

# Forging Strategic Alliances: the agency of Human–Algorithmic Curation under conditions of Platform Capitalism

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## ABSTRACT

Under conditions of so-called Platform Capitalism, software and algorithms undertake the important task of designing the interaction amongst online users and establishing criteria of relevance for content. As such, they operate as curatorial agents of platforms' content, establishing what is there to see, know and consume. This state of affairs calls for a revision of the traditional role of the (human) curator who is confronted with an online environment characterised by the unprecedented collision of commercial, aesthetic, cultural and political interests. The question of what kind of relationship the curator shall create with the algorithm then becomes crucial: is this a relationship of antagonism, resistance or alliance? How do these two curatorial agents influence each other? In this article, I analyse a cluster of hybrid artistic and curatorial experiments (including my own curatorial work) that foregrounds online platforms as discrete modes of socio-technical assemblages that curate particular forms of connectivity amongst networks of users, data layers and technical infrastructures. By doing so, I argue for the forging of strategic alliances between human and machinic curators as a strategy to channel new forms of creativity and cooperation under conditions of Platform Capitalism and to operationalise human-algorithmic curation as a political and aesthetic practice within the networked culture.

## KEYWORDS

Platform Capitalism; Strategic Alliances; Human and Algorithmic Curation; Curatorial Biases; Visibility Gatekeeping.

## 1 | INTRODUCTION

Over the last few years, the notion of Platform Capitalism (Lobo 2014; Smicek 2017) has come to designate the present-day environment of Internet business models based upon the ownership of algorithms, hardware and digital infrastructures that foster the extraction and control of data. This concept has helped to foreshadow two important conditions that characterise the present socio-technical juncture: the first concerns the evolution of the platform from an

“operating and gaming system” (Weatherby 2018) into a “socio-technical intermediary and business arrangement that is incorporated into wider processes of capitalization” (Langley and Leyshon 2017). The platform, in other words, has become “the computational interface between society and capital” (Weatherby 2018) by virtue of hosting processes of cultural and economic production and extraction that are centred around “the intensive techno-creative labour of users” (McQuire 2013). The second condition concerns the role of algorithms as proprietary assets of such online platforms and business models whose specific encoding shapes the distinctive ways in which users' online activities, preferences and interactions get operationalised and hence monetised.

Under these conditions, the public debate around the social and cultural implications of algorithms has remained largely polarised between an understanding of algorithms as impenetrable “black boxes” on the one hand, and their condemnation as guilty parties for all platforms and social media sites' misconducts, on the other. Meanwhile, a new wave of literature coming from the fields of critical algorithmic studies (Rutz 2016; Kitchin 2017; Bucher 2018) and experimental humanities (Finn 2017) is attempting to problematise this schism, by creating new interpretative roadmaps for understanding the agency of algorithms in shaping social, cultural and economic life.

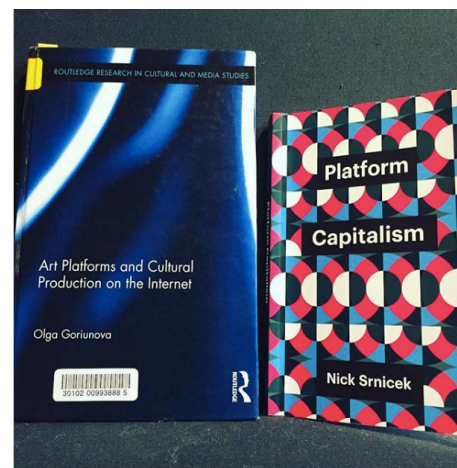


Figure 1 | Book Covers of *Art Platforms and Cultural Production on the Internet* by Olga Goriunova and of *Platform Capitalism* by Nick Srnicek.

In parallel to these discussions, artists and cultural practitioners have begun to take issues with the current conditions of Platform Capitalism by either exposing and disrupting the power asymmetries, value systems and hidden financial infrastructures of online platforms (UBERMORGEN, Femke Herregraven), or by challenging the specific mechanics of particular algorithms, bots and pieces of software (Constant Dullaart, Erica Scourti, Matthew Plummer-Fernandez).

