Kath Weston's *Gender in Real Time: Power and Transience in a Visual Age*

KATH WESTON interviewed by STEFAN HELMREICH

Gender in Real Time: Power and Transience in a Visual Age by the anthropologist Kath Weston (2002) is a provocative intervention into how critical cultural theory might engage the formulations of science and mathematics in order to think anew about how temporality contributes to the formation of gender, race, sexuality, and other genres of social experience. Weston examines the visual register in which much recent gender theory has been pitched – with its attention to images, gazes, maps, levels, representations and structures – and argues that an accounting of time and its contingency is crucially missing from, or merely left implicit in, such work. Rather than emphasizing the temporal emergence of embodiments and classifications, many recent accounts of gender offer freeze frames that arrest our sense of how time and gender constitute one another. By way of remedy, *Gender in Real Time* seeks to examine 'how time travels through the study of gender' (p. 2) and indeed through processes of gendering themselves. According to Weston, not only does 'gender depend upon time for its production' (p. 120), but time is also crucially bound to space, as much in social relations as in Einstein's theory of relativity.

Weston anatomizes a variety of what she terms 'time claims' in gender theory. In dissecting, for example, the role of repetition in theories of gender

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performativity, she shows how such theories emerged against the backdrop of capitalist manufacturing regimes which themselves relied upon repetitive techniques of mass production. By being too quick to substitute the psychoanalytic for the political economic, performativity theories tend to overlook conditions of historical possibility that have shaped gender and its theorizations. Weston also takes a close look at how notions of progress permeate the liberatory timelines of much queer historiography. She analyzes the evolutionary and teleological chronologies deployed in popular lesbian biographical accountings, which enlist images from paleontology (e.g. the 'Old Butch at the Bar' as a 'living fossil') to position earlier 'generations' of women as embodying more primitive stages of self-awareness. But Weston also seeks to introduce alternative time claims of her own, new modes of apprehending the temporal materialization and organization of experience. Her chapter on historical memory, for example, offers the 'wormhole' – a topological shortcut through spacetime theorized in quantum physics – as a timescape through which to think about the shifting character of rhetorical moves between the contemporary moment and times past, in which such molten terms as 'modernity' and 'tradition' can trade places, depending on who is recounting a memory and from which subject position.

The figure of the wormhole signals the innovative approach that Weston adopts throughout this book, which sees her borrowing and reworking ideas and metaphors from physics in order to consider afresh the theoretical models and tools that social science uses to frame its problems. (In this enterprise, her work is akin to that of Karen Barad, the physicist author of 'Agential Realism: Feminist Interventions in Understanding Scientific Practices' [1999], which enlists the work of Niels Bohr to meditate upon questions of embodiment, observation, and knowledge germane to the priorities of feminist and queer theory.) But the central inspiration in the book comes from mathematics. In her guiding chapter, Weston offers what she calls a 'zero concept for gender studies', drawing upon the work of critical mathematician Brian Rotman (1987) on the history of zero. According to Rotman, zero serves as both sign and metasign. Unlike numerals such as 'one' or 'two', zero can signify both presence and absence simultaneously. Using zero, Weston develops a concept that she names 'unsexed', which she describes as 'a temporary suspension of gender'. 'The emptying out of gender into that flash of uncertainty that I have called unsexed,' she writes, 'gives gender theory a sign that, like zero, allows for ... new technologies of accounting for gendered relations of power' (pp. 38–9). 'Unsexed', for Weston, is neither a substantivization of something like androgyny nor an identity category in its own right. Unsexed is a placeholder, a signifier of creative possibilities for ever-shifting social classification:

> Unsexed unsettles the presumption that discussions of gender must ultimately refer back to genders – something countable and enumerable, however culturally constituted that something may be. Like zero, unsexed does not stand alone, but acquires meaning in relation to a number sequence, whether that sequence extends to two (Man, Woman) or three (Man, Woman, Third Gender) or some number of genders yet to be determined. . . . Yet, as a zero concept, unsexed is no androgyne. (pp. 40–1)

Throughout the book, Weston seeks to leverage her zero concept into a reinvigorated gender theory. She shows, for example, that discussions of Third Genders – from transsexuals to intersexuals – have too often left unquestioned the practices of *counting*, of enumeration, that have animated gender classification. She demonstrates, too, how the accounting imagination has colluded in much gender theory with an unreflexive traveling theory. When analysts group the *hijras* of India together with the *xanith* of Oman in the zone of the Third Gender, eliding historical context and difference, this has all too often 'added a bit of color to gender theory [only] through a bit of neocolonialist artifice' (p. 43). Bringing zero to bear, Weston argues, not only calls critical attention to practices of counting and accounting, but also saves a place for gender's undoing, the fleeting moments when gender evanesces and bodies turn transient before being called back into social classification.

This interview is dedicated to exploring how Weston's theory works to reimagine gender, along with other sociotemporal formations to which gender is linked.

