of the 21st century - the raw material that our economies, societies, and democracies are increasingly being built on." Why would these unicorns and tech giants let go of what got them here?

The future is hard to predict.<sup>3</sup> Thus, the background(context) of the project will remain as the current situation(tech companies control digital profiling). However, minor changes initiated by third parties could happen within the system.

Public API(Twitter API) gives developers and other people access to the database. Even though it doesn't allow data exhaust, it helps build a dynamic and automatic system that meets the minimum requirement of digital profiling: digital.

As a designer, I take a stance with humans (internet users) to build a digital profiling system as a third party. Organizational theorist Karl Weick says, "Small wins do not combine in a neat, serial form, with each step being a demonstrable step closer to some predetermined goal." My stance is not in opposition to the powerful internet platforms - the idea is to imagine possible substitutes for future digital profiling systems.

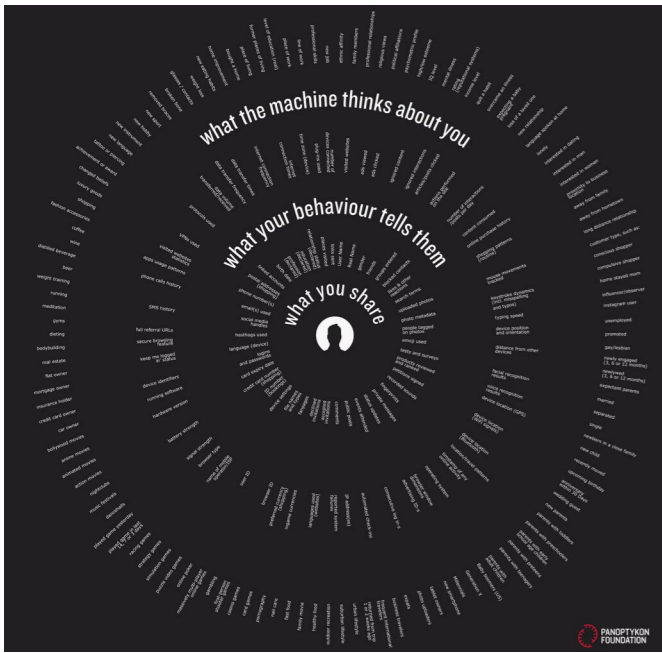
1: The ultimate goal of Solid is to allow users to have full control of their own data, including access control and storage location.  
— [Tim Berners-Lee](#)

3: [Why Futurism Has a Cultural Blindspot](#)

2: [Behavioural Advertising 101](#)

# The near future of digital profiling

The goal of this essay is to explore three main issues from the users' side (lack of transparency in data collecting and processing, lack of control, and lack of feedback loop for confirmation bias) inside digital profiling, followed by my solution to these issues and the applications. My stance toward this topic is neither against the powerful internet platforms nor to introduce some technology that will block data collection—it is to imagine possible futures where digital profiling could become human-centered instead of advertising-driven.



15: Three layers of your digital profile  
- [panoptikon.org](http://panoptikon.org)

We are currently facing potent social and economic shifts.<sup>1</sup> Covid-19 is not necessarily the protagonist of these shifts but rather a catalyst. It is accelerating the process of transforming offline life towards heightened cyber connection. The most significant change right now is working from home and the homebody economy<sup>2</sup> has suddenly become the near-real future. In addition, there are lots of other shifts happening online that average users<sup>3</sup> are unable to perceive and resonate with since they are a hidden, abstract, discrete, and changing phenomenon.<sup>4</sup>

At the front-end of the internet, cheaper, smaller, and faster chips<sup>5</sup> cybernate devices, bodies, and places to construct the 'Internet of Everything'.<sup>6</sup> Meanwhile, increasing features like cookies and the 'Like' button are designed to help track data.<sup>7</sup> At the back-end of the internet, digital profiling is intensively developed. Subjects related to digital profiling, such as data collection, data processing, algorithms, and applications, are well developed for activities such as advertising.

It's more important to understand the relationship between the individuals and the system and how to leverage the balance. Opting out of the system is one utopic solution,<sup>8</sup> although it's not practical. Unveiling the supply and demand of personal data:<sup>9</sup> More shared data piped into algorithms improves performance, better algorithm performance leads to higher advertising revenue and better-customized services, and higher revenue increases investment in algorithm development. Shoshana Zuboff used the word 'reciprocity'<sup>16</sup> times in her article "Big Other" to describe multiple levels of relationship between individuals and firms. The current situation is one of asymmetric reciprocity, as described in Varian's claim:<sup>10</sup> exchanging private information for new information and communication tools, which are essential

requirements for social participation. From an individual's perspective, sharing data will cause issues such as data privacy, secondary usage, and targeted pricing. There are direct and indirect benefits and costs attached to sharing personal data.

Looking back in history, there is a spectrum between two extreme conditions: Intact privacy on the left, and no privacy on the right. The 'current' condition slowly moves from left to right. Its pace of seesawing<sup>11</sup> from one to the other is getting faster. (Does it also follow Moore's law?<sup>12</sup>) If full data privacy becomes pseudo-proposition in the future and blockchain-based digital identity like SoLid<sup>13</sup> and interoperability<sup>14</sup> will not be realized in the foreseeable future, then what should we expect for the near future? Research into the current tendencies from individual users and companies says that data collection is inexorable, but will become more permeative in the future.

Digital profiling

The digital profile is essentially the string of 1s and 0s that represent you in the systems. The current visual representation is seen in the ad setting page. [Google](#), [Facebook](#), [Instagram](#) have different user interfaces. However, they all point to the reality that our digital profile is an ad interest list based on our online trace and activities.

It would be naive, but understandable, to think that we have control over this profile in the first place. We have some control over what we agree to share, however, that is just the tip of the iceberg. It's not hard to imagine that by merely building connections between each piece of data, you could infer behavioral patterns. Even more so when algorithms take over this task. The map "Three layers of your digital profile"<sup>15</sup> done by

- 1: [The last global crisis didn't change the world. But this one could.](#)
- 2: The rise of the 'homebody economy' means you can have all your food, alcohol, clothing and entertainment brought to your door.  
— [The 'homebody economy' gains steam in China amid Covid-19 pandemic](#)
- 3: 74% of Facebook users say they did not know that this list of their traits and interests existed  
— [Facebook Algorithms and Personal Data](#)
- 4: [A Probe into the Symbol Form of Symbolized Design](#)
- 5: [Smaller faster cheaper over the future of computing chips](#)
- 6: Embracing the internet of everything to capture your share of \$14.4 Trillion  
— [Cisco White Paper 2013](#)
- 7: How am I being tracked? Behavioural Advertising 101
- 8: [My experiment opting out of big data made me look like a criminal](#)
- 9: [The intricate tale of demand and supply of personal data](#)
- 10: [Beyond Big data](#)  
— Hal R. Varian
- 11: In these extractive activities it follows the Street View model: incursions into legally and socially undefended territory until resistance is encountered.  
— [Big other: surveillance capitalism and the prospects of an information civilization](#)
- 12: Moore's law is the observation that the number of transistors in a dense integrated circuit doubles about every two years  
— [wikipedia](#)
- 13: Interoperability is a characteristic of a product or system, whose interfaces are completely understood, to work with other products or systems, at present or in the future, in either implementation or access, without any restrictions  
— [Wikipedia](#)  
— [When and how ict interoperability drives innovation](#)
- 14: The ultimate goal of Solid is to allow users to have full control of their own data, including access control and storage location.  
— [Tim Berners-Lee](#)

Panoptykon is an onion-like map which reveals the hidden layers behind the digital profiling. The first layer is the one you control or trigger. It includes your profile information, your posts, likes, search queries, and other types of personal interactions. In other words, it is your online trace. The second layer is one step further. It consists of your behavioral patterns like your typing speed, mouse movements, location pattern, voice recognition results, internet connection frequency, etc. These are not conscious choices you make, but rather the metadata which is embedded with the data you shared.<sup>1</sup> The third layer is composed of the interpretation of the first two layers. Your data will be preprocessed to remove noise and reduce complexity. After that, the data will be analyzed with multiple algorithms. There will be connections built between each piece of data to form specific patterns, and comparison with other users will be conducted to help evaluate the relevance and validity.

There are seven steps in the profiling process:<sup>2</sup> preliminary grounding, data collection, data preparation, data mining, interpretation, application, and institutional decision. The purpose of profiling is as follows:

- it is not simply a matter of computerized pattern-recognition; it enables refined price-discrimination, targeted servicing, fraud detection, and extensive social sorting.<sup>3</sup>

From the perspective of tech companies, data collection helps them build profitable profiles that could help them link advertising to the targeted group of people. 'Internet' delivers people, "you are the end product."<sup>4</sup>

In the near future, I do not expect any fundamental change in digital profiling. Preliminary grounding identifies the goals of the analysis. It will remain profit-oriented. There are already changes happen

ing outside the digital profiling occurring in law.<sup>5</sup> According to data protection regulation, GDPR requires companies to bring more transparency into tracking and profiling.<sup>6</sup> Thus, before blockchain-based digital identity and interoperability are realized, we could expect increasing transparency in digital profiling and a sense of control over personal data. Other than transparency and access to the digital profile, is it also plausible to expect feedback, like psychological mind-mapping, that could benefit users to some degree.

**Confirmation bias**

Confirmation bias is a state of intellectual isolation, people tend to resonate with information that helps confirm and enhance their beliefs or hypotheses. But such a phenomenon had been studied long before this term came out in history, which was long before the internet and algorithms were even invented.

"Filter bubble",<sup>7</sup> written by Eli Pariser, is one book that critiques algorithms that are enhancing confirmation bias. I agree with this opinion because the diminishing incentive of the subject is complemented by the algorithms. One used to search for information to confirm one's belief proactively. However now, one needs to receive the information recommended by algorithms reactively. The book "We are data"<sup>8</sup> brought up the idea of "data derivatives"<sup>9</sup> to critique algorithms that extrapolate the future based on present and the past. The book "Why We're Polarized," written by Ezra Klein, provides a political perspective.<sup>10</sup> Media, Congress, candidates, journalists, and voters will form a system in which there's a feedback loop that accelerates the process of adopting more polarized strategies. Political polarization is just one of the associated effects and outcomes of the confirmation bias.

- 1: Most digital cameras record the GPS coordinates of a photo you take in the EXIF metadata.  
— [Image EXIF data](#)

2,3: Profiling (information science)  
— [Wikipedia](#)
- 4: Commercial television delivers 20 million people a minute. In commercial broadcasting the viewer pays for the privilege of having himself sold. It is the consumer who is consumed. You are the product of t.v. You are delivered to the advertiser who is the customer. He consumes you. The viewer is not responsible for programming— You are the end product.  
— [Richard Serra "Television Delivers People" \(1973\)](#)

5: Transparent information, communication and modalities for the exercise of the rights of the data subject  
— [Art. 12 GDPR](#)

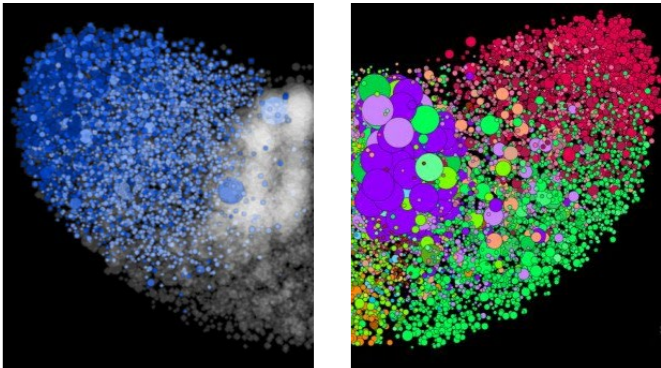
6: [EU Privacy Law Snares Its First Tech Giant: Google](#)

7: [Data Derivatives: On the Emergence of a Security Risk Calculus for our Times](#)  
— Louise Amoore

8: [We Are Data: Algorithms and the Making of Our Digital Selves](#)  
— John Cheney-Lippold

9: [EU Privacy Law Snares Its First Tech Giant: Google](#)

10: Social media is one of those institutions, and in my view, is clearly a polarization accelerant. In the coming years it may prove a primary driver. But the bulk of the run-up in American party polarization predates social media, which means social media isn't core to the story.  
— [Interview with Ezra Klein](#)



7: Left: Resist, anti-Trump  
Right: The US political landscape  
— [This is what filter bubbles actually look like](#)

Algorithms enhance the confirmation bias. It also causes bad user experiences. There have been complaints about content fatigue,<sup>1</sup> which is caused by an algorithm constantly pushing similar content. When Twitter applied the 'while you were away' algorithm, it pushed the 'best tweets' to the top of feeds, which caused complaints about restructuring timelines.<sup>2</sup> There is a button to opt-out from algorithms to have a regular timeline.<sup>3</sup> There is an option to avoid content fatigue, which is tapping the post/feed and selecting 'not interested'.<sup>4</sup> What is getting peculiar here is that if you want to prevent content fatigue, you have to give a click on 'not interested' to something overwhelming your feeds, which is your interest.

What's more, diversity matters for confirmation bias. There are two major recommending algorithms which are collaborative filtering and content-based filtering.<sup>5</sup> Current algorithms combine one or more filtering approaches into a hybrid system.<sup>6</sup> Different platforms will adapt to or favor one of the filtering approaches according to their strategy to differentiate products. One crucial measure beyond accuracy for evaluating algorithms is 'diversity.' Though the hybrid system allows various recommendation algorithms, whether it effectively delivers diverse content is whole another thing.

The problem of finding the right mix for sequential consumption-based recommenders ... individually adjusting the right level of diversification versus accuracy tradeoff.<sup>7</sup>

There is very little feedback conveyed from the platform to users, needless to say, feedback for confirmation bias. The feedback discussed here contains two layers: behavioral feedback and data analysis feedback. Eli Praiser mentioned in his Ted Talk<sup>8</sup> that structured physical spaces give people social feedback. But in the online environment, other than plain text with emoticons, there

is a lack of body language and expression generated by other users, and it wasn't until recently that a dislike button was added on Facebook.<sup>9</sup> Shoshana Zuboff mentioned in his article "Big Other" that tech companies

eliminate the need for, or possibility of, feedback loops between the firm and its populations.<sup>10</sup>

The reason is to separate subjective meaning (revenue) from objective result (profiling). This is an asymmetric reciprocal relationship between users and firms which is reflected

in the fact that typical user has little or no knowledge of Google's business operations, the full range of personal data that they contribute to Google's servers, the retention of those data, or how those data are instrumentalized and monetized.<sup>11</sup>

Furthermore, concerns around using algorithm modifying behavior emerged after Facebook's emotional contagion experiment<sup>12</sup> was revealed to the public.

This essay is not trying to introduce a method to get rid of confirmation bias (which is incapable by ourselves<sup>13</sup>) but rather to propose the question of what we can do to nudge the situation. A good feedback loop might help change your behavior. Does the internet user need some feedback about their confirmation bias from the platform? How can information be designed to offer feedback for users which could intrigue them to conduct proactive searching? Are some of Spotify's algorithms<sup>14</sup> excellent examples of paradigm shifts since it allows users to steer slightly out of their comfort zone and expand their music listening?

1: [Why YouTubers are feeling the burn](#)

3: [About your Twitter timeline](#)

5: Collaborative filtering is based on the user's past behavior but it requires a large amount of information about the user. Content-based filtering makes recommendations similar to the original seed. Although it requires minimal information to start with, it is far more limited in scope. —A Naïve Recommendation Model for Large Databases

7: [Improving Recommendation Lists Through Topic Diversification](#)

9: [Facebook is finally rolling out a dislike button - sort of](#)

12: [Experimental evidence of massive-scale emotional contagion through social networks](#)

14: [Tips for Getting the Most Out of Spotify](#)

2: [Put Down the Pitchfork - A Twitter Algorithm Won't Ruin Anything](#)

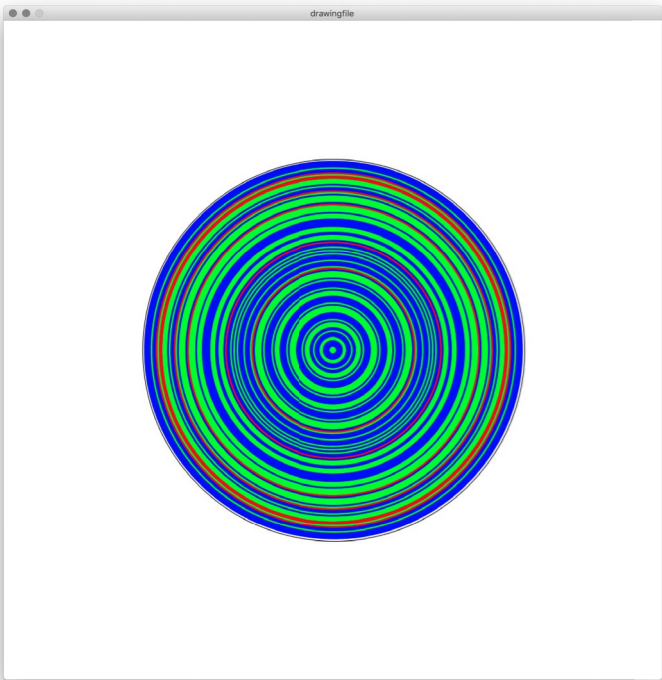
4: [What can I do if I see a post I don't like in Instagram Search & Explore?](#)

6: [Toward the Next Generation of Recommender Systems: A Survey of the State-of-the-Art and Possible Extensions](#)

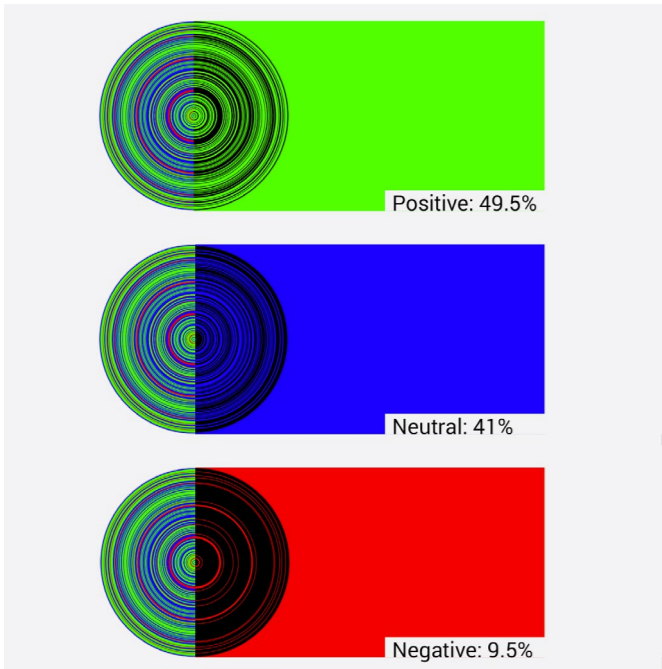
8: [What obligation do social media platforms have to the greater good?](#)

10,11: [Big other: surveillance capitalism and the prospects of an information civilization](#) — Shoshana Zuboff

13: [Myside bias in thinking about abortion](#)



5: Platform: Twitter  
Account: GigiHadid  
Count: 116  
Time: 2018 summer  
- Mimesis 1.0



10: Data Distribution  
- Mimesis 1.0

What I built?

In a nutshell, lack of control from the user's side, lack of transparency in data collecting and processing, and lack of feedback loop for confirmation bias are the three main issues in digital profiling. As mentioned before: the idea of stopping data collection and changing the goal of digital profiling may not be easy to realize because digital profiling serves as monetizing traffic based on algorithms. The degree of transparency needs more laws to level up. Although there are options for people who realize their confirmation bias to opt-out, the political correctness of the existence of those options is more important than their practicality.

Mimesis<sup>1</sup> starts by modifying the preliminary grounding, which is the first step of digital profiling, into constructing a feedback loop for users. The fundamental logic is to reuse existing data to conduct digital profiling for the second time. It falls in line with the concept brought up in SoLid: "reusing existing data."<sup>2</sup> Since some platforms offer public and friendly API,<sup>3</sup> it is possible to reproduce others' 'digital profiling' as a third party.

In this project, Twitter is the central platform used. Twitter API has three aggregated streams of Tweets, which are home timeline, user timeline, and mention timeline.<sup>4</sup> The home timeline consists of retweets and the user's tweets, which represent the user's thoughts. Mimesis 1.0<sup>5</sup> pulls tweets from the Gigi Hadid home timeline and then pipes tweets into a sentiment analysis model which will spit out 1,0,-1 as sentimental results meaning positive, neutral and negative. After that, it uses Processing to match these digits to green, red and blue and draws circles from inside to the outside. Similar to how a tree ring<sup>6</sup> stores data about climate and atmospheric conditions, Mimesis 1.0 stores personal sentiment data. It is an

avatar,<sup>7</sup> as well as a simulacrum.<sup>8</sup> Mimesis 1.0 meets the requirement of substituting the current visual of digital profiling. The result of sentiment analysis is a representation of how a users' emotions flow in their expression. But it has a relatively loose connection with confirmation bias.

