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... the human-built world is not, in fact, built for humans. And, of course, this is to say nothing of what the human-built world has meant for the non-human world. What's more, it may be paradoxically the case that the human-built world will prove finally inhospitable to human beings precisely to the degree that it was built for humans without regard for humanity's continuity with the other animals and the world we inhabit together.

L.M. Sacasas¹

here was a moment in the technological disenchantment unfolding over the last decade when designers of our largest social media platforms expressed regret over the "addictive feedback loops" that their features created.² These technologies and their algorithms are shaping us in service of platform owners' objectives into an image we increasingly do not recognize—we are, ourselves, at stake.

The promise of protocols over platforms is that they could give us greater control over our content, communities, and ultimately our lives. But, like technology, protocols are no less susceptible in their design to the perils of technological platforms, for they have characteristics that mediate between us and our environments, affecting our ability to create ourselves and the world. This means that if we do not start with a strong conception of what we and the world ought to be, we risk succumbing to designs that reward short-term payoffs or are dic-

 "The Human-Built World Is Not Built For Humans." theconvivialsociety.substack.com/p/ the-human-built-world-is-not-built
 Paul Lewis, "'Our minds can be hijacked': tated by those who stand to profit from our attention.

To build a world hospitable to us, that is for us, is to build a world that nurtures and encourages human flourishing. Flourishing is the capacity to develop the aspects of our being that are our most distinctive to humanity: the capacity to self-make, cultivate our character, develop rationality, and realize wisdom. When we misunderstand our nature, we build false worlds on vast scales and end up remaking ourselves in order to fit them. As we build ever more protocols to meet problems in the world beyond our existing institutions and systems, we must consider their effect on our pursuit of flourishing. In mediating between us and our environments, protocols co-constitute reality with us and encourage or impede our flourishing. To create a world in which we are not alienated from ourselves, we need to first properly understand what we are, and then how the objects, artifacts, and technologies we interact with ultimately affect us.

What is a protocol?

I adopt the following definition:

a protocol is a set of explicit or implicit rules or procedures intended to govern, guide, or influence behaviour in a way that allows the emergence or construction of coordinated behavior.

Though some may take a narrower, harder view of protocols as relating primarily to networks and codified rules, I consider that protocols can also be applied to a wider range of social and economic systems. The hard/soft and atomic/systemic axes put forward by Venkatesh Rao et al.⁵ form a useful starting point for beginning to categorize protocols and place them on a spectrum, and it may be that the application of the

^{2.} Paul Lewis, "'Our minds can be hijacked': the tech insiders who fear a smartphone dysphoria," *The Guardian* (6 October 2017). www. theguardian.com/technology/2017/oct/05/smartphone-addiction-silicon-valley-dystopia

Mike Masnick, "Protocols, Not Platforms: A
 Technological Approach to Free Speech," Knight First
 Amendment Institute at Columbia University (1 August
 2019). knightcolumbia.org/content/protocols-notplatforms-a-technological-approach-to-free-speech

^{4.} Venkatesh Rao, Tim Beiko, Danny Ryan, Josh Stark, Trent Van Epps, Bastian Aue, "The Unreasonable Sufficiency of Protocols" (6 March 2023). summerofprotocols.com/research/module-two/the-unreasonable-sufficiency-of-protocols

^{5.} Rao et al.

ideas in this essay will find different modes of expression when applied to different kinds of protocols, depending on how hard, soft, atomic, or systemic they are.

Noting that this essay concerns flourishing from the perspective of humans, protocols that directly govern the behaviors of machines may not be as relevant and may only come into play to the extent that they create new opportunities for people to act. For example, network protocols governing the transmission of data apply primarily to machines, but they allow us to create and use the internet.