Stefan Helmreich: One thing that makes this book unique is the way you approach questions of gender and sexuality through genres of science and technology studies that do not refer immediately to critiques of 'biology'. Instead of examining, as has been an important tradition, how gender is naturalized through biological discourses about sex as substance, practice, or identity, you find a rather different set of tools in cultural studies of mathematics and physics. You use physics and math to show how gender is 'a product of social relations imbued with *time*' (p. xi). Can you say more about how you began thinking of physics and math as offering insight into constitutions of gender?

Kath Weston: When gender theorists engage with science, they're often assumed to be interested in engaging primarily with evolutionary biology, physiology, neurology – fields with which feminists have long been in critical conversation about concepts such as 'nature', 'sex difference', or 'the gay gene'. A critique of biological determinism is widely understood to occupy a central position in women's studies, gender studies and queer studies. Out of that critique came a rich and important literature on embodiment. But physics and math are part of

these intellectual histories, too. Every time someone writes about 'the gaze' as though space could be segregated from time, she's drawing upon a Newtonian framework. Every time someone writes about 'facets of gender' or 'scales of analysis' or a 'queer mosaic', he's incorporating geometry, and a Euclidean sort of geometry at that. You limit yourself as an analyst if you don't pay attention to these debts. And you miss out on all sorts of possibilities.

In a lecture that the renowned physicist Richard Feynman gave back in the early 1960s, he inserted a throwaway comment about how quantum physics had been taken up into all sorts of seemingly unrelated endeavors, including the social sciences. Feynman contended that he hadn't found such appeals to science particularly convincing; the implication was that science was better left to the scientists. Now as much as I love his work and I love his humor and I love his sense of eccentricity, I have to differ with him on this point. It makes no sense to me to advise social scientists to steer clear of science and stick to what we do best, because scientific notions are already so deeply embedded in the conceptual apparatus of the liberal arts. Embedded in modernity, for that matter. *Gender in Real Time* takes the position that, well, if you're trafficking in science in any case, why not recognize it and then go on to ask what sort of science you want to do. When it comes to gender studies, reductionist science is not the only sort of science available to you. Perhaps something from fractal geometry or symmetry theory might help open up the questions you're interested in exploring. It might be a metaphor. It might be an entirely new way of thinking relationships.

When I was a graduate student in anthropology, many of our professors warned us away from engaging across disciplinary lines with science. We had familiarized ourselves with structural-functionalism's search for codified laws of social life, of course, but only as part of learning the history of the discipline and mainly to critique it. We certainly didn't identify that search as rooted in Newtonian mechanics and then go on to wonder whether Einstein would have had something different to say. No, this was 'science', rule-based and therefore suspect. I had great teachers in high school (a public school, by the way) who taught non-Euclidian geometry, Möbius strips, multiple dimensions, and made the whole thing sound fascinating, but the idea of bringing those things into relation with anthropology never occurred to me as a student. By the time I was in college, anthropology had moved away from the search for laws, and 'process' was all the rage, even though concepts like structure, and models like kinship diagrams continued to have some currency, related as they are to geometry and mapping.

It's amazing what a limited range of scientific concepts, subfields and approaches gender studies has utilized. The same could be said for social theory

more generally. The most popular incorporations derive from classical mechanics and Euclidian geometry. Yet so much has happened since! What if we looked more to non-Euclidean formulations and post-Einsteinian physics – theories of asymmetry, singularity, entanglement? Or, for that matter, wormholes?

I still love Edwin Abbott's book *Flatland* (1884), in which the inhabitants of a two-dimensional world try to make sense of the intersection of their plane with three-dimensional objects such as spheres in motion, which appear to them as circles of changing circumference. Of course, Abbott's book was really written for people who live in three dimensions, to get us to consider how things might look from another vantage point. Part of the reason for bringing math and physics into anthropology and gender studies is to remind us that, theoretically speaking, we too occupy a sort of flatland. Concepts from physics and math do not offer gender theory a way to *get out of* or *go beyond* existing perspectives in any embodied manner. What they do offer is an opportunity to think social relations in unaccustomed, even elusive ways and to encourage theorists to pick up different tools as they go about their theorizing. It's no coincidence that *Flatland* toyed with 19th-century genre conventions of travel literature and the romance, encouraging its readers to journey to a world limited to two dimensions in order to give them the tools they would need to imagine a fourth dimension beyond the ones they were accustomed to grasping.

Having spent so much time talking about physics and math, I also want to bring biology back in. In the chapter in *Gender in Real Time* on historical memory called 'The Ghosts of Gender Past: Time Claims, Memory, and Modernity', a reader has to think about both biology and physics to understand what I'm trying to do. The section titled 'Darwin's Bodies at the Bar' uses family history, ethnographic material and interviews to examine a recurring theme in coming-out narratives. There's a genre I call 'first bar' stories that recounts the first time when someone who will later identify as lesbian, bisexual, queer or gay goes into a bar looking for people 'like me'. In these stories, which I recorded in the 1980s and 1990s, a figure appears who's painted in almost monstrous terms. This is an older woman who is consistently described as very butch and who is also depicted in temporal terms as a kind of 'throwback' to another era, archaic, a dinosaur, if you will. These are terms that the narrators themselves used.