In the context of both these theoretical investigations and practical experiments, the role of the algorithm is often paralleled to that of the online curator. This is because algorithms are accountable for the organisation and arrangement of visual content on the Web through activities such as searching, collating, grouping, sorting, analysing, visualising. Within online platforms, they sort out content according to criteria of relevance for users as well as manage the interactions between them. While this view rightfully attributes curatorial capacity to algorithms, the danger is that it reduces the activity of curating to a purely computable task, discarding the fact that the latter also involves cognitive faculties, such as contextualising, interpreting, reflecting, sensing out, imagining, criticising and inserting humour. On the opposite side of this debate is the position held by those human curators who want to assert their superiority over machinic agents at all costs, maintaining that they do serve the public “in a way that big data and learning algorithms cannot” (Byrne 2015). So, the issue at stake is what kind of relationship can the curator create with the algorithm: In what ways can such relationship be described? As a relationship of antagonism, resistance or alliance? How do these two curatorial agents influence each other?

In this article, I want to argue that both curators and algorithms are key “organizational nodes in cultural systems” (Nagler and del Pesco 2011) and acknowledge their growing interdependence in everyday socio-technical systems. As such I suggest the necessity to further explore the terrain of human and algorithmic curation, recognising in the forging of strategic alliances the potential to overcome the “gap between computation and culture” (Finn 2017, p.55) by means of creativity and new forms of cooperation amongst human and technical agents. In what follows, I will analyse a cluster of hybrid artistic and curatorial projects, each of which enters in a different relationship with the curatorial agency of the algorithm. While the analysis of the first project *Cosmos Carl* (2014–) opens broader reflections on the current conditions of Platform Capitalism, the account of the following two projects – Angie Waller’s *eBay Longing* and my own experiment with the eBay algorithm Cassini – more closely look at the mechanics of the algorithm of eBay at different points in time. The last example discussed brings the issue of human-algorithmic curation more closely within the perimeter of the institutional art-world, through a

critique of *HAL 101*, the web crawler conceived and programmed by the curatorial team of the Museum of Digital Art (MuDA) in Zurich. Through the analysis of such experiments, I want to argue for the forging of “strategic alliances” between human and non-human curators as a strategy to channel new forms of creativity and cooperation under conditions of Platform Capitalism and to operationalise online curation as a political and aesthetic practice within the networked culture.

I adopt the term “strategic alliances” from the language of business, where it is usually employed as a synonym for “strategic partnership” – an agreement for cooperation between two parties who decide to work together towards two common objectives, capitalising on each other’s strengths, while maintaining their independence. Here, I employ it to suggest that human-algorithmic curation is a networked practice that could engender new forms of cooperation between humans and technical agents within an online environment where the boundaries between corporate work, cultural production and social interaction are becoming increasingly blurred.

## 2 | COSMOS CARL: A PLATFORM PARASITE

Working with technology against its own grain has been a preoccupation of cultural practitioners and net artists since the early 1990s, when the space of the Web was still an uncharted territory characterised by “the endless joy of serendipity and strong feeling of responsibility” (Lialina in Andrew and Papadimitriou 2018). With the development of the commercial Web in the early 2000s, artists and curators began to shift their attention towards online platforms as sites for sociological and anthropological investigation on the one hand, and for emancipatory and political practices, on the other. An interesting example of a hybrid artistic and curatorial experiment working with technology against its own grain is offered by *Cosmos Carl*, an initiative launched in 2014 by artists Frederique Pisuise and Saemundur Thor Helgason. *Cosmos Carl* consists of an online repository which hosts links to embedded projects occurring in external platforms such as Google Drive, Torrent, Pinterest, YouTube, Etsy, Instagram and eBay among others. By clicking on the links featured on *Cosmos Carl* website, visitors are re-directed to artists projects that are active or eventually “no longer available” on the Internet elsewhere. The interventionist character of the project is reflected in its underlining politics, which follows the legacy of 1960s cultural jamming practices and of early net art, respectively concerned with “the targeted application of the very method one intends to critique” (Elbaor 2018) and the resistance towards privately owned art. As Pisuise and Helgason observe:

*Cosmos Carl artworks are not necessarily political, but by utilizing platforms for the display of art, the contributions disrupt the*

platforms' usual traffic. In that way, the works potentially protest global platforms like Google and Facebook, even though they simultaneously accept their terms and conditions. (Pisuisse and Helgason 2017)

As the above statement reveals, the projects that *Cosmos Carl* promotes play out a key tension: that between online users' automatic habit of accepting platforms' terms of service and the reflexive choice (often carried out by artists and creative practitioners) of breaching them to make their procedures more visible. Moreover, because of the embedded nature of all the artistic and curatorial interventions it activates and hosts, the project operates in a grey area of practice between "not-just-art" (Fuller 1997) and "not-just-art-curating" (Tyzlik-Carver 2016). Two additional dimensions of interest are specific to *Cosmos Carl*. The first, is that it brings to the fore the agential dimension of the technology underpinning each platform or social media site, as this forges the kinds of creative interventions that are possible under conditions of online embeddedness. For instance, an intervention on Pinterest poses a diverse set of challenges and opportunities than one on Tumblr or Instagram in terms of interface, image display and audience experience.

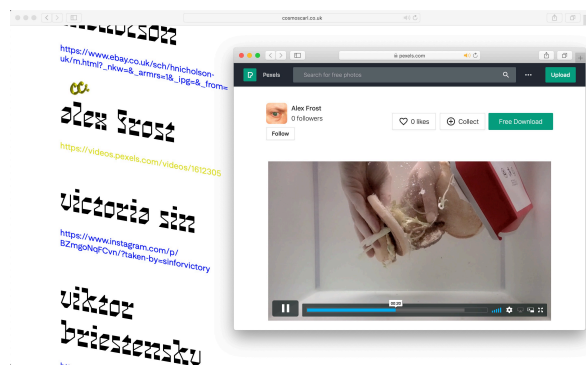


Figure 2 | *Cosmos Carl\_Wet Unboxing\_2018\_Alex Frost*

In this respect, *Cosmos Carl* foregrounds a complex understanding of the platform not simply as a "networked repository or connective archive", but crucially as a mechanism of cultural production and as an "apparatus that observes the world and generates ordering statements" (McKenzie 2018).

The second dimension is its distributed and collective character, which is the ability to coordinate different interventions in several platforms. This aspect significantly increases the impact of the overall operation, which spreads like a "slow virus" (Pisuisse and Helgason 2017), providing a connecting tissue for all the various interventions activated. What *Cosmos Carl* suggests is that the effects of such modes of practice cannot be judged in isolation or within a short timeframe but can be valued in the long term and in concert with other similar operations. In other words, that their force lies in the ability to be part of and form a *network of relations*, that is to establish

strategic alliances amongst creative practitioners and technical agents on the basis of shared and differential values, intents and agendas. In the case of *Cosmos Carl* the aim is to produce a creative rupture in the system of Platform Capitalism and to reveal how platforms curate different networks of connectivity. By drawing attention towards the behaviours of various commercial platforms and their apparatuses, the project emphasises how the co-creation of value passes through the interplay between the platform's infrastructure, community of users and data layers. Taking into the account all these three dimensions, the following section zooms into the socio-technical configuration of a particular commercial platform – eBay – via a joined discussion of Angie Waller's work *EBay Longing* (2003) and my curatorial experiment with the platform's algorithm Cassini (2017) as part of my participation to the project *#exstrange* (<http://exstrange.com>).