On flourishing

A world built for us is a world in which humans can and are encouraged to flourish. To flourish is to actualize what makes humans distinct. We are self-making—unlike other creatures, we are able to overcome self-deception, cultivate our character to come into closer contact with reality, realize wisdom, and self-transcend. The capacity to do this is the distinctively human capacity of rationality, the development of which allows us to then develop wisdom. Wisdom involves the "self-transformation of cognitive processing that enhances the quality of life in some comprehensive manner." This is, in other words, the picture of flourishing. Flourishing depends on these capacities—to build a world for humans is to build a world that creates the conditions that allow people to develop rationality and wisdom and to pursue self-transcendence in a way that enhances their quality of life.

 John Vervaeke, "Awakening from the Meaning Crisis 06: Aristotle, Kant, and Evolution" (23 February 2019). www.youtube.com/watch?v=A_gH5VIZOOQ

Because this cognitive development is greatly influenced by one's environment, the choices that go into building a world are moral choices. We *ought* to build worlds that permit and encourage us to express our distinctiveness, to become as human as we can be. The more we develop our rationality, the more we are able to build worlds suited to that development; the more conducive our environments are to developing our capacity for rationality, the better we are able to pursue and achieve flourishing. This is an upward spiral, where each encourages the other in a pattern of reciprocal growth—and it is a process that can easily turn into a downward spiral where we build worlds without regard for our essential humanness. This is not to say that to focus on human flourishing is to create an anthropocentric world for humans and humans alone. Human flourishing relies on close contact with reality, and this reality necessarily involves the environment into which one is thrown: into nature, alongside other creatures, subject to physical laws, and on planet Earth. In order to develop rationality and wisdom, we need at least:

- sufficient order—this allows us to take actions beyond survival and creates space for us to act and reflect, train and rewire our processes and intuitions in order to appropriately respond to and act in the face of the changing demands of our environments;
- self-knowledge—going beyond factual knowledge, this is the ability to know through self-reflection how we perceive and participate in the world, such that we can change how we act in the world;
- attunement of attention—attention is "the manner in which our consciousness is disposed towards whatever else exists... it renders the world what it is." Aspects of the world can only be real for us if we can attend to them and the construction of our reality and framing of the world is

^{7.} John Vervaeke and Leonardo Ferraro, "Relevance, Meaning and the Cognitive Science of Wisdom," in *The Scientific Study of Personal Wisdom: From Contemplative Traditions to Neuroscience* (Dordrecht: Springer, 2013), based on final version made available on ResearchGate at p. 1: www.researchgate.net/profile/John-Vervaeke/publication/286508333_Relevance_Meaning_and_the_Cognitive_Science_of_Wisdom/links/58f529df458515ff23b56743/Relevance_Meaning-and-the-Cognitive-Science-of-Wisdom.pdf

^{8.} Iain McGilchrist, *The Matter with Things: Our Brains, Our Delusions and the Unmaking of the World* (London: Perspectiva Press, 2021).

- directed by our attention. If this reality is skewed, our cognitive processes are inhibited and we are susceptible to illusions and self-deceptions; and
- insight—this insight pierces through illusion and glimpses the world as it is, and it arises through the ability to flexibly reframe the world. Insight is fundamental to honing rationality and achieving wisdom because it is the method by which we see through our narratives and self-deceptions.

The design and structures of our worlds can encourage the development of rationality and wisdom. In The Timeless Way of Building, Christopher Alexander argues that patterns in architecture and the urban organization have a "quality without a name" that makes a house, a street, a town more or less "alive." We perceive a place as alive when it is structured or organized to allow congruence within us—this congruence is the capacity to align us with our biological reality and natural desires, allowing those forces to move freely. 10 I see Alexander's concept of aliveness as being akin to flourishing—a world built in a way that generates aliveness is a world built for us. And, similarly, our systems, platforms, and protocols can be designed, arranged, and implemented in such a way as to encourage this aliveness and flourishing.

