

The Lurker and the Politics of Knowledge in Data Culture

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This article explores the practice of lurking, developing the figure of the lurker as a conceptual persona. The lurker is a sage of the digital era, constructing a form of “private” knowledge. Not involved but performative, constative but only in a manner of probability, the lurker produces frameworks for private truth production through continuous self-adjustment. A mode of knowing and a method of being, lurking is about the poesis of the embedded self and the power to establish conditionality in digital networks. A lurker maps out a plane that is occupied today by big data analytics. It is data algorithms that lurk, operating with sagacious data wisdoms rather than technical knowledge and constructing partial and probabilistic propositions. The article concludes by inquiring into the consequences of the current digital technical condition in which the conceptual persona of the lurker is fulfilled by algorithms, and its mode of knowing becomes a new mode of governance.

Keywords: lurker, lurking, critique, Deleuze, Guattari, digital culture, data analytics, big data, algorithm, machine learning, social media, knowledge

The lurker is a darkish figure. Today, lurking is sometimes seen as stalking, and not far from trolling. Yet, throughout the Web’s first 20 years of existence, lurkers constituted up to 90% of its communities. In this article, I reevaluate the figure of the lurker. I posit the lurker as a conceptual persona, borrowing this notion from the last book by Deleuze and Guattari, *What Is Philosophy?* (1994). I suggest that the lurker acts as a sage of the digital age, constructing a form of “private” knowledge. Rarely participating, she maps the terrain in which she operates, acquiring ethnographic knowledge and volumes of data in her head and in her fingers. The acquisition of this knowledge is affective and aesthetic, and its value is new.

Today, it is also the algorithms and data analytics that lurk, taking on the mode of knowing developed by the conceptual persona of the lurker. It is widely debated to what extent big data—producing correlation rather than establishing causation—is able to establish its own validity. As big data breaks with prior scientific regimes of objectivity (Rouvroy, 2012), the data regime operates with a certain degree of openness, inscribing plasticity in some of its analytical models, especially machine learning and neural networks. I am convinced that our data condition rearranges the relationship between fact and fiction, the real and the symbolic, mobilizing culture and reentangling inquiries pertaining to

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sciences and the humanities. It is not that the humanities are undone by the dominance of data and algorithms, but rather that they are recruited into the data models, data sets, and algorithmic cultures and practices in new ways. Recognizing how data analytics takes on the mode of knowing previously explored by lurkers is one way of reclaiming the space of imagination and action in relation to data and software. Big data surveillance, racializing biometric identification, and normative uses of computer vision are oppressive and dangerous, but they are not one solidified force. Posing the practice of lurking between users and algorithms constructs a form of entry into discussions about data infrastructures and software that presents them as porous, seamful, conflictual, omnivorous, and ready to be recruited by a wide range of interests.

Describing lurking as a precursor to data analytics is both real and metaphorical. Haraway (1984/1991) wrote about her cyborg in a similar way. Perhaps the lurker inherits some of the energy of the 1980s proposition of the cyborg, a figure designed to recognize the military, male, and repressive logic of technology as well as to reclaim it as dirty, wet, affective, female, circulating, and varied. Lurking as something that can be performed by humans and algorithms alike suggests a form of knowledge and practice that is technocultural and art-scientific. While it can morph and oscillate, such a mutant form suggests the existence and development of new logics, frameworks, and partnerships: something to be joined for a good tussle.

The following sections contain a short discussion of lurking and an introduction to the notion of the conceptual persona. I then discuss the lurker as a conceptual persona, paying specific attention to the mode of performing and knowing that lurking establishes. I explore data analytics as a form of lurking and conclude by making some propositions about the current technical condition in which the conceptual personae of lurkers are fulfilled by data analytics, and algorithmic lurking generates new frameworks for knowledge, possibility, and the experience of life.

The Lurker: History and Practice

The lurker is a freeloader. Generally understood, it is a user that reads and follows, but never contributes. Lurking only happens in interactive environments: Watching television is not lurking, but reading all posts on an online forum without ever responding, posting, or starting one's own thread is lurking.

Lurkers have always constituted a large proportion of technically mediated communities, since the times of bulletin board systems, LISTSERV electronic mailing lists, and Usenet groups (late 1980s and early 1990s). It is usually estimated that lurkers make up between 40% and 90% of communities, depending on the platform in question (Nonnecke & Preece, 2000). As a major force, they attracted scholarly attention early on, especially in areas such as computer-human interaction and computer-supported collaborative work. Over time, the early tendency to perceive lurkers as "non-contributing, resource-taking members" (Kollock & Smith, 1996) and people who take what others create and never give back (Morris & Ogan, 1996) gradually shifted toward a certain appreciation of lurkers (Donath, 1999).

As part of this new approach, some studies were conducted to demonstrate, for instance, that lurking can be seen as a strategy to learn—by peripheral participation—which then leads to full participation (Lave & Wenger, 1991). Behind this figure of the lurker is the idea of passivity of a germinating activity, which can be recognized in a phrase, such as “the idea has been lurking in the background.” Lurking has been claimed to be “a natural process of human communities” (Ebner & Holzinger, 2005, p. 70). It has been shown that, for instance, in online learning environments or technically assisted learning there is no correlation between active participation, such as posting, and passive participation, such as reading, in learning achievement (Ebner & Holzinger, 2005). In short, those who write more do not read more and hence do not learn better.