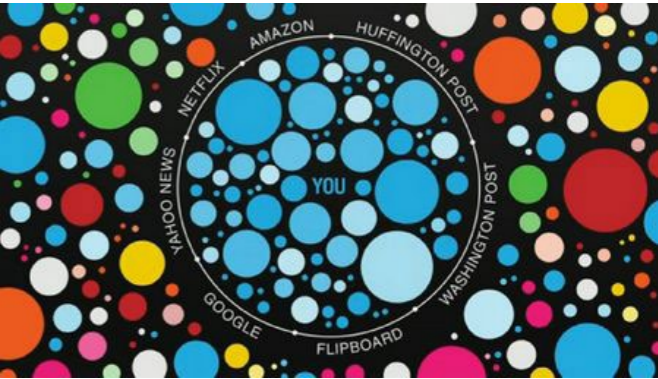
Thomas Goetz, executive editor of WIRED magazine, mentioned that a feedback loop involves four distinct stages:<sup>9</sup> evidence, relevance, consequence, and operation. The data comes in first: A behavior has to be calculated, recorded, and processed. Second, the information must be conveyed to the user in a way that makes it emotionally resonant, not in the raw-data form it was collected in. But if we don't know what to make of it, even persuasive evidence is useless, so we need a third stage: consequence. The knowledge needs to illuminate one or more paths forward. Finally, a clear moment must come when the person can recalibrate a behavior, make a decision, and act. Then the action is evaluated, and the feedback loop can run again; each step triggers new habits that get us closer to our objectives.

All data collected from the users after being processed is conveyed back to the user. Mimesis 1.0 did manage to complete the first two stages: providing users with behavior evidence which they can resonate with. It did illuminate the past pattern and left the future paths, such as being more positive or negative to the users. However, it is unable to break the loop of confirmation bias because the message unveiled in the graph<sup>10</sup> is not related to diversity. Diversity of perspective matters in confirmation bias. If there is a visual representation of confirmation bias, it will be the "filter bubble."<sup>11</sup> The color inside the bubble has much fewer diversity. Thus, what Mimesis needs to illuminate is the information relevant to the diversity of perspectives.

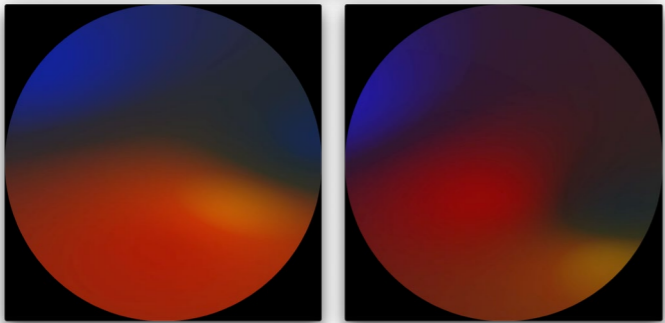
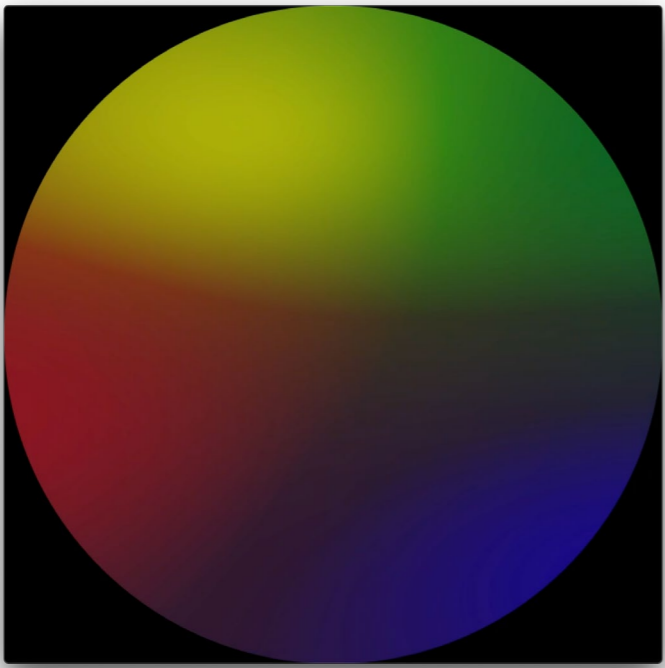
- 1: Mimesis is a term used in literary criticism ... which include imitation, nonsensuous, similarity, receptivity, representation, mimicry, the act of expression, the act of resembling, and the presentation of the self.  
— Culture—Art—Society  
Gunter Gebauer & Christoph Wulf
- 2: Developers will be able to easily innovate by creating new apps or improving current apps, all while reusing existing data that was created by other apps  
— SoLid
- 3: [The rise of APIs](#)
- 4: [Get Tweet timelines](#)
- 5: [Mimesis](#)
- 6: [tree ring](#)  
— [LintonArt Shop](#)
- 7: In computing, an avatar (also known as a userpic) is the graphical representation of the user or the user's alter ego or character. An icon or figure representing a particular person in a video game, Internet forum, etc.  
— [Wikipedia](#)
- 8: 'It is the reflection of a basic reality. It masks and perverts a basic reality. It masks the absence of a basic reality. It bears no relation to any reality whatever: it is its own pure simulacrum.'  
— Jean Baudrillard: Simulacra and Simulations
- 9: [Harnessing the Power of Feedback Loops - Thomas Goetz](#)
- 10: [Data Distribution](#)
- 11: [Filter bubble](#)  
— [Ted talk: Beware online 'filter bubbles'](#)



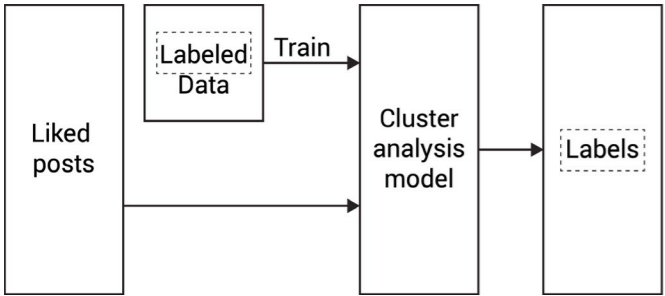
6: tree ring  
— [LintonArt Shop](#)



11: Filter bubble  
— [Ted talk: Beware online 'filter bubbles'](#)



1: Platform: Twitter  
- Mimesis 2.0



7: Platform: Twitter  
- Mimesis 2.0

Mimesis 2.0<sup>1</sup> is the speculative result based on the same process as Mimesis 1.0, which is extracting data, conducting analysis, and drawing the result. The difference between 1.0 and 2.0 is not only replacing the sentiment model with the cluster analysis model<sup>2</sup> but also much higher complexity during the process. The MobileNet<sup>3</sup> model in RunwayML (a democratized machine learning tool for artists and designers) is the one that I have used and tested for 2.0. Since low fidelity models perform similar to the required cluster analysis model, which needs to be trained by enormous labeled datasets,<sup>4</sup> the list of which will refer to the popular synsets in imagenet (an image database organized according to the Word-Net hierarchy). After data is piped into the model, it generates several clusters.<sup>5</sup> The names of these clusters are subsets of the labels in the data set, which will be mapped to colors.<sup>6</sup>

There are a lot of details in the process<sup>7</sup> unresolved in Mimesis 2.0. What is the definition of diversity? What is the benchmark of adequate diversities? For example, one user is mainly interested in animals, but the information about animals in his feed has depth and breadth. The other user has a wide range of interests, but the information about each topic lacks depth. Which scenario counts as having more diversities? At the same time, how does Mimesis 2.0 transform when the case changes from scenario 1 to scenario 2, and vise versa? Moreover, what is the process of color mapping? Is the result of mapping based on some degree of universal agreement? Can users decide how colors are mapped? Although there are two variables in color, saturation and variety, that could be mapped to depth and breadth, what is the criteria for mapping? Have all the questions above fallen in the realm of how to design a compatible label system for the stream of diverse information?

The ideal Mimesis should have a wide range of data input that could represent the user's epistemology and ideology. Input data should be analysed by a customized cluster analysis model which will be trained by a specifically designed training data set. In other words, this model should generate neither clusters that are too general, nor clusters that are too scattered. The system should find the balance between the amount of colors being used and an appropriate level of complexity which users can easily comprehend. The complexity of ideal Mimesis outweighs my imagination. But Mimesis 1.0 tests and proves the logic and process, and Mimesis 2.0 is a low-resolution speculation for the ultimate program. Thus, I believe it is manageable. Plus, tech companies already have 'Mimesis2.0' which is the ad interest list. It just needs some adjustment and one more step—drawing.

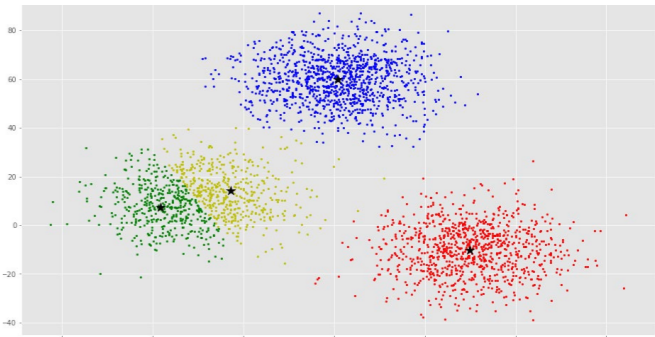
**Goals for Mimesis**

- This is an information design project.
- This is an avatar design project.
- This is a UX design project.
- This is a generative design project.
- This is also a speculative design project.

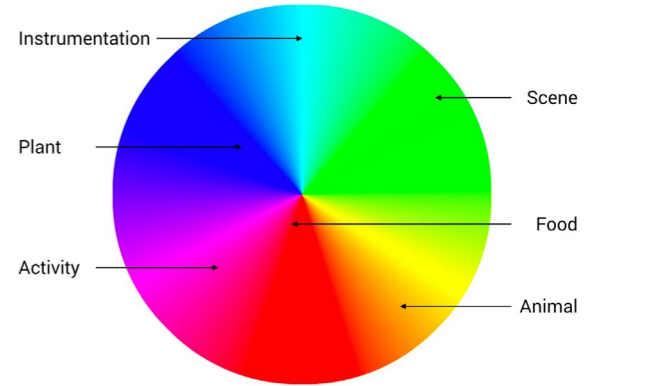
There are multiple ways to define this project. Different definitions are pursuing different goals. I believe there are two major goals (based on Emotional Design<sup>8</sup>) in a design project: changing perception, and changing behavior.

Perception and behavior are tightly interconnected<sup>9</sup>. Tim Brown from IDEO suggested designing simple digital tools to provide feedback as an additional tip to nudge people into new behaviors<sup>10</sup>. Thus, likely, the best way to change perception is to let users use the Mimesis rather than an informative one-time report. There are multiple ways to convert information design outcomes into tools

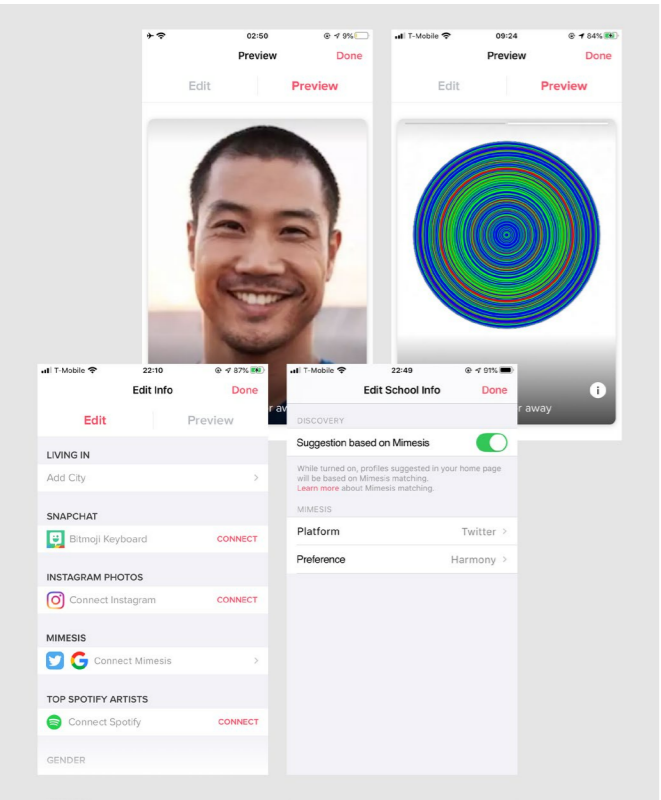
- 2: Cluster analysis is a class of techniques that are used to classify objects or cases into relative groups called clusters.  
— [Cluster analysis](#)
- 3: [Everything you need to know about MobileNetV3](#)
- 8: The three levels are visceral, behavioral, and reflective.  
— [Emotion Design - Don Norman](#)
- 9: [Beyond the Perception-Behavior Link: The Ubiquitous Utility and Motivational Moderators of Nonconscious Mimicry](#)
- 10: [IDEO's Tim Brown on Using Design to Change Behavior](#)



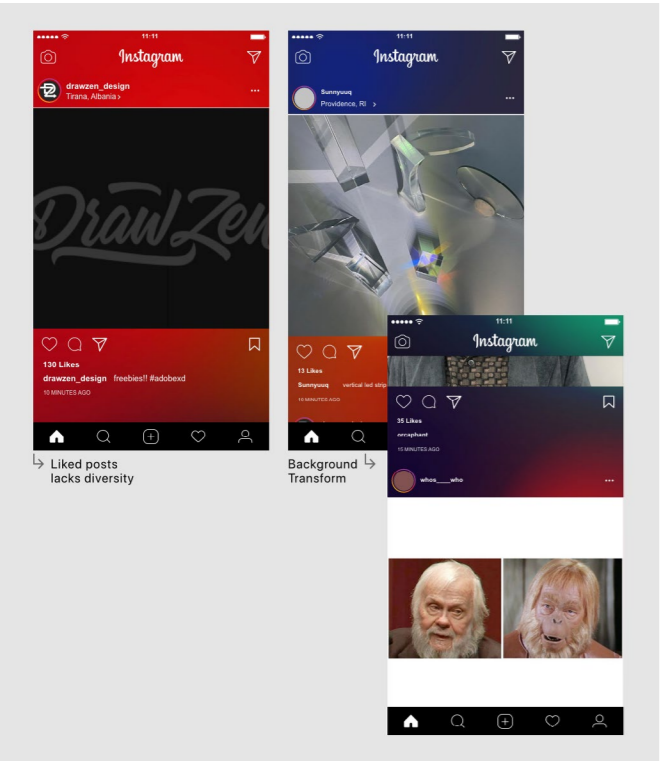
5: [Example of clusters](#)



6: [Color mapping List resource-imagenet](#)



3: Tinder  
Mimesis 1.0



6: Instagram Home page  
- Mimesis

for other activities. Pantone linked global environmental issues with the "Color of the Year 2019." <sup>1</sup> Designers, artists, and industries will keep reminding ordinary people of the issues when they keep applying the color in their work. Mimesis shares the same idea of generating customized results based on one's information with "Casa da Música logo generator." <sup>2</sup>

Mimesis 1.0, a customized graph, could be interpreted as an avatar. The applied platform is Tinder.<sup>3</sup> You can choose to connect Mimesis like Snapchat and Instagram photos. From a user's perspective, bridging Snapchat and Instagram with Tinder increases the plurality of information, though it might turn into a concern for some users. Mimesis shares the same idea offering Tinder users an option to show more about themselves. On top of that, Mimesis provides an alternative for matching algorithms.<sup>4</sup> In color practice, there are multiple choices to collocate different colors. What if matching algorithms could use Mimesis as a source to incorporate color combination theory <sup>5</sup> to expand users' options? Users' cards will be pushed to others based not only on age, distance, and gender preferences but also on their Mimesis matches.

For Mimesis 2.0 and the ideal Mimesis, the speculative application happens on platforms functioning as user's information resources. In this scenario, the demonstration <sup>6</sup> executes on Instagram's home page, which will be used as the background of the app. There are two different stages of the Mimesis. In the first stage, colors won't change but rather they'll slowly float. The second stage will be triggered by the posts that are liked by the user. The new liked post will be analyzed by the system, and the analysis outcome will decide to increase, decrease or change colors. Referring back to the four stages of the feedback

loop: evidence, relevance, consequence, and operation, Mimesis embedded in the background functions as the relevant evidence of the user's liked posts. When users' likes are limited to a few categories of posts, the diversity of colors in Mimesis will diminish. This builds the consequence stage, which informs users of their 'bubble.' And finally, the 'bubble' nudges users to operate and completes the feedback loop.

Finally, the speculative scenarios outlined here need to be a proof of concept that could generate revenues through further experimentation, research, and development of policy.

The idea put forward in this essay, that shifting the purpose of digital profiling as a third party, may draw worthwhile arguments about the practicality and policy issues. My point is to demonstrate my future visions or wishes for this technology and to propose a mutually beneficial strategy to tech companies.

4: Aside from your current location and gender, it's just your age, distance and gender preferences to start. Proximity is a key factor - [The method behind our matching](#)

5: Complementary, harmony, calming, split, dynamic, vivid - [Color combinations](#)



1: Living Coral  
— [Pantone color of the Year 2019](#)



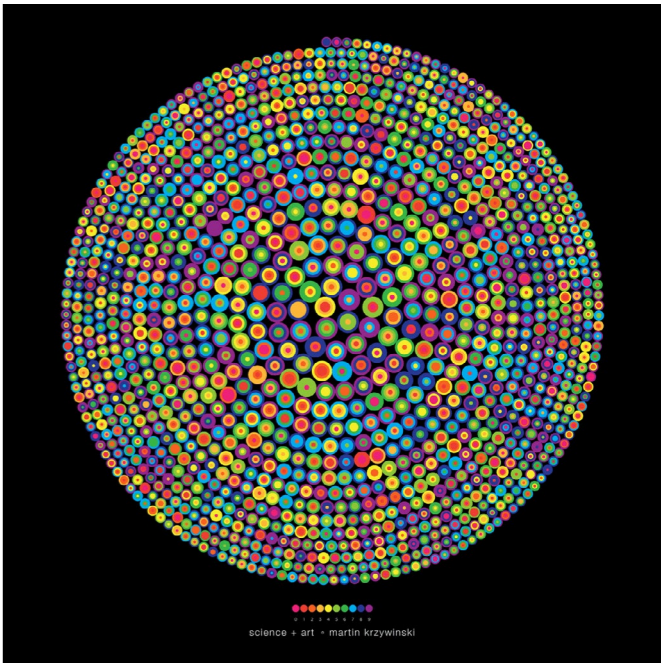
2: [Casa da Música logo generator](#)  
— sagmeister

# The spiral and the loop

As Julia Cameron puts it in The Artist’s Way:  
You will circle through some of the issues over and over, each time at a different level. There is no such thing as being done with an artistic life. Frustrations and rewards exist at all levels on the path. Our aim here is to find the trail, establish our footing, and begin the climb.<sup>1</sup>

This essay dives deeper into the research of the system. It shows a more transparent and detailed picture of the digital profiling system. My aim here is to ‘find the trail, establish our footing, and begin the climb.’ In other words, this essay paves the path toward my stance on why we need a more human-centered digital profiling system.

\* This essay will reuse part of the content in the previous one.



Pi Day 2014 poster  
— Martin Krzywinski

1: The Artist's Way: 25th Anniversary Edition  
— Julia Cameron

Reference:  
[The WIRED Guide to Your Personal Data \(and Who Is Using It\)](#)

150 BC	Antikythera Mechanism, Greek, the <a href="#">‘First Computer’</a>
Lat 1880s	<a href="#">Tabulating machine</a> , Herman Hollerith, help process Census data.
1960s	<a href="#">Mainframe computers</a> , IBM, Store and process data on nearly every American, corporation used the machines to analyze consumer purchasing habits.
1964	Vance Packard’s book, The <a href="#">Naked Society</a> , which argued that technological change was causing the unprecedented erosion of privacy.
1970	<a href="#">Fair Credit Reporting Act</a>
1974	Privacy Act. The regulations mandated transparency but did nothing to prevent the government and corporations from collecting information in the first place
1990	<a href="#">Lotus MarketPlace</a> : Households names, income ranges, addresses, and other information, canceled
1990s	<a href="#">Ads economy</a> permeating the web.
2000	Privacy groups argued that <a href="#">DoubleClick</a> could have used personal information collected by the data broker to target ads based on people’s real names.
2006	DoubleClick sold the firm at a <a href="#">loss</a> .  The <a href="#">Network Advertising Initiative</a> was created, a trade group that developed standards for online advertising, including requiring companies to notify users when their personal data is being collected.
2008	<a href="#">Google acquired Doubleclick</a> .
2014	The <a href="#">Social Credit System</a> is a national reputation system being developed by the Chinese government. By 2020, it is intended to standardize the assessment of citizens’ and businesses’ economic and social reputation, or ‘Social Credit’.
2016	<a href="#">Google revised its privacy policy</a> to permit personally-identifiable web tracking.
May 2018	The data protection regulation GDPR that was put in place gives European users the right to verify their data, including marketing profiles generated by data brokers, internet platforms, or online media. While companies can still protect their code and algorithms as business secrets, they can no longer hide personal data they generate about their users.

