

Autonomy of attention

Kaisa Kärki

Postdoctoral fellow, Practical philosophy, PL 24 (Unioninkatu 24), 00014 University of Helsinki,
kaisa.karki@helsinki.fi

Keywords

attention, manipulation, agency, freedom, attention economy, distraction, immersion, phubbing

Abstract

What precisely does a distraction threaten? An agent who spends an inordinate amount of time attending to her smartphone – what precisely is she lacking? I argue that whereas *agency of attention* is the agent's non-automatic decision-making on what she currently pays attention to, *autonomy of attention* is the agent, through her second-order desires, effectively interfering with her non-automatic decision-making on what she currently pays attention to. *Freedom of attention* is the agent's possibility to hold or switch her focus of attention without fixating on any specific focus against her will or without distraction from chosen foci. This conceptual work provides resources to track manipulations that diminish a person's freedom of attention.

1. Introduction

Our environment has become filled with electronic distractions of various kinds. Not only are we exposed to external distractions like pop-up advertisements, but we are also exposed to immersive digital experiences in games, news feeds, and music videos that aim to keep the focus of the user's attention engaged in the media for as long as possible. On social media sites, we are furthermore vulnerable to digital content that targets our vulnerabilities for addictive and compulsive behavior.

Legal scholars (e.g., Tran, 2016) and philosophers alike have started to discuss whether and how we should regulate digital medias that aim to grab, sustain, and immerse the attention of their users. For example, according to Castro & Pham (2020), the attention economy should be regulated just like any other industry that centers on habit forming and harm inducing products. In this paper, my aim is to find out *precisely* what it is that distractions and immersions from digital medias, and elsewhere,¹ threaten when it comes to the attention of agents. For example, an agent who spends an inordinate amount of time attending to her smartphone even though it is against her own goals² – what precisely is she lacking? What exactly does a distraction, or a state of immersion threaten, if anything?

In this paper I develop conceptual resources to answer these questions. I define an agent's *autonomy* of attention and distinguish it from her *freedom* of attention and from her *agency* of attention, which provides central resources for autonomy and freedom of attention. Moreover, I argue that to maintain freedom and autonomy of attention, *attention capital* is needed, by which I refer to the agent's understanding of the functioning of her attention, her appreciation of various attention-requiring tasks, her attention skills, and her motivation to develop and regulate her

¹ Even though I concentrate on digital media-induced manipulation of attention, the conceptual distinctions are applicable to distractions of all kinds – such as noise from a renovation outside – as well as to states of immersion that can be caused, for instance, by an intense non-digital game.

² This may be a paradigm case of phubbing, an incidence of the practice of snubbing conversational partners in favor of one's phone (Aagaard, Steninge & Zhang, 2021).

attention. This is because especially when attention is treated as a commodity,³ what is in jeopardy and commodified has to be somehow noticed, known, and valued, in order for it to be regulated according to the person's own values.

The questions of freedom and autonomy of attention are especially pressing because to be able to protect whatever it is that is threatened through regulation, it needs to be known what exactly is jeopardized. The distinctions made will be useful when defining the attention rights of citizens⁴, attention norms, and other ways to regulate the blooming attention markets – businesses that aim to grab, maintain, and immerse the attention of their users. They are also useful when developing the newly emerging field of *political philosophy of attention*. Furthermore, in this paper my aim is to contribute to the philosophical understanding of online manipulation⁵ in the context of an increasing variety of online attention manipulation.

2. Preliminary remarks

It can be debated what attention is metaphysically⁶ and I will not try to provide an answer here. I assume that attention *selects* something at the center of a person's cognitive processing and that it is a subject-level phenomenon of a kind. The subject, also called the agent, is a living (human) organism capable of self-reflective states. Selecting means directing, holding, or spreading the

³ Literature criticizing attention economy (e.g., Williams, 2018) has deemed that attention is treated as a commodity when the business model of a digital company is based on trackable user engagement.

⁴ Regulation to protect rights is one of the central grounds for regulation. According to Prosser, other central grounds are regulation for market choice, regulation for social solidarity, and regulation as deliberation (2010, p. 18).

⁵ Following Susser et al. (2019, pp. 2-3), I use the term online manipulation to talk about such manipulative practices that are enabled by a broad range of information technologies.

⁶ Whereas Allport (among others) has argued that attention should not be treated as a single mechanism (2011), Mole argues that it is what unifies consciousness to perform a task (2011), Watzl that it is a priority structure (2017), and Wu that it is the mechanism that selects actions (2014). It does not matter which view the reader endorses but the extent of the loss of agency and autonomy of attention has slightly different meaning on each view: in Watzl's view, the detrimental effects of losing one's priorities to something external to the agent herself is emphasized, whereas it follows from Wu's view that the agent's actions are governed by something other than the agent herself when she has lost her autonomy of attention.

center of the agent's cognitive resources to something at the expense of something else. The center can be narrow when totally located to one focus, such as the agent's own breathing, or it can be wide when spreading attention among a totality of different foci, for instance, when attending to a fast-paced auction as a whole. People can intentionally direct their attention – shift attention intentionally, sustain or hold it intentionally, spread it to diverse foci – which is often called endogenous attention. The attention of agents is also liable to be grabbed by salient stimuli; the loudest, most colorful, and the blinking stimulus – like an ambulance – is likely to grab anyone's attention. This unintentional capturing of the agent's attention by an external stimulus is often called exogenous attention. Attention *prioritizes* stimuli and it *binds* features like the color and texture of a stimulus together. The *effect* of attention is that what is attended to tends to become emphasized, whereas unattended things tend to lose emphasis. By distraction, in the following, I mean any stimulus that grabs the agent's attention involuntarily. Distraction can come from outside the agent – as in the case of a sound of a siren – or it can come from her own body – as in the case of a persistent migraine pain.