Overall, it seems that during the first decade of the World Wide Web’s existence a condescending notion of the “silent majority” gave way to a nuanced differentiation. As the presiding spirit of the early Web was that of do-it-yourself, cooperation, and collaborative construction of knowledge, it is understandable that lurkers did not initially get good press. However, the figure of the lurker is rooted in the same utopia of collective intelligence, equality, and liberty. To this end, scholars discussed lurking as the opposite of stardom and found that e-mail-based discussion lists with the highest traffic had the lowest lurking levels, which effectively meant that higher engagement and quality corresponded to more lurking (Preece, Nonnecke, & Andrews, 2004). Lurkers were also sharing what they learned in one community outside its bounds for “altruistic reasons” (Kollock & Smith, 1996).

Lurking hence began to be seen as a way to improve the community. Voices called for a general shift from annoyance at “freeloaders” to an appreciation of lurking, which recognized it as a valuable and therefore valorizable activity (Muller, Millen, Shami, & Feinberg, 2010). A paper by IBM Research measured lurkers to compare their contribution with their use of resources in an attempt to valorize lurking and, consequently, target them (Muller et al., 2010). Furthermore, some argued that the Amazon recommendation system, among other innovations, was designed specifically for lurkers: The buyer lurks at what products others bought or thought about buying (Nonnecke & Preece, 2000). Here a shift of agency is notable: It is Amazon’s algorithms that learn about buyers’ behavior on the website, lurking behind their browsing and purchasing trajectories, which is then selectively displayed to the lurking would-be buyers. Alongside user-submitted ratings and reviews, the system lurks and offers its lurking fruits to customers.

In the second decade of the Web’s existence and when most developed countries came online with Web 2.0, the “silent majority” did not quite want to remain silent. In the era of participation, lurking as it used to be became complicated. On Amazon, a lurker withdrawing ratings, reviews, or feedback still contributes her data for others, and the platform, to consider.

Today, in the age of social media, lurkers have reappeared under multiple and diverging new terminology. For the game-streaming platform Twitch, lurkers are its main target audience, the engagement base. As the majority of users watch someone’s gameplay, they are not lurking behind the interface; they are constructed in and included into the interface by being explicitly named as such. While social networks seemingly make little provision for lurkers and rename them as “listeners” on Twitter, “sleeping accounts” on Facebook, and “silent users” or “ghost accounts,” the positive turn in valuing

lurking continues. Kate Crawford (2011) has aimed to rehabilitate lurking from pejorative connotations and rethink it through the figure of listening. Crawford discusses different kind of listening on social media as a valuable form of participation. However, lurking on a proprietary platform, arguably a walled garden, often goes without the anonymity and withdrawal of data characteristic of early lurking, and it is this history that is useful to trace.

The practice of lurking changed dramatically between the 1990s and the 2010s. Back in the era of multiple search engines, when Web pages were indexed by keywords and metatext HTML tags, it was possible to "browse" or "Web surf" to discover unusual websites and lurk on, for instance, the 20th page of the now-defunct search engine AltaVista's served results. With the architecture of the current Web and the way Google's PageRank and other algorithms index it (Fuller, Feuz, & Stalder, 2011; Rieder, 2012), it is no longer possible to find anything outside the box. Most results will be the largest platforms, and today one discovers sites and pages through friends' sharing, liking, and retweeting.

"Friends" networks have substituted for open networks. How is it even possible to lurk on Facebook? To effectively lurk on social media, one still needs an account, even a silent one, or an elaborate system of note-keeping. Becoming a member in such a network is already an infringement on the lurker's sense of the world. To connect to other users, one would need a real name (to find friends from school) or an elaborate and attractive performance of a fake persona (which involves substantial work and investment of time) to attract others—both are against the spirit of lurking. A "sleeping" or "listening" account can be used to lurk or can be just that: sleeping. The difference can only be discerned by algorithmic surveillance. Having an account but also just browsing on a mobile device without being signed into one's account these days generates a data footprint that is carefully assembled and used in generation of a data subject of the lurker, who was previously able to remain absent and subjectless. Here lurking itself becomes a function of data-harnessing algorithms and data analytics. It is the algorithms that are lurking.

Conceptual Persona

Gilles Deleuze and Félix Guattari propose that the business of philosophy is the creation of concepts. They go on to differentiate philosophical concepts from discursive propositions or the representation of worldviews, scientific functions, and other forms of questioning and meaning making. Furthermore, making concepts is neither contemplating nor reflecting or communicating, which correspond, according to Deleuze and Guattari, to the historically established practice of philosophy. What has been drawn upon extensively from *What Is Philosophy?* is the idea of creation of concepts that are alive, like living beings, and unique, like every individual creature. Concepts are "centers of vibrations" (Deleuze & Guattari, 1994, p. 23) that, as such, cannot be wrong (though they can be vapors, fog, and hallucinations) because they are fabricated in a unique plane of immanence that is arranged by every philosopher anew as her special cut (slice) of chaos, "that acts like a sieve" (p. 42). It follows that concepts by different thinkers may be at a tangent to one another or exist at planes of immanence that are inaccessible to us at the current moment, but are never outdated and neither can be "proven" irrelevant. This set of propositions posits philosophy as ultimately a creative activity, and not the one primarily concerned with the "right" way of abstracting, generalizing, or judging.

