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Quantum Masculinities: Doing Gender with Max Tegmark's Mathematical Universe Hypothesis

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Quantum Masculinities: Doing Gender with Max Tegmark's Mathematical Universe Hypothesis

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Abstract

In his book *Our Mathematical Universe*, Max Tegmark proposes a way of viewing “reality” as a multiverse of parallel universes governed by mathematics. In this article we take a few of Tegmark’s more accessible ideas and combine them with the study of masculinities to form “quantum masculinities.” Specifically, we use Tegmark’s presentation of the multiverse and the quantum state of superposition as a thinking tool for imagining not just multiple masculinities but *infinite* and *contradictory* masculinities. We then mobilize this newly proposed concept of quantum masculinities in two contexts. First, we put quantum masculinities in dialogue with Judith Butler’s theory of gender performativity to question to what degree gender performance requires an observer. Second, we explore how far quantum masculinities are reconcilable with The Five Stages of Masculinity. We conclude with some discussion about the categories of “I” and “we” in imagining the self, as well as how the study of masculinities might evolve.

Keywords: masculinities, quantum physics, multiverse, gender performativity, superposition, parallel universes

Masculinidades Cuánticas: Haciendo Género con la Hipótesis del Universo Matemático de Max Tegmark

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Resumen

En su libro *Our Mathematical Universe*, Max Tegmark propone una forma de ver la "realidad" como un multiverso de universos paralelos gobernados por las matemáticas. En este artículo tomamos algunas de las ideas más accesibles de Tegmark y las combinamos con el estudio de las masculinidades para formar las "masculinidades cuánticas". Específicamente, utilizamos la presentación de Tegmark del multiverso y el estado cuántico de superposición como una herramienta de pensamiento para imaginar, no solo masculinidades múltiples, sino que masculinidades infinitas y contradictorias. Después vamos más allá y planteamos este nuevo concepto de masculinidades cuánticas en dos contextos. En primer lugar, ponemos en contacto las masculinidades cuánticas con la teoría de la performatividad de género de Judith Butler para preguntarnos en qué medida el desempeño de género requiere una persona observadora. En segundo lugar, exploramos hasta qué punto las masculinidades cuánticas son reconciliables con Las Cinco Etapas de la Masculinidad. Concluimos con una discusión sobre las categorías de "yo" y "nosotros" al imaginarnos a nosotros mismos, y sobre cómo podría evolucionar el estudio de las masculinidades.

Palabras clave: masculinidades, física cuántica, multiverso, performatividad de género, superposición, universos paralelos

Like many things in the contemporary world, it started with a Tweet. On Twitter, one of us had noted that “masculinity in 2016 appears to be in simultaneous states of extremity: increased normativity, increased queerness” (@drjosephgelfer, 2016b), to which the anthropologist Dick Powis replied, “Dibs on ‘quantum masculinities’ #buzzwords #jobmarket” (@dtpowis, 2016). Some phrases demand to be unpacked and “quantum masculinities” is one of them, even if that means reverse-engineering meaning that was not originally intended.

An orthodox treatment of quantum masculinities would no doubt investigate masculine performances within the field of quantum physics, and indeed we can find studies that do just that in comparable physics communities (albeit minus the phrase “quantum masculinities”). Helena Pettersson (2011) provides an ethnographic study of plasma physicists in the United States, noting that the subject is a primarily male domain, how the lab in which she did her study had an atmosphere of “boys and their toys” (p. 55), homosociality, manual labor, and the dangerous and dirty nature of the work, all of which signify normative masculinity. Allison J. Gonsalves, Anna Danielsson and Helena Pettersson (2016) offer three case studies in Sweden, Canada and the United States within a predominantly learning environment across various physics subfields such as astrophysics, theoretical high energy particle physics, and solid state physics. In these case studies, masculine ideals were again presented as the norm, to the point where even female participants “reject traditional femininity, and may be seen as performing a type of female masculinity instead” (p. 12). No doubt similar findings would be discovered were such a study made of the specific subfield of quantum physics, adding to what is now a long history of feminist literature regarding the gendered nature of science (for example, Keller, 1985; Harding, 1986; Schiebinger, 1999), including quantum physics (Barad, 1995). In such a context, quantum masculinities is like a game of “masculinities spotting” in which one keeps a tally of the number of people who perform normative masculinity (including, as we see above, women), and those who perform (willingly or unwillingly) alternative forms of masculinity.