‘Agency’ here is the sum of the agent's non-automatic, intentional behavior.

Intentional behavior can be manifested in intentionally doing something, intentionally not doing something as well as doing something intentionally with others. Not all behavior of an agent is intentional, however. Much of it is automatic and not under the rational guidance of an agent. Here I assume that automatic behavior is behavior that starts by itself, cannot be stopped by the agent once it has started and is wild in relation to the available evidence – meaning that the agent cannot stop and re-direct the behavior even if there was evidence of it being dysfunctional. Automatic behavior in general does not require executive resources. In intentional behavior, however, executive cortical processes are present at some point relating to the agent's current action guidance, but they are not necessarily present all the time. This is because intentional behavior does not require constant

vigilance. In automatic behavior, executive processes are lacking or not directed to what the agent is doing.

‘Autonomy’ is a difficult notion. It can be used to refer to the agent’s *capability* of self-governance, to her actual self-governing *decision making* as well as to her *right* to make certain kinds of (self-governing) choices. To clarify, we can distinguish between three different notions of autonomy.

‘*Autonomy as a choice*’ refers to the agent’s actual manifestations of agency that are autonomous.

‘*Autonomy as an ability*’ refers to the agent’s capability to make autonomous choices which consists of, at least, some self-reflective (or metacognitive) capacities, the ability to make sure one’s behavior coheres with one’s values, some degree of self-restraint, and in the case of the autonomy of attention, some amount of attention capital.

‘*Autonomy as a right*’ refers to a collective agreement that protects either the agent’s possibility for autonomous decision making or the central abilities for autonomy.

It must be noted that using the notion of autonomy as an ability does not necessarily require the agent *uses* these capacities. For instance, when navigating among a wide array of stimuli in a hurry, the agent may not have time for autonomous choices on what to attend to even though her ability for autonomy is intact. This is because autonomous choices require some degree of undisturbed time for self-reflection and judgment. In very fast-paced decision-making situations there may not

be enough time for such heavy self-reflective processes, regardless of the agent's abilities for self-reflective decisions.

Many times, all three uses of 'autonomy' are relevant in the same situation. Being in an open office may threaten one's 'autonomy' as a right if the worker in question is meant to be able to concentrate on her work. Having to work in an open office may also threaten 'autonomy' as a choice if the number of distractions is such that the worker has no room for autonomous decision making – for instance, through being constantly bombarded by messages that require her to respond immediately. It may also threaten 'autonomy' as an ability if the agent in question is disposed to distracting stimuli to the extent that she *never* has room for self-reflection about long-term plans, values, or second-order desires. This distinction between will prove valuable later when demarcating between the various kinds of deficits in autonomy, freedom, and agency of attention.

This triad is not the only complication in the notion of autonomy. Enoch distinguishes autonomy as *non-alienation* from autonomy as *sovereignty* (2020). Autonomy as non-alienation means that a decision concerns the agent and is such that the relevant matter is determined by her values (the Watsonian picture of autonomy), or deep commitments, as Enoch calls them, including the perspective on her future self (the Bratmanian picture of autonomy) or second-order desires (the Frankfurtian picture of autonomy). Autonomy as sovereignty, on the other hand, means that the agent herself has “the last word regarding the relevant matter” (Enoch 2020, p. 162). Both aspects of autonomy are central to autonomy of attention. Thus, autonomous choice here includes autonomy understood as sovereignty because it emphasizes the *actual* choice of an agent. Paternalistic interventions by default threaten autonomous choices because they bypass the agent's actual choice, assuming to know what is best for her without consulting her.

Furthermore, autonomous choice here is a kind of choice that includes non-alienability in that the agent herself makes sure the choice coheres with her own values, long-term plans, or second-order desires. One benefit of this view of autonomous choices in including both sovereignty

and non-alienability is that it grants that the agent can self-reflectively adjust her values in the light of earlier choices and experiences. The value system and its coherence with actions is thus not assumed to be static but a matter of constant re-evaluation by the agent herself.

Enoch illustrates a person lacking in autonomy as someone who “stumbles onto a career rather than chooses one (not even in the retroactive, endorsing kind of way); someone who is forced into her relationships rather than chooses them; perhaps also the cult member who follows the leader’s extremely specific rules and regulations to the letter never second-guessing them” (2020, p. 162). Similar examples are easy to find from cases in which an agent’s autonomy of attention is missing. An inordinate smartphone user stumbles into another feed of amusing videos without stopping to notice that she is missing an important class. A worker in an open office is pleasantly interrupted by a talkative coworker missing several hours of concentration from her work. A student struggles with mathematics because she does not have access to a quiet room to study having been born into a family that was never able to value such facilities and tasks. In the following, I will answer systematically what is common to these cases and why this field of enquiry is important.