### 3 | WORKING WITH THE EBAY ALGORITHM

#### 3.1 EBAY LONGING (2003)

Pre-Facebook and pre-Tinder, eBay is one of the first online platforms that allowed users to interact with strangers on the Web. The platform was officially launched in 1997, two years after its founder Pierre Omidyar wrote the code for AuctionWeb (its first iteration). Soon it established itself as an open marketplace dedicated to bringing together buyers and sellers and producing "an army of bubble wrap entrepreneurs" (Lewis 2008, p. 7). Among the several artistic projects that have creatively investigated the commercial platform of eBay and engaged with its community (John D. Freyer's *All My Life For Sale*, 2000; Emily Spivack's *Sentimental Value*, 2007–), Angie Waller's *EBay Longing* (2003) is the only identified that specifically explored the platform's search algorithm and technical infrastructure. Waller's intervention consisted of scraping the eBay database during the years of the so-called "war on terrorism" using the word "Afghanistan" as the search query. The aim of this quasi-anthropological study was to explore the shift in the sale of objects in countries such as Syria, Afghanistan and Iraq through the collection of a few hundred images. The images depicted objects spanning from memorabilia and souvenirs to American-made T-shirts bearing slogans in support of the war, alongside bumper stickers and miscellaneous items that the troops were sending back home. Waller's intention with this project was to critically reflect upon the relationship between users' activity and the performance of the algorithm as influenced by specific cultural trends and contingent political biases. In the artist's own words, the project was intended to track "how the consumer goods of an online bartering database reflect the sentiment of its active online community" (Waller 2016, p.223).

The outcome of her intervention foreshadows that commercial platforms are not only sites for the

production of economic value, but that they also generate social value through the affective interplay between user behaviours, networked architecture and algorithmic systems. Additionally, the project emphasised how eBay is a particular coming together of “code and commerce” (Langley and Leyshon 2017), which synthesizes every kind of exchange amongst users as searchable data. More broadly, it pointed to the problem of human and algorithmic curation and its entanglement with broader questions of power and control associated with the use and implementation of technology. This is a topic that Waller continued to explore in her subsequent works, such as for instance *Data Mining with Amazon* (2003) and *How to Look at Artist Networks* (2015) – works concerned respectively with the algorithms of Amazon Database and Google Knowledge Graph. Waller’s experiment paved the way for my exploration of the later eBay’s algorithm Cassini (2013) as part of my participation as a guest curator to the project *#exstrange* (2017).

### 3.2 CURATORIAL CONSULTANCY SERVICE WITH CASSINI ON #EXSTRANGE (2017)

Project *#exstrange* was an initiative mobilised by curators Marialaura Ghidini and Rebekah Modrak that used the online marketplace of eBay as “a site of artistic production and cultural exchange and as an artistic intervention into capitalism” (Ghidini and Modrak 2017) [1]. The premise of the project was to treat the idea of the auction as an artwork: hence the category chosen, the images uploaded, the prize and the description. Everything was to be considered part of the artwork and each auction would run for seven days. All auctions and interactions with buyers were documented on the project’s website [2] and in a catalogue published in the summer of 2017. Through this conceptual framework, the curators were aiming to place art in a context where it could solicit an “exchange with a stranger”, from where the title *#exstrange* developed.

When reflecting upon the actual visibility of the project *#exstrange* and its penetration within the eBay platform, it became clear that the latter was executing a key operation of mediation between the project and its publics by means of its search engine and “best match system”. Further to exploring eBay analytics I soon discovered that the eBay search algorithm was enhanced in 2013 to improve the platform’s overall performance, selling standards and customer satisfaction. Interestingly, eBay renamed its algorithm after a NASA space probe dedicated to a famous Italian-born astronomer of the Seventeenth Century, Giovanni Domenico Cassini [3]. Cassini replaced eBay’s previous search engine, Voyager, revealing the consistent fascination of eBay developers with the imaginary of the NASA. Its implementation, led by the then eBay’s vice president of experience and search Hugh Williams, was part of a rebranding strategy which began around 2008 and that marked a new era

in the platform’s history: the move from a seller-oriented marketplace to a customer-centred one. Essentially Cassini ranks highly listings that are honest and clear, informative, categorized correctly, and supported with excellent customer service. To foster the platform’s computational culture, Cassini values engagement over everything else. The algorithm is also described as “data-driven, values-driven, shopper-oriented” (Hsiao 2017), being based upon eBay’s four corporate values of “Relevance”, “Value”, “Trust”, and “Convenience” (Hsiao 2017). If these values are observed, the visibility of a listing is optimized and long-term relationships between users are maintained. Through analysing and understanding the effect of Cassini it became clear to me that the algorithm was a crucial curatorial agent: it sorted and selected content according to criteria of relevance and managed the interactions between users. For this reason, I decided to forge a strategic alliance with the algorithm by means of circulating and selling on the platform a joint curatorial consultancy service. Unlike Waller’s earlier project, which more overtly pursued a hacking strategy, consisting in the actual scraping of the data generated on the platform, my strategic alliance with Cassini aimed to produce a moment of dissonance, ambiguity and critical reflection.