However, this article is not an orthodox treatment of quantum masculinities; it takes a more literal approach, posing some thought experiments about masculinities that can be had by engaging theories of the quantum and mathematical universe as proposed by Max Tegmark (2014).

This article is not part of some greater project, rather the documentation of some thoughts that have arisen through a critical reading of two texts that were never intended to be put in dialogue. The first section introduces Tegmark’s concept of the “multiverse” and a context in which we can imagine not just multiple masculinities but *infinite* masculinities. The second section then debates Tegmark’s presentation of the quantum state of superposition, which again opens up a space not just for multiple masculinities but *simultaneously contradictory* masculinities. This section also puts Tegmark in conversation with Judith Butler’s concept of gender performance (Butler, 1999), questioning whether a performance needs an observer, and if so, whether this closes down the possibility of masculinities in superposition. Of course, there are—to say the least—significant epistemological and ontological differences between the approaches of Tegmark and Butler: our aim is not to reconcile these differences (or even to explore them), rather to see what possibilities surface when we hold these two thinkers in productive tension. The penultimate section explores to what extent quantum masculinities are reconcilable with The Five Stages of Masculinity (Gelfer, 2016), bringing the two together to question the notion of the “I” in perceptions of the self. In conclusion, we explore some implications of the “I” and “we” in the multiverse and look at under what circumstances quantum masculinities are distinguishable from quantum femininities. We finish by locating this discussion in the context of the study of masculinities and how this might usefully evolve.

Some of these thought experiments are not entirely serious, and none of them are scientific. We are mindful that the subject of this article—using the terms “quantum” and “masculinities”—sounds an awful lot like a joke combining two infamous hoax articles, *Transgressing the Boundaries: Towards a Transformative Hermeneutics of Quantum Gravity* (Sokal, 1996) and *The Conceptual Penis as a Social Construct* (Boghossian & Lindsay, 2017). But there is a point—that no doubt shifts from reader to reader—where tongue-in-cheek comments take a serious turn, where the playfulness opens up a different line of thought that might otherwise have remained closed: we will explore this boundary in the conclusion.

This article also seeks to play its part in redressing an imbalance in the study of masculinities, which is typically characterized by a modernist approach that has made the subject look a lot like sociology (Beasley, 2013,

2015). This is in comparison to other fields of gender studies such as feminist theory and queer theory that have complemented such modernist approaches with more postmodern and philosophical approaches. There are of course many masculinities researchers who use a postmodern approach, and a more philosophical worldview can also be found in the largely—and unfairly—ignored field of Critical Men’s Studies in Religion (Krondorfer, 2017), but the study of masculinities nevertheless needs to be fleshed out. Lucas Gottzén (2018) has affirmed “that we need both ‘modern’ and ‘postmodern’ approaches” (p. 85) to masculinities. This is of course commendable, but it also feels like a somewhat outdated request, like dragging the study of masculinities into the early 1990s (undoubtedly a sweet spot for gender studies, when feminism had reached new levels of maturity, queer theory was firing on all cylinders, and what are still the most important theories in the study of masculinities had been set down). Why ask to play catch-up when you can play leap frog? Why not think bigger? Why not engage with even ostensibly unrelated lines of questioning and worldviews—such as quantum mechanics—to see if new thoughts are revealed?

The Multiverse

Tegmark is a Professor of Physics at Massachusetts Institute of Technology. His book *Our Mathematical Universe: My Quest for the Ultimate Nature of Reality* (2014) can be described as a “popular science” book, which means non-scientists can understand it. He employs what he describes as a “Dr. Jekyll/Mr. Hyde Strategy” (p. 244) in which Jekyll provides the traditional physics and Hyde the speculative physics. His work is not without its critics from physicists and mathematicians who have no time for such crank-like alter-egos (Frenkel, 2014; Woit, 2014). In this article we have no interest in questioning Tegmark’s scientific rigor. The objective is to take a few of his ideas and use them as a jumping-off point for thinking around masculinities.

At the heart of Tegmark’s book is the idea of the multiverse, which comprises four levels. The Level I multiverse comprises an infinite number of parallel universes—based on the assumption that space is infinite—which are “distant regions of space that are currently but not forever unobservable; they have the same effective laws of physics but may have different histories” (p. 139). The Level II multiverse comprises parallel universes that are

“distant regions of space that are forever unobservable because space between here and there keeps inflating; they obey the same fundamental laws of physics, but their effective laws of physics may differ” (p. 139).