3. Autonomy or agency of attention?

First, I will show that a two-layered notion of autonomy and agency of attention is needed to detect the variety of things that can be threatened by distractions, immersions, and the manipulation of attention in general. The argument is that autonomy of attention should be distinguished from agency of attention because agentive attention is not necessarily autonomous – in cases like reward-seeking⁷ or avoidant attention. Both autonomy of attention and agency of attention seem to be able

⁷ Bhargava & Velasquez call rewards that vary in frequency and magnitude ‘intermittent variable rewards’ and present an extensive review of the ways in which digital platforms can create and reinforce reward-seeking behavior (2021, pp. 326-327). They point out that our understanding of the ways in which digital companies regulate rewards are not yet fully known and that there are probably mechanisms that are not well documented in the current literature.

to contain lapses in what Thomas Metzinger has call veto-control. First, I will take a closer look at Metzinger’s notions of mental autonomy and attentional agency. Then, I will present a distinction with modifications that is better suited for understanding the difference between agency and autonomy of attention, as I argue, because it allows that mind-wandering can be intentional and that reward-seeking and avoidant decision making is not necessarily autonomous.

For Metzinger (2018, p. 12), attentional agency is “the conscious experience of actually initiating a shift of attention, of controlling and maintaining attentional focus on a certain aspect of reality.” Attentional agency includes a sense of effort and a sense of having an experience of being the originator of shifts or stays in attention. For Metzinger, attentional agency requires the ability to control one’s focus of attention (2017). This ability is lacking in mind-wandering, non-lucid dreaming, sleep — but also, according to Metzinger, “in infancy, dementia, or severe intoxication syndromes” (2015, p. 274).

On the other hand, for Metzinger, mental autonomy is the ability to control one’s own mental functions, like attention, episodic memory, planning, concept formation, rational deliberation, and decision-making (2015). It includes the capacity to impose rules on one’s own mental behavior and to select goals for mental action, as well as the ability for rational guidance and intentional inhibition, suspension, or termination of an ongoing process (Metzinger, 2015, p. 271). For Metzinger, mind-wandering is an example of a lack in mental autonomy that results in non-voluntary mental behavior (2017). Veto-control, the ability to stop a mental process, is necessary for Metzinger’s mental autonomy. He says that “if you cannot terminate your very own activity, then you cannot be said to be autonomous in any interesting sense” (2015, p. 278). Mind-wandering episodes are examples of situations in which an agent does not have the capacity for autonomy because she cannot suspend or inhibit her own activity (2015, p. 278).

One problem with this distinction between mental autonomy and attentional agency is that if mental agency is defined by the presence of veto-control, agentive processes that involve

automaticity are not conceivable. Controlling mental episodes by becoming aware of what one's mind is doing is a description of a mental action *par excellence*⁸. However, mental action can include automatic processes, and often does. One example of such is a case of intentional brainstorming. The agent sets her mind to start brainstorming but much of what happens is not under her control, nor does it necessarily involve veto-control once the agent is immersed in brainstorming. As Irving (2016) has pointed out, mind-wandering episodes can also be intentional. Yet they do not necessarily include veto-control, because once the agent is immersed in a mind-wandering episode, she cannot necessarily stop it.

The presence of veto-control seems to be a too demanding condition for the entirety of manifestations in mental agency. Instead, some lapses in veto-control naturally coincide within an agent's intentional mental agency. If mental agency is defined by the presence of veto-control, intentional mind-wandering would not, for instance, be an exercise of mental agency.

Nor does a temporary lack in veto-control necessarily mean that mental autonomy is jeopardized. An autonomous agent can intentionally let her attention be immersed in uncontrolled processes such as mind-wandering, sleep, intoxication, and flow. For instance, an agent whose mind is wandering may be lacking in mental autonomy if she has involuntarily zoned out from listening to the lecture she was intending to attend. But intentional mind-wandering *can* cohere with the agent's long-term plans, with her values, with her second-order intentionality — most views of autonomy grant episodes of automatic behavior if they happen because the agent autonomously decided to let them happen. Self-governing agents intentionally evaluate and control both their agentive and their automatic processes. If all instances in which an agent's mental processes are automatic are seen as lapses in mental agency and mental autonomy, the scope of the concepts will be too narrow, as automaticity is a central part of many, if not most, intentional mental phenomena.

⁸ Intentionally directing one's attention is a prime example of a mental action (e.g., Levy 2016, p. 68).

Some manifestations of mental agency, however, are not autonomous in the sense implied by the notion of autonomous choice. Not every mental action of an agent coheres with her second-order desires, long-term plans, or her value system. To distinguish also that mental action can be reward-seeking, and autonomous choices are a subset of agentive choices, we can distinguish between autonomy and agency of attention. Thus,

Agency of attention is the agent's non-automatic decision-making on what she currently pays attention to.