In these stories, the narrator is often frightened. She's *thinking time*, not only when she portrays the figure of the Old Butch at the Bar, but also when she speculates about a future for herself mediated through that older woman. 'Will this be me in a few decades?' she wonders. 'Is this my future? If I come out, will I, too, become a fossil?' In the stories the narrators project all these scary, negative qualities onto this person to whom they barely speak. She (the future me) is

lonely, mean, isolated, depressed and so forth. They saddle this Old Butch figure with the task of representing a kind of deep history that is paleontological in its metaphors and racialized in its reference to the throwback. So there's an evolutionism implicit in the narrative.

At the same time, with the question 'is this my future?' you also get a cyclic conception of time, once that narrator starts wondering whether this is part of a life cycle that all lesbians recapitulate. As an analyst, when you hear this narrative reiterated over and over again, that's a perfect example of why you can't just say, well, my project is time, not biology. You have to attend to the popular notions of evolutionary science in the narrative.

The same chapter interweaves first bar stories with family history about my godmother's close involvement with her best friend during the 1930s. In my telling of my godmother's story there is no easy answer to the question of how to understand this relationship between the two women. Is it erotic? This is certainly not a coming-out story in any classic sense. There's no revelation. There's a lot of indeterminacy, ambiguity. Rather than simply celebrate ambiguity, as so much queer theory has done, it's at that point that I turn to physics and bring in the notion of the wormhole.

SH: How does wormhole time compare to, or help you think about, the narrative shape of evolutionary time?

KW: The reason I turn to the wormhole at the very end of that chapter is so that readers who hold to the idea that evolution equals progress can be introduced to a rather different notion of time that comes out of physics. The standard critical move would be to identify the social Darwinist leaning in these stories, note its racist legacy, distinguish social Darwinism from less teleological understandings of evolution, and leave it at that. So why bother to send readers down the scientific equivalent of Alice's rabbit hole?

Wormholes open up a sort of shortcut through spacetime that allows passage to another universe, or at least to another timespace that is not contiguous to the one the time traveler occupies when she sets out. It's a model for time travel, if you will. This is not the only concept in physics that plays havoc with intuitive notions of space, time and travel, of course. The idea of entanglement in quantum physics describes a link between particles whereby a change in one particle is accompanied by a corresponding change in the state of the other, even when the two particles are nowhere near one another in any sense that could be explained by the principles of classical mechanics. The idea of parallel universes explores the possibility that a body can occupy more than one location in spacetime

simultaneously, which would allow for contemporaneous stories that reference the same body. All of these concepts disrupt the conventional narrative devices used in biography and autobiography (which rely heavily on chronological time) in ways that I find interesting for ethnography.

In *Gender in Real Time*, I use the wormhole to undercut some of these narrative devices, even as I play with them. 'The Ghosts of Gender Past' sets readers up to feel an impulse towards closure and the anticipation of progress toward the better future promised by narratives of gay liberation and narratives of modernity more generally. Looking at the photograph of my godmother with her best friend Trudy, arms around each other, hand on thigh, then hearing my version of their story, a reader might well ask, 'Oh, I wonder if they're going to get together? Are they going to come out? Are they going to move forward?' That is the narrative impulse I'm interested in playing with, but also undercutting. Because of course they never get there: Where would *there* be in the context of their lives, without some sense of the frames of reference of different narrations of those lives?

The story of my godmother and the 'first bar' stories are narratives in tension. My telling creates a narrative set in the 1920s and 1930s about women who saw themselves incarnating the progressivist vision of the Modern Woman, the New Woman, the working woman who controls her own paycheck. They queered existing social arrangements but that was not at all the same as claiming a lesbian identity. 'Coming out' as such couldn't happen in that time frame, that historical moment. In contrast, the 'first bar' stories of the 1980s would have cast my godmother and her best friend, by virtue of their age, as the antithesis of modernity: everything old, superseded, about to be forgotten. Threatening enough, if imagined as one's own future, to repress. These are contradictory temporalities, growing out of shifting circumstances as well as conventions of narration, that become more interesting and productive, I think, if you stop trying to force them back into chronology.

SH: So the wormhole can help us trace how something like this photograph of your godmother and her friend Trudy – which you bring into the 21st-century reader's time through reproduction in the book – comes to mean different things to different people, or even to the same people, depending on how they position their own biographies, their senses of themselves as modern, as liberated, as 'out', with respect to it. And you're also asking us, as readers and scholars, to take account of our own flatlands as we think about how to place the photograph and the stories it might tell *vis-à-vis* time.