Spiral

This section is going to walk through technological development related to digital profiling. There is invisible, ongoing wrestling constantly happening between stakeholders within the system. However, it is not a fair fight. This section aims to conclude that users lack data collection control, and the development of related suppressive and complementary technologies and laws fall behind the development of data collection.w

The list on the left is the spiral.<sup>1</sup>

If we zoom into one single case: the Google Street View project, we can find the same pattern. This project received enormous objection when it was launched in 2007. It started out as cars with scanners when it was first discovered in Germany.<sup>2</sup>

The Investigations of Google Street View by EPIC revealed that

Google intentionally intercepted payload data for business purposes and that many supervisors and engineers within the company reviewed the code and the design documents associated with the project.<sup>3</sup>

Finally, Google paid seven million dollars to settle the case.

In Street View, Google developed a declarative method that it has repeated in other data ventures. This modus operandi is that of incursion into undefended private territory until resistance is encountered.<sup>4</sup>

Like some other technology,

Google then exhausts its adversaries in court or eventually agrees to pay fines that represent a negligible investment for a significant return.<sup>5</sup>

- 1: A process of deterioration through the continuous increase or decrease of a specified feature.  
— [Spiral](#)
- 2: [Germany’s Complicated Relationship With Google Street View](#)
- 3: [Investigations of Google Street View](#)
- 4, 5: [Big other: surveillance capitalism and the prospects of an information civilization](#)  
— Shoshana Zuboff

Three years ago, different attitudes<sup>1</sup> toward the Google Street View emerged among artists. It became a platform, a medium, and a collapse of the virtual and real-world that invites creative works. In 2016, Aaron Puzey, a digital games programmer, developed Cycle VR,<sup>2</sup> which is compatible with the Google Street view that allows users to cycle in virtual reality.

The seesawing pattern I see within one project on a longer timeline is a tug of war between technology and humans.

Individuals quickly came to depend upon the new information and communication tools as necessary resources in the increasingly stressful, competitive, and stratified struggle for effective life. The new tools, networks, apps, platforms, and media thus became requirements for social participation. Finally, rapid buildup of institutionalized facts—data brokerage, data analytics, data mining, professional specializations, unimaginable cash flows, powerful network effects, state collaboration, hyperscale material assets, and unprecedented concentrations of information power—produced an overwhelming sense of inevitability.<sup>3</sup>

Technology does not always win. Amazon Ring changed its privacy setting amid concerns that it shares customer data with Facebook and Google.<sup>4</sup> According to data protection regulation, GDPR<sup>5</sup> requires companies to bring more transparency into tracking and profiling. But the result of the seesawing pattern is essentially a spiraling trend of technological development.

Data collection drew the most resonance from the user's side because it directly connects to privacy issues. There are two other factors in my research that matter to digital profiling. They are APIs and chips, which are relatively not as sensitive as data collection.

Giant tech is becoming more and more open to the public.<sup>6</sup> Some inside the industry think that this is because they understand how higher levels of sustained interaction (and contribution) with successful open source projects can help them set the rules of the game, in some, if not all scenarios.<sup>7</sup> API is one crucial medium to the open-source feature. API (application programming interface) is a computing interface that defines interactions between multiple software intermediaries. Whether it's internal API or external API, it serves as a critical component in accelerating business in terms of driving agility, data availability, automation, business intelligence, and governance.<sup>8</sup> It is a win-win move<sup>9</sup> between giant techs and smaller companies. They open their API to the public, which will help other businesses developing around their current ecosystem. At the same time, it helps prevent duplication of effort because it is less likely for another team to build something from scratch when the work has already been done. From the user's side, it brings convenience. Imagining whenever you visit a new service platform, you don't have to create a new username and password.

Cheaper, smaller, and faster chips<sup>10</sup> accompanied by sensors are the infrastructure at the front-end of the internet, cybernate devices, bodies, and places to construct the 'Internet of Everything.' There is enormous value in IoT, according to the Cisco 2013 White Paper.<sup>11</sup> Internet of Everything does not only serve the purpose of improving the convenience and agility in customer experience but also reduces the cost in the industry and eliminates waste in supply chain and logistics.<sup>12</sup> Sensors are tongs that grab data from the physical surroundings. Chips equipped with a WiFi module transfer data to the cloud. In the future, personal data collecting techniques will be more

1: <a href="#">How Google Street View Became An Art Form</a>	2: <a href="#">Cycling the length of Britain, virtually</a>
3: <a href="#">Big other: surveillance capitalism and the prospects of an information civilization</a> — Shoshana Zuboff	4: <a href="#">Ring to tighten privacy amid concerns it shares customer data with Facebook and Google</a>
5: <a href="#">EU Privacy Law Snares Its First Tech Giant: Google</a>	6,7: <a href="#">The Impact Of The Tech Giants On Open Source</a>
8: <a href="#">Why APIs are not just for tech companies</a>	9: <a href="#">APIs are the next big SaaS wave</a>
10: <a href="#">Smaller faster cheaper over the future of computerchips</a>	11,12: <a href="#">Embracing the internet of everything to capture your share of \$14.4 Trillion</a> — Cisco White Paper 2013

permeative. Currently, the market already has smart speakers (Alexa, Echo), smartwatches (Fitbit, Apple watch), a smart shoe sole (Digitsole), street cameras, etc.

However, there are advantages of data sharing. First and foremost, there's research being done around the topic that sharing mobility data creates the opportunity to help city planning. Especially in the current situation - COVID-19, google reveals location data to help public health officials.<sup>1</sup> There was also a study in 2016 in Indonesia that showed data sharing improves urban planning.<sup>2</sup>

At the same time, technologies are under development to help data protection and deal with data privacy. There is an end-to-end encrypted communication tool such as Signal. Differential privacy will enable social scientists to share useful statistical information about sensitive datasets.<sup>3</sup>

More and more professionals join the task of blockchain-based digital identity, or so-called self-sovereign identity<sup>4</sup> and the inventor of the World Wide Web, Tim Berners-Lee, collaborated with MIT and is developing the project: SoLid<sup>5</sup> (Social Linked Data). Designers are trying to hack the control of smart devices<sup>6</sup> and give control back to the user.

Each application of technology needs to be proof of concept that could generate revenue through further experimentation, research, and development of policy. This collection of facts, along with derived patterns, helps me affirm that we need to embrace data sharing. At the same time, we need to develop technology in order to secure data against unauthorized access (data protection), and push forward legislation to dissolve ownership issues (data privacy).

Surveillance capitalists have skillfully exploited a lag in social evolution as the rapid development of their abilities to surveil for profit outrun public understanding and the eventual development of law and regulation that it produces.<sup>7</sup>

The continually evolving surveillance economy is like the constantly growing endpoint of the spiral, driving the development of related suppression, complementary technologies, and laws.

**Loop**

The history of profiling shows that the emergence of this technology serves the governing stakeholder (service provider in the business, the government in society). However, it also provides enormous consequences on a user's online experience. This section is going to parse digital profiling on tech giant platforms from the user's perspective, which aims to conclude that there is a lack of feedback loop in social media platforms for transparency in data collecting and processing as well as for confirmation bias.

Profiling has a long history. Back in 1996, knowledge discovery in databases (KDD)<sup>8</sup> has already become an emerging field of study. In the article "Digital Inclusion and Data Profiling of Profiling",<sup>9</sup> Seeta Peña Gangadharan offered a much longer and broader spectrum view from low tech profiling (racial profiling, redlining, and medical profiling), to surveillance profiling. The 21st century's prevailing digital profiling solves the underlying problem (which is typically too voluminous to understand and digest easily)<sup>10</sup> addressed in low-tech data profiling. The form of the profiling result might be more compact (for example, a short report), more abstract (for example, a descriptive approximation or model of the process that generated the data), or more useful (for

1: [Google Reveals Location Data to Help Public Health Officials](#)

2: [How Sharing Data and Collaboration Can Improve Indonesia's Urban Planning](#)

3: [Harvard University Privacy Tools Project](#)

4: [Self-Sovereign Identity in a Globalized World: Credentials-Based Identity Systems as a Driver for Economic Inclusion](#)

5: The ultimate goal of Solid is to allow users to have full control of their own data, including access control and storage location.  
- [Tim Berners-Lee](#)

6: [Alias — A teachable "parasite" for your smart assistant](#)

7: [Big other: surveillance capitalism and the prospects of an information civilization](#)  
— page 83

8,10: [From Data Mining to Knowledge Discovery in Databases](#)  
— Fayyad, U.M.; Piattetsky-Shapiro, G.; Smyth, P. (1996)

9: [Digital inclusion and data profiling](#)  
— Seeta Peña Gangadharan

example, a predictive model for estimating the value of future cases).<sup>1</sup>

Digital profiling has a wide range of application domains from social profiling<sup>2</sup>, business<sup>3</sup>, financial<sup>4</sup>, employment<sup>5</sup> to forensic science<sup>6</sup>. This section mainly focuses on the business.

Digital profiling could be parsed into three aspects, each hosting different stakeholders. It helps marketing in businesses in general in terms of understanding, identifying, and building connections with their customers.<sup>7</sup> For tech giants, especially those with large internet infrastructures, including shopping, social media, searching, and payment system, they not only provide services but also bridge users to other businesses. Users receive customized content packages as their information flows according to their profile from the tech giant platforms. At the same time, users' data (online tracing) is the constant fuel to maintain the whole system. We can see multiple loops here: businesses and customers, tech giants and users, and tech giants and businesses. Inside each loop, the central reciprocity is 'give and take.'

However, between companies and customers, in most cases, tech giants have the advantage of using this powerful tool. The most direct and accessible evidence is the result of the Google search 'How digital profiling benefits the users.' If the algorithm didn't mess up my searching result, you wouldn't get the answer to the question instead of responses to the question 'how digital profiling benefits your business.' Shoshana Zuboff mentioned the word 'reciprocity' 16 times in her article 'Big Other' to describe multiple levels of relationship between individuals and firms from give and take, firm and population, employees and customers, price and wage, income growth and standard of living, and trust and professional sanction. I see these reciprocities as independent

John Berger provides deep insight into his analysis of the purpose of Ads<sup>8</sup> that the role-play of the stakeholder in the loops might shift according to different scenarios. In the loop such as give and take, customers are both workers and buyers, and companies are both employers and service (product) providers. The current stage is a reciprocity described as Varian's claim: exchanging private information for new information and communication tools,<sup>9</sup> which are essential requirements for social participation. Shoshana Zuboff described digital profiling (surveillance capitalism) as asymmetric reciprocity because 'data assets were taken, not given and did not produce.' Users are the most, but at the same time the least, important stakeholder.<sup>10</sup>

The asymmetric reciprocity is not only reflected in unequal control but also a lack of transparency. The current visual representation is seen in the ad setting page. Google, Facebook, Instagram have different user interfaces. However, they all come down to the reality that our digital profile is an ad interest list based on our online trace and activities. They do offer options to access our data package. Other than that, it is a black box. The map "Three layers of your digital profile"<sup>11</sup> done by Panoptikon is an onion-like map which reveals the hidden layers behind the digital profiling. This map shows much more diverse types of data being collected in digital profiling, such as metadata related to behavioral patterns like your typing speed, mouse movements, location pattern, voice recognition results, internet connection frequency, etc. Furthermore, it also reveals how data is grouped differently to infer different interpretations. It is also not clear to users how data is used and sold after data exhaust.<sup>12</sup>

Furthermore, the asymmetry reciprocity lacks the feedback loop in the profiling system. Digital profiling on tech giant platforms serve other

1: [From Data Mining to Knowledge Discovery in Databases](#)  
— Fayyad, U.M.; Piatetsky-Shapiro, G.; Smyth, P. (1996)

3: [Privacy and Consumer Profiling](#)

5: [Workplace Privacy](#)

7: [Why You Should Collect Your Customers' Digital Profiles](#)

9: [Beyond Big data](#)  
— Hal R. Varian P5

11: Three layers of your digital profile  
— [panoptikon.org](#)

2: [Social Profiling: A Review, Taxonomy, and Challenges](#)

4: [Profiling behaviour: The social construction of categories in the detection of financial crime.](#)

6: [Digital Profiling: A Computer Forensics Approach](#)

8: [Ways of Seeing \(section 7\)](#)  
— John Berger

10: Google is 'formally indifferent' to what its users say or do, as long as they say it and do it in ways that Google can capture and convert into data.  
— [Big Other Page 79](#)

12: Data exhaust refers to the data generated as trails or information byproducts resulting from all digital or online activities.  
— Paul Kedrosky

What is the latest brand image that you think Instagram is trying to achieve?

Bring people more closely connected and users first.

In this report: Social media and young people's mental health and wellbeing, Instagram ranks in the last position. I wonder if you think Instagram is trying to do something to deal with the situation?

From my perspective, Instagram has been spending lots of effort on solving or at least mitigating this problem since the last year or so. In fact, Instagram has an org called wellbeing, which is focused on resolving such issues. The site also has teams that review anonymous reports of posts by individuals who may need mental health support, after which they are connected by Instagram to organizations that offer aid.

Instagram also put efforts into redesigning notification system/mechanism. Some examples of solutions and measures Instagram has taken include removing like numbers, removing the following activity tab where you could see the latest actions of people you are following, anti-bullying campaigns, and measures.

8: One section of the Interview with former instagram intern - Jinjing

businesses, and users. For other businesses, this tool becomes a service/product because it can bridge businesses to customers. There are multiple types of partnership marketing.<sup>1</sup> However, from a service/product design perspective, how the feedback loop<sup>2</sup> functions in the partnership is unclear to me due to being incapable of finding materials. When it is related to users, there is a mechanism within digital profiling which is quite similar to the feedback loop. It is continuously collecting user's online traces instead of feedback, and incorporating algorithms to customize the content for the user. Although the latter mechanism shares the same structure as the feedback loop, it is fundamentally a dopamine-driven feedback loop.<sup>3</sup>

The dopamine-driven feedback loop affects mental health. In RSPH's research report, "Social Media And Young People's Mental Health And Wellbeing",<sup>4</sup> five social media platforms, YouTube, Twitter, Facebook, Snapchat, and Instagram, are the primary targets in the survey. They all more or less incorporate the dopamine-driven 'feedback loop' in their content regulator system. Fourteen factors are being asked during the survey, such as awareness, anxiety, loneliness, sleep, and self-expression. As a result, Youtube ranked first and was the only positive platform among them all. Twitter came in 2nd place, followed by Facebook, Snapchat, then Instagram took last place.

The dopamine-driven feedback loop enhances confirmation bias.<sup>5</sup> Confirmation bias is a state of intellectual isolation that people tend to resonate with information that helps confirm and enhance their beliefs or hypotheses. It is hard to get rid of confirmation bias,<sup>6</sup> needless to say, with the 'help' of feedback loop. This feedback loop is also capable of modifying behavior proactively by platform. At the same time, it causes bad user experiences. From the user's side, there have been complaints

about content fatigue, which is caused by the algorithm constantly pushing similar content. When Twitter applied the "while you were away" algorithm, it pushed the 'best tweets' to the top of feeds, which caused complaints about restructuring timelines.

From the user experience design perspective, it is not complicated to build a real feedback loop to counterbalance the dopamine-driven feedback loop. Tim Brown from IDEO suggested designing simple digital tools to provide feedback as an additional tip to nudge people into new behaviors. In the article "Harnessing the Power of Feedback Loop",<sup>7</sup> there is a case that city engineers slow down drivers in school zones by an average of 14 percent by merely showing current speed to the drivers on a dynamic speed display. Thomas Goetz mentioned that a feedback loop involves four distinct stages: evidence, relevance, consequence, and operation. It is possible to imagine a feedback loop where there is relevant evidence that can trigger users to operate consequent behavioral adjustment. Former Instagram intern,<sup>8</sup> whose main project is to optimize the type of notifications sent to Instagram users, shared that Instagram has put effort into redesigning notification mechanisms to improve user experience.

This collection of facts, along with deep-diving into the system, helps to affirm that we need a more human-centered digital profiling system. We need a real feedback loop in the system for the sake of mental health, perception, and human-centered experience.

1: [A complete guide to partnership marketing](#)

3: A dopamine-driven feedback loop is a self-perpetuating circuit fueled by the way the neurotransmitter works with the brain's reward system. — [dopamine-driven feedback loop](#)

5: It is a type of cognitive bias. This term was coined by Peter Wason.

7: [Harnessing the Power of Feedback Loops](#)

2: The product feedback loop is the process of collecting customer feedback continuously and improving your product based on their opinions. — [How product teams can build effective customer feedback loops](#)

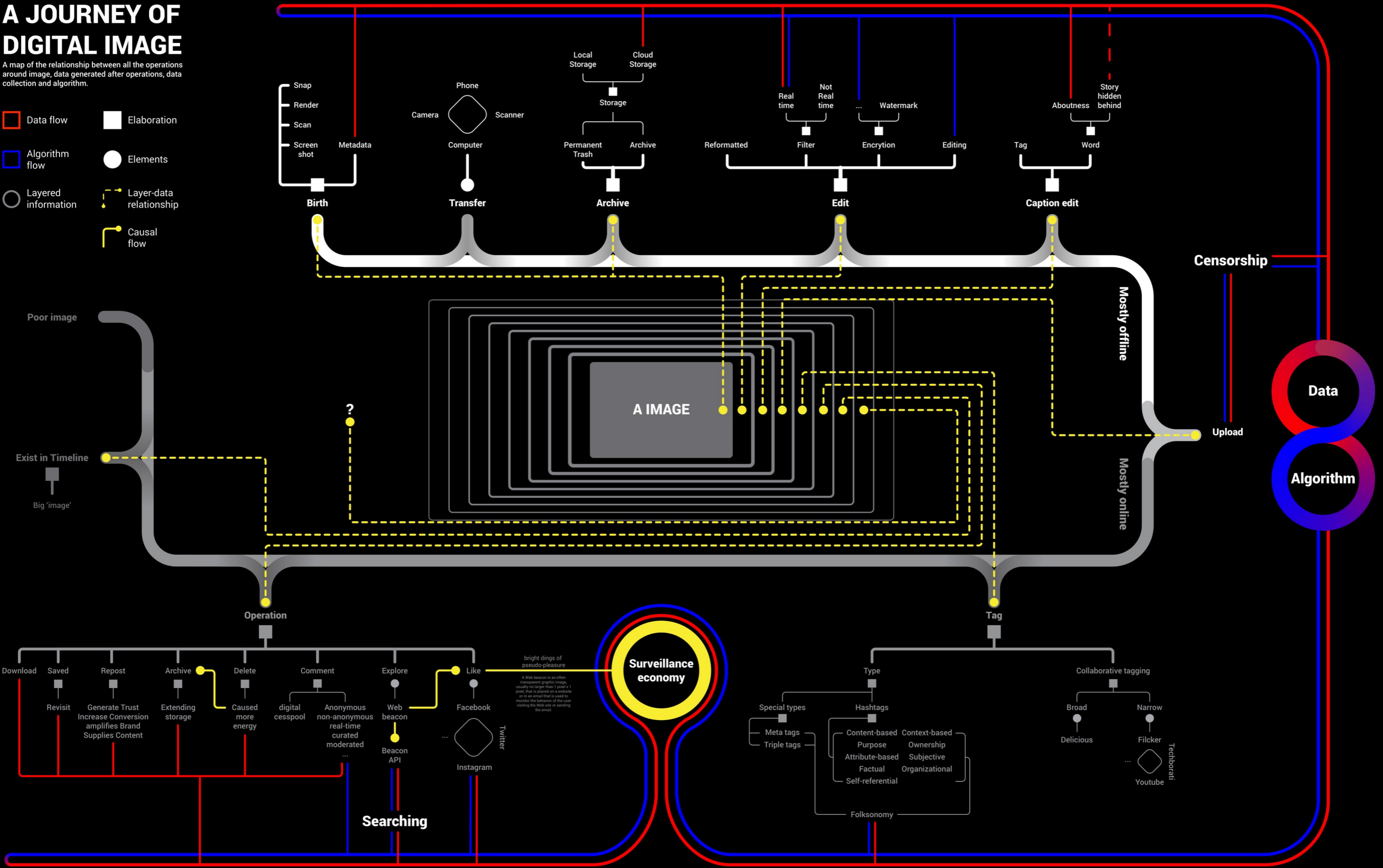
4: [Social media and young people's mental health and wellbeing](#)

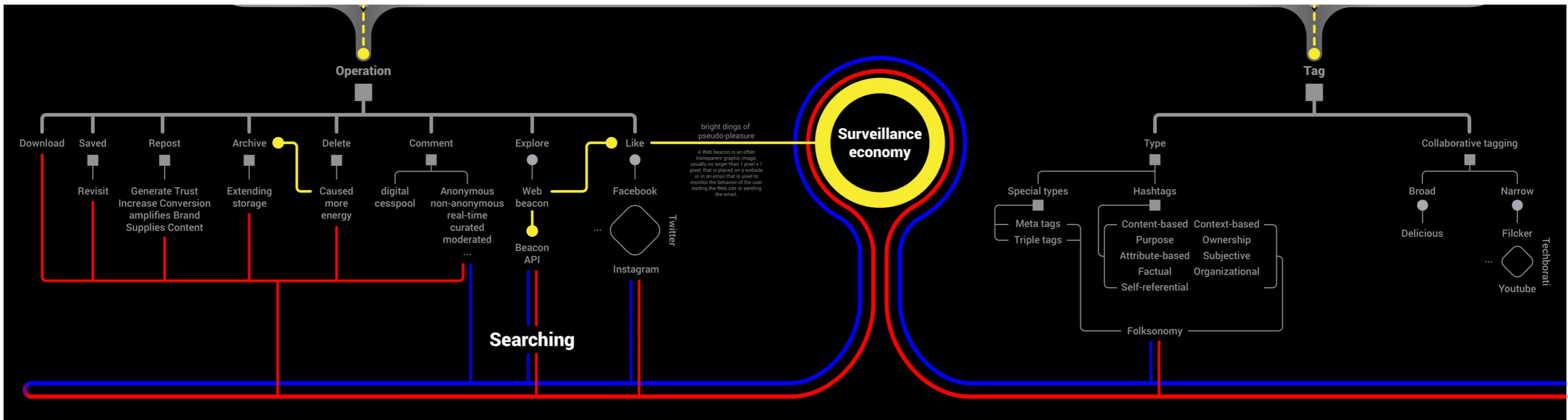
6: [Myside bias in thinking about abortion](#)

# A JOURNEY OF DIGITAL IMAGE

A map of the relationship between all the operations around image, data generated after operations, data collection and algorithm.