Autonomy of attention is the agent, through her second-order desires, effectively interfering with her non-automatic decision-making on what she currently pays attention to.

An instantiation of agency of attention is, for instance, a situation in which an agent intentionally directs her attention away from a book she is reading to listening to someone speak. When the agent has agency of attention, she has some degree of veto-control over her attention at least at the beginning of an episode. She intentionally guides her attention by holding or switching its focus – after which the veto-control can intentionally be lapsed.

Autonomy of attention, however, requires something more. An example of autonomy of attention is a situation in which the agent self-reflectively decides not to direct her attention to a newsfeed in her smartphone because she does not consider it to be a valuable focus of her attention. Here she is in contact with her long-term plans, values, judgments, or second-order desires, self-reflectively regulating her attention according to what she thinks is important for her to pay attention to. Her agentive choice is not only about following her instant first-order desires to pay attention to something.

Agency of attention requires the agent to ask: *What am I paying attention to?*

Autonomy of attention requires the agent to ask herself: *What would be important for me to pay attention to?* Whereas agency of attention requires intentional states regarding attention, autonomy of attention requires intentional states regarding these intentional states. Distractions, immersions, compulsive and obsessive attentional behavior may interfere with agency of attention – when the agent is exogenously distracted by a loud voice or zoned out when involuntarily immersed in a fast-paced game – or they may threaten autonomy of attention by inducing, for instance, the agent’s reward-seeking agentive behavior. Consider again an agent spending an inordinate amount of her time on the smartphone. The agent’s first-order decision to attend to a smartphone is not enough to guarantee judgments regarding whether the behavior is according to her own *values* (or deep commitments).⁹

Autonomy of attention is central especially when regulating one’s own reward-seeking intentional behavior, as well as when regulating one’s compulsive or avoidant agentive behavior. A gambler can try to avoid casinos and the inordinate smartphone user can get rid of her phone to act more autonomously. Let me further illustrate this distinction.

The attention zombie is an agent who suffers from a complete lack of agency of attention.

⁹ Socialized notions of autonomy are not incompatible with what is argued here about autonomy of attention. Perhaps the agent never chooses her own values without the influence of the community around her. This is precisely what makes deep oppression cases, discussed in more detail in part 4, difficult because they do not display a deficit in autonomous choices. In deep oppression regarding autonomy of attention, for instance, following her friend’s example, the agent may have redefined her values so that they allow her to spend excessive amounts of her time attending to the smartphone. Something is wrong in cases of this kind, however, and it is partly due to the community in question to determine what that something is. In deep oppression regarding autonomy of attention, moral intuitions and reactive attitudes of other people provide feedback as to something being wrong. In any case, here it is assumed that autonomy of attention is a relative notion – autonomy is always a matter of degree not only because of the laboriousness of autonomous processes, but also because deep oppression is insidious.

The attention wanton is an agent who suffers from a complete lack of effective second-order desires regarding her attention.

The attention zombie is someone who completely lacks agency when it comes to her attention. She cannot intentionally direct her attention. Her attention is always grabbed exogenously by the most salient stimulus left there until the next salient stimulus grabs it. She has no voluntary guidance of attention.

The attention wanton, on the other hand, has agentic attention but does not have effective second-order desires, values, or self-reflective guidance related to her future self. She lets her attention be guided by, for instance, what she predicts is the most pleasurable stimuli, always following her first-order desires on what to attend to. Even though she *can* guide her attention away from a stimulus, she does not reflect about whether her attentional behavior coheres with her values, whether it is important to her in the future, nor does she plan what she pays attention to according to what she thinks is important. Even though she has attentional agency, her attention is very easily controlled by her own reward-seeking behavior, and through it, by others who know how to control the reward-seeking behavior of others. What the attention wanton is lacking is autonomy of attention, the choices made about what is of value to her in regulating her attention.

4. Intentional and spontaneous processes

The interplay of automatic and intentional processes seems to be central in accounting for the difference between agency and autonomy of attention. The difference is further illustrated in these hypothetical cases.

The perfect attention agent is an agent who has no automatic processes regarding her attention.

The perfectly autonomous attention agent is an agent who only reflects on her regulation of and the specific focus of her attention to the extent that actually acting on this reflection is halted.

Perfect agency over one's attention would mean complete lack of involuntary automatic processes in attention. An agent without automatic attentional processes would not, for instance, automatically turn to look at a person who walks into a room, nor would she be disrupted by an explosion outside the building against her will. She would have total agentive veto-control of her attention at every moment.

The problem with this hypothetical agent is that she can hardly be a living organism. An agent lacking in spontaneous thought does not have features that are necessary for humans; for instance, creative thinking would be impossible without the spontaneous processes involved, and without the correct interplay between intentional and automatic processes. The perfect attention agent's attention is never grabbed by a daydream, she never lets her mind wander, associates freely, loses her train of thought, or has mental states of laziness and effortlessness.

Perfectly autonomous attention is equally inconceivable for a human being. An agent with perfect autonomy over her attention would need to spend such an excessive amount of time evaluating how her attention is directed and whether it coheres with her values – as well as reflecting on what those values are in the first place – that she would be nearly incapacitated from actual decision making and action.