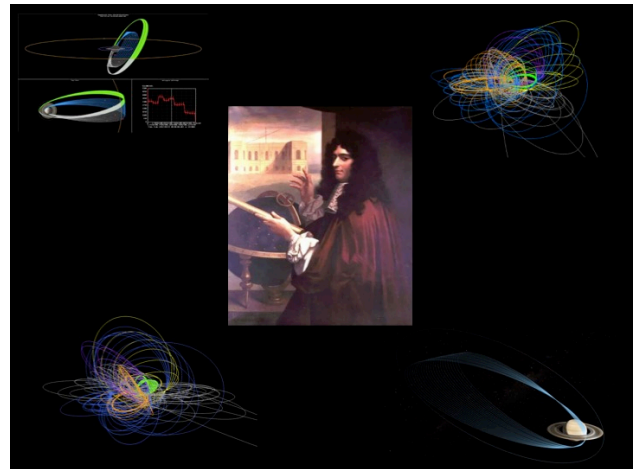


Figure 3 | Cassini, The Algorithm of Engagement

The parameters and visual language of my strategic alliance with Cassini were defined through the process of interacting with the platform’s interface and database, from the choice of the listing’s category to its full descriptive text and the images uploaded. The little-known eBay subcategory chosen for my auction “Specialty Services > eBay Auction Services > Appraisal & Authentication” assisted the purpose of highlighting that the sale consisted in an unusual service and that such service was closely related to the mechanisms of validation of the platform itself. The “item specifics” described a mode of human and algorithmic curation, which aimed at merging a quality usually associated to humans (reliability) with one generally attributed to machines (efficiency), through the common channel of creativity. The latter was



framed and put forward as a property that cannot be located in either humans or machines alone, but “it is found in their interrelationships, in-between” (Goriunova 2007).

Although available to all eBay users, the service was specifically addressed to artists or curators interested in exploring the currency of their name and their listing in the liminal space between the commercial platform – the so-called “eBay universe of happy transactions” (Hsiao 2017) – and the art world. The curatorial consultancy service placed particular emphasis on two key success markers – visibility and criticality – which weigh the relevance of an artist or a work of art in both the art market and the institutional establishment. These success markers are usually hard to quantify and control since they depend upon highly subjective and volatile criteria, such as fame, chance, taste and market fluctuations.

By invoking the calculating capacity of the Cassini algorithm in the process of evaluating them, through the strategic alliance, I performed a double mandate: on the one hand, I aimed at exposing the arbitrary mechanisms of the art world and its market – mechanisms of judgement, validation, inclusion and exclusion – and traded them as assets in a commercial exchange; on the other hand, I wished to confront “a certain tyranny to the curator’s role” (Brand 2011), by testing a more open and transparent approach through the involvement of a non-human agent. Overall, I attempted to perform an institutional critique of the system of art curating by recognising the influential role the curator plays in shaping not only “the public tastes but the very value system of art” (Tyžlik-Carver 2016, p.51). The affordable price of the consultancy service – only \$15 – reiterated the urgency to challenge mechanisms of curatorial gatekeeping and to redistribute agency more evenly across all agents – artists, curators, algorithms and online users – involved in the process of curating.

A number of actual benefits were offered as part of the consultancy, including: unlimited Skype and telephone assistance towards the creation of a listing that the algorithm Cassini would rank well; the co-creation with Cassini of an eBay collection tailored on the buyer’s listing and personal tastes; the fabrication of an electronic report summarising the key findings emerging from this experimental mode of human and algorithmic curation; a special announcement during a public event in a prestigious London Gallery which aimed at extending the buyer’s visibility from the platform to the art world.