What Deleuze and Guattari (1994) call constructivism, the intensive force of making concepts, "unites the relative and the absolute" (p. 22). As they maintain, the absolute is the way of creation. The concept is absolute or ideal without being actualized or abstracted. Here, *actualized* would mean being implemented according to a pre-given formula, whereas *abstracted* would imply adherence to some transcendental reality. I think, therefore, that we can use such a formulation to account for different conceptual personae that are general enough to be recognizable as similar in different technical networks—for instance, Polish or English-speaking—and within differentiated computational systems that may be, for instance, proprietary or free-software-based, if they happen to present as such: for instance, as a lurker. This does not mean a dominance or superiority of one way of doing things or a form of technical determinism in which the system itself has the sole capacity to produce specific roles for humans to fill. The use of the conceptual persona allows for an absolute or ideal without positing any transcendence. This means that there is not an abstract or transcendent "global digital culture," (the theme of the Special Section this article is a part of) while there *are* conceptual personae that are global insofar as they are real and ideal (but not blueprints to follow, universals shared due to some innate human substance, or necessary implementations of design principles or other technological determinations).

The project of Deleuze and Guattari's oeuvre, the philosophy of radical immanence, is folded into their offering. For them, whereas science makes propositions and enunciations that refer to external reality that constitutes its conditions of truth, concepts are not *immanent to* anything; they are "intensive features." Concepts give consistency to a plane of immanence that is a "section of chaos," which itself undoes any consistency. The plane of immanence is the absolute horizon, and yet, as an infinite variation, it has "to be set up" (Deleuze & Guattari, 1994, p. 40), selected, to construct concepts and something "adjunct" to them: conceptual personae. Conceptual personae, then, do not relate the "lived to a transcendent subject" (p. 48), but only to the immanence of the plane. Deleuze and Guattari write: "The role of conceptual personae is to show thought's territories" (p. 69). Conceptual personae therefore institute and lay out a plane with its coordinates and horizons in which a concept or something else (a behavior, a mode of being) can then be made.

Conceptual personae are not necessarily produced aesthetically. Deleuze and Guattari are relatively traditional here, reserving for aesthetics only the production of affects and percepts (p. 24). But although Deleuze and Guattari specifically state that conceptual personae are not "literary or novelistic heroes" or aesthetic figures, they do reserve some of the power of conceptual personae for "great aesthetic figures of thought" (p. 65). In fact, they write: "The plane of composition of art and the plane of immanence of philosophy can slip into each other to the degree that parts of one may be occupied by the entities of the other" (p. 66).

One could argue that in Dostoevsky's writings, for instance, a certain conceptual figure can be clearly sensed. Such a conceptual persona in his novels is linked to a set of problems and events and becomes a position, a sensibility that arises out of the entire piece of writing, or the whole life's work. Not a position of one personage, nor that of the author, the conceptual persona is a lens radiating a particular spectrum of questioning and propositions that is mapped out, sliced out of chaos in the space of the novel. This spectrum is very particular and can give birth to concepts, as in Deleuze and Guattari's schema.

Dostoevsky's conceptual persona thinks and senses through events and problems another answer to which is nihilism. It is unable to accept the answers given, for instance, by Nietzsche, on the powerlessness of human reason, after the end of Christian teleology rendered the world fully material and absolutely chaotic. Deleuze and Guattari write: "The role of conceptual personae is to show thought's territories" (p. 69). The conceptual persona crystallized in Dostoevsky's novels can be perhaps sensed as affective and perceptual, but it is certainly not a type, and what it does is institute and lay out a plane with its coordinates and horizons in which a concept or a mode of being) can be made.

I propose the lurker as a conceptual persona that possesses a degree of systematicity as opposed to it being regarded as a type of behavior or a personality. As a mode of creation and action itself, the conceptual persona allows, first, for recognition of agency and creativity. It is thus open and plastic and belongs to the order of imagination rather than simply to sociopolitical arrangements conditioning a typology (e.g., of users). Imagining the Internet and computational infrastructure not only inhabited by users but also constructed by conceptual personae allows the introduction of depth and multiplicity to this realm, to imagine and see it as governed by various and conflicting logics and operating under a multiplicity of powers and passions. A conceptual persona is created and lays out a plane, but it is also made available for others to try on without necessarily adhering to the plane or the concepts. One can try to find herself on the plane of immanence laid out by a philosopher through thinking her concepts. Similarly, one can try on a conceptual persona to find herself on the plane of immanence it slices out and maps.