Living human agents necessarily have lapses in veto-control and our definitions of agency and autonomy should recognize it. An agent who has lost someone close cannot guide her

attention away from the loss. The affective content of sorrow brings her attention back to the loss, but we would not say that she has entirely lost her autonomy of attention — at least her personal autonomy may be intact. Affective states undermine freedom of attention, which can undermine autonomy as well. Moreover, even the most autonomous agent's attention is captured by the most salient stimulus. To be an agent, and to be autonomous, is to have affective states and automatic states interfering with goal-oriented agentic behaviors. To be autonomous is to fail at times. This is because agents do not have total freedom of attention.

The interplay between the environment's incoming stimuli, mental states of the agent, and moments of self-awareness about those states constantly changes. Autonomy of attention manifests as continuous decision making about what, and by whom, the agent wants her attention to be guided. But to have freedom of attention, the agent must also be free to govern her internal states to some extent and to create such environments that support her desired focus of attention.

5. Autonomy or freedom?

Next, I will define freedom of attention and show that it can be distinguished from both agency and autonomy of attention.

Freedom of attention is the agent's possibility to hold or switch her focus of attention without fixating on any specific focus against her will or without forced or manipulated distraction from chosen foci.

Freedom of attention is the actual possibility of sustaining or switching the focus of attention without involuntary inner or outer constraints. By freedom of attention, I mean an agent's lack of internal or external constraints, obstacles or barriers that limit where and for how long she can

direct her attention – not including constraints that arise out of merely being an agent, such as not being able to focus for 48 hours in one sitting. This concept of freedom is essentially negative meaning that freedom is seen as being limited by external constraints¹⁰ instead of being necessarily a deficiency in autonomy of the agent, but the conceptual distinctions made could allow us to define a positive conception of freedom of attention as well. An agent being free to concentrate without forced distraction is a prime example of a triadic relation between the agent, the outside stimulus, and what she wants to do.

Freedom of attention can be diminished without threatening an agent's autonomous choice over her attention. An agent can be fully autonomous without still being fully free because a lack of freedom may follow from a lack of power, or a lack of resources in regulating one's own attentional environments. An agent, who has full autonomy over her attention, but who is working at a jail with constant disruption is an example of such a case. Power to be able to pay attention to something is a different matter than whether an agent is making value-based choices on what she wants to pay attention to. Attention capital deficits, and other cases of deep oppression, however, are situations in which the agent is lacking in freedom of attention through a deficit in autonomous decisions about her attention.

It must be noted that an external distracting stimulus is not necessarily a threat to freedom of attention. A ruminator, for instance, may be freed from her own unwanted automatic processes when she is distracted by a sound from outside. Autonomy of attention can manifest in the agent designing her stimulus environments in a way that support her goals in routinely distracting herself from rumination. Moreover, rumination is just one example of a deficit in freedom of attention. Another is an exterior renovation of a building. As well, a noisy open office may affect the agent's freedom of attention; even if she had complete mastery over her agency and

¹⁰ I assume that freedom of attention can be limited without any *person* being responsible for diminishing the agent's possibilities for attention guidance – as it is limited in the case of disruptive thoughts, for instance.

autonomy of attention, being alive makes it impossible to avoid all external distractions unless the agent has power over the stimuli in her environment. Even the most autonomous agent is not necessarily free because she may not have the resources to fully govern her stimulus environments¹¹. Let us consider the following cases.

The inordinate mind-wanderer spends excessive amounts of time automatically mind-wandering.

The inordinate smartphone user spends excessive amounts of time with reward-seeking attention, agentively guided by anticipated yet unpredictable rewards from digital medias.

Always on call is an agent whose attention is always available for others.

The inordinate mind-wanderer suffers from a lack in agency of attention because she has excessive amounts of automatic thought that are not intentionally initiated or sustained. She does not display actual choices on what she pays attention to because she does not stop to think about what she is currently paying attention to and for how long.

The inordinate smartphone user, however, suffers from a lack in autonomy of attention without a lack in agency of attention because she is actually making small decisions about what to click on. She has agency of attention when she is not completely immersed in digital content, but

¹¹ Whereas autonomy of attention seems to have degrees, so does freedom of attention. Freedom of alive agents should not be approached as a binary construct – cases of addiction show this especially well because if an action is very difficult for the agent, it is very near being impossible thus limiting her freedom to do something (Côté, 2020). In this way of approaching freedom, it can be seen how reward-seeking behavior may be freedom-limiting, without necessarily making acting otherwise impossible.

she does not stop to think about whether her agentic and automatic behavior coheres with her values, future goals, or second-order desires.

An agent who is always on call is someone whose attention is always available to others. Her role may be, for example, to observe several chat channels and immediately answer all incoming messages. She may have a deficiency in autonomy of attention if she has given up her own goals when following first-order desires to answer others. She may, for instance, be following a norm that a good friend is always available, and the norm¹² in question is harming her autonomy of attention because it is preventing her from even thinking about her set of values and long-term goals and how they cohere with her actual behavior.