The visuals accompanying the listing drew together the language of astronomy, search optimisation and online curation. They included satellite-generated images produced by the Cassini space probe, a lithograph of the astronomer Giovanni Domenico Cassini and two screenshots taken from the platform featuring the error messages that appear when a

given listing cannot be seen or accessed in a specific location or at a given time: “this listing has been removed, or this item is not available” and “this item isn’t available in your location”. The function of the latter was to hint at the possibility that a mode of human-algorithmic curation could help circumnavigating visibility problems on the platform and fashioning new modes of visibility.

The listing went live on March 23, 2017 at 10:00 UK time. It was artist Alessandro Sambini, registered on eBay as user “Afaja”, who purchased it. As part of the consultancy, I conferred with Sambini and guided him through the production of a brand-new listing entitled *Portable Wildlife Image Instance* [4]. Sambini’s auction ranked at the top of the eBay search. This was due to its original title, witty description and high-quality photographs — three features that the previous study of Cassini had revealed as key. After fierce competition and thirty-two different bids, user “Temporama” bought *Portable Wildlife Image Instance* at the price of \$44.00, for an increased market value of 40.5%.

The kind of operation the strategic alliance with Cassini produced can be first and foremost described as conceptual, in the sense of working with different planes of imagination, and critical, in the sense of soliciting a reflection about the algorithm’s concealed role within the platform. The polysemy of the word Cassini on the Web was instrumental for these purposes, since it enabled to put in relation different concepts (Cassini the Astronomer, Cassini the space probe and Cassini the Algorithm), fields (science, culture, technology) practices (art curating, business, hacking) and regimes of visibility (the human language of signs and symbols and the computational code of numbers and data). To provide a foundation to the strategic alliance with the algorithm, a new aesthetic and semantic coherence was created out of the remix of these different planes of information and imaginaries. Such remix was enabled by the simple operations of cut-and-paste, which are available to online users and that allow the de-contextualisation and re-contextualisation of content (Paul 2006; Groys 2016). In this case, human and algorithmic curation operated as a method to forge a conceptual and cultural reading of the algorithm and to re-envision technical practice as a crucial aspect of culture from which poetic performance can originate.

However, through the course of the experiment, the premises of my strategic alliance with Cassini, which were based upon the complementarity of aims and actions between the algorithm and myself, were complicated. This is because I discovered that the curatorial capacity of the algorithm was inextricably linked to the wider dynamics of control over users’ data and behaviours that eBay implements because it is a commercial platform. In other words, the Cassini algorithm was acting as a visibility gatekeeper, determining what users see, know and

consume on the platform. Additionally, it also created an “art filter bubble” (Tedone 2019) – an algorithmically delineated community of artists and art professionals whose online preferences and searches qualify them as already part of a particular system. Consequently, the circulation of my project and its sale remained confined within the perimeter defined by the project *#exstrange*, even if its premise was to open up such confines by challenging the conventional paradigm of art curating through a mode of human and algorithmic curation. This outcome points to an important paradox which describes the state of artistic and curatorial interventions online: either they exist within predefined contours that link them back to specific systems of reference and fields – these being for instance the contemporary art and new media worlds or the academia – perpetuating old institutional separations that the logic of the Web attempts to disrupt – or they risk dissolving within the plethora of content produced online or disappearing entirely from the Web. While the latter risk was detected in the case of both Waller’s project and the interventions undertaken under the umbrella of *Cosmos Carl*, the next project runs into the opposite problem, that of reinforcing the logic of the “art filter bubble” (Tedone 2019) and perpetuating the biases already engrained in the process of curating and in the fabric of the Internet.

#### 4 | THE ALGORITHM-CURATOR AND ITS BIASES: HAL 101

The recently funded Museum of Digital Art (MuDA) in Zurich represents a case in point of small and flexible institution that is currently experimenting with a mode of human and algorithmic curation. The team at the museum has decided to open its curatorial process to the participation of HAL 101, a web crawler that searches the Web in order to index and select potential artists to exhibit. In this way, the museum does not only create a strategic alliance with the algorithm, but it also takes this interaction a step further through the actual programming of HAL 101. The premises behind this project are therefore different from my own intervention with Cassini, which operated at a conceptual, imaginative and critical level. The MuDA project also diverges from the other two examples discussed above (*Cosmos Carl*’s parasite project and Angie Waller’s intervention) in which algorithms were pushed to work against the grain to create fissures in the systems of commercial platforms. The fact that MuDA is a non-profit cultural organisation whose mission is that of “untangling the digital fabric connecting data, algorithms and society” (MuDA website), frees this mode of human and algorithmic curation from the logic of profit, offering the opportunity to test the pursuit of a cultural agenda. However, the parameters that are used to encode the algorithm and the specific kinds of actions it executes under this allegedly transparent agenda remain opaque. As can be learned from the museum’s website, HAL 101 has been instructed to look for