My adaptation of the conceptual persona of Deleuze and Guattari is to think of the conceptual persona as a preconceptual (prephilosophical) figure that holds strongly enough by the aesthetic and technical wires composing it to be available as a performance, a mode of living on the networks. Trying it on does not bind the actor to accepting the concepts it creates or even to loyalty to the plane it maps. But as a performance, it is aesthetically and technically consistent and creates specific modes of knowing, acting, and becoming. Deleuze and Guattari (1994) write that, similarly to how concepts are both absolute and relative, a conceptual persona is

relative to its own components, to other concepts, to the plane on which it is defined, and to the problems it is supposed to resolve; but it is absolute through the condensation it carries out, the site it occupies on the plane, and the condition it assigns to the problem. As whole it is absolute, but insofar as it is fragmentary it is relative. (p. 21)

The performance that is the conceptual persona is the absolute or ideal without being general or abstract, though currently there are struggles over the appropriation and devouring of certain conceptual features of the persona that I propose, which I will shortly turn to.

Lurker, the Conceptual Persona

The conceptual persona of the lurker that I propose is not that of all the world's lurkers generalized and abstracted into one. It is also not a "correct" or original kind of lurker as opposed to the one parasitized by corporate interests. While there are indeed changes to lurking as a practice, where the activity of lurking itself has been taken on by software and become instructive in data capitalism, lurking

cannot be claimed to have once been a unified phenomenon. I would like to put forward a conceptual persona of the lurker that relates to the conflictual set of practices described at the beginning of the article, maintains its own conceptual consistency, and slices out a plane of immanence of its own making.

The lurker's conceptual persona is that of a *scholar* of the digital age. As such, it is defined by her practice of knowing. Scholarship in medieval Russia, for instance, mainly consisted in transcribing old manuscripts and documenting historical events from within the framework and practice of a Christian monastic wisdom. Reason and public knowing had not yet become a framework, and neither had experience and the practice of knowledge. A scholar, therefore, is not necessarily enlightened.

In her construction of knowledge, the lurker relates to the conceptual persona of the idiot (Goriunova, 2013). An idiot is also the unenlightened maker of his or her own truths. Commenting on a Cartesian proposition concerning the figure of the idiot, Deleuze and Guattari (1994) write that the idiot is a private thinker, thinking "by the natural right." They further establish that the idiot "goes mad" and acquires a capacity to create. These are the lines alongside which the lurker differs from the artisanal idiot: She doesn't produce, except for making propositions and inferences concerning the running interworkings of her environment.

Kant's (1992) writings united in *The Conflict of the Faculties* are often evoked in relation to the discussions of the function of knowledge, its use, allegiance, and organization. What Kant terms higher faculties—that is, knowledge called to serve the public and the state, such as law, medicine, and theology—is delineated from philosophy, a lower faculty, called upon to critically examine such service. Critique here, in Kant, needs to be divorced and protected from performativity. Although appearing as a private endeavor, philosophy's role is to serve the public good. Kant's idea of the university is of also an autonomous space that functions in the public interest, but is devoid of the praxis associated with the regime of the state. Such private autonomous knowledge, however, is still public in its critical agency and functions within the transcendental regime of establishing the truth, inaccessible to the higher faculties.

In contrast to that view, the truth of the lurker is thoroughly private. The lurker is not on the path of a transcendental inquiry; she is advancing in the development of private knowledge. Such private knowledge is not fully constative—that is, a statement of truth called to critique—and not fully performative, aimed at functional intervention. While it can be rendered operative and useful, it is necessarily limited. The type of knowledge the lurker arrives at is of a specific kind, afforded by the media ecologies (Fuller, 2005) in which she operates. The scale, the modes of assembly, and operation of particular media ecologies is the plane of immanence that the lurker cuts out of the universe of digitalized existence.

Encyclopedia Dramatica (2016), a satirical wiki-based encyclopedia of "troll humor," offers the following definition of the lurker: "A Lurker has an account, is actively reading, downloading, and doing shit, but NEVER *** POSTS. . . . Chances are, you will not be affected by the unwarranted self-importance virus when you submit your user-generated content" (para. 1). So, first of all, the conceptual persona of the lurker has a sensibility different than that offered by creative industries and affective regimes of late capitalism: The lurker is not a *producer*. While she may be on a quest of personal private Enlightenment, a

lurker endeavors to withdraw output, whether it is personal information or contribution to the public good. A lurker's affective cognitive output does not get to be put out. Following from this, the lurker is not a position that automatically arises from the system (e.g., everyone joining is automatically a lurker); neither is it forcefully carved out as a radically alternative and resistant form of use. A lurker is neither necessarily a de facto user nor an activist.

One carefully works on becoming a lurker. The craft of lurking relies on time invested and mistakes made. A lurker, therefore, is not simply an intermediary or preparatory step to becoming an active participant or a public knower. Instead, a lurker is a private scholar. Seldom participating, if at all, she maps the terrain in which she is operating, acquiring volumes of ethnographic observation and personal information in her head and at her fingertips. The acquisition of this knowledge, which is often affective and aesthetic and whose value is hard to determine, happens almost involuntarily, through extended dwelling in and sensing into the environment. It is a sucked-up semiosphere of a particular media ecology individualized in the conceptual persona of the lurker.