- ▬ Data flow
- ▬ Algorithm flow
- Elaboration
- Elements
- Layered information
- - - Layer-data relationship
- └─ Causal flow





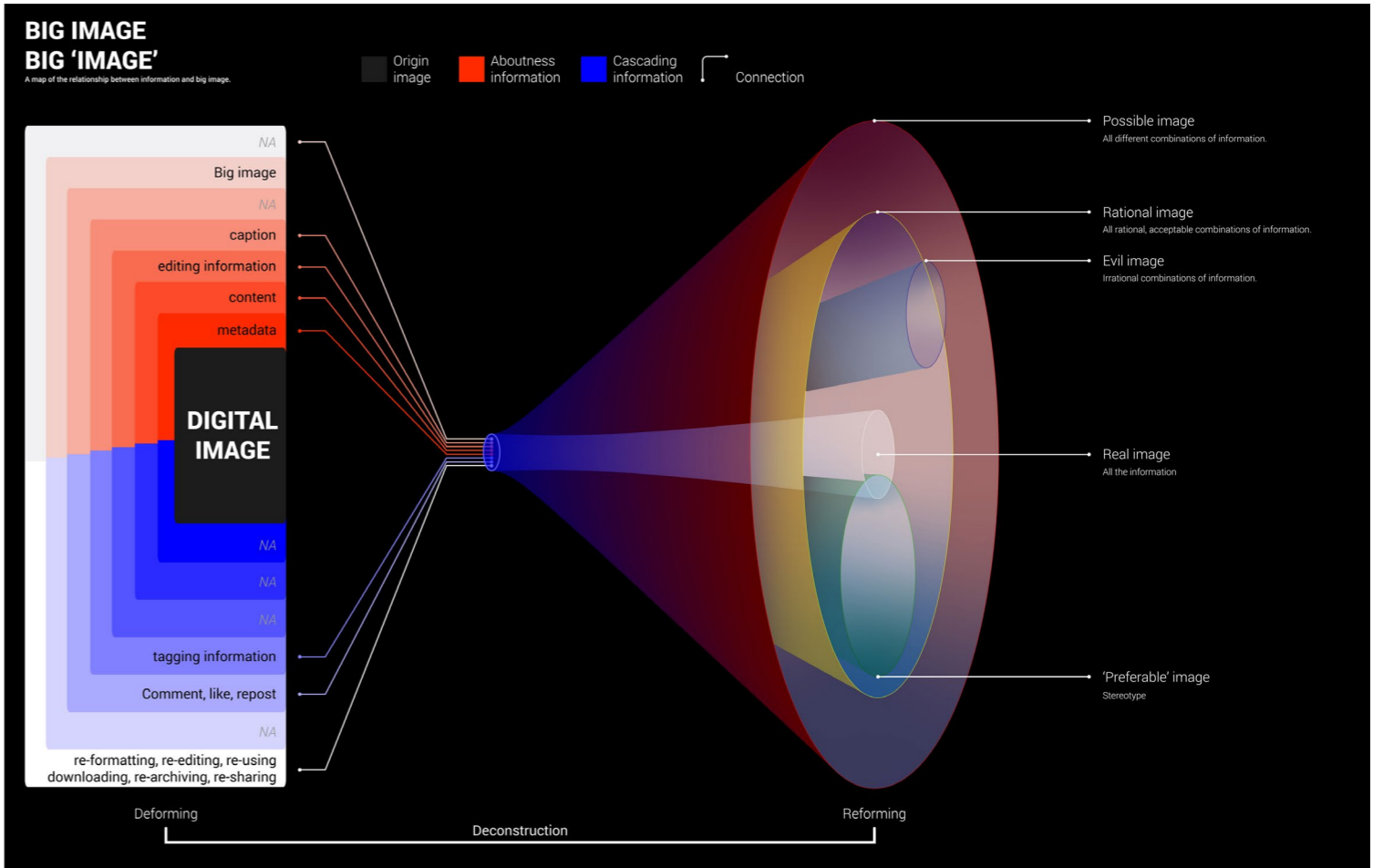
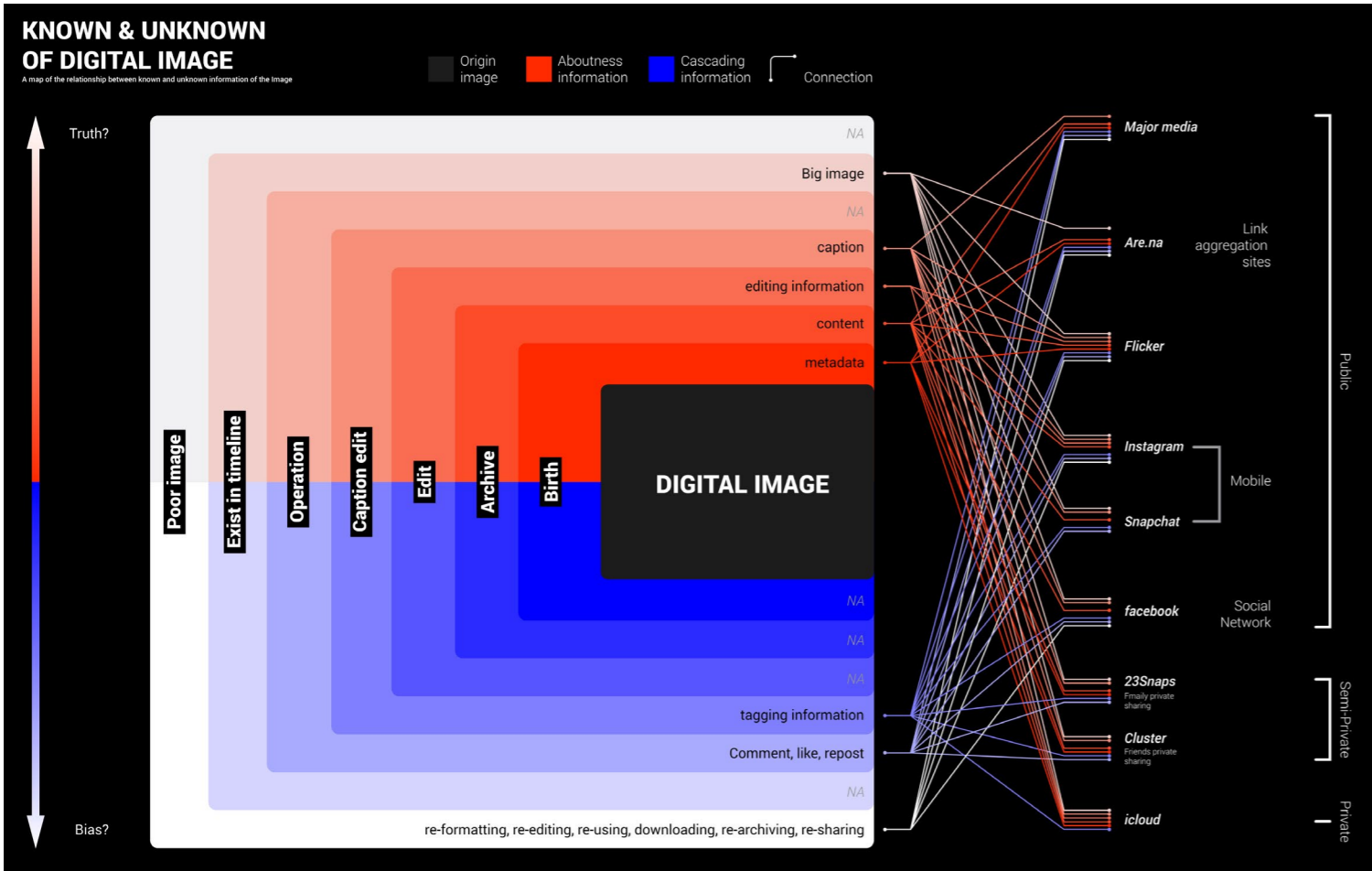
## A study of image data and surveillance economy

Most of the online information is being collected, calculated and processed by machines and systems.

There are two different categories of information in and around the digital image. The first category is the cascading information generated along with all the operations on the image. Most of the operations will leave a trace in the image or online. For example, tagging leaves traces. If the image is in a broad collaborative tagging system, there will be a long tail behind the image. If the image is in a narrow tagging system which means only the publisher can tag on the image, the trace will be more succinct and sometime not related to the image. Once the image is published, the information mainly consists of the comment, like and repost. In some specific situations, there will be saved, archives. The last trace is partially collectible by google reverse search. It is also a trace of the poor image as well as a trace of re-formatting, re-editing, reusing, downloading, re-archiving, re- sharing...

The second category is information about the image. Metadata will be the first batch of information for machines to learn about when, how and even where is the birth of the image. Machine learning will identify the content of the image as the second batch like what object, people, architecture, creature or etc in the image. Captions usually consist of emotion, people and events that are related to the image. Information in captions might not be identifiable in the image. If the image is a creative work instead of the documentation, then there will be the fourth batch which is the story or the concept. This kind of information is hard to collect and not alway travel around the internet with the image. Even so, the image itself is the main subject that has been consumed by other users. Furthermore, if the image was sold at auction, there is the fifth batch which is the chronological ownership.

- 1: Pauline M.Rafferty: Tagging
- 2: Explaining and Showing Broad and Narrow Folksonomies
- 3: In defense of the poor image

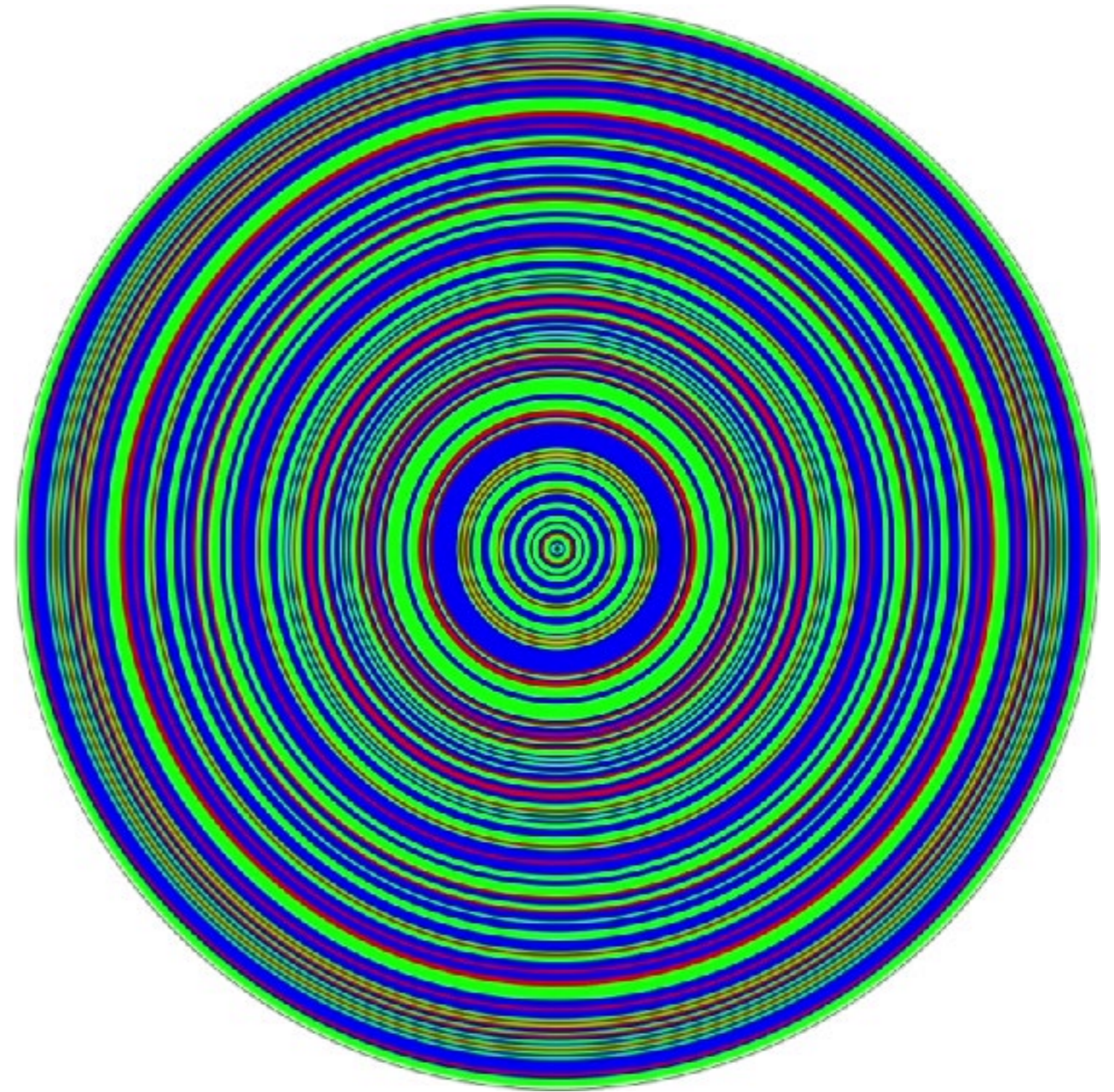


In the map: 'Known and unknown', information is segmented by different layers. Layer is a metaphor for deconstruction.

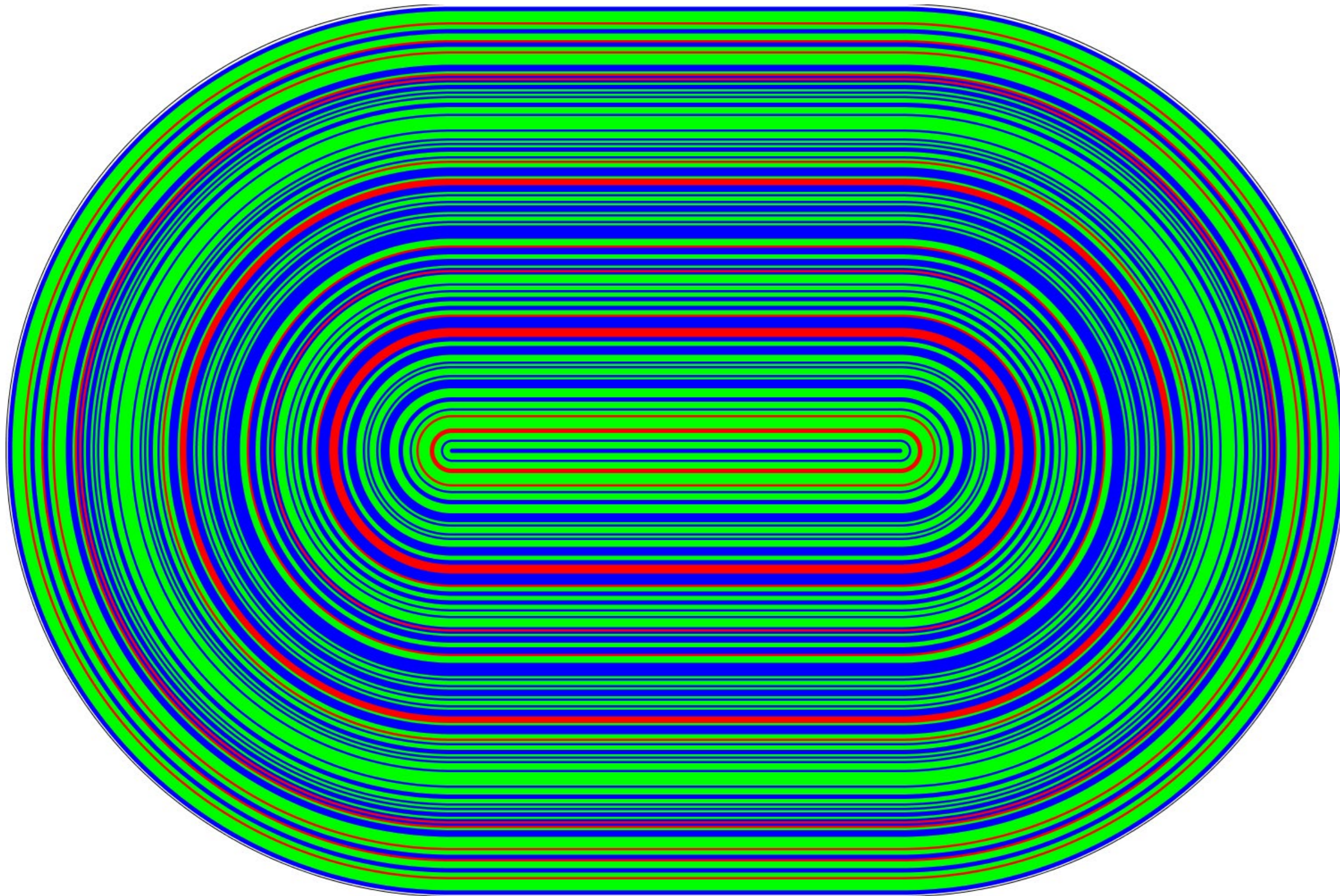
John Berger provided multiple perspectives to understand what you see. In his book: ways of seeing, seeing is not only an action but also a process of collecting information and analyze them. I think we are using the same method to understand a digital image.

We have the intention to curate better profiles in our account. Such as notification - bright dings of pseudo-pleasure is the pay back for our effort of curation. But the like button also caused psychological effects which make Instagram and Snapchat ranking as the worst for mental health and wellbeing - both platforms are visual oriented and it appears they may be driving feeling of inadequately and anxiety in young people. People care about what other people think of their profile.