The Level III and IV multiverses are beyond the scope of this article. However there are other clear lines of exploration for the mathematically brave. The Level III multiverse operates at a quantum level in the multi-dimensional Hilbert space, which is a purely mathematical domain. This type of multi-dimensional space feels very intuitive when discussing the multiplicity of masculinities. Indeed, looking for a more philosophical analogy for Hilbert space one could do worse than look at the Deleuzian concept of rhizomatic or “smooth” space (Deleuze & Guattari, 1987, p. 12), which we have previously proposed as a space for deregulated gender performances (Gelfer, 2009, pp. 168–169). More recently, Deleuze has been discussed in the context of Hilbert space (Christiaens, 2014), and more generally in quantum mechanics (Crockett, 2013, pp. 148–162).

Given that space is infinite, Tegmark suggests anything that *could* exist in these infinite parallel universes *does* exist, including other versions of us. Remember, the Level I multiverse has the same laws of physics but different histories. This means that the multiverse “contains many more people who are almost like you, yet slightly different” but also, given its infinite capacity, “out of all your infinitely many look-alikes out there on other planets, there’s also one who speaks English, lives on a planet identical to Earth, and has experienced a life completely indistinguishable from yours in all ways. This person subjectively feels exactly like you feel” (p. 123).

In the study of masculinities, “multiple masculinities” has a reasonably limited meaning. Harry Brod (1987) refers to “the study of masculinities and male experiences as specific and varying social-historical-cultural formations” (p. 2). Multiple masculinities have also been applied to females (Butler, 1999; Halberstam, 1998). In a more individualized and internalized context, concepts of the “multiple self-aspects framework” (McConnell, 2011) and the “dialogical self” (Hermans & Kempen, 1993) have been applied to multiple masculinities within the individual (Gelfer, 2012).

In the Level I multiverse, multiple masculinities take on an altogether different meaning. We move from identifying different masculine performances in our common understanding of space and time (here a masculine performance in a Bangladeshi market, there a masculine

performance in a play by Shakespeare), beyond different hypothetical performances (masculinity can mean anything you want it to mean), right through to the concurrent reality of *all possible masculine performances*. Multiple masculinities are not, then, simply a project that seeks to trouble how gender is regulated in society on Earth; rather, *infinite* masculinities are a *necessity* that is required to approximate the “reality” of the many versions of us that exist in the Level I multiverse (whether near-identical copies, or copies that have significantly diverged due to the different unfolding of local histories).

In the Level II multiverse there are further possibilities. Tegmark opens a section discussing Level II with the single exclaimed word “Diversity!” (p. 134). Remember, Level II occupies distant areas of space that “obey the same fundamental laws of physics, but their effective laws of physics may differ.” Tegmark proposes that “*fundamental laws* of physics, which by definition hold anywhere and anytime, can give rise to a complicated physical state of affairs where the *effective laws* of physics inferred by self-aware observers vary from place to place” (p. 134, original emphasis).

Of course, “diversity” possesses an almost magical resonance in the study of masculinities (and, more generally, gender and sexuality). The different effective laws of physics provided at Level II open up various possibilities of different physical formations to combine with masculinities. At Level I we “merely” have a different set of histories that demand an infinite set of masculine social constructions. At Level II the complex intertwining of sex and gender can take on—*must* take on, given its literally infinite variety—hitherto unimagined permutations. There is a further metaphorical application here to multiple masculinities. The “*fundamental laws* of physics, which by definition hold anywhere and anytime” are analogous to hegemonic masculinity whereas the “*effective laws* of physics inferred by self-aware observers vary from place to place” are analogous to subordinate or resistant masculinities.

Superposition

Tegmark quips, “If you want to stir up a cocktail party by sounding like a quantum physicist, another buzzword you’ll need to drop is superposition: a particle that’s both here and there at once is said to be in a superposition of here and there” (p. 176). So let’s drop it in.