To illustrate: Back in the 2000s I read a lot of discussions on the Eva.ru women's forum. A professional lurker like me absorbs (and can sometimes make copies of) useful information, alongside being exposed to other content, which often includes personal information disclosed by active users. Over time and involuntarily, I have accumulated enough awareness of other users that when some new key pieces of information were revealed by them, I realized that I could identify—and, were I to wish, deanonymize—these users. Merely monitoring these environments led to such an accumulation of data that its involuntary cross-matching happened automatically in my brain. Such an example aside, a lurker like me would have enough material for a monograph on women's forums, their structures of authority, agreed wisdoms, conventions, structural interventions of interfaces and interaction patterns, the interplay of a local culture with moderating systems, and so on. By performing the conceptual persona of the lurker in this environment, a plane of immanence is sliced, which maps a range of options not only of being a woman in Russian culture, but of "being" a forum platform and of means of constructing knowledge, thinking, inferring, feeling, and intervening in this version of the world.

What kind of knowledge does a research methodology of lurking produce or entail? The lurker exists in the infrastructures, but does not necessarily act in them, so she misses some vital experience. For instance, on a forum, a lurker can read all posts, investigate individual profiles, remember what's discussed, store discussions, and create a personal archive, but she would lack the experiences of being responded or not responded to, being sent private e-mails, and being banned or blocked. She will also develop a peculiar hands-on experience of the platform: Being attentive to and knowledgeable about the obscure corners of the infrastructure and yet lacking in practical knowledge of the actions it affords (e.g., uploading pictures). It is therefore a knowledge that is thoroughly affective and sensual, but may lack in gestural involvement. The lurker is definitely involved, but remains at a distance. It is someone who observes and processes through a practice that is not too dissimilar from participant observation, but does not participate. It is important to note that lurker does not arise to a higher knowledge or a detached rational view while others' brains are boiled in a heated debate. The lurker feels. The specificity of the conceptual position of the lurker, therefore, lies in simultaneous involvement and withdrawal, activity and passivity, sparseness, invisibility, and, simultaneously, intensity.

Following from the above discussion, what kind of private scholar does the conceptual persona of the lurker posit? Not a performer of services, her knowledge is acquired through practice, craftful tedious exploration, dwelling, repetitive reading, and the action of searching for grains of interesting things in the bulk of the output of boredom. A creative private scholar, closely involved in specific media ecologies in relation to which she is becoming a lurker, she is born at a distance. Depending for its existence on close involvement, the lurker has to work on the problem of becoming oneself through the craft of manufacturing a certain distance, inscribed in its plane of immanence. And yet it would be too soon to claim such a distance to be a Kantian constative one, giving autonomy and protection to a critical position.

Encyclopedia Dramatica (2016) states the following: "The more you lurk, the more you realize how complete shit everything is" (para. 1). To paraphrase, this means that one acquires a certain critical attitude. At a distance, performing as a lurker produces a critical mode of knowing the media ecologies of the digital age, which is yet again not fully of public value or service. The mode of knowing that the research methodology of lurking entails relates to a self-styling—to a certain subjectification of the lurker and the art, practice, and poiesis of lurking. The art of self-production in the framework of truth and action traditionally included figures such as clowns, harlequins and jesters in their bespoke paths to truth. The lurker is on her bespoke path to private truth.

As mentioned, learning to be a lurker relies on affective involvement. Here, watching someone's play onscreen will trigger the twitching movements of lurker's fingers. However, a lurker is far from a shady character in need of a restraining order. Choosing her channels carefully, the determination to inhabit the infrastructure opens the lurker's body to the ability to feel life in cyberspace. Getting absorbed allows not only for empathy with human users but also for a way of sensing the technical affordances of the media environment. Lurkers therefore are scholars not only of content, but of frameworks, formats, data types, algorithms, affordances, and technocultural limitations. Lurkers' sensing into technology does not necessarily make them technodeterminist, but develops a *technical intuition*. Such an intuition is not one of innovation and progress, but a scholarly ability to foresee and analytically ground technocultural phenomena arising from and conditioned by specific media ecologies.

A lurker is not a flaneur. Net.art claimed that, in the age of information overload, the role of the artist is that of a filter in the information channels, and that art's material is communication. The work of art, therefore, is the insertion into and a redirection of information flows. If an artist is an abstract filter, then the conceptual persona of the lurker is herself an art project of a common artist, an *artist vulgaris* of media ecology. For the lurker, what is important is not the performance in the communication flow, at a lower or higher level, but the creation of a space where there is a possibility not to perform, but to explore. Lurkers want a different space they have to carve out; it is their practice and performance that produce the space they need to inhabit. This space is not ever given; it has to be manufactured and claimed through a mode of inhabitation.