6. Abilities needed: Mindfulness and attention capital

What Metzinger has called veto-control is an ability to stop an attentional process. To be able to have such control, one needs to be able to observe one's own attentional processes. This is because when an agent's attention is completely immersed, she does not have moments that would grant her to opportunity to decide what to pay attention to. What is lacking when a person is completely immersed is what Latham has called 'mindfulness,' the act of noticing the mental states that occupy the focus of one's consciousness (2016).¹³ How we guide attentional processes seems to be based, at least on some extent, on mindfulness.¹⁴

¹² Here I assume that attention norms are collective agreements that regulate how and to what people should pay attention to and what should be ignored.

¹³ According to Latham, "S is mindful of the mental state at the focus of her consciousness at *t* iff she has the higher-order thought at *t* that she is experiencing this lower-order mental state now" (2016, p. 1792). In many definitions of mindfulness, a non-judgmental evaluative stance is also necessary, which Latham does point out (2016, p. 1794). The non-judgmental nature is central to many mindfulness practices, and it probably has a role in the beneficial effects of mindfulness meditation. Here the notion of mindfulness is more limited one, merely pointing out the connection of attentionally agentic phenomena in noticing mental states.

¹⁴ Latham, among others, has argued that the control of mental states is based on our ability to be mindful.

Autonomy of attention, however, can manifest both through internal as well as external sources of mental control. The attentionally autonomous agent can regulate her attention not only through acts of mindfulness but also through designing her environments and intentionally developing her mindfulness skills. Autonomy of attention furthermore requires the ability to observe how one's attention works in different settings and the ability to observe one's own regulation of attention. Some understanding of how attention works seems to be needed, as well an appreciation of the value of sustained attention-requiring tasks. Let us call this set of abilities and values attention capital.

Attention capital is the agent's understanding of the nature of attention, her appreciation of the value of various attention-requiring tasks, her set of attention skills, her surrounding environments and practices that support her execution of attention-requiring tasks, as well as her ability and motivation to develop and regulate them.

Attention capital is necessary for autonomy of attention because whenever there is an abundance of stimuli around the agent, the agent needs to regulate her environments so that she can concentrate on a given task. When it comes to attention, to induce the desired automatic or agentic attentional behavior, the regulation of environments is central¹⁵. Without any knowledge of how attention works it is difficult to govern one's environments independently in a way that supports a variety of attention-requiring tasks. Without appreciating the value of sustained attention-requiring tasks, for example, it is impossible to design suitable environments for tasks that require sustained attention. This is because environments that include many distractions are heavy for working memory

¹⁵ Attention capital need not only concern individual agents. It can be inherited from a workplace, a school, or a family. It can be developed independently; agents can have attention capital as well as communities.

resources. The agent who wants to succeed in solving tricky mathematical problems but allows herself to be distracted every 30 seconds is thus limited by her lack in attention capital.

Agents with attention capital have the potential to change stimulus environments so that they better support their goals. The inordinate smartphone user with attention capital can get rid of her smartphone to be able to concentrate on her work. A person who does not value sustained attention-requiring tasks or does not know about what kind of environments are conducive to such tasks, cannot succeed in them optimally – regardless of her agency of attention. Thus, attention capital seems to be necessary for autonomy of attention, especially whenever the agent meets challenging stimulus environments which can happen, for instance, when digital companies are competing for her attentional faculties.

7. Three levels of freedom-deficit

Next, I will show how the conceptual work done helps us to understand deficits in freedom of attention. By manipulation¹⁶, I mean deliberate influence¹⁷ on another agent's behavior that bypasses her own decisions regardless of whether the decisions are reflective. If we look at the nature of agentic choices, it is apparent that not all decisions are very reflective, which is why I have clarified the distinction between autonomy and agency of attention. Coercion here just means deliberate influence that does not bypass the agent's decision making, but that makes choosing

¹⁶ There is some controversy on the definition of manipulation, especially when using it in online contexts. In these contexts, it has been debated whether an algorithm, or an artificial intelligence, instead of a person, may be manipulative. There is also disagreement on whether intent is necessary for manipulation and on whether the intent needs to be malevolent to account as manipulation. Susser et al. (2019, p. 3) think that manipulation exploits the victim's vulnerabilities in steering her behavior toward the ends of the manipulator. Buss thinks that manipulation interferes with self-governing activity – making up one's own mind about how to act (2005).

¹⁷ Following Susser et al. (2019), manipulation is a hidden form of influence, covert subversion of another person's decision-making.

otherwise hard or impossible for the agent. Someone who is being intimidated, being threatened, for instance, with a gun to do something, is coerced instead of manipulated.

Here manipulation of a person's attention amounts to a deficiency in freedom of attention – regardless of whether the deficiency in question was intended by another person. In the case of distractions, even very minor negative effects such as losing one's train of thought while preparing a speech, can be regarded as freedom-deficits. Then, different levels of how an agent may suffer from a deficit in freedom of attention due to manipulation can be categorized (see Table 1.) according to whether the agent's decisions are bypassed completely (as in the case of manipulating her automatic processes), whether someone coerces her agentic processes by inducing agentic attentional behavior, or whether someone appeals to her at the level of autonomous processes by affecting her deep commitments, or by making heavy autonomous decision-making impossible through constant disruption.