artists whose data traces correspond with those initially chosen by the curatorial team for the museum’s inaugural set of exhibitions (Hendricks 2017; MuDA website).

Therefore, the working of the algorithm mirrors and executes decisions previously made by the curatorial team. The parameters upon which the algorithm has been programmed are not publicly disclosed and the information available is limited to the claim that the algorithm’s search ensures that “nationality, age, gender or financial factors don’t override the decision-making process” (MuDA website). In the framing of HAL 101 as a curatorial agent, the MuDA team thus emphasises how the scope and reach of the algorithm prevents the perpetration of biases that might affect the selection process – biases based, for instance, on an artist’s previous participation in a particular Biennale or an exhibition in an established gallery. The algorithm is indeed presented as an agent that can offer visibility for artists who are not already in the public eye. The fact that the algorithm creates a scoring system that is not personal and does not differentiate between and judge different information sources is presented as evidence of the algorithm’s democratic approach. But what such an argument disregards is that technology can in fact never be neutral or democratic (Chun 2009; Hendricks 2017; Bucher 2018) and that considerations of the context and provenance of any information form part of a process of critical evaluation and analysis.

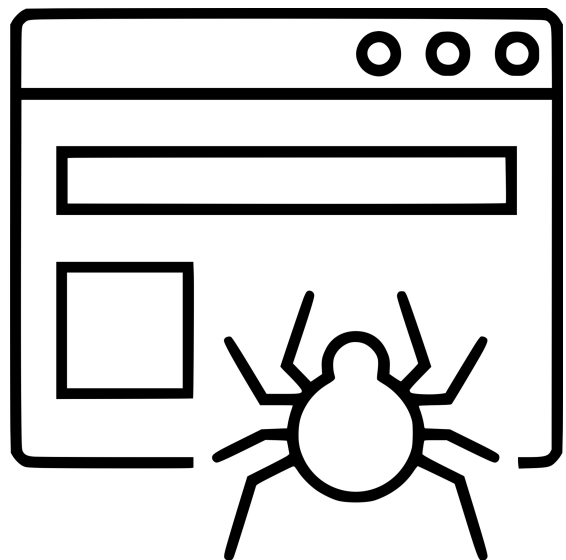


Figure 4 | Web Crawler Free Icon.  
Available from Online Web Fonts.

In its attempt to overcome the curatorial biases associated with the activities of search, selection and evaluation, HAL 101 inevitably amplifies biases that are already built-in on the Internet itself, and potentially also creates new ones. Its logic of objectivity and transparency is undermined by the fact that its choices are precisely based on information that is already visible online – information such as an

artist's name, and the titles and specifications of artworks represented online and have already been indexed by search engines. As such its attempt to critically reflect on the mechanisms of inclusion and exclusion that the very process of curating articulates, is not substantiated by an equally necessary awareness of the biases the algorithm itself generates and reproduces. In its work as a curator, the algorithm primarily serves here as a tool that simplifies the operations of searching and selecting, reduces complexity in the decision-making process and absolves human curators from the difficult task of operating "cautious differentiation" (Goriunova 2012, p.45) from within the aesthetic complexity of the networked culture. Such differentiation involves attentiveness to the nuances between cultural appropriation and plagiarism, user creativity and savvy marketing strategies, Web parody and defamation – all differentiations that rely upon the use of human cognitive faculties such as critical reflexivity [5] and knowledge. What such a shortcoming points to, is the need for online curatorial practices to encompass not only a sophisticated knowledge of algorithms but also their very own critique – understood not as some automatic dismissal of the potential of algorithms to transform the practice of curation, but as an opportunity to explore more thoroughly their wider socio-cultural impact. As Bucher lucidly puts it:

*Algorithms matter in a variety of ways: in their capacity to govern participation on platforms, distribute information flow, embed values in design, reflect existing societal biases and help reinforce them by means of automation and feedback loops, and in their power to make people feel and act in specific ways.* (Bucher 2018, p.120)

Consequently, she further observes, "knowing algorithms might involve other kinds of registers than code" (Bucher 2018, p.113), such as the register of critical analysis, speculative inquiry and poetic imagination.