It seems to me that you're making an observation similar to one offered by the anthropologist Johannes Fabian (1983) in his *Time and the Other*, in which

he argued that cultural otherness is often imagined to map onto spatial distances that are then construed as marking *time* differences: that which is remote is primitive, that which is on the colonial periphery is in need of modernization, and so on. 'Darwin's Bodies at the Bar' is a perfect example of locating bodies as other in time. But with the wormhole you also suggest ways of disrupting these temporalizations.

KW: And, of course, with the inclusion of photographs in the book that are taken up into stories, I'm once again gesturing toward the inseparability of time from space, from visuality.

SH: What, then, about *real time*? What is real time in a context in which various time claims are in play, in contest?

KW: 'Real time' gestures toward film studies. Long before the television show '24', in which 24 hour-length segments depict events that take place over a 24-hour period, you had the idea of being able to shoot an event in real time. A 60-minute story could be shot in 60 minutes, or, to make things more complex, a film could be produced in which an hour of narrative time would pass in an hour of the spectator's time – 60 minutes for 60 minutes. That form capitalizes on *cinéma verité* by focusing on the practice of something unfolding as we speak, as we watch, as we study, as we participate, as we observe – all those things that anthropologists love to say we do. But at the same time, for me 'real time' is a playful reference, a fantastical reference. What would that *be*, the idea of real time, especially coming from a discipline like ours, anthropology? We've had so many studies of ethnotemporality that explore the radically different cultural categories used to organize time, different subjective senses of time, different ways to parse time, different calendars, people for whom time was never something that could be chopped or saved or divided, critiques of 'time' itself as a culture-bound construct. Clearly, in the face of all that, there can be no single, identically conceived and experienced 'real' time. Yet anthropology's methods – participant observation, interviewing – build upon a certain notion of real time in the sense that the analysis gains credibility because the analyst can claim to have been there to witness something 'as it happened'. Not just 'I was there', but 'I was there, then', to modify the aphorism about one of anthropology's key authorizing devices to take account of time.

SH: Right, and as you suggest in your last chapter, *real time* itself is a time claim of recent vintage – and certainly, with film-based time-and-motion studies,

wrapped up in the political economic moment that begins with mass production. I am also reminded here of a piece by the anthropologist Annelise Riles, who in 'Real Time' (2004) discusses the temporality of transnational banking. The people of whom she writes, bankers in Japan, use 'real time' to refer to something like just-in-time investment done by individual bankers who are authorized to bypass, ignore, or override bureaucratic oversight. 'Real time' is meant to do away with the 'clutter' of too many laws, too much hierarchy in the way of speedy investment. Of course, what this does is to leave in place practices and networks of financial connection that have all sorts of social and economic inequality inscribed within them. This real time erases and runs roughshod over less powerful time claims, claims positioned differently in the 'global' economy ... which gets us, perhaps, to another key timescape in your book, that of Fordism and post-Fordism.

In your chapter, 'Do Clothes Make the Woman?' you take on the time claims implicit in the theories of performativity so popular in much contemporary gender and sexuality studies, and you place those ideas in an historical materialist context – another kind of time claim. You critique formulations like Judith Butler's famous articulation of performativity (1990), by arguing that a focus on the repetition – the citation – of signs of gender identity ignores the ways that political economy – in its manifestations in Fordism and flexible specialization – conditions how people variously think of and inhabit repetitive and improvisatory action. You point out that materiality for Butler tends to be *corporeal*, not the materiality of historical materialism, that the time that appears in her analysis is one of subjective duration rather than economic transformation. This is nicely condensed in your statement that the 'turn toward psychoanalysis at the expense of political economy makes it difficult for performance theory to gauge the limits of its own applicability' (p. 85). Can you say more about this?

KW: Performativity has been an extremely influential theoretical framework, and not just in gender and sexuality studies. So much so that I used to joke that while the much-vaunted end of history hadn't quite panned out, after performativity arrived on the scene, the end of theory still had possibilities. One of the things I wanted to do in *Gender in Real Time* was to think in a more historical materialist vein about the conditions for the production of performativity theory itself, to place its popularity and its ability to stage a compelling argument in its own space and time. I use 'time' here perhaps a little less mischievously than elsewhere in the book; there aren't any wormholes in this chapter.

Repetition and citation are the temporal concepts on which all else depends in a performative understanding of gender. With performativity, there is no 'there'

there, no essential or even historically given gender waiting to be revealed or correctly perceived. The *impression* that gender exists in some coherent fashion waiting to be expressed is achieved through a process of potentially endless citation, involving repeated references to qualities, etc., that are said to be there. It is the repetition itself that seduces us into attributing a stable referent.

What was going on at the time when performativity theory started on the ascendant? Its rise came on the heels of the 1980s, when 'deindustrialization' entered the lexicon. (Notice how this terminology encodes a North American perspective. Obviously if you were in China, the period would have looked like one of accelerating industrialization.) Factory jobs, the icons of Fordist production, began to shift to historically less industrialized regions of the USA, and eventually overseas. I argue that along with this shift came a certain perspective on the temporalities associated with industrial production – most notably repetition – that allowed these temporalities to be articulated in a certain way and taken up into theory. One could also say (though I do not develop this point in the book) that the postindustrial landscape fostered a certain naturalizing tendency when it came to related temporalities such as citation, which continue to dominate information technologies in the sense that the internet, for example, constitutes a vast citational apparatus.