Protocols and world

As our patterns, systems, and structures that construct the world have a direct

9. Vervaeke and Ferraro, p. 7.

impact on our flourishing, so too do our protocols. Protocols play an essential role in constituting both the world and our selves. Postphenomenological thinkers such as Peter-Paul Verbeek argue that artifacts and technologies *mediate* between humans and world—they actively shape the ways in which we can be present in the world and the ways in which the world presents reality to us. 11 Postphenomenology draws on James Gibson's concept of "affordances" to explain how technology affects our world. The affordances of an artifact or environment are what it offers for an agent to do with it. In a design context, this refers to the relationship between the *properties* of an object and the capabilities of an agent that determine how the agent can use that object. A door with no handle allows me to push it but not to pull it open. The characteristics of an object affect what the agent can do with the object, and that affects what the agent can do in the environment.

Therefore, objects are not neutral intermediaries between us and the world. Rather, they actively shape our relationship with the world—they mediate. The actions or states that an object allows or discourages is the reality that the object mediates for its user. 12 This occurs through the ongoing construction of perception, what we think we can do with an object, and action, what we can actually do with the object. Perception and action allow the user and the object to co-constitute a new reality and shape how we live in the world. Perception defines action, and action shapes perception. This mediation constructs a part of our reality and our being in the world. In doing so, it necessarily has an effect on our ability to develop rationality and pursue flourishing.

Like technologies, protocols perform this mediating function between participants and the world. Protocols have

^{10.} For example, a room is more alive when it is well-lit by sun and is designed so that we can be comfortably in the sunlight. When we are in a room for any length of time, Alexander describes two "forces" acting upon us: our tendency to go towards the light and the desire to be comfortable. The pattern of having a window place, he argues, allows us to come to life because we can resolve these two forces and have them moving freely within us. By contrast, a room where the windows are mere holes in the walls set up a conflict between these two forces that cannot be resolved—consequently, the room feels less alive. Christopher Alexander, *The Timeless Way of Building* (New York: Oxford University Press, 1979), p. 48.

^{11.} Peter-Paul Verbeek, What Things Do: Philosophical Reflections on Technology, Agency, and Design, trans. Robert P. Crease (University Park, Penn.: Pennsylvania State University Press, 2005), p. 114.

Laurence Diver, "Law as a User: Design, Affordance, and the Technological Mediation of Norms" (2018) 15:1 SCRIPTed 4. script-ed.org/?p=3534

characteristics that encourage or discourage certain actions or modes, which then either enable or restrict the capacity of its participants to pursue flourishing.

As a result of these characteristics, participants in protocols are encouraged to develop certain modes of being that can foster or impede their ability to pursue flourishing and, therefore, those protocols possess an inalienable moral dimension. Through this mediation, protocols impact human flourishing. I explore how this is is facilitated through the following characteristics:

- stability—protocols must be stable to exist and dictate action and protocols create stability by setting out steps for action;
- constraint—protocols restrict the actions that participants can take to the those set out by the protocol and constrain the options open to participants;
- legitimacy—in telling participants how they should act, protocols act as a source of authority and legitimacy as a guide for action; and
- narrativity—protocol design arises out
 of a perception of how the world is and
 assumptions about the best way to navi gate that world through following proto col; in turn, the way in which protocols
 allow or constrain action shapes partici pants' perceptions of their environment.

As a result of those characteristics, protocol participants:

- have increased agency in being able to act in certain ways and perceive insights due to sufficient certainty and order;
- are constrained in action and encouraged to conform;
- may be inclined to disclaim responsibility for actions; and
- have the world revealed to them in a particular way by the protocol.

Stability

In establishing order and certainty, stability affords different levels of individual agency, giving participants the freedom to act. At the most fundamental layer, the stability of a protocol in the unchanging nature of its content introduces sufficient order into the world such that one can act at all. Protocols must be stable in order to exist and dictate action—to paraphrase the legal philosopher, Lon Fuller, a protocol that changes every day is worse than no protocol at all. 13 To continually change a protocol is to remove the ability for participants to follow it. Stability, therefore, is a necessary requirement for participants to act in accordance with the protocol. If the protocol is designed to change, there should be a stable process of change that itself remains the same.