# Mimesis1.0

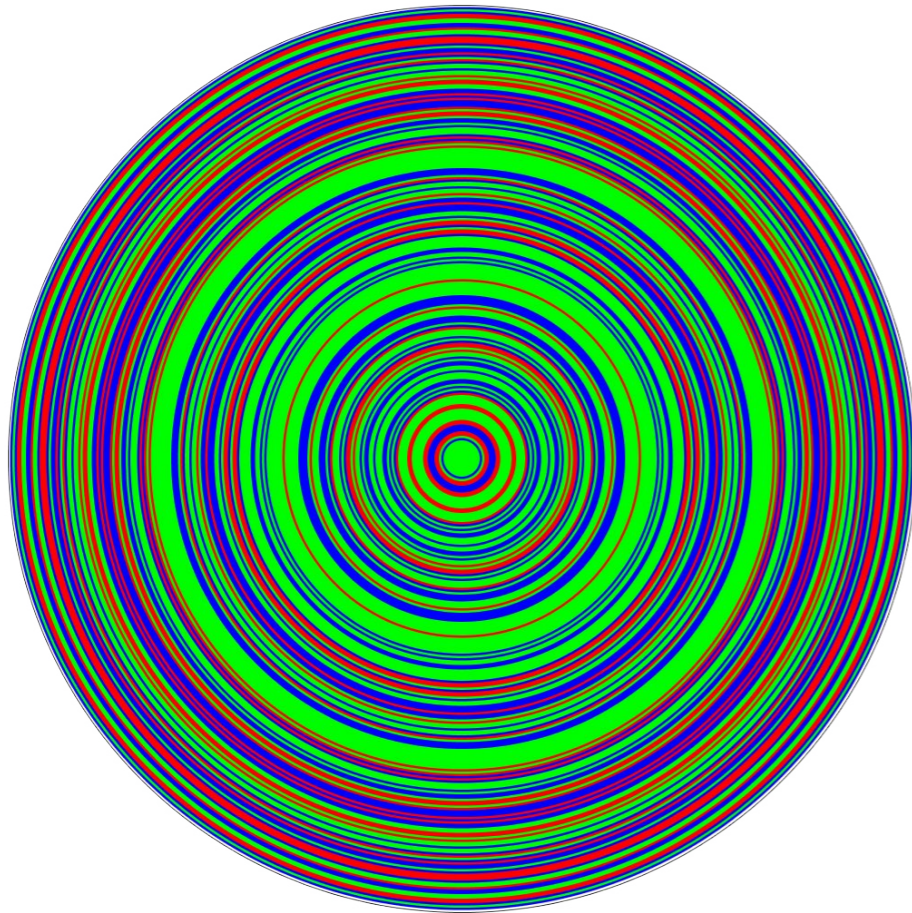


Resource: Twitter  
Account: realdonaldtrump

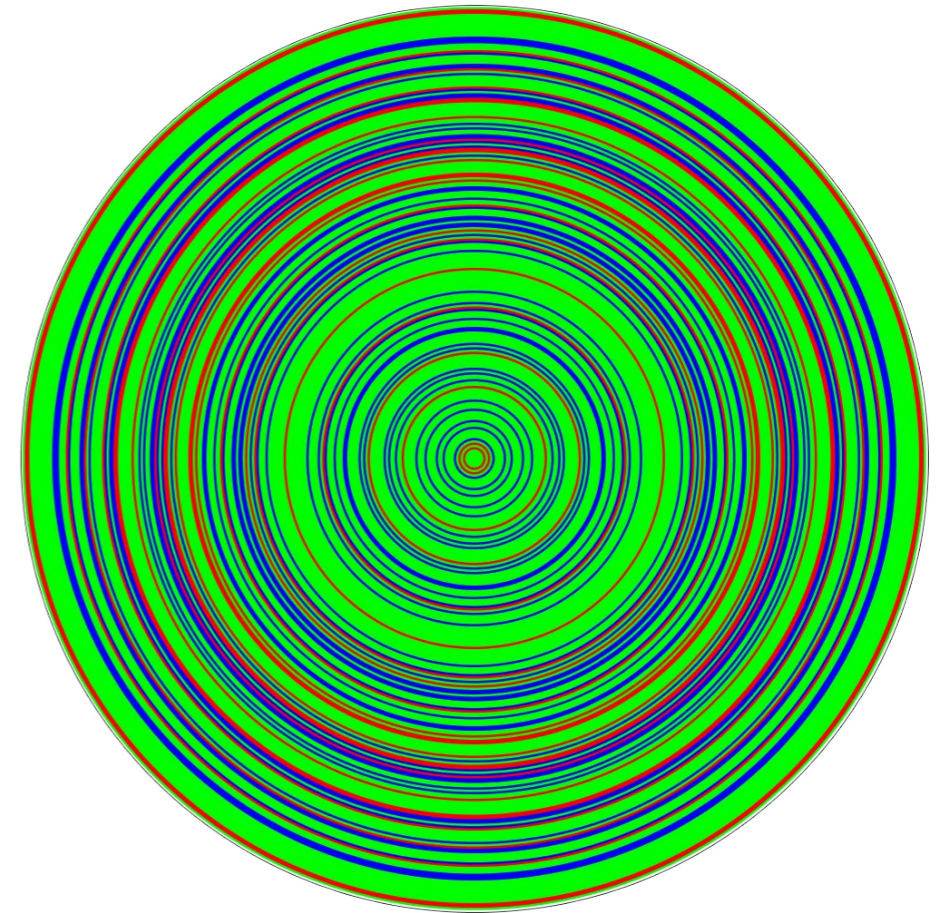


## Mimesis1.0

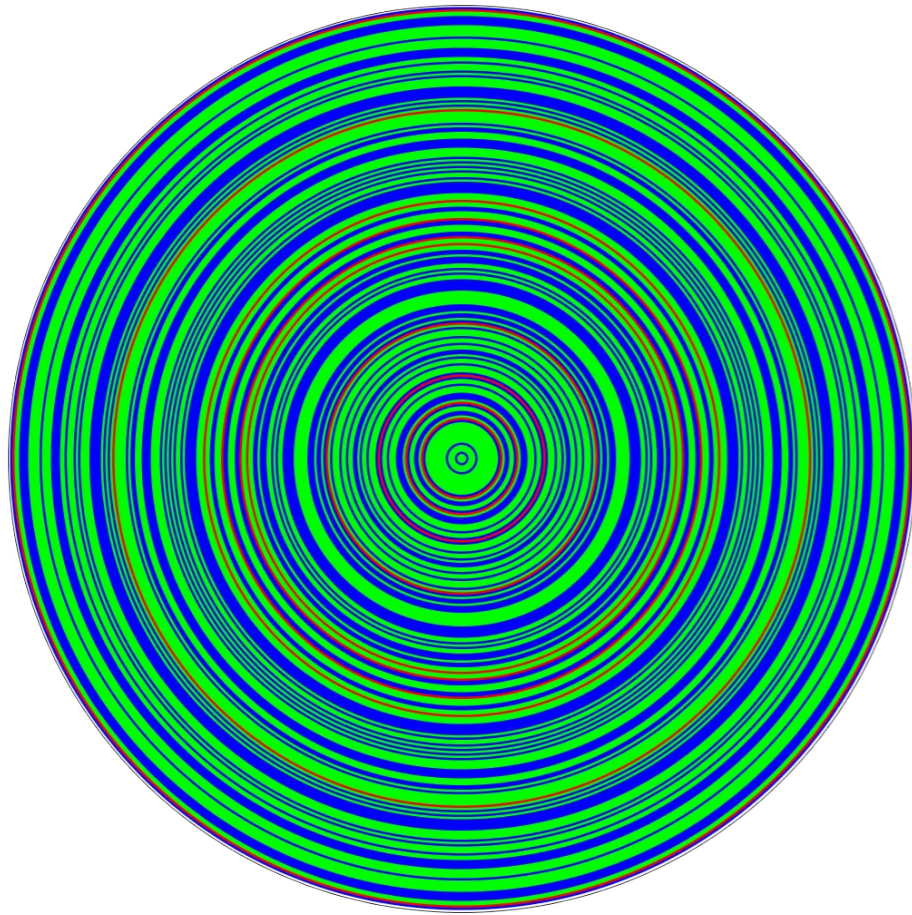
Twitter is the central platform involved in the process. Twitter API has three aggregated streams of Tweets, which are home timeline, user timeline, and mention timeline. The home timeline consists of retweets and the user's tweets, which represent the user's thoughts. Mimesis1.0 pulls tweets from the Gigi Hadid home timeline and then pipes tweets into a sentiment analysis model which will spit out 1,0,-1 as sentimental results meaning positive, neutral and negative. After that, it uses Processing to match these digits to green, red and blue and draws circles from inside to the outside. As a tree ring storing climate and atmospheric conditions data, Mimesis1.0 stores personal sentiment data. It is a visual representation of the internet user. It is an avatar, as well as simulacra.



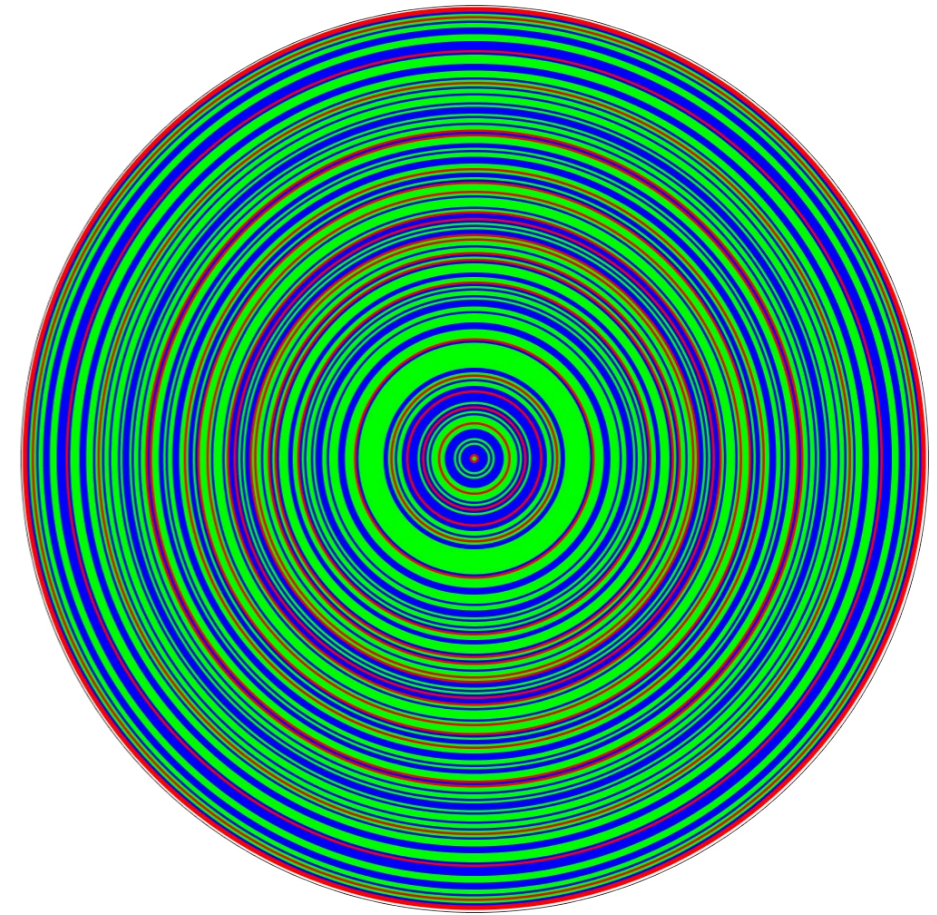
**Donald Trump**  
2020 April 21 - 2020 April 28



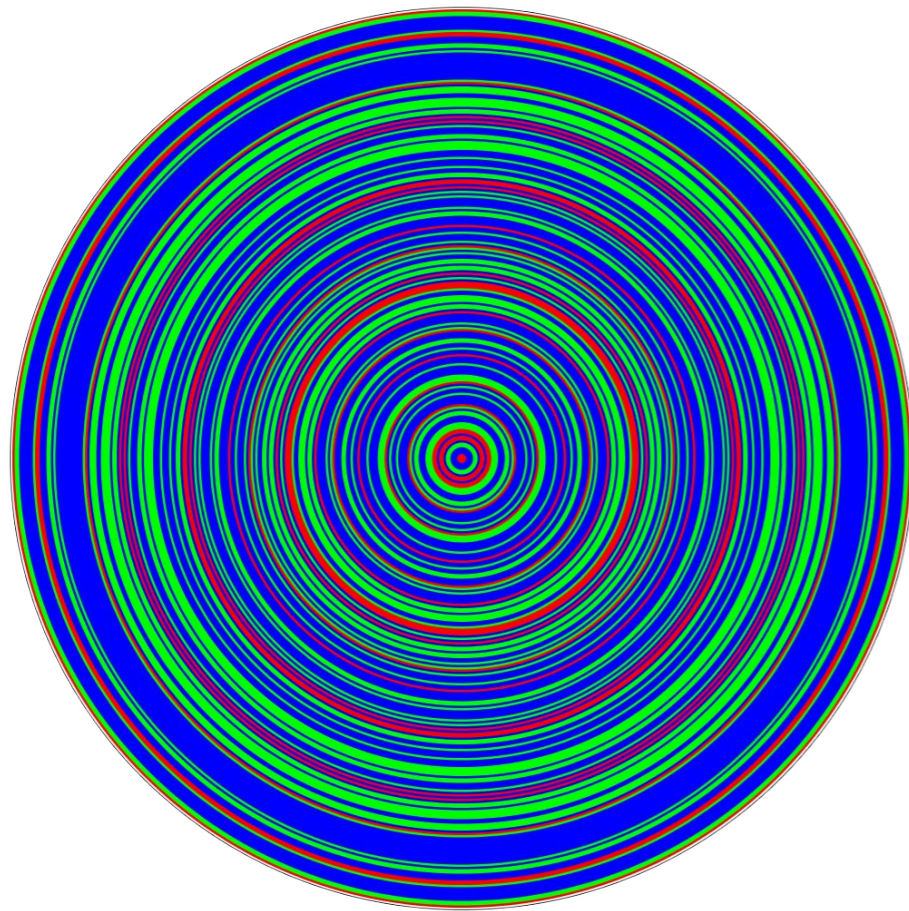
**Barack Obama**  
2019 April 15 - 2020 April 27



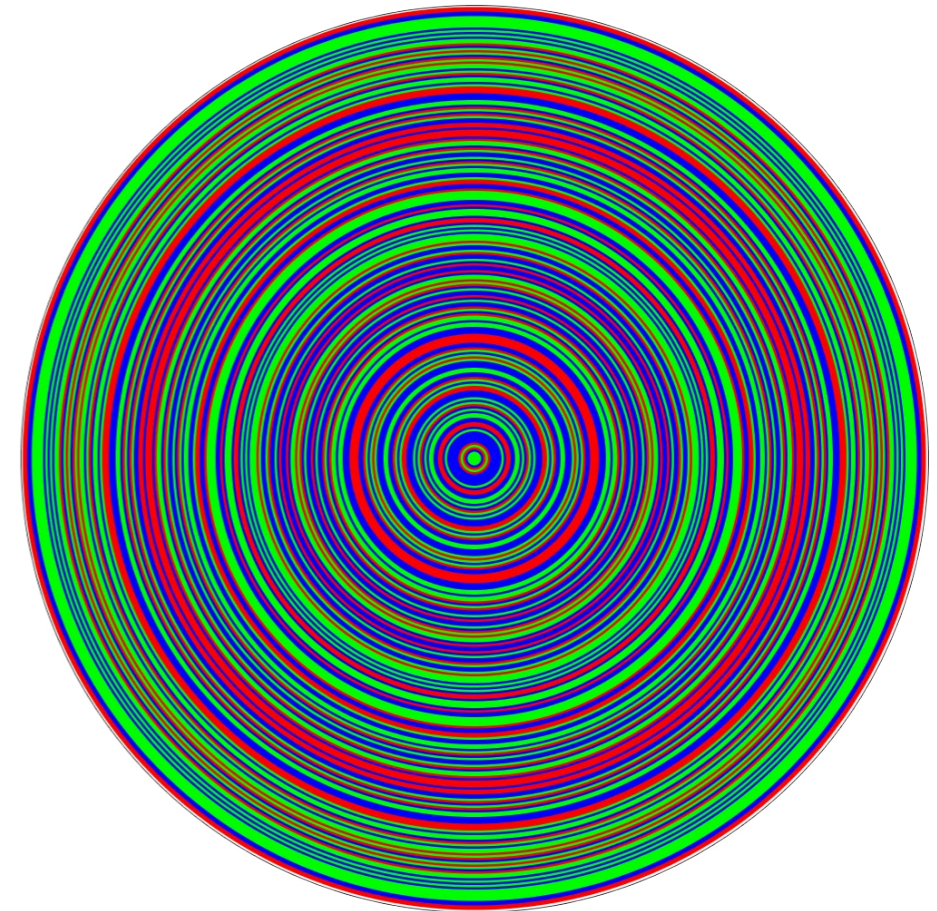
**NASA**  
2020 April 14 - 2020 April 28



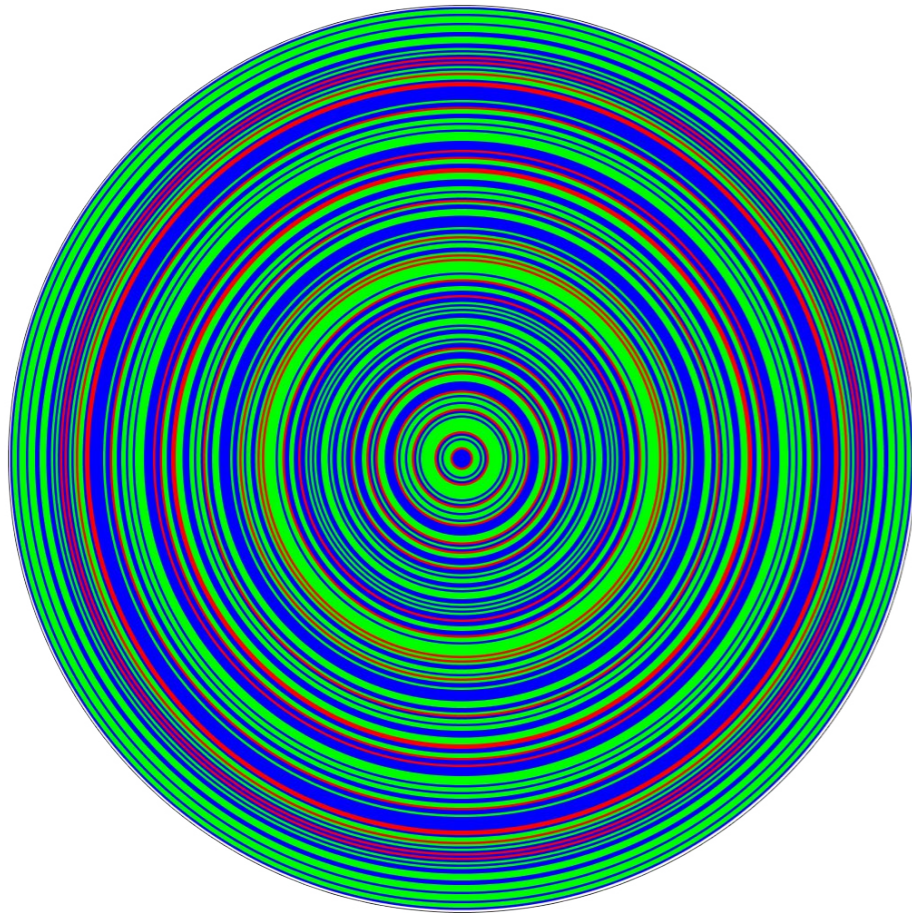
**Guggenheim**  
2020 February 14 - 2020 April 28



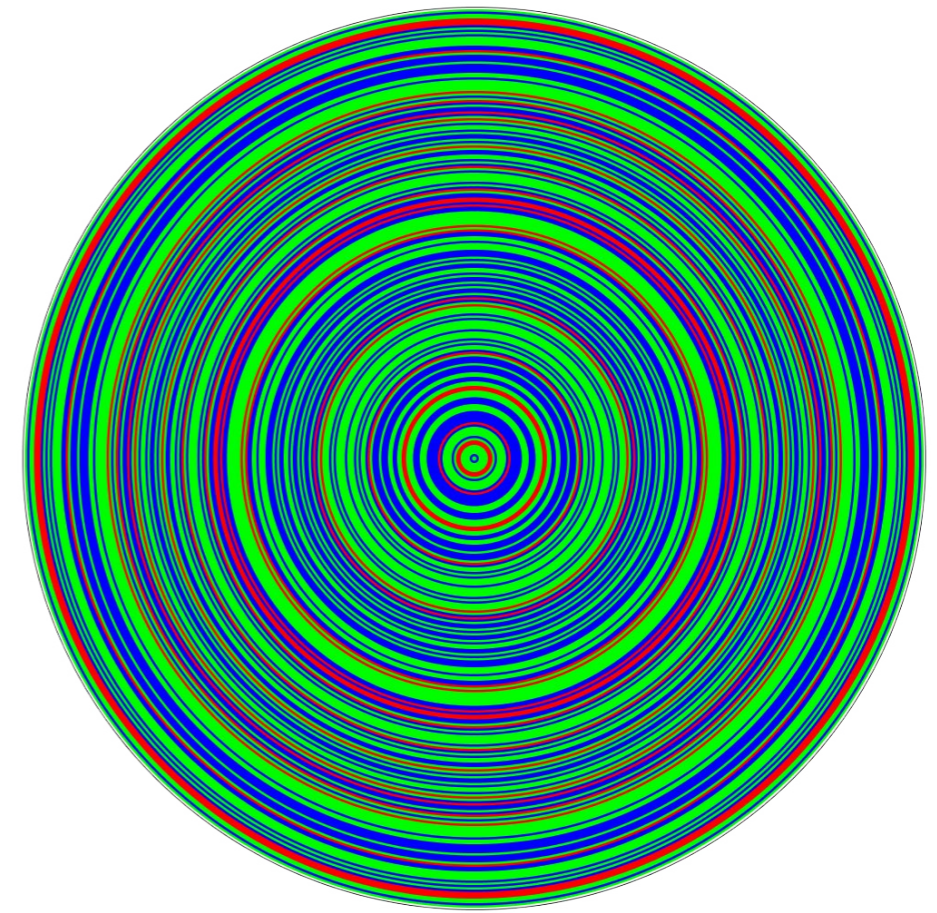
**Greta Thunberg**  
2020 March 5 - 2020 April 27