The gateway most people have to superposition is the example of Schrödinger's cat. In this thought experiment the physicist Erwin Schrödinger places a cat in a chamber with a small amount of radioactive substance that may or may not kill the cat within an hour due to the radioactive substance decaying. If we were to run this experiment multiple times, half the time the cat would be alive when we open the box, half the time dead. But importantly here, it is our *observation* of the event that gives it a conclusion: before we open the box, the cat is in a superposition of being both dead *and* alive. Tegmark describes superposition as a “quantum-mechanical situation where something is in more than one state at once, for example in two different places” (p. 179).

Superposition offers us another analogy for multiple masculinities. In other words, masculinity can be both *this* and *that* at the same time. In a basic sense we might say that masculinity is in a superposition when it can be *either* hegemonic *or* subordinate (or any number of other individual masculine performances). In a more nuanced sense we might say that masculinity is *both* hegemonic *and* subordinate (or any number of other individual masculine performances) at the same time: this is like a quantum version of “hybrid masculinities” (Bridges & Pascoe, 2014) where men selectively incorporate subordinate into hegemonic masculine performances. Superposition also seems to have a striking resemblance to Judith Butler's understanding of gender performativity, where “genders can be neither true nor false, neither real nor apparent, neither original nor derived” (p. 180); or at least a re-casting of this statement where “genders can be either true or false, either real or apparent, either original or derived” or, even better, “genders can be *both* true *and* false, real *and* apparent, original *and* derived.”

But the analogy of superposition for multiple masculine performances does not extend very far. Let's go back and explore Butler's gender performativity a bit further in the context of Schrödinger's cat. The cat is in a superposition until it is observed: it is both alive and dead; both *this* and *that*; it has multiplicity. However, Butler implies that performativity requires observation: while our gendered “reality is fabricated as an interior essence” it is also the case that this “interiority is an effect and function of a decidedly public and social discourse, the public regulation of fantasy through the surface politics of the body” (p. 173). It is this public discourse and regulation that implies observation, and thus the collapsing of the superposition.

While Butler is ultimately concerned with the politics of the body, Tegmark is more concerned with the physical properties of the body (or object). Tegmark states that “an object can only be found in two places at once in a quantum superposition as long as its position is kept secret from the rest of the world. If the secret gets out, all quantum superposition effects become unobservable” (p. 199). Butler implies that gender performance requires public discourse. It would seem, then, that we have reached an impasse if we try and extend superposition beyond a metaphor for multiple masculinities: we can only have gender performances in superposition if they take place in secret, but we cannot do gender performances in secret. Indeed, Tegmark suggests that something in a state of superposition does not even require a conscious observer to collapse the state, merely the transfer of information, such as an object being struck by light and air (pp. 199–200). In this sense, even if Judith Butler was the last person left not just on Earth, but in the whole multiverse, her gender performance could not be kept secret unless she locked herself inside a lightless perfect vacuum; and then the performance would not last very long because she would suffocate. So much for superposition.

Quantum Masculinities and The Five Stages of Masculinity

The Five Stages of Masculinity categorizes various philosophical, ideological and political worldviews regarding masculinity (Gelfer, 2016). Stage 1 refers to “unconscious masculinity” where people adhere to ideals of normative masculinity without any awareness of its existence. Stage 2 refers to “conscious masculinity” where people consciously adhere to ideals of normative masculinity. Stage 3 refers to “critical masculinities” where people provide a systemic critique of normative masculinity. Stage 4 refers to “multiple masculinities” where people reject normative masculinity and perform any number of masculinities (including ones that appear normative, but minus the regulation implicit in normativity). Stage 5 refers to “beyond masculinities” where people reject the idea of masculinity.

At this point, we have suggested that “quantum masculinities” as a term combines two key ideas. First, masculinities are infinite given the infinite nature of the multiverse, and that those masculinities may follow different histories that share our same laws of physics (Level I multiverse) or may

follow different histories and take on different localized laws of physics (Level II multiverse). Second, superposition functions as an interesting analogy (albeit not extendable very far) for explaining why masculinities can simultaneously be in different and/or contradictory states.