Stability is also established once one begins to follow a protocol, rendering a set of actions as predictable and clarifying what participants can do. Once this predictability is established, the protocol also makes it possible for people to exploit the gaps or opportunities made possible by the protocol. Participants have more agency through the actions that a protocol allows them to carry out, but if they are able to see it, they also have an opportunity to act in ways that deviate from the protocol. For example, the infrastructural layout of Los Angeles allows burglars to pull off the freeway, rob banks at the bottom of the off-ramp, and immediately rejoin the freeway. 14 The sameness of Los Angeles' urban design protocol allows the prediction of bank locations and the knowledge that there will be a readily available route for a rapid escape.

Thus, stability can afford *insight* where its predictability can be perceived as a pattern. As in the case of the burglars, the

^{13.} Lon L. Fuller, "Eight Ways to Fail to Make Law." people.brandeis.edu/~teuber/Fuller_Eight_Ways_To_Fail_To_Make_Law.pdf

^{14.} See, for example, Geoff Manaugh, A Burglar's Guide to the City (New York: Farrar, Straus and Giroux, 2016) and the Summer of Protocols guest talk with him, Burglary, Architecture, and the Protocols of "Nakatomi Space." www.youtube.com/watch?v=pK7U2IrPETQ

orderliness and certainty allowed the protocol to be made apparent to its participants, such that they were able to use the protocol in a way unintended by its designers. Pattern identification may encourage participants to then apply those patterns to other protocols and areas. Like a game, protocols can afford different levels of play.

Constraint

Protocols act as constraints in requiring that participants follow protocol. They prioritize one set of actions and restrict the ability to take others. In doing so, they save participants from the complexities of decision-making by removing optionality and supplying the requisite knowledge, thereby reducing friction in action. Constraints, properly applied, play a key role in the establishment of stability and can enhance agency.

This reduction of friction makes it easier to conform to the protocol. In doing so. however, this may encourage passivity in participants at the expense of any agency that may have been gained through the existence of constraint. Participants tend to accept the protocol as given and are not prompted or encouraged to act on their own initiative. Where the protocol is broadly implemented, it can also form a standard that becomes difficult to depart from or to exit. If a protocol works, and is stable and deeply embedded, why change it? To imagine, generate, and migrate to new protocols—whether one is dreaming up a new world based on cryptographic protocols or simply trying to retire the wearing of ties in formal settings—requires vision and courage: traits that conformity might not foster. Flourishing requires the cultivation of character, which almost always requires that we examine the systems to which we are beholden and that we break with our narratives and frames. This requires us to take responsibility for our own development—a mindset at odds with mindlessly following a protocol. Like bad habits (which are, after all, effective habits), effective protocols

make it easy for people to continue following protocol.

If this is a protocol's only success, its constraints may ultimately prove limiting. Cooking is subject to a number of nested protocols, one category of which takes shape as a recipe. A recipe tends to concern a specific dish, thus directing the participant towards only spaghetti bolognese or only chocolate cake. Those who learn to cook by reading recipes may tend to feel comfortable only when following a recipe. Because a recipe sets out exact measurements, the implication is that the dish will only turn out as intended if the recipe is followed exactly. By contrast, Samin Nosrat's Salt, Fat, Acid, Heat: Mastering the Elements of Good Cooking, a guide on how to cook without recipes, moves from the level of protocol (recipe) to the level of principle (element). Nosrat focuses on four elements—salt, fat, acid, and heat—each of which can be found in some form across every cuisine and examines how to make choices through them. This affords greater agency while also requiring the cook to take greater responsibility. When making choices based on principles, one strives for balance and discernment—one cannot blame one's actions on following protocol because there is no set procedure to step through.

Protocols, in constraining action, may give participants a sense of control over a comprehensible realm: if we follow the rules, the procedure, the recipe, then everything will turn out fine. However, the perception of control is not an indication of alignment to the reality of one's situation—it is only an indication that one is operating within a realm of familiarity. What is graspable is not necessarily an accurate representation of how things truly are. Protocols may, in this way, encourage illusions and self-deceptions that stand in the way of the pursuit of flourishing.