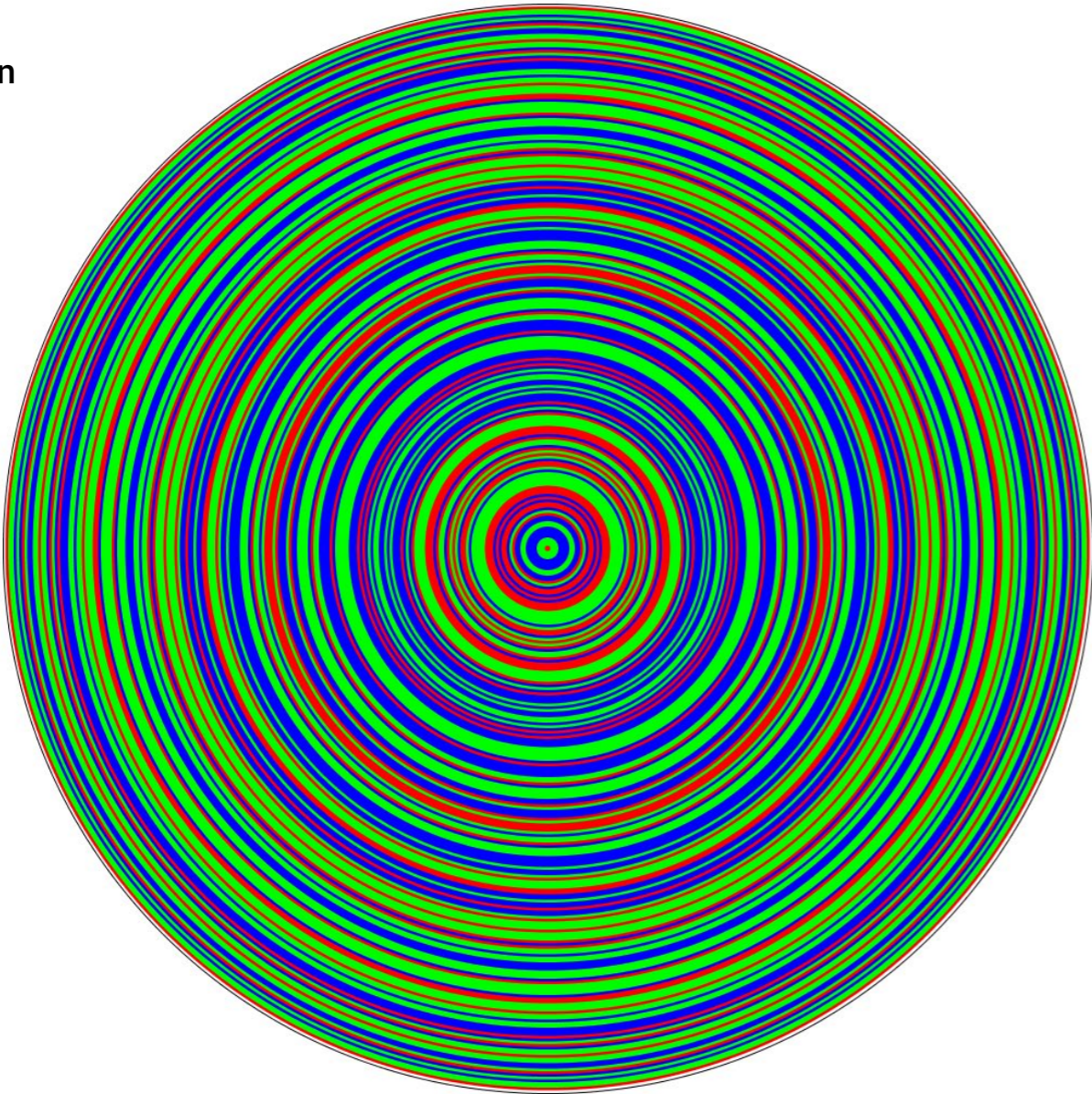
**Bernie Sanders**  
2020 March 12 - 2020 April 27



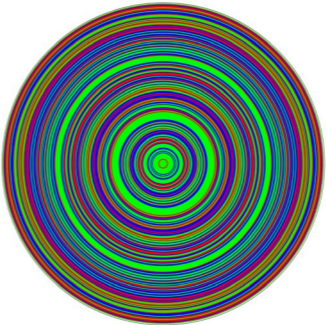
**Elon Musk**  
2020 April 16 - 2020 April 28



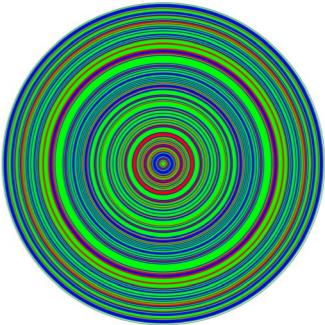
**Trevor Noah**  
2019 November 1 - 2020 April 27



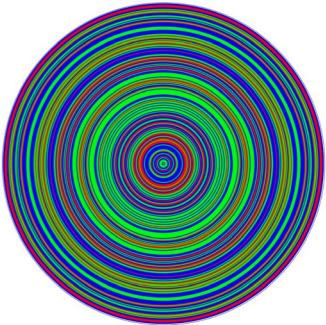
2020 April 30 - May 7



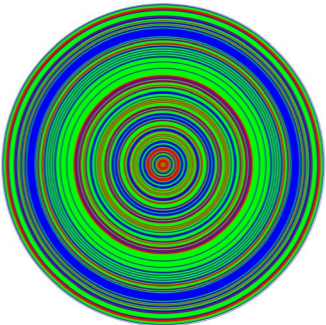
2020 April 23 - April 30



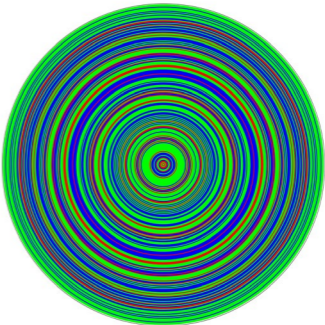
2020 April 17 - April 23



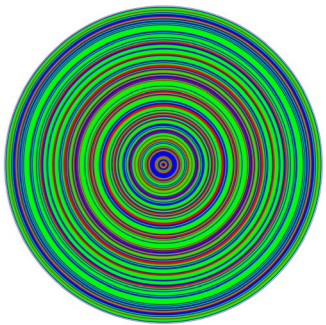
2020 April 09 - April 17



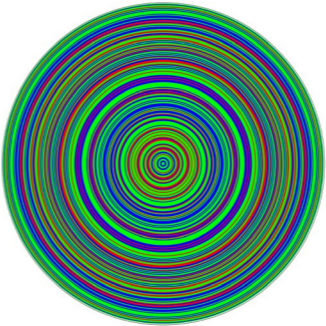
2020 March 31 - April 09



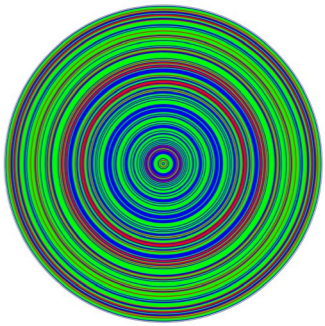
2020 March 23 - March 31



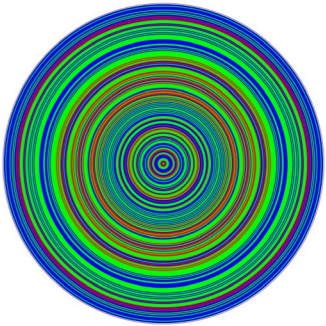
2020 March 19 - March 23



2020 March 12 - March 19



2020 March 04 - March 12



2020 February 26 - March 04

mimesis 1.0

↓ Mimesis introduction

Mimesis 1.0 is a website that conducts digital profiling as a third party. Twitter is the data source platform. In the 'Generate your mimesis' section, input the Twitter ID and Count to generate more Mimesis 1.0 profile. There is an option to upload the new profile to this Twitter(Twitter: Mimesis). On the right side, it is a gallery showing the profiles being uploaded to Twitter.

→ Generate your mimesis

→ More information

Tweets are pulled from users' home-timeline by [Twitter API](#) and piped into a sentiment analysis model which will spit out 1,0,-1 meaning positive, neutral, and negative which will be matched to green, blue, and red. Circles are drawn from inside to the outside.

As a tree ring storing climate and atmospheric conditions data, Mimesis 1.0 stores personal sentiment data. It is a visual representation of the internet user. It is an avatar, as well as simulacra.

To help you further understand the process, here is an [example report](#) as a reference.

Image source:  
[LintonArt shop](#)

Example:  
Tweets count: 3

Donald Trump  
2020 April 21 - 2020 April 28

Barack Obama  
2019 April 15 - 2020 April 27

Tsai Ing-wen  
2019 November 23 - 2020 April 27

Bernie Sanders  
2020 March 12 - 2020 April 27

Tedros Adhanom Ghebreyesus  
2020 April 18 - 2020 April 27

Greta Thunberg  
2020 March 5 - 2020 April 27

Trevor Noah  
2019 November 1 - 2020 April 27

Elon Musk  
2020 April 16 - 2020 April 28

NASA  
2020 April 14 - 2020 April 28

Mimesis website/community

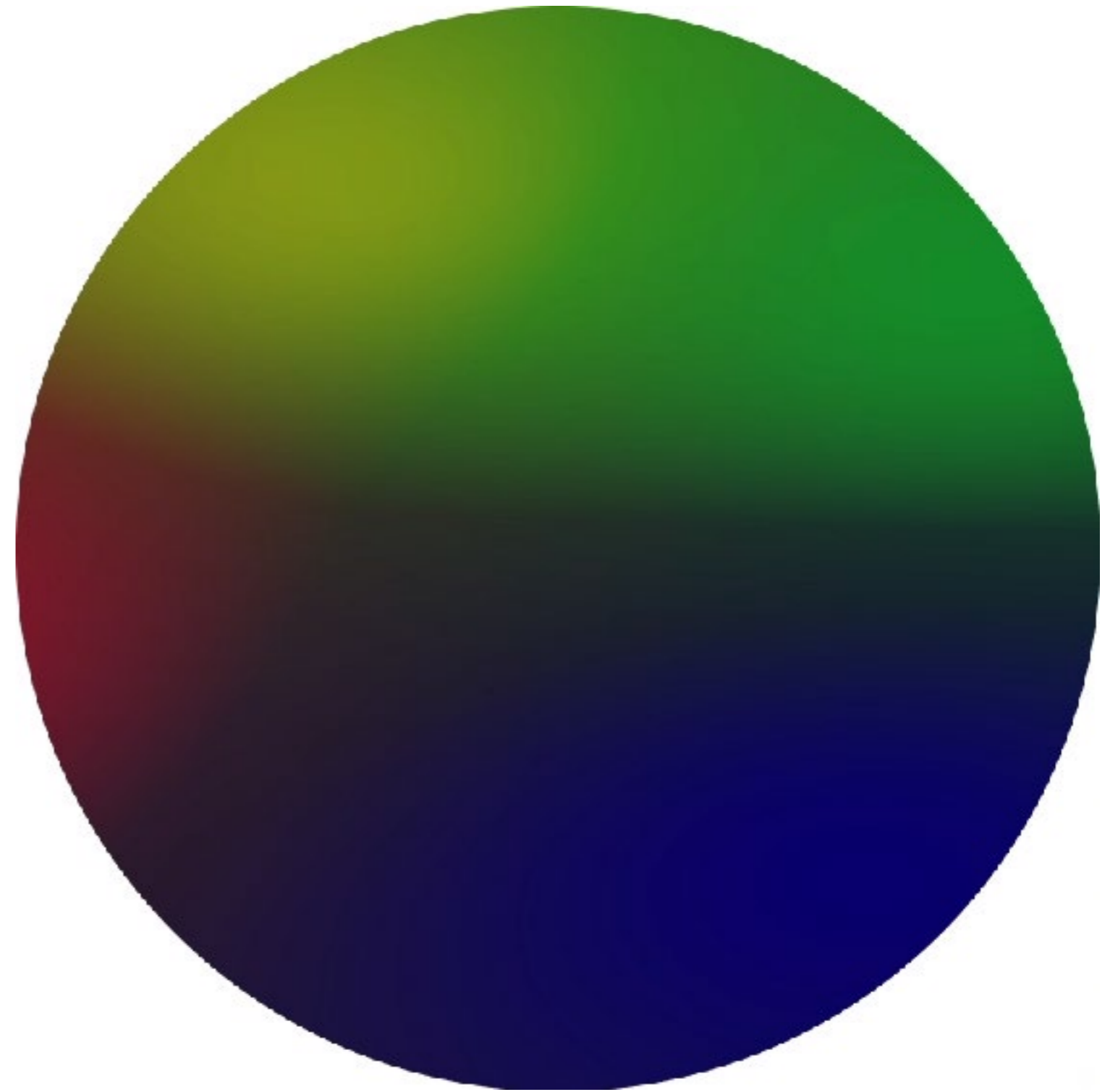
The goal of this website is to bring access to a broader range of audiences other than GitHub users. At the same time, it uses mimesis as a medium to build a community that is also linked to a Twitter account.

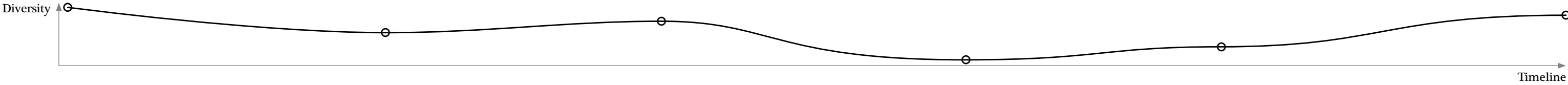
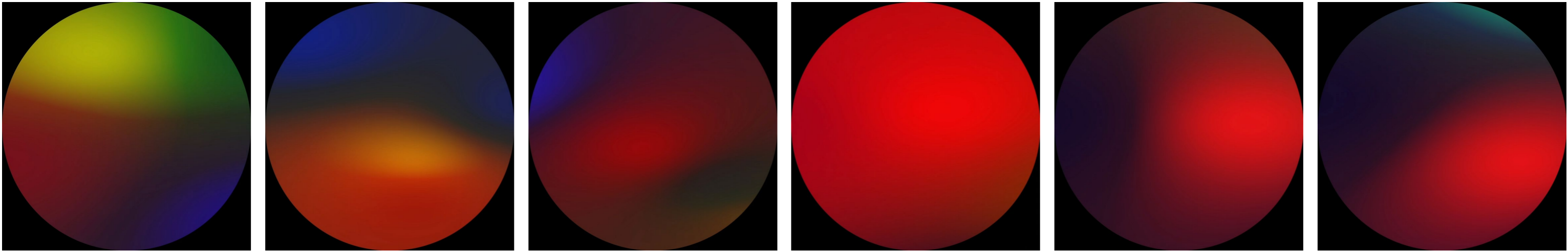
The audience could input their information and submit their request in the 'view your mimesis' section. Their mimesis will be drawn and replace the placeholder. The new graph is also available for download. Their new requests will be updated in new blocks emerging after 'the latest request' block.

Special thanks to Benjamin Vu for helping composing javascript for this site.

- Tools list
- 1. [Twit Npm](#)
  - 2. [Sentiment Npm](#)
  - 3. [P5.js](#)

# Mimesis2.0





Mimesis2.0

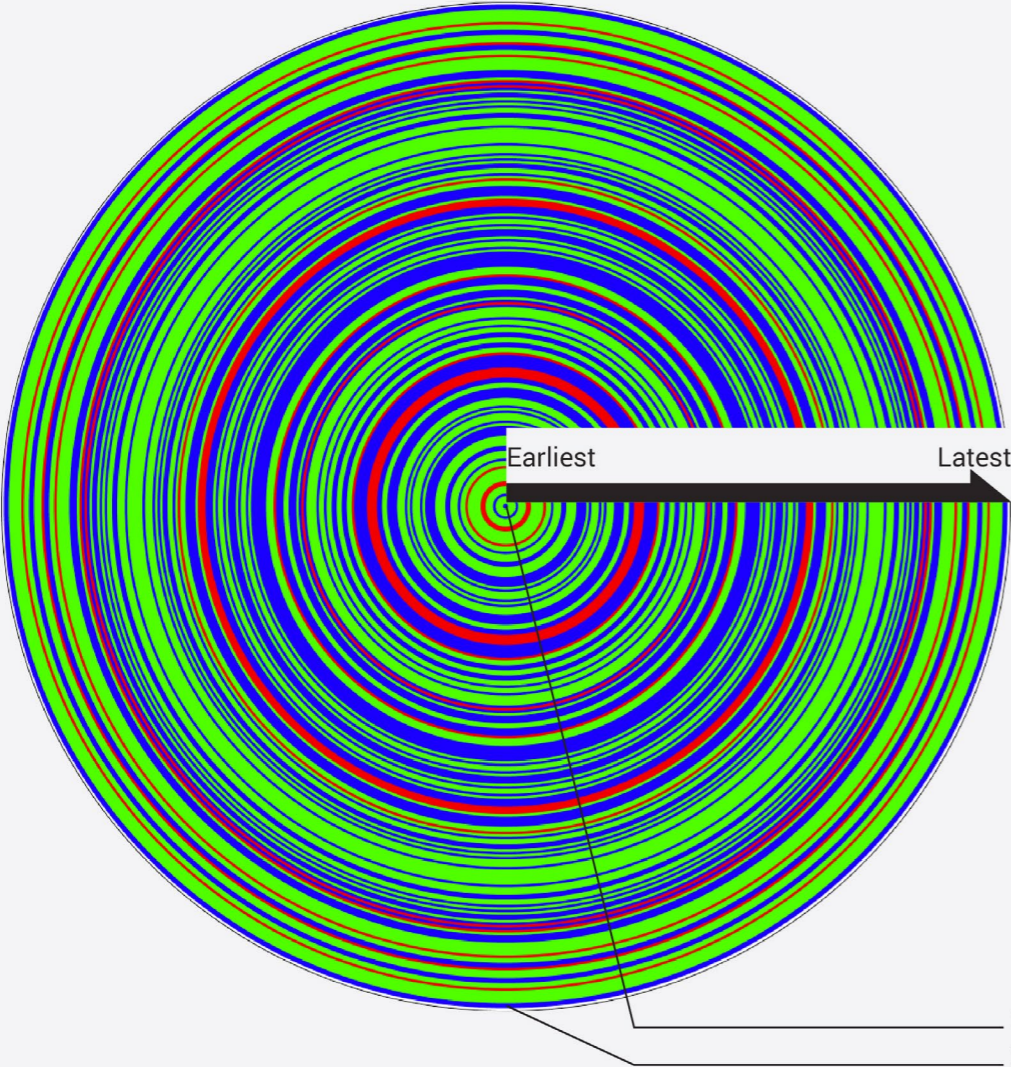
Mimesis 2.0 is the speculative result based on the same process as Mimesis 1.0, which is extracting data, conducting analysis, and drawing the result. The difference between 1.0 and 2.0 is not only replacing the sentiment model with the cluster analysis model but also much higher complexity during the process. The MobileNet model in RunwayML (a democratized machine learning tool for artists and designers) is the one that I have used and tested for 2.0. Since low fidelity models perform similar to the required cluster analysis model, which needs to be trained by enormous labeled datasets, the list of which will refer to the popular synsets in imagenet. After data is piped into the model, it generates several clusters. The names of these clusters are subsets of the labels in the data set, which will be mapped to colors.

There are a lot of details in the process unresolved in Mimesis 2.0. What is the definition of diversity? What is the benchmark of adequate diversities? For example, one user is mainly interested in animals, but the information about animals in his feed has depth and breadth. The other user has a wide range of interests, but the information about each topic lacks depth. Which scenario counts as having more diversities? At the same time, how does Mimesis 2.0 transform when the case changes from scenario 1 to scenario 2, and vice versa? Moreover, what is the process of color mapping? Is the result of mapping based on some degree of universal agreement? Can users decide how colors are mapped? Although there are two variables in color, saturation and variety, that could be mapped to depth and breadth, what is the criteria for mapping? Have all the questions above fallen in the realm of how to design a compatible label system for the stream of diversive information?

# Application Scenarios

As mentioned before, the new 'digital profiling' visual identity will be hosted in the same context, which means corporates still hold control in hands. It is also a try-out by the third party, which is also a small win. The other potential application scenarios outlined below are one step further. It doesn't mean these scenarios are against the context. It also doesn't mean that there is no space for these scenarios to survive. The difference is how much control is given back to users. Projects like Nobias (Google extension), Alias (filter for Google Home), Gobo (social media filter) are great paradigms. These applications could be experiments, third party plugins, or actual products. Before carrying out applications, they need to be a proof of concept that could generate revenue through further experimentation, research, and policy development.