The self-styling of the lurker at a distance crafted through a consistently performed becoming is resonant with the practice of becoming aware of the conditions of possibility of truth, its notions, vocabulary, and frameworks—that is, the foundation of critique. On the Foucauldian notion of critique, Judith Butler (2001) quotes Foucault's (1997) "What Is Critique?":

If governmentalization is . . . this movement through which individuals are subjugated in the reality of a social practice through mechanisms of power that adhere to a truth, well, then! I will say that critique is the movement by which the subject gives himself the right . . . to question truth on its effects of power and question power on its discourses of truth. (para. 27)

Butler (2001) continues:

Note here that the subject is said to "give himself that right," a mode of self-allocation and self authorization that seems to foreground the reflexivity of the claim. . . . "Critique," [Foucault (1997)] writes, "will be the art of voluntary insubordination, that of reflected intractability" . . . If it is an "art" in his sense, then critique will not be a single act, nor will it belong exclusively to a subjective domain, for it will be the stylized relation to the demand upon it. And the *style* [emphasis added] will be critical to the extent that, as style, it is not fully determined in advance, it incorporates a contingency over time that *marks the limits to the ordering capacity* [emphasis added] of the field in question. So the stylization of this "will" will produce a subject who is not readily knowable under the established rubric of truth. More radically, Foucault pronounces: "Critique would essentially insure the desubjugation . . . of the subject in the context . . . of what we could call, in a word, the politics of truth." (32, 39) (para. 28) . . . I would suggest only that he has shown us that there can be no ethics, and no politics, without recourse to this singular sense of poiesis. (para. 46)

The conceptual persona of the lurker is therefore a kind of subject that one can try to become, or try on, to experience the "limits to the ordering capacity of the field in question." This poiesis of a position of the subject (but not a self, or a person) allows for growing an affective awareness of the contingency of the environment and its technocultural truths, and therefore a production of ethics. Lurking as the art of distance which entails a suspense of judgment produces an ethics, inevitably either virtuous or befalling, that comes close to that of trolling. Turning into a troll as an effect of power accrued in the practice of lurking is of the order of poiesis that underlies the politics of truth. Because the conceptual persona of the lurker cuts a plane of immanence productive of own truths, lurking accumulates power in large reserves. Certainly that is why algorithms are now grappling for the praxis of the lurker: It is about the poiesis of options and power to establish normativity and conditionality, and therefore ethics.

The poiesis of self-styling, the production of subject's conditions of existence, and the exhibition of the contingent character of truth making, which the lurker is busy with, is markedly different from the Kantian scholar. A lurker's critique is based on styling, subjectifying oneself into a practice through which the conditions of possibility can be distinguished and questioned, blurring the Kantian distinction between the constative and the performative as the former can only be arrived at and practiced through the latter. Such a differentiation is certainly in the spirit and timeliness of the Foucauldian practice of politics, and yet the lurker is not a critic. As the lurker inquires into the conditions of possibility of the media ecology and into the determinations of action within it, she often produces a close reading, a localized, chance wisdom, only potentially useful. As such, the lurker is a sage.

The lurker is a *sage* of the technical era. Nietzsche's Zarathustra is a sage in the world in which not only the possibility of the existence of truth has vanished with the death of God, but the conditions or imperative of looking for truth as necessarily rooted in the former have to collapse. The figure of the sage is therefore not one of a sufferer who bears witness to the transcendental truth, but that of a maniac joyful at the possibility of thought and of divergence. A sage lives through the senses rather than reason, through chance—the dice throw, creating values (Deleuze, 2005). The sage is a way of being that creates sensibilities. The sages of the technical era are an army of specialists in technical sensibilities and intuitions. A global army of sages, fractured in their locales and chance wisdoms, they practice distanciation and sense probabilities.

If semi-involuntary awareness is the sensibility of lurking, are not lurkers halfway between the conscious processing of human users and nonconscious processing of algorithms, the current sage army recruits? The description of knowledge accumulation and data cross-matching given above in particular resembles an explanation of how data analytics may work today.

Lurking Algorithms

Understanding software and hardware infrastructures, algorithms, models, and databases as cultural is arguably one of the most pressing concerns of today's critique. Technology is not transparent, and neither is it created in a vacuum. Taking computational infrastructure as a subject critical theory seriously engages with has some roots in the 1990s net.art and software art movements, and artistic engagement with technology more generally. Artists know the recalcitrance of material, and if their material is software and networks, materialist artistic practice includes critical engagement with computation. For instance, I/O/D's artistic browser *WebStalker* (1997) analyzed the politics of the technology of the browser, while Mongrel's *Natural Selection* project (1998) critically engaged with recommendation algorithms. Some of the key thinkers in software studies come from this tradition of the critical understanding of computation: Matthew Fuller, who co-organized (with Graham Harwood and Lisa Haskell) the Software Summer School in 2000, proposing, for its program, software studies as a mode of inquiry (Fuller, 2008; Nettime, 2000), and Lev Manovich (2001), who suggested software studies as the successor to new media studies. Software studies, dedicated to the critical exploration of software, code, models, and computation more broadly (notably given one platform by the *Computational Culture* journal), is joined more recently by an interest in algorithms and data emerging from a range of disciplines, including sociology, political theory, and the humanities.