Legitimacy

Constraint and passivity can also lead individuals in the protocol to disclaim

responsibility for their actions by reference to the protocol due to perceptions that the protocol has been designed and implemented by figures of authority. Protocols can also become a knowledge store, imbuing them with even greater authority. Civilizations evolve through strategic forgetting¹⁵—protocols play a part in giving rise to advance through increasing the number of operations that can be performed without thinking of them. 16 Participants are empowered to act in the absence of firsthand knowledge where that knowledge is encoded in the protocol, but a failure to identify that knowledge as their own might encourage a denial of responsibility. In order to pursue flourishing, one must take responsibility for one's actions and life—if participants are disposed by the protocol to reject responsibility, and if the protocol forms a significant part of their life (say, as a social, cultural, or religious protocol), then flourishing is hindered.

However, deference to the protocol can encourage participants to reject responsibility for their actions in following the protocol. At the Nuremberg trials, Hermann Jarheiss—a defense lawyer for the Nazis argued that the Nazi officials under trial were "following orders" and that their actions did not breach the laws of the time. Jarheiss put forward the position that, so long as the laws were passed and recognized by the relevant state, any action in accordance with those laws was legal, permissible, and unable to be subject to any claim of unlawfulness. Morality becomes irrelevant one cannot throw someone in jail for acting immorally. The following of a law which has itself been lawfully passed is the only concern. In the context of protocols, the faithfulness to a protocol can eclipse questions of whether one should be following the protocol at all and, if so, the manner in which the protocol should be followed.

Narrativity

Protocols reveal and create worlds. They tell stories about the contexts they operate in and the people who partake in them. Codifying something in a protocol directs attention to a particular area, thus in some circumstances bringing it into existence for protocol participants. In setting the narrative for a world to a participant, protocols also *make* the world. One's capacity to achieve flourishing is directly linked to the way in which one perceives the world, of which protocols play a constitutive part. Consequently, this characteristic can also influence how the other characteristics are perceived.

The level of risk addressed by health and safety protocols is a choice, even while they must adhere to a level of objectivity in the operation of the environment and the body. This choice is a narrative choice—a safety protocol designed to meet the bare minimum of regulation will have different features from a safety protocol designed to protect and perhaps even enhance the well-being of the relevant individual. Meeting regulations leads to solutions designed to patch over issues rather than properly addressing it. Safe Work Australia suggests that to minimize the risk of injuries from repetitive strain in labor-intensive jobs, employers should identify the postures and movements that repeatedly arise and design the workplace to restrict those postures and movements. 17 This looks vastly different from a safety protocol designed to prevent, rather than manage, repetitive strain—a preventative protocol might have employees train and strengthen those ranges of motion to handle the load. The story that Safe Work Australia tells is that human bodies are fragile and prone to breaking from overuse, rather than organisms that strengthen through proper repetitive motions. Although fragility may

^{15.} Gene Tracy, "How much can we afford to forget, if we train machines to remember?" *Aeon* (8 April 2019). aeon.co/ideas/how-much-can-we-afford-to-forget-if-we-train-machines-to-remember

^{16.} Rao et al.

^{17.} Safe Work Australia, "Lifting, pushing and pulling (manual tasks)." www. safeworkaustralia.gov.au/safety-topic/hazards/lifting-pushing-and-pulling-manual-tasks

capture the reality for many, the protocol plays a part in letting that remain the reality and carry over to other areas. In the fitness industry, for example, some actively avoid training certain ranges of motion because they are "dangerous," when the reason those ranges of motion are dangerous in certain people is because they remain undertrained and weak.

In addition to setting powerful narratives, protocols also become the lenses through which we see. For example, religious protocols that posit the existence of a deity can make it difficult for participants to understand a world without that deity and the rules emanating from that doctrine, especially where a society orients itself and its ethics around those teachings. Where the protocol is itself the method by which an individual is trained, the protocol can span the entire space of reality for that individual in those circumstances by drawing attention to those aspects and steps in the protocol and prompting the participant to fit to that protocol. The familial and social protocols and psychological habits developed from childhood fundamentally determine how we see and inhabit the world—mentally, emotionally, and physically.