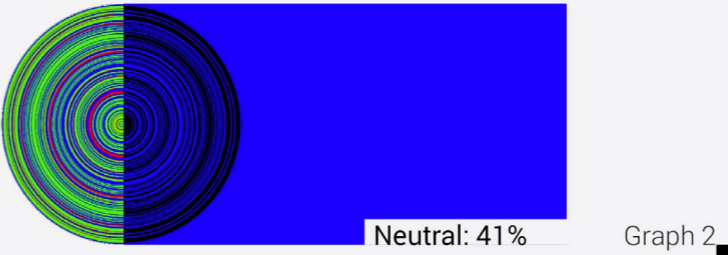
Each application consists of one visual outcome and one piece of description. The extrapolation is the extension of the past trajectory. The mediums vary from reports, to designs, to videos.



Visual distribution result:  
The layers that don't change  
color into black in the over-  
lapped graphs were the  
target layers.



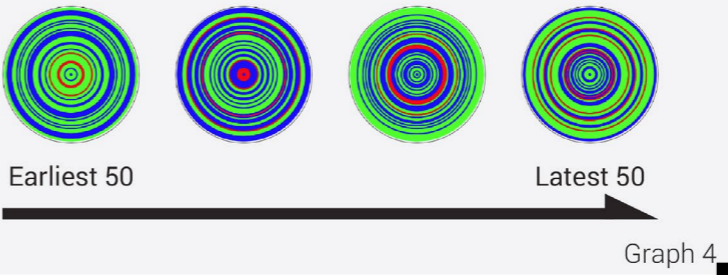
Graph 1



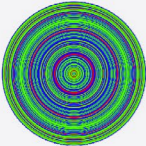
Graph 2



Graph 3



Graph 4



Platform: *Twitter*

Duration: *2020.3.4 - 2019.3.28*

Count: *200*

Account: *GigiHadid*

Green: positive | Red: negative | Blue: neutral

Analysis File: [GiGiHadid.csv](#)

Personal Report

This personal report derives from the Mimesis1.0 functioning as further analysis of the Mimesis1.0 graph.

In RSPH's research report "Social Media and Young People's Mental Health and Wellbeing", five social media platforms, Youtube, Twitter, Facebook, Snapchat, and Instagram, are the primary targets in the survey, which is conducted among around 1,500 14 to 24-year-old people. Fourteen factors are being asked during the survey, including awareness, anxiety, loneliness, sleep, and self-expression. The result was Youtube ranked first and was the only positive platform among them all. Twitter ranked in 2nd place, then Facebook, Snapchat, and Instagram took last place.

At the same time, there is emerging research on the relationship between mental health and social media.

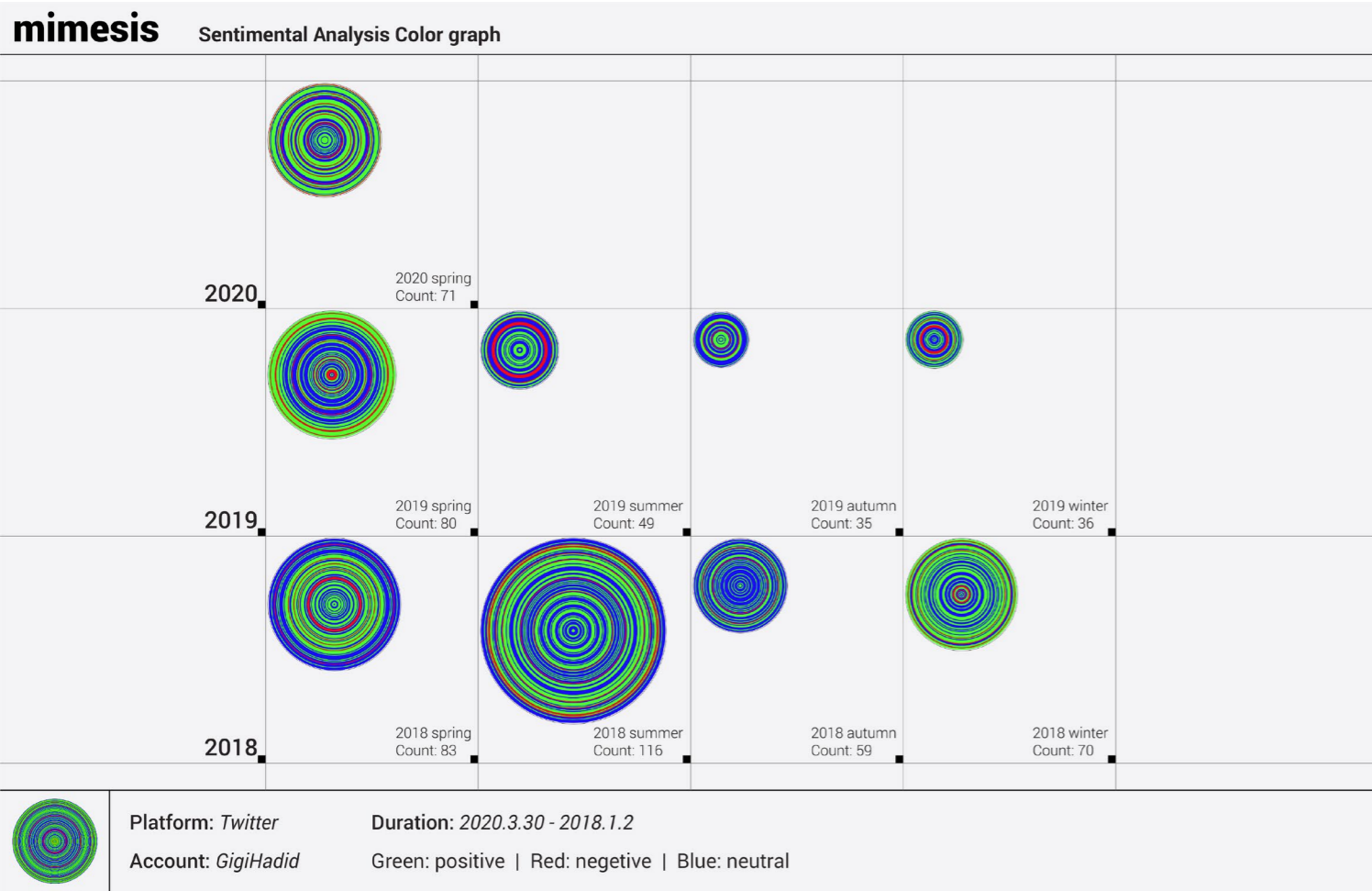
We review recent work that utilizes social media "big data" in conjunction with associated technologies like natural language processing and machine learning to address pressing problems in population-level mental health surveillance and research, focusing both on technological advances and core ethical challenges.<sup>1</sup>

Thus, this personal Twitter report might become auxiliary material for mental health analysis.<sup>2</sup>

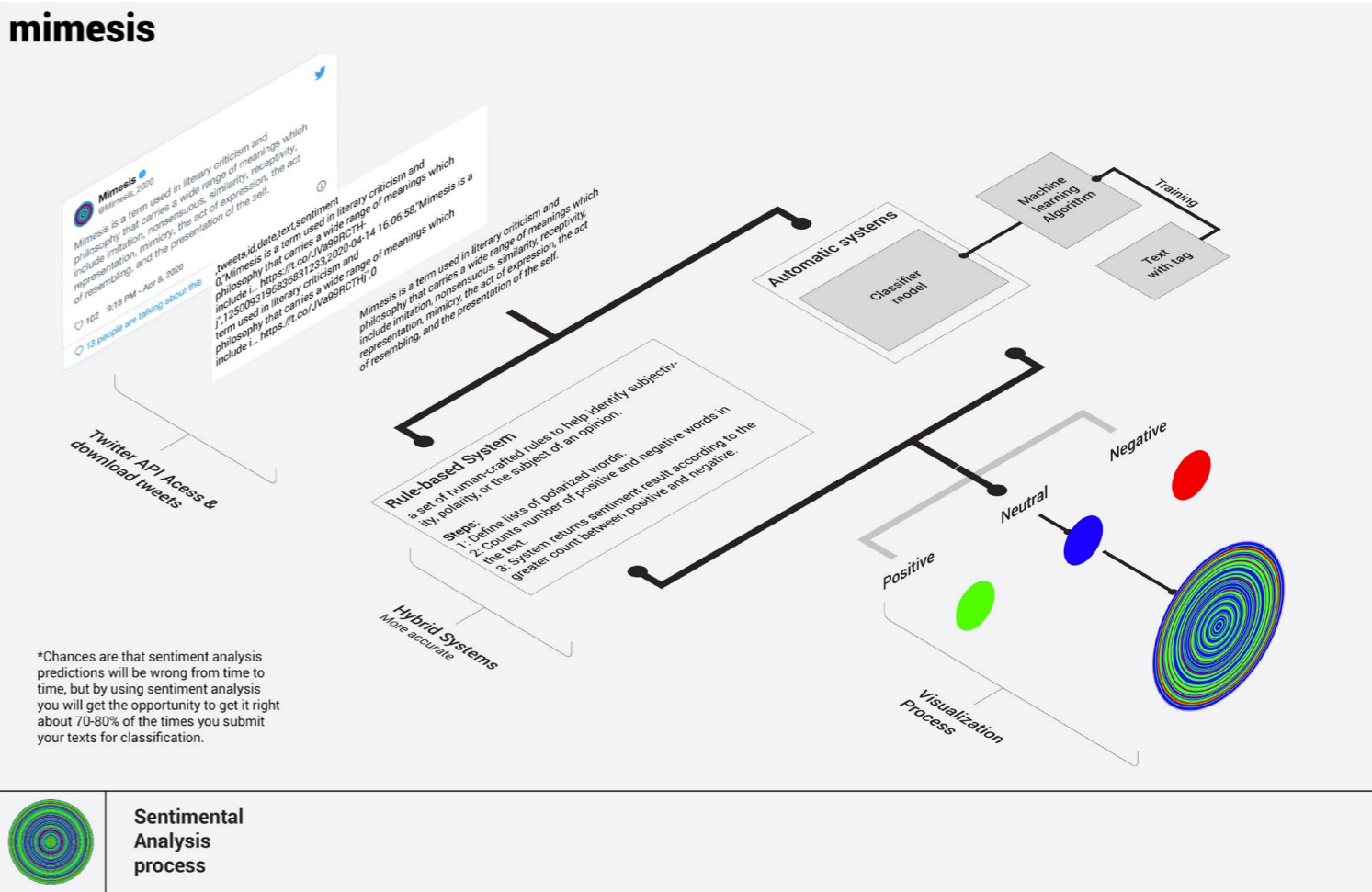
According to the trait of [Twitter API](#) and [tweets object](#), there are two methods to filter tweets. The first method that twitter currently provides is seven parameters: name, count, since\_id (from when), max\_id (until when), trim\_user, exclude\_replies, and include\_entities. When the request is submitted, these parameters help filter tweets. The second method is selecting the attributes in the tweet objects to write into a dictionary, and then filtering the dictionary for specific values of attributes. Filtering tweets according to different parameters might cater to different perspectives and needs.

1: [Social Media, Big Data, and Mental Health: Current Advances and Ethical Implications](#)

2: [Social Media Analytics for Behavioral Health](#)



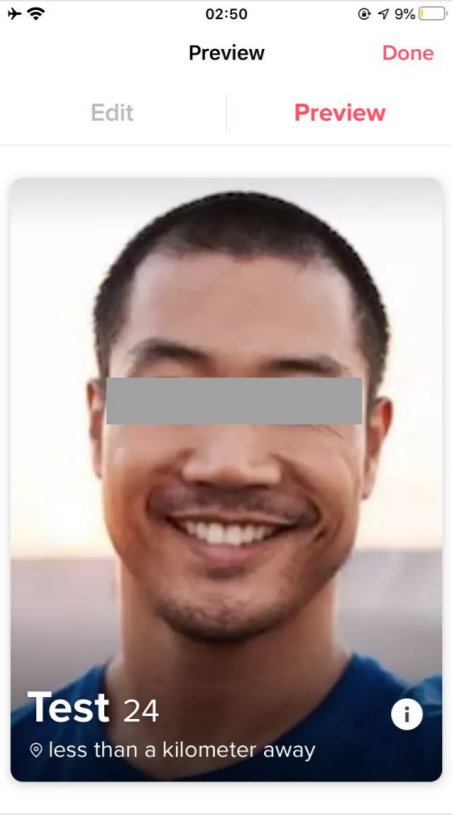
This report did not put effort into filtering tweets according to attributes. It uses the since\_id and max\_id to draw Mimesis according to season. Time is one way to deconstruct tweets. There are other alternative attributes such as geolocation, retweet ID, and comment ID. If the user is a person who sojourns all around the world, geolocation is an important and interesting attribute to deconstruct tweets. It might show that different patterns match to different geolocation.



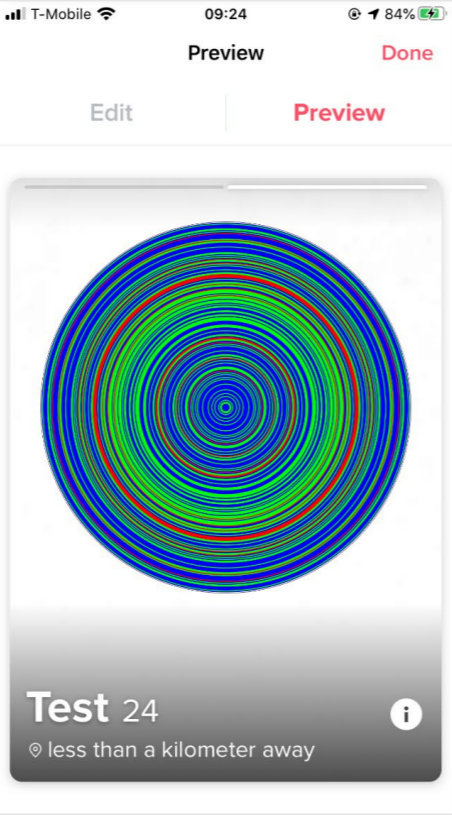
So, if I'm not mistaken, most, if not all of these deep learning approaches, or even more generally machine learning approaches are, essentially black boxes, in which you can't really inspect how the algorithm is accomplishing what it is accomplishing.<sup>1</sup>

Black box might be an appropriate description of deep learning, algorithm, and digital profiling for some situations. For this particular project, Mimesis is not a black box. The whole process could be broken down into several steps. The information design here is to help people understand the process.

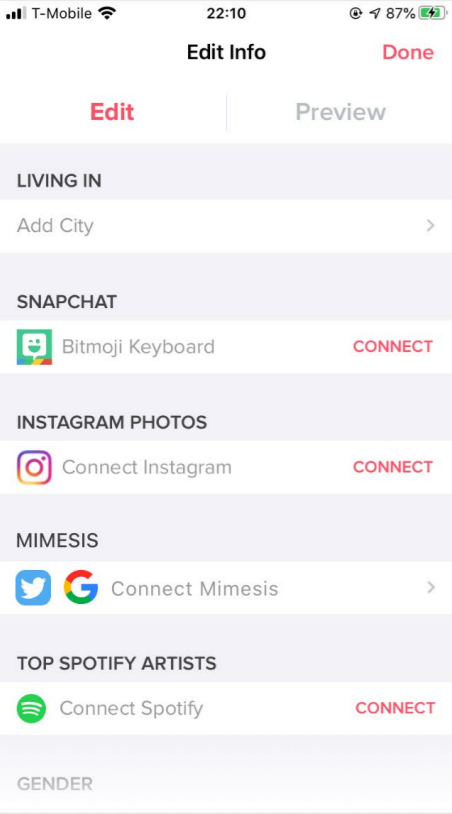
1: Sam Harris (an neuroscientist, philosopher, and author)



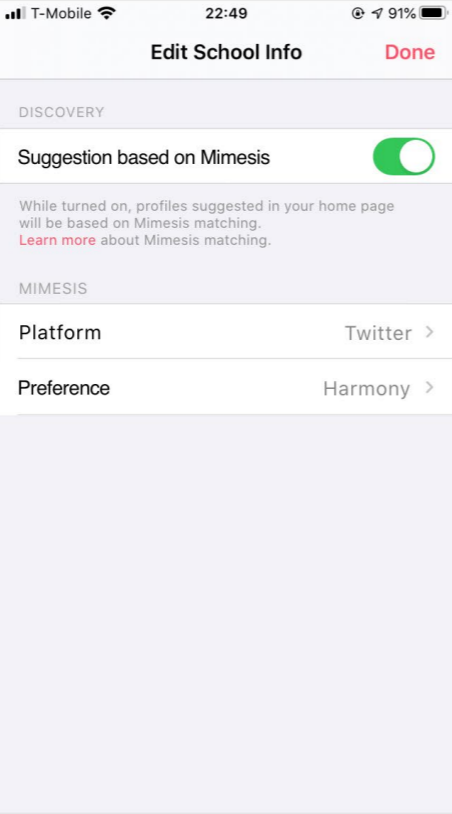
Original  
Profile Image



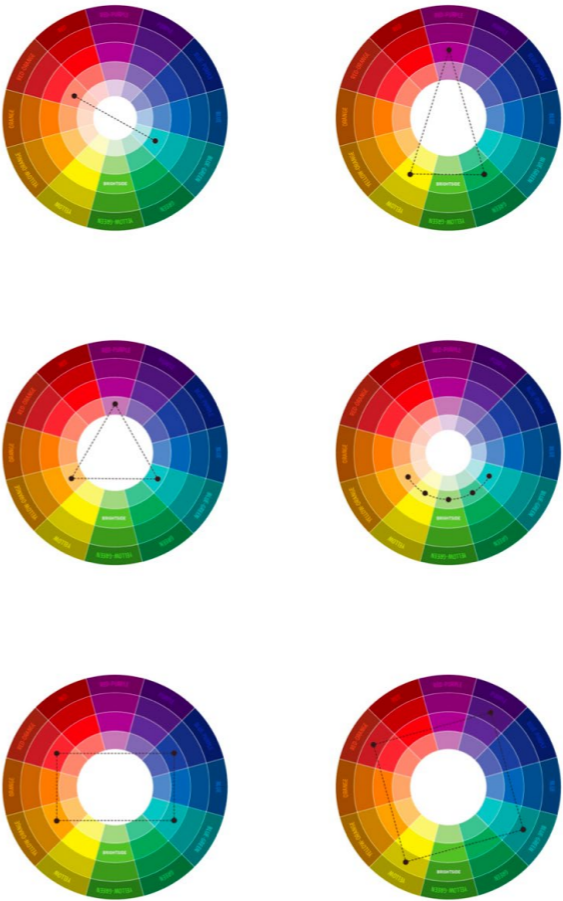
Mimesis 1.0  
Graph



Multiple platforms  
incorporate Mimesis in  
their system. Tinder  
users can choose to  
connect Mimesis like  
Snapchat and  
Instagram photos.



Mimesis provides an  
alternative for matching  
algorithms. Users'  
cards will be pushed to  
others based not only  
on age, distance, and  
gender preferences but  
also on their Mimesis  
matches.



2: Complementary, harmony,  
calming, split, dynamic, vivid  
-Color combinations

Avatar on Tinder

The media uses representations - images, words, and characters or persona - to convey ideas and values. On different social media platforms, we use different packages of information to display ourselves and interact with each other. There are also auxiliary tools like avatars creating applications to recreate an animation yourself. But still, the process of creating these avatars is an accumulation of socially and historically constructed concepts. In other words, gender, skin color, race, body shape, and face shape are still ingrained in those avatars. Prejudices are built into existing institutions and structures, and even though they look like a new medium, however, they still create barriers and limit opportunities.

Mimesis 1.0 is a customized graph, generated from the text by sentiment analysis model, and Processing. Although there is bias ingrained in constructing a deep learning model, results could be a new form of identity representation. Is it more natural and neutral? Does it break barriers and limits?

Tinder users can choose to connect Mimesis like Snapchat and Instagram photos. From a user's perspective, bridging Snapchat and Instagram with Tinder increases the plurality of information, though it might turn into a concern for some users. Mimesis shares the same idea offering Tinder users an option to show more about themselves. On top of that, Mimesis provides an alternative for matching algorithms. In color practice, there are multiple choices to collocate different colors. What if matching algorithms could use Mimesis as a source to incorporate color combination theory to expand users' options? Users' cards will be pushed to others based not only on age, distance, and gender preferences but also on their Mimesis matches.

Why identity matters - critical media project

# Guideline

This guideline is designed for assisting users in finding the type similar to their behavioral patterns online. All the corresponding graphs are references for drawing your mimesis1.0. Your creation-mimesis1.0 will be input into the text 'beauty filter' system. With the aid of a text generator, the system, governed by the mimesis graph, will generate paragraphs for you to publish online.

*'Behavioral patterns' refer to Nancy White's research project: Community Member Roles and Types*

Example:



Factors in the graph:  
Color pattern,  
Counts,  
From inside to outside.