A close reading of software and computational systems is tremendously important, and some fine examples of this mode of inquiry have been produced (see a range of articles in the *Computational Culture* journal). We need to explore the cultural formation of the practices of ranking, numbering, modeling, of training learning algorithms, to name just a few directions. How technical systems are framed socially and politically and put to use to serve particular interests is also widely discussed today. However, it is equally important to be able to talk about procedures of computation conceptually, taking their material specificity onto the grounds of the critical inquiry pertaining to the humanities and the arts. A conceptual discussion has space for poetry, and for reimagining technical practice as not only firmly embedded within culture, but capable of poetic performance. To see the conceptual persona of the lurker as something born within

the circle of human users, technocultural, creative, craftful, and symbolic structures, then shared with the machinic, and ultimately passed over almost completely, as a conceptual mode of practice, to the algorithms and the computational infrastructure they serve is one such exercise.

Lurking algorithms, gathering and analyzing data, inhabit the persona of the lurker. As the lurker becomes distributed and outsourced to software, it is the government agencies, corporations, and small and large political and economic interests that lurk through continuous data gathering. Algorithmic lurking acts as a disjointed and distributed foundation to the political infrastructure of surveillance. It has also been extensively commented upon that such an infrastructure functions within a specific and distinctly new politics of knowledge that data analytics operates within—something I suggest has been in part developed by the conceptual persona of the lurker.

The field of machine learning and especially neural network models are widely used today to work with what has been called big data. While there is sufficient range and differentiation of models, their basic principle is “learning,” whereupon algorithms are set to develop analogously to models of the human mind. Algorithms get trained on a set of data and are expected to demonstrate better performance with experience. For instance, in supervised learning, I could train algorithms to sort out supportive and negative statements, then feed them a Twitter data set on the topic of climate change to be sorted by the means of identification they had learned. The technique of descriptive clustering, inherited from linguistics and literary analysis, will try to find structures in this data. In unsupervised learning and predictive clustering, I could ask the algorithms to find correlations that explain why people might deny climate change and calculate the probabilities of support for a new climate change bill among specific subsections of the population.

While there are voices calling for specific attention to be paid to the kinds of data sets (e.g., the image data sets used in the field of machine vision) used to train algorithms, which may reflect conservative or even discriminatory positions, machine learning has been mainly critiqued for doing away with causality and operating with probabilities by the logic of induction and abduction rather than deduction. It has been commented that data mining and profiling create “an epistemic and political universe gradually deserted by empirical experiment and deductive, causal logic” (Rouvroy, 2012, p. 144). Instead, data analytics functions outside the apparatus of scientific objectivity (e.g., of a trial, test, or examination) (Rouvroy, 2012). Big data does not do absolute causality; it is interested in correlations and predictions. Neural networks, for instance, cannot offer linear causal explanations; they instead make propositions about correlations in a specific subset of data and in their possible future correlations. To this end, David Byrne (2002) argued that neural networks are case-centered, and “what emerges from the procedures are sets of cases rather than [causal – Olga Goriunova] models” (p. 95). Writing on SPSS (a software package for statistical analysis), Uprichard, Burrows, and Byrne (2008) propose that:

The concept of generalization . . . is arguably defunct. Understanding how cases are “generally” requires an explicit recognition of how they are “specifically.” The logic of predictive analytics . . . aims . . . to know “enough” to make . . . “moderatum generalisations” about particular types of cases [which] relates to tentative claims that are only relatively enduring. (p. 618)

Neural network models are an aggregation of individual cases, and they act as analogies, propositions, and probabilities. Whereas before, a model (in statistics) was a mathematically manipulable abstraction that performed a causal explanation, today's models are case-based "good enough" analytical tools.

The preemptive logic of prediction based on a set of cases is uncannily close to the lurker's knowledge. The lurker's knowledge is that of a locale rather than a generalizable or "objective" claim. It is based on a learning performance within the bounds of a particular media ecology (a data set, singular user, or set of tasks) and arises from cross-matching (correlations, evaluation of probability on a case-by-case basis). It is a private knowledge (that is case-based) that, in the case of building a profile, for instance, is correlated with other private knowledges (data on other persons) and, with models applied to it, produces conditionality and propositions about that case.

Let us consider the example of a widespread machine learning technology—a spam filter. In most general terms, a spam filter can be understood as a communication platform where multiple actors offer their insights. The features and combinations of these insights are dynamically weighted in terms of their importance and usefulness, with unique decisions being made on a personalized basis (one's own e-mail activity). Peter Flach (2012) introduces his textbook on machine learning with a discussion of SpamAssassin. SpamAssassin assigns a score to each e-mail; if a score is higher than a set percentage, the e-mail will be moved to the spam folder. Scores are assigned in relation to a number of different tests. Flach gives one example of an e-mail coming in as already flagged by the server that passed it on (the e-mail originates from a domain name that has too many consonants in a row). Such a warning is essentially one voice SpamAssassin takes into account, pushing the score into the spam range. It is not SpamAssassin that acts as an overall conductor for the chorus of voices of different tests. Machine learning comes in here to adapt the tests to the personal e-mailing character of the recipient individual and dynamically evaluates the tests with a view of improving (local) knowledge. As different voices pull in opposite directions, offering conflicting probabilities of the e-mail being spam, an expert knowledge figure would invariably fail in deciding what is spam for a particular user. As Flach (2012) puts it: "So, instead of manually crafting a small set of 'features' deemed relevant or predictive by an expert, we include a much larger set and let the classifier figure out which features are important, and in what combinations" (p. 9). Working on a case-by-case basis, rule-based classifiers (only one type of machine learning) assess the relevance of features and make personalized decisions. Such decisions, dynamically evaluated for usefulness at the local level, are the lurker's sagacious knowledge.