The narratives and perspectives set by protocols shape our roles and relationships to the world, and this directly impacts our capacity for flourishing. The protocol of court etiquette is an example that deliberately establishes certain roles. This is the behavioral code by which barristers abide in advocating their cases and must refer to other lawyers as "learned friend." Some traditions hold that lawyers cannot refer to judges by the pronoun "you" and consequently, the phrase "thank you" cannot be said to a judge. Rather, one must say "as Your Honor pleases"—a phrase that speaks of deference and obedience. I call this the "majesty protocol" because it operates to uphold respect and veneration for the law. The majesty protocol reinforces the narrative that the law is above us, as reflected visually by the physical elevation and distancing of a judge in court. Majesty gives us a manner in which we can express emotion alongside practicing restraint for the event of adjudication. It allows us to use our most human capacity for reason to pause and reflect even while appreciating and feeling the gravity of the situation. 18 Perhaps this is why, archaic as it seems, the majesty protocol persists.

The inalienable moral dimension

The characteristics of protocols have a real effect on how we are disposed to perceiving and acting in the world. Because of that, every protocol possesses a moral dimension that is tied to its characteristics. It is through these characteristics that the protocol mediates between us and the world. Having a knife in a particular context changes the actions open to the knifewielder, and it changes the knife-wielder's perception of self and situation. This mediation co-constitutes our reality, shapes our capacity for developing rationality and wisdom, and thus encourages or impedes our pursuit of flourishing.

Viewing protocols instrumentally conceals this moral dimension from view. An instrument can come to have and influence values of its own instigation—values not always foreseen or intended by the original goal. Building protocols in ignorance of their mediating role and corresponding moral dimension means we are more likely to build worlds not made for us. The invention and standardization of internet and telecommunications protocols that facilitate instant communications allow us to achieve the goal of reaching anyone, anywhere, but they also cause us to reshape our lives. Our communications take on a different, more rapid cadence. Our expectations of others' availability to our requests and demands change. We become more reliant on the protocol and consequently we forget knowledge once commonly held. We

^{18.} Harvey C. Mansfield, "The Majesty of the Law" (2012). scholar.harvard.edu/harveymansfield/publications/

are permitted by the protocol to retreat into ourselves, to communicate purely through a screen, to avoid moving through crowds or using our faces and hands to convey what we want to say. The very existence of a protocol means the world is changed for its participants in ways we cannot foretell.

Where the world is in attunement with the conditions for flourishing, and where we as flourishing human beings are attuned to the world as it really is, the individual and the world both flourish. We start to be able to evaluate protocols and give reasons for why one works better than another beyond efficiency and effectiveness, and why one characteristic is better than another. Why is it, and how is it, that good protocols go beyond the activities they codify and catalyse thoughtful stewardship of the protocol, in turn allowing the protocol to learn, grow, and deliver civilizational advances? 19 I contend that flourishing facilitates the proper functioning and evolution of the protocol, making the protocol alive and not merely effective. And, in turn, a protocol is alive where it encourages states of being which help participants to better realize and actualize their flourishing.

To illustrate, I draw on Christopher Alexander's examples of two spatial patterns: one that carries his concept of aliveness and one that does not.²⁰ The first is a band of whitewash that is painted outside every house in some Greek villages to allow people to pull their chairs into the street and partake in the life around them. The second is having indoor cafés in Los Angeles to prevent food from being contaminated. Alexander claims that the first pattern is *congruent* with the forces in people's lives and their feeling such that it will sustain itself and continue to be renewed. People, generally speaking, want community, liveliness, and to feel the sun—to stay inside and speak to no one is to move away from aliveness, not towards it.