In the timespace of industrial production, repetition dwells iconically in the assembly line: a worker has five, six, 20 seconds to perform a prescribed manipulation of an object, after which the widget moves down the assembly line and the entire process starts over again with another widget. In this context, repetition also inhabits the rhythmic pounding of heavy machinery that you get in 20th-century film treatments of industrial settings, such as *Metropolis*. I bring in a bit of Gilles Deleuze to underscore the elegantly obvious point that the second iteration is never the first iteration; with repetition you may have what looks like sameness, because 'it' occurs again, but because this is again and not the first time, there's always a difference the second time around. Like snowflakes, no two widgets, no two flutters of the eyelashes, are identical, in the sense of identity as a relationship of self-sameness.

Locating performativity theory in a timespace when industrial manufacturing begins to disappear from view does more than enhance our understanding of how repetition came to occupy such a pivotal position in theory. I'm also trying to open the necessary conceptual space to pose questions about what this kind of theory is and isn't good for. For all its sophistication, performativity theory hasn't been any more reflexive about its applications than about the conditions of its own production. Part of the reason, I think, is that repetition is a temporal concept but not a particularly historical one. A better understanding of these constraints can help researchers who write about gender bring time into their

accounts in ways that are both integral to the analysis and not limited to cyclicality or citationality. Otherwise history, politics, economy turn into background material, scrutinized somewhere else apart from gender relations and imported into the analysis. Given the stakes, in terms of the extreme inequalities associated with 21st-century globalization, that won't do.

SH: So, from these kinds of historical temporal accountings, let's move to the mathematics you use in the book, and in particular, toward a discussion of your handling of the concept of zero.

KW: The zero chapter picks up on what now looks like a very old, outdated feminist quest from the 1970s: the search for a genderless practice, a millenarian call for the dawning of a genderless society. This was a quest in the most classic medieval sense – a romantic adventure, if you will – so it's fitting that the chapter should take its inspiration from medieval science and trade. With the critique of the color-blind society in critical race theory and the butch–femme revival of the 1980s, there came a reconsideration. Would a genderless society be desirable, even if it were possible? People began to wonder whether gendered differences inevitably had to generate power differentials. Could they approach gender as a resource that generates creativity as well as oppression? And things moved on from there.

The chapter 'Unsexed: A Zero Concept for Gender Studies' turns this potted history on its head by arguing that a genderless world was here all along, if you knew where to look, rather than in some far-off future to be achieved only through exhortation and great effort. I started to think about the quest differently, using the idea of zero, *sunya* in Sanskrit, *sifr* in Arabic, going back to Buddhist–Hindu debates on 'emptiness' and the golden age of medieval Islamic science. Zero, emptiness, not in the substantive sense of nothingness, but in the fleeting sense of a temporary, temporizing, unconditioned no-thing that gives way to variously gendered somethings, and to which they in turn will give way. Zero as a placeholder for other values or signs. The idea was to sidestep the essentialism versus constructivism debate, to which performativity theory still implicitly speaks. Zero occupies both sides of the debate, and neither.

SH: You call *unsexed* a 'zero concept for gender studies'. As I understand it, by 'unsexed' you mean a moment of uncertainty before a subject is called, hailed, into gender. You write:

> Unsexed is a vanishing, not something you are, a fleeting moment of being 'called out of one's sex' before being called into another gendered position . . . Unsexed is what you become in the moment of doubt before reclassification. (p. 28)

You're interested, it seems to me, in two things: (1) how zones of uncertainty become historically available; that is, how particular moments of the illegibility of bodies become manifest and to whom, and (2) the historical forces that turn the zero not into an absence, but into a placeholder, a sign, and indeed an integer that is followed by the one-two count of gender binarism or the 1, 2, 3, 4, 5 . . . of laying out gender continuums using number lines, which then allows for ideas such as third gender or *trans*gender.

KW: The zero chapter opens with a difficult and violent scene of an attack on a city bus. The attackers are trying to place one of the passengers; they're infuriated when they find they can't figure out the person's gender. Their inability to perceive gender is inflected by an overdetermined inability to perceive race or class. You might say that the body, if not the person, has become undone, ever so temporarily. I use 'unsexed' because sex/gender is my focus here. But I could equally well have said 'unraced' or 'unclassed' in a different analytic context. Lots of things can become undone. What is meaningful enough to fall out of reference, however briefly, will differ. During the attack on the bus, there is a flash, a 'zeroing out' of gender/race/class before the attackers think they know what they've got. The attack itself becomes part of the process of attempting to force the body back into familiar categories.