The cross-network of private knowledges does not produce a universal knowledge, the absolute knowledge of Enlightenment. None of the knowledges makes a claim to truth, and yet all together they are stitched and layered to work. Metanarratives no longer threaten us, but these stitched-together local knowledges are very far from Haraway's (1988) situated knowledges. Aggregates of good-enough inferences and predictions operate as calculations of possibility that are specific and local at the same time as they become multiple and global.

Not involved but performative in the distance, constative but only in a manner of probability, producing frameworks for own truth production through self-adjustment, learning algorithms are

automated lurkers on private paths of potentiality. Data wisdoms, rather than technical knowledges, are their arena. Local cases operating in terms of chance in a mode of speculation are their propositional grounds. As a global army, algorithmic modeling multiplicities derive their affectivity from close involvement and their interpretative power from the distance. The power of a lurker's mode of knowing, its poesis, and ethics are effectively employed in a unique aesthetics of contemporary power in data regimes: scaling up and down, zooming in and distancing, abstaining from claims of an objective and general character, yet relying on good-enough local generalizations that readily obtain universal status. A lurker therefore ceases to be a marginal figure and becomes a major mode of knowing and power that maps out, mobilizes, and recruits formulas of contemporary techniques of governance.

The biggest challenge that this condition makes clear is to assess how and why these computational local knowledges are stitched together. They do not readily form a patchwork quilt submissive to some overarching logic. Yet it feels that there is a new order of dominance being formed, grounded upon a framework of knowledge production divorced from the global, causal, objective knowledge claims of modernity. What kind of governance is formed through stitching these knowledges together? Can we unstitch and recast our own data condition? How is the lurker's cutting of the plane of immanence translated into new techniques of governance? The currently emerging stories about the deployment of data analytics and their interaction with populations through social media in the U.S. elections and the UK's referendum on the European Union show that these technical infrastructures effect a new kind of polity—one that learns from the customer relations management-based work of Obama's first victory (Pariser, Moveon.org, etc.) to build a more motile and aggressive system based around "information dominance" rather than communication. To trace and undo such systems, we need new forms of lurking.

Conclusion

In this article, I propose to use the concept of the conceptual persona to map features of a certain technical plane of immanence that, in this special issue, is called global digital culture. Specifically, I propose that the conceptual persona of the lurker can serve for such an exercise in mapping its coordinates or features. These features are not universals, but neither do they depend entirely on historical or national specificity or collective representations. I reflect on what Deleuze and Guattari propose as concepts, describe conceptual personae, and discuss how such conceptual personae can indeed act in what can be referred to as a global digital culture, but only if we conceive of it as a specific plane that is outside forms of absolutism or transcendence.

To deal with lurkers, companies such as Facebook are trying to create algorithms that would delete accounts with unusual patterns of activity. Only those who participate are thought of as capable of action: Action is associated with living ethically. Lurkers, instead, are still seen as either shady characters or as too close to the hacker problematic and too interested in the questions of rights and fights—for instance, for the neutrality of the protocol. Lurkers in the collective imagination are therefore stuck between being clumsy dummies and insightful but radical hackers.

However, as I have tried to demonstrate in this article, the specter of lurkers is productive of a mode of knowing that carries within itself a poesis and an ethics, which become characteristic of some of

today's technical thought and infrastructure of governance. An observer, a follower, an outsider, the lurker could offer an aesthetic performance of not posting on Twitter, except that it is now the infrastructure of the Twitter platform itself that has taken on her roles. Local ecologies of walled gardens of social networking sites are layered with, enhanced, expanded, and traded with other local sets of data, creating lurked composites that feed and update the governing machineries.

The conceptual persona of the lurker operates in and creates a plane of immanence, mapping out its coordinates and preparing it for the emergence of concepts, ways of being and living. The lurker maps the features of a new turn in the digital technology, a data culture, in which the generation of expression is preposited and solicited in the regime of calculation and anticipation. Cutting off this plane, the lurker signals a setting out of a series of technical conditionalities, each rooted in its own genealogy, but operative as an assemblage of power. What are the concepts whose arrival the lurker signals? Perhaps they are related to the new machinic logics in global data culture. Absolute while being relative, the lurker strings local digital cultures together, trying to make sense of labor, care, logic, observation, difference, nuance, and situatedness to harness, predict, and dwell in considerations that give rise to concepts informing today's modes of power.

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