We now want to show how quantum masculinities and The Five Stages of Masculinity are reconcilable. At Stage 4, “each individual dwells in a category of sex and gender as unique as their fingerprint” (Gelfer, 2016, p. 279). In essence, at Stage 4, masculinities are infinite as “masculinity can mean anything to anyone” (Gelfer, 2016, p. 279). While clearly implying masculinities performed by people on Earth, there is nothing in the formulation of Stage 4 that prevents its accommodation of the multiverse. The contradictory state of masculinities in superposition is also observable at Stage 4. For example, John Wayne might be a classic example of Stage 2 masculinity, assuming he believes this is how masculinity *should* look. But John Wayne can also exist quite happily at Stage 4, assuming he believes this is how masculinity looks for John Wayne, *but not necessarily anyone else*. In the first situation of superposition-as-analogy, this works just fine, but if we take it any further, as soon as John Wayne is observed by a transfer of information his superposition collapses regardless of his intentionality (we note here that the intentionality of the subject in superposition does not seem relevant to either Tegmark or Butler).

Stage 5 is more interesting. At Stage 5, “masculinity exists as a consensual hallucination which nevertheless has many real effects” (Gelfer, 2016, p. 280). It is useful here to turn to Tegmark’s discussion of reality. Tegmark describes external reality as “the physical world, which I believe would exist even if we humans didn’t,” consensus reality as “the shared description of the physical world that self-aware observers agree on,” and internal reality as “the way you subjectively perceive the external reality” (p. 239). At Stages 1–3 on The Five Stages of Masculinity these three levels of reality are collapsed into one another.

At Stages 1–3, the masculinity the “I” perceives (internal reality) is perceived as the same as the masculinity that exists in external reality, and both Stage 2 and 3 (being both conscious of masculinity and having different worldviews) debate the consensus reality from their relative positions. Stage 4 is slightly different inasmuch as it has its internal reality model of masculinity, assumes the external model of reality is broad enough to

accommodate all masculinities, and has little interest in debating the consensus reality (as consensus functions as a form of regulation that Stage 4 rejects). Stage 5 is the only stage where these three elements are starting to be teased apart (although not fully). It understands the differing natures of the three realities and begins to call them out: “masculinity exists as a consensual hallucination which nevertheless has many real effects” implies the interplay between these realities. But Stage 5 also questions the “I” in the first place, which aligns with another of Tegmark’s conclusions, that “your perceptions of having a self, that subjective vantage point that you call ‘I,’ are qualia” (p. 318). Ultimately, Stage 5 masculinity retreats into certain mystical descriptions of the self not because it is necessarily “spiritual,” but because mystical language sets a precedent for attempting to give form to that which lies beyond our current conceptual and linguistic frames of reference. It should then come as no surprise, given some of the parallels identified between Stage 5 masculinity, quantum masculinities and Tegmark’s cosmology, that one of his critics observes that “the ‘Mr. Hyde’ part of the book crosses over to what I must consider science fiction and mysticism” (Frenkel, 2014). Ultimately, quantum masculinities and *The Five Stages of Masculinity* meet not in physics, but metaphysics.

More generally, from a structural point of view, another commonality can be identified between the multiverse and where *The Five Stages of Masculinity* “points.” Stage 5 is not an endpoint of masculinities, indeed “Stage 5 is not a stage, rather a signpost to somewhere else” (Gelfer, 2016, p. 282). Visually, *The Five Stages of Masculinity* is rendered as a Venn pyramid, comprising five overlapping circles of decreasing size. The final and smallest circle representing Stage 5 is therefore not a final circle, rather the final circle that we can see. Remember, the other “parallel” universes in the Level I and II multiverse actually share the same space as us, they are just too far away for us to have seen their light yet (Level I) or are expanding away from us at such a speed that they will always be too far away for us to see their light (Level II). Alternatively, if you really must see what comes next, imagine the Stage 5 circle as a water-soluble pill with many small bubbles endlessly effervescing from the top: some are too small to see; others pop spectacularly; they are constantly in movement.

Conclusion

The dual authorship of this article is not real. There is only one author; it is another thought experiment. The “single” author was born Joseph Organ but his name was changed at five years old to Joseph Gelfer. We like to imagine that Joseph Organ went on to follow his Stalinist namesake to take up a post-doc in theoretical physics at the Moscow Institute of Physics and Technology, while Joseph Gelfer went on to research masculinities and teach at a Catholic university in France. But of course, we do not need to like the *idea* of this happening, because somewhere in the multiverse it *did* happen: Joseph Organ never became Joseph Gelfer and he went to Moscow to study physics, as well as any number of other places and other subjects, and so did Joseph Gelfer. Indeed, Tegmark offers us—no doubt unwittingly—a modest precedent for these multiple personas with his confessed “Dr. Jekyll/Mr. Hyde Strategy”: what is this if not a productive fracturing of the multiple self?