By going to the history of mathematics to understand what is happening, I'm looking for a way to trace the subtle temporalities of a genderless world that arises here, there and everywhere, in all sorts of situations, if only for an instant. Unsexed is more than some reworked notion of gendered liminality, because the instant in which a body becomes unsexed is not stable or enduring enough to last. In that sense, unsexed does not even represent a quantity as neatly demarcated as an instant. Unsexed is a zero concept, a placeholder that gives way to social classifications as varied as they are historically and materially contingent. As such, unsexed is infused with the operations of power.

I give several other examples of times when gender zeros out, including a moment when someone comes up to me on the street while I'm wearing my hair very short and I'm all bundled up in winter clothing. People are going by, and as they pass, this person asks, 'Can you spare some change, ma'am? Can you spare some change, sir? Can you spare some change, ma'am?' When she gets to me, there's that flash. Not necessarily an intellectualized flash, but a conundrum sort of flash of being at a loss about how to hail me, because all the hailing that's been done so far has been in this dichotomously gendered fashion, ma'am or sir. There was a pause. After the pause, the call back into classification took a form that was

actually quite brilliant. And effective, I might add. My interlocutor looked me straight in the eye, then rephrased the question for my benefit: 'Can you spare some change, sir-ma'am-sir?' And so I became sir-ma'am-sir, which pretty much covered the bases as she understood them, with an extra 'sir' thrown in for good measure. All this happened in the time it took for me to walk past and turn to reach into my pocket.

In this example, unsexed is not the sir-ma'am-sir moment, because by then, the speaker has already attributed a gender to my body. 'Sir-ma'am-sir' just makes it clear that the speaker can't decide which category fits. Gender's ever-so-evanescent zeroing out came with the flash of uncertainty that preceded this clever, provisional resolution.

SH: The shifting dynamics of calling bodies into classification puts me in mind of some recent thinking in science studies. In their book, *Sorting Things Out: Classification and its Consequences*, Geoffrey Bowker and Susan Leigh Star introduce the metaphor of 'torque' to describe the process that unfolds when 'the "time" of the body and of [its] multiple identities cannot be aligned with the "time" of [a] . . . classification system' (2000: 190). They argue that torsion results when the temporalities of classification and lived experience slide out of sync. They use examples such as racial classification in apartheid South Africa; what they are interested in are biographical trajectories. What you're doing here is directing our attention to something much more fleeting, it seems to me.

KW: Thus the book's subtitle: 'Power and Transience in a Visual Age'. The term 'unsexed' as I use it is very different from talking about a person who 'is' androgynous and runs around being androgynous for days or weeks or years at a time. Or a person who identifies as 'a woman' and later comes to feel conflicted about that identity. Or a person who refuses the category 'mannish' that others seek to foist upon him. This attention to a flash of becoming 'unsexed' or 'undone' involves an almost Buddhist sort of move. Instead of looking elsewhere, projecting yourself off into an illusory future, searching for this other place, just be where you are and allow yourself to notice something so passing, so transient, that in the ordinary course of affairs you wouldn't attend to it. Unsexed is not an identity, a state of being, or a quality of personhood. Any body, any organism, or even any commodity to which gender is on occasion attributed, can zero out with respect to gender. But remember, the zero's power lies in its ability to hold open a possibility. Along comes an operation of multiplication, division, social classification, and a seemingly more substantive quantity arrives to take its place.

SH: You write that 'unsexed unsettles the presumption that discussions of gender must ultimately refer back to genders' (p. 40). Can you explain this and also say something about why, then, 'sex' needs to appear here at all?

KW: Let's come back to the sex/gender distinction in a minute. In that sentence, I was trying to draw attention to practices of counting and accounting that are deeply, unreflectively embedded in the way that people talk, think and write about sex and gender. The emphasis in the sentence is on the 's' – genders – a plural implying that it's only common sense to be able to use cardinal numbers to enumerate gender ('the two sexes') and ordinal numbers to rank order these imagined species ('the third gender', 'the second sex'). Is that always the most useful way to think sex/gender? Where is the zero in these formulations?

SH: Right – and you could ask that question of a more natural scientific framework like that of biologist Anne Fausto-Sterling, who, in her 1993 piece in *The Sciences*, 'The Five Sexes', adds three categories to the usual male and female: herms (so-called true hermaphrodites, who possess one testis and one ovary), merms ('male' pseudohermaphrodites, XYs who have testes and aspects of female genitals), and ferms ('female' pseudohermaphrodites, XXs who have ovaries and aspects of male genitals).

KW: In that piece, where Fausto-Sterling looks at the medicalization of intersexuality, she doesn't limit herself to counting; she also uses the model of a continuum. Yet one could argue that a certain kind of numeracy is built into a continuum, too, insofar as a continuum is defined by two poles. It's still a linear kind of model. If you have male, female, and all points in between, you have set up a two-dimensional array that draws upon Euclidean geometry and bears some resemblance to a number line. The counting of chromosomes, gonads, genitals, so-called secondary sex characteristics such as hair or breasts (note the ordinal ranking): these are all operations that yield a tally.