We can distinguish between alternative ways – be it coercion or manipulation – that diminish the agent's freedom of attention on three levels¹⁸. Firstly, one can diminish an agent's freedom of attention by affecting her automatic attentional processes through guiding it by immersing, nudging, salience-based manipulation or priming. Secondly, agentic processes can be affected by diminishing an agent's mindfulness¹⁹, inducing reward-seeking behavior, nudging (if it contains an actual decision), or by intimidating the agent to do something. Thirdly, autonomous processes can be affected by creating ideals and norms, by making something ubiquitous²⁰ –

¹⁸ This framework can be used to provide an answer as to when and how precisely attention manipulation evades an agent's decisions or whether an influence on a person's attention merely coerces her to pay attention to something. A fine-grained analysis of attention manipulation provides a nuanced picture for finding out whether, and when, specific manipulations of attention are wrong. For instance, it makes it possible to address specific normative questions such as, when precisely an immersion of attention is harmful, or whether mindfulness skills should be taught to everyone.

¹⁹ If we accept that some degree of mindfulness is necessary for agentic choices regarding one's mental states, reducing mindfulness could happen through intoxicating an agent, or depriving him of education to learn how to be mindful.

²⁰ Ubiquitous computing could bring attention manipulation to a level that cannot be escaped. This can happen through the Internet of Things, for instance. In Weber and Weber (2010), the Internet of Things is

something the agent cannot even fathom living without – and through diminishing another person’s attention capital. Constant disruption disturbs freedom of attention through autonomy of attention because it threatens the faculties of deep and slow decision making that are necessary for autonomous decisions.

Examples of automatic processes in which an agent is lacking freedom of attention are rumination and disruptive thoughts. Through salience-based disruptions the agent can be manipulated to pay attention to something. This is more likely when the agent is lacking in mindfulness or lacking in attention capital in that she may not notice anything is lost when she loses focus on something.

Freedom of attention deficits through a lack in autonomy of attention are cases in which an agent holds autonomy-decreasing ideals or norms. Moreover, the whole faculty of

Table 1. Different levels of freedom-deficit

Automatic processes	Agentive processes	Autonomous processes
Priming	Intimidation	Ideal
Nudging	Nudging (if it contains a decision)	Ubiquitous distraction
Immersing	Reward-seeking agentive behavior	Attention capital -deficit
Salience		Constant disruption
Lack of mindfulness		

autonomy of attention can be deficient when the environment of an agent is completely governed by distractions. For instance, an agent cannot question attending to a specific website when she is on

“the backbone of ubiquitous computing”, that enables smart environments to recognize and identify objects and retrieve information from the Internet to their adaptive use.

the Internet all the time anyway. Another example of what could be seen as a deep oppression case is when an agent has embraced an ideal of a modern worker who is always on call and starts to manifest this ideal in her life. Freedom of attention is also lacking through a deficit in autonomy of attention when the agent has little attention capital. It can also be diminished when she does not have sufficient number of undisturbed moments for autonomous decision making in the first place.

This framework of freedom-deficits also gives us keys to understanding how we can empower agents in attentionally demanding environments. Teaching mindfulness may increase freedom of attention through increasing moments that make agency of attention possible. Transmitting attention capital empowers agents through increasing autonomy of attention. Creating spaces that include no salience-based manipulations, priming or immersing of agents grants freedom of attention through non-interference in governing the agent's automatic process. Creating spaces that include no disruptions grants an opportunity for slow autonomous decision-making. Informing people about their attention rights would also make them more resilient to defending their freedom of attention but the rights themselves are yet to be defined.

8. Conclusion

The distinctions that have been made are useful when developing the attention rights of citizens, because when developing regulation to protect whatever it is that is jeopardized, it needs to be known what that something is²¹. The idea of basic rights is to protect something that is collectively

²¹ Following Bennett Moses (2017), I assume that new technologies can generate new risks and harms which create a need for regulation to protect the rights of the parties that have been harmed. They can also create concern over social solidarity, which creates the need for regulation to ensure adequate inclusion (Bennett Moses, 2017, p. 578). The notion of attention capital suggests that there are questions of equality related to how resilient a person, or a group of people, is to resist their attention being manipulated. According to Bennett Moses, new technologies also create pressures for proper democratic deliberation over their design (2017, p. 583). So that this kind of democratic deliberation would be possible, a full account of the threats in question is needed. Thus, a more detailed analysis of the variety of ways to influence a person's attention is useful so that it could be collectively decided whether it should be allowed, and when.

perceived to be of value. The personal autonomy of agents is usually perceived to be an important value, but autonomy of attention is also something our moral intuitions seem to be able to recognize. Workers whose productivity is based on long bouts of sustained attention, for instance, should be able to work in areas in which this kind of concentration is possible. Children trying to learn mathematical skills in the presence of constantly attention grabbing, addictive, and immersive digital medias may need environments in which their attention rights are protected so that their autonomy of attention could develop in the first place and so that their slow and laborious autonomous decision-making concerning attention could be protected when it is relevant.