The shift to the “we” is a useful experiment. The life-art of Genesis Breyer P-Orridge provides a fine exploration of this concept. P-Orridge seeks to create an identity beyond the sex/gender binary through the psychic and physical transformation of pandrogyny. But P-Orridge also seeks to break a further binary: not just sex/gender, but the I/you: “we see the ‘I’ of our consciousness as a fictional assembly or collage that resides in the environment of the body” (P-Orridge, 2010, p. 445). This “fictional assembly” bears a commonality with the conclusions of Stage 5 and quantum masculinities, as well as Tegmark’s endpoint of the “I” as qualia.

P-Orridge’s shift results in a string of references to “we” and “our” that “they” maintain in all circumstances. At first glance, this pretense can feel annoying: it sounds like the Queen (and not a fun RuPaul kind of queen): “we are not amused.” But when something feels troubling it is worth exploring why. The shift from the “I” to the “we” feels in some way subversive. It has the potential to resemble a political act that resists the atomization of society. It has the potential to recast “the massive subjective turn of modern culture” (Taylor 1991, p. 26), that infuses the individual and its subjective experiences with almost numinous gravitas, into a more dialogical process of meaning-making that we might call the “collective turn.” It creates connections, it builds empathy, it mitigates isolation and

loneliness, it obstructs the flow of the sentence: Who are “they” referring to? Who is speaking? We can now witness this multiplicity of identity occurring within the “individual” (to use the common frame of reference), society (inasmuch as what we experience on Earth through both history and the present) and the combined multiverse.

Intellectual honesty requires us to reveal our understanding of what is “real” about the proposed concept of “quantum masculinities” and what is not. We can say with certainty that quantum masculinities do not contain a shred of science. However, if we take Tegmark’s multiverse seriously, quantum masculinities offer a scenario for describing the possibilities of multiple masculinities that is at least novel, and potentially “true” by the standards of external reality. Viewing multiple masculinities in a state of superposition is clearly farcical, yet we find ourselves having new thoughts about the differing nature of gender performance with or without an observer, and have another tool at hand to describe the often contradictory and paradoxical variables that arise when discussing masculinities.

Is there a difference between quantum masculinities and quantum femininities? Should this article actually be about “quantum gender”? Assuming the reality of the multiverse, we have to conclude that the idea of a gender binary is not just contestable but ludicrous in the context of an infinite number of outcomes. So in the same way that Stage 5 masculinity is identical to Stage 5 femininity (inasmuch as there being no such tangible and discreet thing as “masculinity” and “femininity”), so too quantum masculinities is the same as quantum femininities (inasmuch as “each individual [in the multiverse] dwells in a category of sex and gender as unique as their fingerprint”).

However, throughout the multiverse there are an uncountable number of worlds just like ours where people who view masculinities via a Stage 5 lens nevertheless live in worlds where the majority of people are Stage 1 to 3, so they must always be tethered to these competing internal and consensus realities that are very much bound with “masculinity” and “femininity,” in which case there does remain a difference between quantum masculinities and quantum femininities. Again, we find echoes of the state of superposition: it both *is* and *is not* the same.

In the introduction we noted that the study of masculinities is typically perceived as a modernist and sociological project, and agreed with Gottzén

(2018) that this needed to be complemented with more postmodern and post-structural approaches. But we also posed the need to think bigger. In this article we have, sometimes tongue-in-cheek, put masculinities in dialogue with quantum theory and, in the process, have managed to surface a few new thoughts. All of gender studies—not just masculinities—is ripe for a massive leap forward in understanding itself. Sometimes this leap will occur due to connecting different existing fields of study and taking more seriously those liminal spaces where fields converge (such as the present conversation where physics bleeds into metaphysics), sometimes it will require waiting for certain scientific breakthroughs (we look forward to science finally cracking how consciousness works, for example, and engaging in a conversation about how this transforms the idea of the “self” in gender studies and beyond). The leap forward will also require being mindful about the way regulation takes places around knowledge production: the danger of constructing new orthodoxies at the same moment that we deconstruct the old, and of replacing hegemonies with a spectrum of micro-hegemonies. All of these challenges in the study of masculinities have—through the demands of infinite outcomes—already been fruitfully resolved in other parts of the multiverse: let’s do the same here.

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