**Dominators**    Name for reference

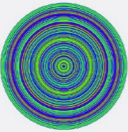
People who post frequently influence the pace of an online interaction space and can, unknowingly and unintentionally, dominate that space making it harder for others to participate. Most often, dominators don't know they are dominating. Facilitators can gently ask via email for the member to give others a little more time to respond, while also acknowledging their important contribution, for the line between core member and dominator is pretty fuzzy. Dominators can often be given productive roles to take advantage of their interest and time, such as volunteer hosts or content experts.

Please read carefully.  
There are nuance differences between graphs but much bigger differences between each type.

## mimesis

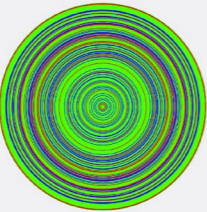
Copyright © 2020 by Nancy White  
Copyright © 2020 by Nancy White

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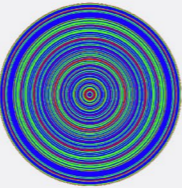
**Core Participants**

There are usually as small group of people who quickly adapt to online interaction and provide a large proportion of an online group's activity. Some speculate that 10% of the membership make up 90% of the community activity. These individuals visit frequently and post often. They are important members. Understanding and meeting their needs will go a long way to making your community successful. They can be a source of volunteer leadership (hosts, cybrarians, greeters) and ideas for improving the community. Ask them what they think, need and want to do. On the flip side, be careful that they do not dominate and make it hard for less active folks to participate.



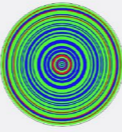
**PollyAnnas**

Also known as the PC (politically correct) Police. PollyAnnas also operate across a range of 'acceptable' behavior, from being a source of appreciation of community members, to the being 'nice' at the expense of being honest or 'real.' They see the bright side to most anything, so they can be a positive influence. However, PollyAnnas drive some people so nuts they will leave a thread just to escape. PollyAnnas avoid conflict and withdraw before clarity is reached because they are averse to conflict.



**Defenders**

Defenders sometimes defend an individual (sometimes to the point of being perceived as a slavish defender) or groups. They can be hypersensitive to the smallest slight or suggestion of attack, perhaps because of previous experiences. They may also have highly developed intuitive skills, which can be very productive for a community and serve as an 'early warning' signal of a changing community dynamic.



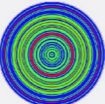
**Needlers**

It only takes one line, repeated, inserted, and insinuated, over time, to recognize a needler. They have a point to make and it appears again, and again, and again. Often in the form of a cynical 'I told you so.' Needlers know they are right and won't let you forget it. Their point may be insightful or irrelevant, but the value of the point is quickly lost on an audience who gets fatigued from the repetition. This is different from a spammer because the point is often 'on point.' But it can lose its power and context, regardless of the quality. In some cases, this may be from a visionary who is ahead of her/his time, who needles with the best interest of the group in mind. Other times it is from a person who will not budge from their stance. Needlers can also keep us 'honest' by not letting a group evade critical issues or behaviors. They can be bellwethers of new ideas.



**Newbies**

Sometimes called "clueless newbies," newbies (or New Bees, as I like to call them) are members new to a community. They might also be new to online interaction. When new folks jump into an online interaction without checking it out, observing the interaction or learning the community norms, they can be perceived as rude and clueless. In some communities, newbies are treated to a baptism of fire by old hands as a way of either being accepted or rejected from the group. Newbies are also the source of new blood, ideas, interest and "pollination," thus the new-bee appellation. Newbies deserve our attention and should be supported with information to help them become part of the group.



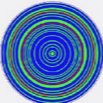
**Untouchable Elders**

We tend to thrust this archetype on others – the expert, the guru – and sometimes unconsciously create a different set of rules or norms for the elder. Most often, the elder does not seek this recognition. Elders may not held accountable to the same community norms or scrutiny of the other members. Elders can dominate new members by a few words, regardless of the value of the words of others around them. Their wisdom is gold to a community, but their influence can inadvertently muzzle the rest of the group who might feel uncomfortable posting in such company.



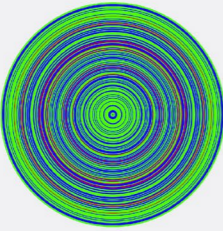
**Readers/Lurkers**

Readers or Lurkers are the unseen forces that DO affect a community. Community owners estimate that there are approximately 10 to 100 readers per active poster. They represent a combination of people new to the community, those not yet comfortable in posting, people who will only read and never post, and people who come in and then drift away without engaging. This group represents a huge pool of potential active members. Gentle efforts to pull them in with welcoming email, offering of guides, greeters or mentors and other efforts are well rewarded. The readers also play another very important role: audience to the active posters, especially in larger, open, social communities. For commercial communities that rely on page views to drive advertising revenues, readers are indispensable.



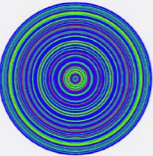
**'Shade of Grey' Folks**

Sometimes characterized as wishy-washy, with no clear convictions, and as members who shrink away from the tough issues. Often they won't fully engage or justify their positions. On the other side, they often can help neutralize a polarized situation and offer new, combined viewpoints for a community. They tend to carry new information into a group that has polarized on issues and can be a breath of fresh air.



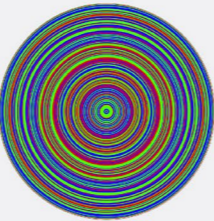
**Actors and Characters**

Flamers live, as they say, to flame. Flaming is defined as sending hostile, unprovoked messages. What is actually considered a flame varies by community, but often there are people who enjoy challenging other members just for the 'fun of it.' Name-calling, innuendo and such are the tools of flamers. The interesting dynamic of flaming is that to an extent, it draws community interest as a form of entertainment. At the other end, it drives people away if it goes over the line of community norms. Flamers can also be the source of new ideas which, when applied within community norms, creating what is known as 'creative abrasion' and can be helpful in workgroups and brainstorm.



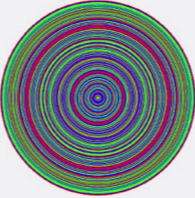
**Linkers, weavers and pollinators**

The bumblebees and butterflies! This group of people is very important in larger communities where there may be a large selection of conferences and topics from which to choose. These members tend to participate across a range of interests, and in doing so, are in the best position to let others know of interesting happenings across the community. They make wonderful greeters and mentors, and often have interest in bringing new resources to a community as cybrarians. They keep spouses from getting dull or stale. On the other hand, they can disrupt slower, deeper conversations with their 'flitting' in and out.



**'Black and White' Folks**

These are the people who present immutable positions. They appear to be initially unwilling to see points of view beyond their own. They push instead of probe. They are usually willing to take the blame for their style (ownership) but shy away from the responsibility of the impact of their style. They engage only on their own terms, but may refuse to engage others who utilize the same tactics. Interaction often escalates and winning is the goal. They also are keepers of important information that the community may need, but not particularly liked. They ask the tough questions, but may not like to be asked them back in return.



**Flamers**

Flamers live, as they say, to flame. Flaming is defined as sending hostile, unprovoked messages. What is actually considered a flame varies by community, but often there are people who enjoy challenging other members just for the 'fun of it.' Name-calling, innuendo and such are the tools of flamers. The interesting dynamic of flaming is that to an extent, it draws community interest as a form of entertainment. At the other end, it drives people away if it goes over the line of community norms. Flamers can also be the source of new ideas which, when applied within community norms, creating what is known as 'creative abrasion' and can be helpful in workgroups and brainstorm.

## 'Beauty filter' for text editing

Platforms are places that will showcase your personality. There are a lot of behavior taxonomies out there. In Nancy White's research project: "Community Member Roles and Types," <sup>1</sup> she came up with 15 archetype participation styles which are: core participants, readers/lurkers, dominators, linkers, flamers, actors, energy creators, defenders, needlers, newbies, pollyAnnas, spammers, 'black & white' folks, 'shade of grey' folks and untouchable elders. Different archetypes maintain their style in multiple ways, including constructing a profile and engaging publicly in their own way.

In the book 'Virtual Social Identity and Consumer Behavior,' authors point out that the benchmark in adolescence is the kids' desire and ability to explore multiple selves. It won't be a surprise that all internet users will not maintain the same identity through all the platforms. It's a fundamental desire to explore and embrace the other-selves within themselves. In everyday life, we approach every individual in a very different manner. Our behavior is based on the environment, who we are with, and what community we are in. This kind of behavior pattern can even be viewed on social platforms.

In Japanese, there is a phrase called '人物設定' (Karakutādezain) which originated from game design. It means the character design. Later on, in the Chinese internet environment, it became a phrase that is used to describe celebrities' public images. It is always designed by the company or celebrities' studio for marketing purposes. Gradually, every individual realized that they all have '人物設定' more or less. You might try to be tolerant, smart, or critical on Twitter. You might only post beautiful pictures on Instagram since it's visual-driven. The professional version of you will be on LinkedIn.

There's a definite need here. What kind of application could help internet users build a better public image according to their needs? Currently, all different types of photo editing apps, beautifying filters, and avatar apps are prevailing. Most of these are visual-driven, targeting popular Instagram users. What next? What is the service for Twitter, and these text-driven platforms?

The Twitter bot has been published for almost a decade. The usage is still focused on research and some public services.

The bot software may autonomously perform actions such as tweeting, re-tweeting, liking, following, unfollowing, or directly messaging other accounts. The automation of Twitter accounts is governed by a set of automation rules that outline proper and improper uses of automation. <sup>2</sup>

What if Mimesis is the automation rule that governs the bot? In that case, users could create certain types of Mimesis that follow specific behavioral patterns. In February, OpenAI published a language model called GPT-2 <sup>3</sup> that generates coherent paragraphs of text one word at a time. Mimesis, GPT-2 model, and Twitter bot complete the critical components in the new application for Twitter.

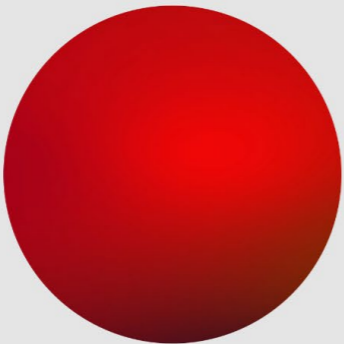
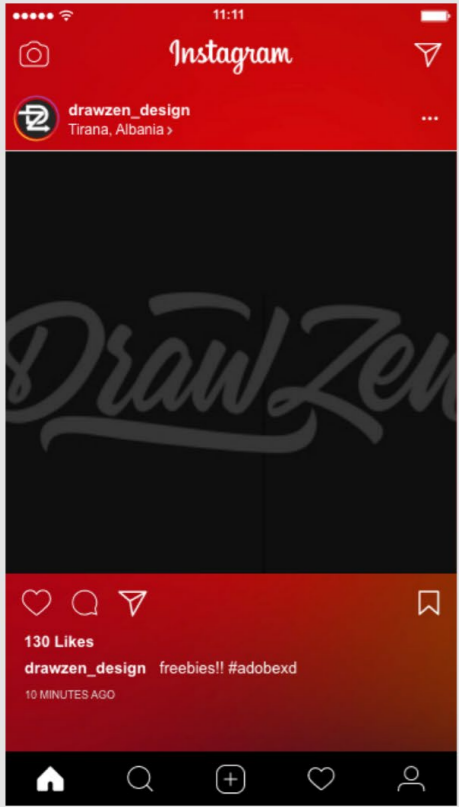
- 1: [Community Member Roles and Types](#) — Nancy White
- 2: [Automation rules](#) — Twitter Help Center
- 3: [GPT-2 is a large transformer-based language model — Better Language Models and Their Implications](#)

# mimesis

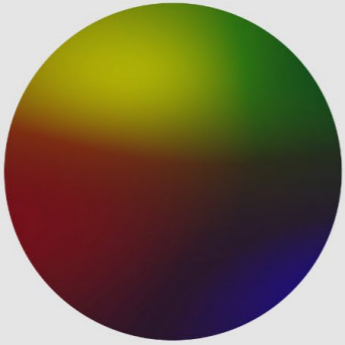
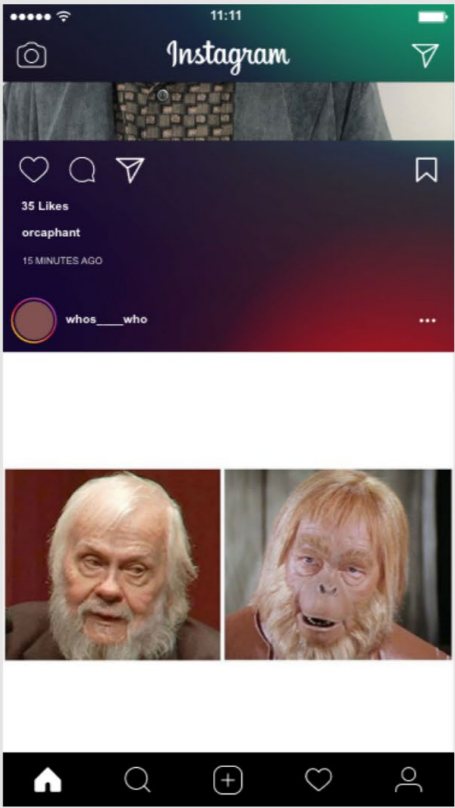


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The current stage of Mimesis 2.0 indicates the user's feed lack of diversity in the breadth of topic. Because there's only one color-red in the graph although there are different saturation of red.



The current stage of Mimesis 2.0 indicates the user's feed lack of diversity in the depth of topic. Because there are a lot of color in the graph but colors aren't bright enough.

### Feedback loop

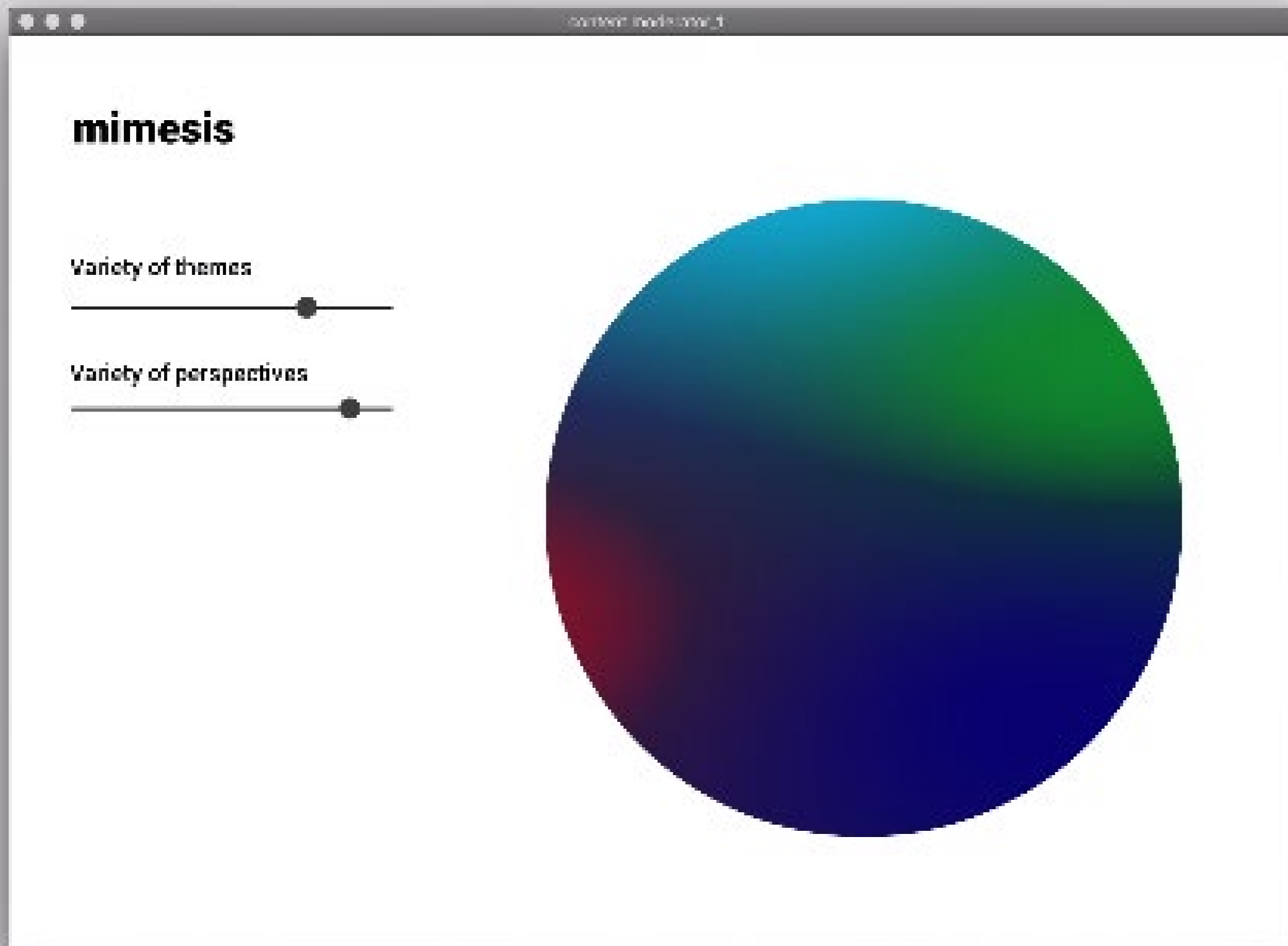
Thomas Goetz mentioned that a feedback loop involves four distinct stages: evidence, relevance, consequence, and operation. From the user experience design perspective, it is not complicated to build a real feedback loop to counterbalance the dopamine-driven feedback loop. It is possible to imagine a feedback loop where there is relevant evidence that can trigger users to adjust their subsequent behavioral. In the article "Harnessing the Power of Feedback Loop", there is a case that city engineers slow down drivers in school zones by an average of 14 percent by merely showing current speed to the drivers on a dynamic speed display.

For Mimesis 2.0 and the ideal Mimesis, the speculative application happens on platforms functioning as user's information resources. In this scenario, the demonstration executes on Instagram's home page, which will be used as the background of the app. There are two different stages of the Mimesis. In the first stage, colors won't change but rather they'll slowly float. The second stage will be triggered by the posts that are liked by the user. The new liked post will be analyzed by the system, and the analysis outcome will decide to increase, decrease or change colors. Referring back to the four stages of the feedback loop: evidence, relevance, consequence, and operation, Mimesis embedded in the background functions as the relevant evidence of the user's liked posts. When users' likes are limited to a few categories of posts, the diversity of colors in Mimesis will diminish. This builds the consequence stage, which informs users of their 'bubble.' And finally, the 'bubble' nudges users to operate and completes the feedback loop.

What's more, this is not a speculation of what comes after dark mode design, but it could be an alternative option. Dark mode design has been criticized for not being proven to improve focus or productivity.<sup>1</sup> A new design feature<sup>2</sup> is a better definition of what it is. Mimesis background is designed as a feedback loop, as well as a customized background (for marketing).

1: [Do You Really Need Dark Mode?](#)

2: [Twitter Goes Dark. Or at Least the App Interface Does](#)



## Content Moderator

The content moderator is the reverse engineering of the ideal Mimesis. In this system, you have two slide bars to control your feeds. The variety of themes is linked to the diversity of the colors, and variety of perspectives is linked to the saturation of the colors.

# Closing

As a designer, an agent serving both humans and corporates, I chose to stand closer to humans. I hope this thesis could nudge the development of digital profiling in a human-centered direction.

As a designer, I am incapable of imagining a new system or creating a paradigm shift to change the system from the outside, and that is why this project requires sitting within the system. This is not succumbing to the system, because, in the foreseeable future, we will continue living with it like a virtual ecosystem.

This thesis is an experiment on what the potential substitute for the existing digital profiling is. From the result perspective, Mimesis 1.0 and 2.0 serve different purposes. Mimesis 1.0 was successfully built and well functioning. For the application of Mimesis 1.0, there needs more thinking and research on how Mimesis serves as an avatar on social media platforms as well as what does human-centered means. Mimesis 2.0 was designed to tackle higher-level issues(the lack of feedback loop embedded) in the profiling system. However, due to the degree of complexity, it remained as speculation. In the future, I hope to continue working on 2.0 to find a way to realize it.

The most noticeable and critical challenges for the application is how to make a clear moment to let users understand the logic, furthermore the true value of Mimesis. I also concern that the delivery of value and thinking of Mimesis will lose fidelity in their applications. What's more, at the very end of the thesis—final defense, I received one critique about the "Goodheart law", which leads to a deeper degree of thinking and research around the topic of cybernetics.

This thesis doesn't end here as there is no right answer to Lego. The 'best' solution should always evolve according to the context. I will carry on thinking of it while continually observing the change of the large system.

I hope this book is informative and inspiring to my dear readers. Thank you for reading.

1: Goodhart's law is an adage named after economist Charles Goodhart, which has been phrased by Marilyn Strathern as "When a measure becomes a target, it ceases to be a good measure."

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