Fausto-Sterling's point that males and females do not constitute discrete groups – that bodies shade into one another – is certainly well taken. But genes, hormones and morphology come in wildly different combinations. What criteria would govern their placement on a line? Does an intersexed body whose testes develop after puberty belong closer to the 'male' pole than one whose balls and labia have been visible since birth? That would be a rather arbitrary placement, really. And all the while, the continuum model begs the question of what counts as 'male' or 'female', because in a world where 'male' and 'female' are not discrete, the poles themselves must be defined through ideal types or statistical aggregations rather than specific bodies.

SH: So you've discerned this impulse toward counting that animates the ways people think about sex and gender, which we see in this Fausto-Sterling article, but also in the assumptions about gendered binaries and in the research on third genders that you examine in the book. What does zero do to alert us to the implications of these styles of counting?

KW: Well, in none of those schemes do people start with zero, right? There's a certain way that children learn the number line in school. It involves counting with an implied referentiality, one, two, three, four apples, mangoes, bunny rabbits, what have you, and then only later do they get to zero. Why is that? What makes zero such a special, strange and versatile sign? A sign that can mark the difference between the value of $10 and $10,000,000? Mathematics and global finance, as they are practiced today, can't really get along without zero. Yet zero makes no pretense of referring to anything, any *thing*, after all.

When it comes to gender theory, zero opens possibilities precisely because referentiality has always been at issue in discussions of gender and sex. The idea of gendering as a verb – something I wrote about in *Render Me, Gender Me* (1996) and others have written about before me – allowed us to think about how bodies can be gendered in any number of interesting, shifting ways. Women can traffic in masculinities, for example. Assignment to 'a' gender doesn't necessarily tell you all you need to know about gender in terms of social relations. Likewise, when performativity theory argues that gender doesn't exist apart from its citations, the implication is that gender has no fixed material referent.

By attending to fleeting moments when gender zeros out and bodies become unsexed, the discussion can go beyond the business of identifying the referent or exposing the nonexistence of the referent, whether you want to locate gender's referentiality in the genes, or in the domain of history and culture, or nowhere at all. Zero allows for movement in and out of gender-soaked categories, a movement that depends upon the possibility of gender's short-lived dissolution. By holding open the 'place' of unsexed before giving way to a gendered classification, zero is the sign that makes that subtle movement apparent. And zero encourages us to ask questions about the historical, material conditions that give rise to such movements. Not all bodies become unsexed in a scene of violence. Not all instances when gender zeros out take place under solicitation or, for that matter, on a bus.

This brings me back to your question about the sex/gender distinction. Originally the sex/gender distinction was articulated using a kind of layer-cake model, in which nature (sex) supplied the biological substrate and culture (gender) supplied, if not the icing, then a higher layer in the cake. It's a Parsonian model, really. Biology (male/female) figured as a solid, stable, recognizable referent.

Culture (man/woman) might reference biology, but in no way were gendered arrangements such as divisions of labor *determined* by biology. These sorts of gendered differences were social constructs. As a feminist and social critic, you could do some work with that distinction, because it promised certain liberatory possibilities: What was made could be unmade, remade, within constraints, of course. Biology represented the constraints, but there was also a vibrant literature devoted to demonstrating how minimal those constraints turned out to be. With its emphasis on the malleability of gender, the sex/gender distinction advanced modernity's promise: progress for women and an end to gender inequality, predicated on the success of feminist movements.

In my view, recent developments have lessened the analytic utility of the sex/gender distinction. Technologies such as cloning, genetic engineering, sex-change surgery, and so on have destabilized the notion that biology is fixed or foundational. I could go further to say that it's not just technology that troubles the sex/gender divide. It's how these two terms were conceptualized in the first place. New technologies and human intervention aside, why should biology be conceived as fixed? In a piece I wrote some time ago called 'Forever is a Long Time: Romancing the Real in Gay Kinship Ideologies' (1995), I explored some of the ways in which biology could equally well signify transience. The body's cells are constantly renewed; you are not the same body today as you were yesterday. It's a cultural move to interpret biology as intransigent, given, or permanent.

On the other side of the divide, the idea that gender, understood as a socially created 'construct', offers the ideal site for political intervention hasn't quite panned out. The building we're sitting in is constructed, but given a system of property relations and Harvard's political clout, the fact that we can all agree that it's fabricated doesn't necessarily make it easy to dismantle. So the 'sex' in 'unsexed' doesn't act as some sort of ground for gender. I use the two terms interchangeably.