Losing autonomy or agency of attention is difficult to talk about, partly because it often goes unnoticed. When we immerse ourselves in an endless feed of news, we barely notice what else we would like to do, or that we are immersed in the first place. Different stimulus environments pose different kinds of threats to freedom, agency, and autonomy of attention. Attention grabbing, immersive, and addictive digital medias can pose a threat to freedom of attention especially when the business logic of digital companies is based on successfully manipulating the attention of their users. But to develop regulation for this newly emerging field through norms and laws, it needs to be known what is that elusive, nearly unnoticeable thing that we are about to lose, or that we have already lost.

Acknowledgement

I would like to thank Michael Laakasuo, Tuukka Kaidesoja, Tarna Kannisto, Tuomo Käkelä, Jyri Vartiainen, and Sebastian Watzl for comments on a draft of this paper. I also thank audiences at Theoretical Philosophy at the University of Helsinki, at Practical Philosophy at the University of Gothenburg, at SPP 2021, at ESPP 2021, at the Oslo Mind Group, at Tennessee Value and Agency Online Conference 2021, at the 72nd Annual Northwest Philosophy Conference, at Georgia Online

Workshop on Philosophical Perspectives on Rights, Obligations, and Freedom, at the Future of Feminist Philosophy Workshop at the University of Tilburg, and at PT-AI 2021 in Gothenburg.

References

- Aagaard, J., Steninge, e., & Zhang, Y. (2021). On the hermeneutics of screen time. A qualitative case study of phubbing. *AI & Society*. doi:10.1007/s00146-021-01223-y
- Allport, A. (2011). Attention and integration. In C. Mole, D. Smithies & W. Wu (Eds.), *Attention: Philosophical and psychological essays* (pp. 24-59). New York: Oxford University Press.
- Bennett Moses, L. (2017). Regulating in the face of sociotechnological change. In R. Brownsword, E. Scotford & K. Yeung (Eds.), *The Oxford handbook of law, regulation, and technology* (pp. 573-96). Oxford: Oxford University Press.
- Bhargava, V. R., & Velasquez, M. (2021). Ethics of the attention economy: The problem of social media addiction. *Business Ethics Quarterly*, 31(3), 321-359. doi:10.1017/beq.2020.32
- Buss, S. (2005). Valuing autonomy and respecting persons: Manipulation, seduction, and the Basis of Moral Constraints. *Ethics*, 115, 195-235. doi:10.1086/426304
- Castro, C. & Pham, A. K. (2020). Is the attention economy noxious? *Philosopher's Imprint*, 20 (7), 1-13.
- Côté, N. (2020). Weakness of will and the measurement of freedom. *Ethics*, 130, 384-414. doi: 10.1086/707214
- Enoch, D. (2020). False consciousness for liberals, part I: Consent, autonomy and adaptive preferences. *The Philosophical Review*, 129: 159-210. doi:10.2139/ssrn.3580987
- Irving, Z. C. (2016). Mind-wandering is unguided attention: Accounting for the “purposeful” wanderer.” *Philosophical Studies*, 173(2), 547-571.

- Latham, N. (2016). Meditation and self-control. *Philosophical Studies*, 173(7), 1779–1798.
- Levy, Y. (2016). Action unified. *The Philosophical Quarterly*, 66 (262), 65-83.
doi:10.1093/pq/pqv056
- Metzinger, T. (2013). The myth of cognitive agency: Subpersonal thinking as a cyclically recurring loss of mental autonomy. *Frontiers in Psychology* 4, 1-19.
doi:10.3389/fpsyg.2013.00931
- Metzinger, T. (2015). M-Autonomy. *Journal of Consciousness Studies* 22(11-12), 270-302.
- Metzinger, T. (2017). The problem of mental action. Predictive control without sensory sheets. In T. Metzinger & W. Wiese (Eds.), *Philosophy and predictive processing: 19* (pp.1-26.)
Frankfurt am Main: MIND Group.
- Metzinger, T. (2018). Why is mind wandering interesting for philosophers? In K.C.R. Fox & K. Christoff (Eds.), *The Oxford handbook of spontaneous thought: Mind-wandering, creativity, dreaming, and clinical conditions*. New York: Oxford University Press.
doi: 10.1093/oxfordhb/9780190464745.013.32
- Mole, C. (2011). *Attention is cognitive unison: An essay in philosophical psychology*. Oxford: Oxford University Press.
- Prosser, T. (2010). *The regulatory enterprise: Government, regulation, and legitimacy*. Oxford: Oxford University Press.
- Susser, D., Roessler, B., & Nissenbaum, H. (2019). Online manipulation: Hidden influences in a digital world. *Georgetown Technology Review* 1, 1-45. doi:10.2139/ssrn.3306006
- Tran, J. L. (2016). The right to attention. *Indiana Law Journal* 91(3), 1023-62.
- Watzl, S. (2017). *Structuring mind: The nature of attention and how it shapes consciousness*. Oxford: Oxford University Press.
- Weber, R. H., & Weber R. (2010). *Internet of things: Legal perspectives*. Berlin: Springer

Williams, J. (2018). *Stand out of our light: Freedom and resistance in the attention economy*.

Cambridge: Cambridge University Press.

Wu, W. (2014). *Attention*. New York: Routledge.