## 5 | CONCLUSIONS

The comparative analysis of these examples suggests that a nuanced approach should be developed in regard to the kind of relationship the online curator shall create with the algorithm and that the forging of strategic alliances between human and technical agents is not devoid of frictions and biases. It also revealed that curators and algorithms similarly take up the role of cultural and visibility gatekeepers since they both operate through mechanisms of filtering and selection; such gatekeeping mechanisms, if not attentively recognised and monitored, could even be amplified through their co-operation. For this reason, the development of strategic alliances between curators and algorithms must be based upon the critical awareness of both

their complementary roles and potentially similar biases. More precisely, these strategic alliances would need to recognise online platforms as discrete sociotechnical intermediaries that "condition how networks come together" (Langley and Leyshon 2017), whilst remaining attentive to the contingent and performative nature of their algorithms. Moreover, they would need to incorporate a critical reading of both the algorithm and the curatorial process involved, their potential biases and filtering mechanisms; the parameters of such alliances would need to be negotiated case by case; their outcomes would depend on the kinds of values that are encoded in the algorithmic system and which the alliances aim to produce and co-create.

In other words, in order to understand what strategic alliances can achieve, it is important to first recognise that the social and cultural role of both the algorithm and the curator are still very much up for debate and contestation and that the values of sharing, aggregation and cooperation need to be built into technical systems in order to challenge the logic of Platform Capitalism. Under this light, experiments in the field of human and algorithmic curation can offer the opportunity to implement a mode of "processual criticism that is both reflexive and playful" (Finn 2017, p.13), whilst also bringing to the public attention urgent debates concerning the wider implications algorithms have on society and the increasing interdependence between humans and machines in everyday life. Their social and cultural remit could serve the purpose of understanding that human-algorithmic curation is a subtle operation whose politics lies in opening up small brackets of intervention against current power asymmetries and in envisioning new dynamics of value co-creation amongst users and technical agents. As such, the forging of strategic alliances between humans and algorithmic agents can help developing a fine-grained reading, interpretation and informed questioning of the socio-technical transformations brought about by the algorithmic and "platformed" (Weatherby 2018) world.

## ENDNOTES

[1] For an in-depth description and analysis of my contribution to the project's #exstrange, see my essay for its catalogue *Co-curating with Cassini: from the abyss of Commodification to the exploration of Space Curation* (Tedone 2017) and my forthcoming doctoral dissertation, *Curating The Networked Image: Circulation, Commodification, Computation* (Tedone 2019).

[2] See: <http://exstrange.com>.

[3] Cassini was the first to take successful measurements of the solar system latitude and to discover what became known as the Cassini Division in the rings of Saturn. The Cassini Mission to Saturn,

which started in the early 1980s and terminated on September 15, 2017, was one of NASA's most renewed missions in recent times.

[4] Sambini's listing played with the tropes of contemporary landscape photography and Dada ready-made and sold half of a shopping bag of the multinational retailer Tesco depicting the image of a generic countryside view.

[5] 'Critical reflexivity' is here understood as a quality belonging to humans only. My use of the term draws upon Alveesson and Köldberg's framing of reflexivity as "ways of seeing which act back on and reflect existing ways of seeing" (Clegg & Hardy, 1996, p.4 cited in Alveesson & Köldberg, 2009, p.271), whereby the act of seeing is "inseparable from the perspective, it is perspectival" (Alveesson & Köldberg 2009, p.6). It is coupled with Scott Lash's understanding of critical reflexivity as a mode of reflexivity whose reference shifts 'from everyday experience to "system", of commodities, bureaucracy, or reification of life forms' (Lash 1994, p.140).

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