By contrast, in order for the second pattern to persist, it must be supported by

external forces of regulation and infrastructure causing pollution. Alexander considers that this is because indoor cafés are incongruent with the inner forces telling us to sit on the street and partake in the community and beauty of life and nature. Without the force of law, they would deteriorate and disappear. To choose to implement a pattern or a protocol is, therefore, a moral decision. It speaks to the *ought* of how we run our lives, the boundaries we set for the people in our societies, what we allow them to do, what we don't allow them to do. All of this derives from the picture of what we should be and how our lives should go.

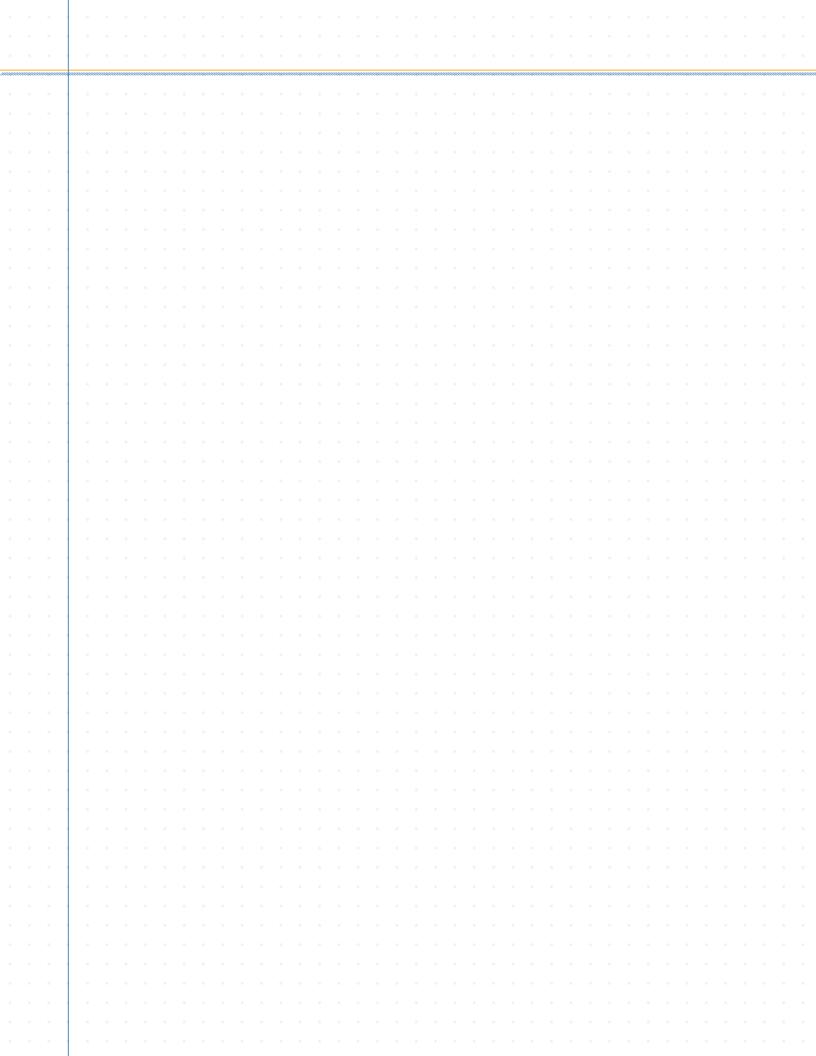
A world that is built for us is a world in which humans flourish. We pursue flourishing by actualizing that which makes us distinct: the capacity for self-making and self-transcendence through the development of rationality and wisdom. Like technology, protocols mediate between us and the world through the effects that protocol characteristics have on our perception, action, and our disposition to being in the world. Participants and protocols co-constitute reality—because of this, protocols have an inalienable moral dimension. In order to build worlds for us, we need to take seriously the impact that protocols have on our pursuit of flourishing. And, in doing so, we will be better able to build protocols, worlds, and selves that live and thrive. \triangle

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^{19.} Rao *et al*.

^{20.} Alexander, p. 120.





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