SH: Let's conclude by returning to the matter of the interdisciplinary conversation with science studies that you wrote this book to encourage. Let me offer a final example of allied work that crosses the physics/social science divide, from a field in which I write and teach, science studies. In 'The Mangle of Practice', the historian of physics Andrew Pickering (1993) argues that agency and intentionality must be understood as historically, temporally emergent from material and semiotic interactions between, say, scientists and machines like bubble chambers. Such interactions transform what count as subjects and objects in the world. Pickering discusses these interactions in terms of resistance and

accommodation, terms that have sharp resonance for contemporary cultural criticism and social science. What do you make of his analysis?

KW: I grew up in a class, place and generation with grandmothers who still had mangles stationed next to their washbasins. So Pickering's image of the mangle – a machine used for squeezing water out of newly laundered clothing – is a very compelling image for me. The mangle could be thought of as a mechanical ghost of gender past with the metaphorical power to wring new insights from the dynamics of what he calls a dialectic between resistance and accommodation.

It's very interesting as an anthropologist to read Pickering's work in light of our own discipline's *critique* of the concepts of resistance and accommodation. Lila Abu-Lughod (1990), for example, critiques the tendency to romanticize political resistance in her work on Bedouin women. Those women might have resisted the directives of their elders when they started dressing in lingerie, but at the same time the cash required to purchase lingerie pushed them toward accommodation with repressive state-sponsored settlement policies designed to get nomads to stop traveling and work for wages. In Abu-Lughod's dialectic, a practice that counts as resistance with respect to one thing doubles as accommodation with respect to another.

Pickering's idea of the mangle, in contrast, treats resistance and accommodation as opposed dynamics that are refigured only after they go through the wringer and emerge in other forms. He takes his cue from a European-inspired science that has long distinguished human from nonhuman agency, going back to the Great Chain of Being. The dichotomy he draws between material and human agency (unintended versus intentional) can't account for the ways in which human agency itself is made up of many kinds of conditioned physicality.

Now, if you started elsewhere – with post-Einsteinian physics, for example, rather than the physicist operating the machine – and substituted a concept like *entanglement* for the classical mechanics involved in the operations of the mangle, that might be interesting. That might point to a way out, or through, the puzzle of agency and its shadow term, structure. Because when particles are entangled, what happens to one alters the other, however separated in timespace they might be. Interaction between the two, in Pickering's sense, need not be evident. The particles participate in a relationship in which they are simultaneously two and one, or perhaps something better depicted as a dispersed 'entity' that defies enumeration.

SH: So, we're back to discounting Feynman's hope that social scientists will stay away from the latest physics. Indeed, it seems that we have returned to considering concepts and conversations that anthropology might share with physics.

KW: I think it's worth reading Einstein as a social scientist. It's not just space travelers who have to deal with relativity and the curvature of spacetime. What happens to ethnographic treatments of temporality if you bring in Einstein's discussion of reference frames? Why not pose the question? Sure, it's rocket science, but only in the strict sense of the term. This way of posing questions might sound like a leap, but why does it sound like a leap? The answer has to do with the habitual direction of our reading, the composition of our reading groups, the particular interdisciplinary lines we cross, or don't. And in any case, what's wrong with leaping? Quantum theory came along and lent intellectual respectability to the leap. Gender theory has a chance to do the same.

References

Abbott, E.A. (1884) *Flatland: A Romance of Many Dimensions*. London: Seeley & Company.

Abu-Lughod, L. (1990) 'The Romance of Resistance', *American Ethnologist* 17(1): 41–55.

Barad, K. (1999) 'Agential Realism: Feminist Interventions in Understanding Scientific Practices', pp. 1–11 in M. Biagioli (ed.) *The Science Studies Reader*. New York: Routledge.

Bowker, G.C. and S.L. Star (2000) *Sorting Things Out: Classification and its Consequences*. Cambridge, MA: MIT Press.

Butler, J. (1990) *Gender Trouble: Feminism and the Subversion of Identity*. New York: Routledge.

Fabian, J. (1983) *Time and the Other: How Anthropology Makes its Object*. New York: Columbia University Press.

Fausto-Sterling, A. (1993) 'The Five Sexes: Why Male and Female Are Not Enough', *The Sciences*, March–April: 20–4.

Pickering, A. (1993) 'The Mangle of Practice: Agency and Emergence in the Sociology of Science', *American Journal of Sociology* 99(3): 559–89.

Riles, A. (2004) 'Real Time: Unwinding Technocratic and Anthropological Knowledge', *American Ethnologist* 31(3): 392–405.

Rotman, B. (1987) *Signifying Nothing: The Semiotics of Zero*. Stanford, CA: Stanford University Press.

Weston, K. (1995) 'Forever is a Long Time: Romancing the Real in Gay Kinship Ideologies', pp. 87–112 in S. Yanagisako and C. Delaney (eds) *Naturalizing Power: Essays in Feminist Cultural Analysis*. New York: Routledge.

Weston, K. (1996) *Render Me, Gender Me: Lesbians Talk Sex, Class, Color, Nation, Studmuffins . . .* New York: Columbia University Press.

Weston, K. (2002) *Gender in Real Time: Power and Transience in a Visual Age*. New York: Routledge.

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