

***Remaking HIV Prevention in the 21st Century: The Promise of TasP, U=U and PrEP.* Editors Susan Kippax, Adam Bourne, Sarah Bernays, Peter Aggleton and Richard Parker**

An unfinished history: a story of ongoing events and mutating HIV problems.

Marsha Rosengarten, Goldsmiths, University of London email: m.rosengarten@gold.ac.uk

An unfinished history: a story of ongoing events and mutating HIV problems

Abstract

By reflecting on the thinking that has come to prevail with regard to women and HIV and, doing so, by working back through an albeit brief outline genealogy of the development of PrEP, I examine how the relevancies of HIV prevention regimes have become folded into a particular scientific logic and why this should concern us. Without disputing the affordances of PrEP, in either pill or long-term acting form, I suggest that the WHO/UNAIDS 90-90-90 goals and, no less, an optimism for a future end to the dynamics of the epidemic is founded on a misplaced conception of what is at stake. Drawing on a branch of process philosophy that has earned the term 'event-thinking', I propose that if biomedicine is to be responsive to the relevancies of those affected by HIV, a more open conception of what is assumed by international health authorities as the 'dynamics of the epidemic' may be warranted. With reference to the RCTS discussed in this chapter, namely SMART, FEM-PrEP and VOICE and their carefully constructed bioethical undertaking yet deemed failure, I suggest that efforts to achieve an ethico-biomedical 'solution' may be out-of-kilter with the realities of those for whom it is proposed. Reluctance or outright recalcitrance of trial participants provides an opportunity for reformulating the problem of HIV and for what has become a normative conception of ethics. Insofar as bioethical rules and norms are presupposed to protect research participants, bioethics shares the same world view as science on what matters.

An unfinished history: a story of ongoing events and mutating HIV problems

In an interview by one of his colleagues at the 2019 International AIDS Conference, Director of the U.S. National Institute of Allergy & Infectious Diseases, Anthony Fauci stated: 'now we have the tools [antiretroviral drugs], if we implement them properly, aggressively, to the extent that we can, we can *theoretically turn off the dynamics of the epidemic.*' (my emphasis).¹ Referring to the UNAIDS/WHO ('90-90-90') goals – that by 2020, 90% of all people living with HIV will know their HIV status; 90% of all people with diagnosed HIV infection will receive sustained antiretroviral therapy; and 90% of all people receiving antiretroviral therapy will have viral suppression – he stressed that the biomedical prevention technology, PrEP (HIV Pre-Exposure Prophylaxis), should be included in regimes to redress the problem of HIV incidence. He also stated that PrEP should become available not only as a daily pill but additionally in the form of a long term acting injectable or implant suitable for women. The proposal to refashion PrEP was made with reference to the failure of a recent PrEP pill behavioural randomized control trial (RCT) conducted with women called SMART (Sequential Multiple Assignment Randomized Trial). As we shall see, this RCT was preceded by other PrEP RCTs that also failed to find relevance for women.

Without disputing the affordances of PrEP, in either pill or long-term acting form or, indeed, the concreteness of HIV, what I want to dramatise in this chapter is how the relevancies of HIV prevention regimes have become folded into a particular scientific logic and why this should concern us. By reflecting on the thinking that has come to prevail with regard to women and HIV and, doing so, by working back through a brief outline genealogy of the development of PrEP, I shall suggest that the WHO/UNAIDS goals and, no less, Fauci's optimism for a future end to the dynamics of the epidemic is founded on a misplaced conception of what is at stake. Drawing on a conception of problems provided by a branch of process philosophy that has earned the term 'event-thinking' (Fraser, 2009), I shall propose that if biomedicine is to be responsive to the relevancies of those affected by HIV, a different conception of what is assumed of the 'dynamics of the epidemic' may be warranted.

The 'essence' of the problem for biomedicine

Underpinning the premise for 90-90-90 goals and proposals about PrEP, is the idea that problems arise from a *deficit* in the normal course of events (Schillmeier 2017). This is not surprising, it is the commonplace conception of the problem of HIV. Nor is the idea surprising that a solution, devised in terms of pinpointing and fixing the deficit, could make HIV disappear. The means for devising a solution is sought through knowledge-making and, as mentioned with regard to the SMART trial, the most lauded method is an RCT. It provides the data for evidence-based medicine (EBM) and also, increasingly so, for evidence-informed health policymaking (EIHP). The former mode for EBM is premised on a problem pre-identified as a deficit in the biology of the human body, namely a lack of capacity to ward off HIV infection. And it is in response to this that RCTs have shown antiretroviral drugs to be highly efficacious. The latter mode for EIHP is premised on a problem pre-identified as a deficit in the sociality of human subjects, namely a lack in individual or community conduct for preventing the biological body becoming exposed to what it cannot ward off either for acquiring or transmitting infection. This distinction between two orders of reality - the biological and the social - orchestrates much of the field of HIV intervention.

While this distinction has been important to cultivating approaches for the prevention of HIV infection prior to the introduction of biomedical technologies and, specifically, prior to antiretroviral drugs for treatment and, more lately PrEP, when adopted as if self-evident rather than a useful but limited construction, it serves to elide the relationship between a complex nexus of situated factors (see for example, Race 2012; Kippax and Stephenson 2012:789). Here, I suggest that the distinction and its presupposition that the problem of HIV can be assigned first and foremost to a deficit or lack in either the body or the social subject, goes to the heart of the claim by social scientists that the epidemic has become 'biomedicalised' (Kippax & Race, 2003; Kippax & Stephenson, 2012; Young, Flowers, and McDaid, 2016). While there is some debate on what is meant by the term 'biomedicalised' (Flowers and Davis 2013), there is no doubt that the achievement of

efficacious antiretroviral drugs as a solution to the biological problem of HIV has given those in the natural sciences an increasingly more authoritative role in determinations for thwarting or assuaging the effects of HIV. Determinations that extend to both sides of the distinction.

If we leave aside for now different styles of critical engagement with the mode of the RCT (see for example, Kippax and Ven 1998; Michael and Rosengarten 2013; Savransky and Rosengarten 2016), it could be argued that the SMART trial and, subsequently, Fauci's proposal for refashioning PrEP show an appreciation for a long-standing neglect of women's HIV needs (see for example: Sheth, Rolle and Gandhi 2016). One of the most concerning epidemiological findings of the epidemic is that girls and women make up more than half of the 37.9 million people living with HIV (UNAIDS, 2019). The SMART trial was designed to compare the efficacy of different kinds of dosing adherence support for women in order to address difficulties previously identified as a problem of lack in reference to dosing with the PrEP pill. The trial recruited 400 women who at the outset consented to participate. It randomised consenting participants to brief counselling and either WhatsApp groups or weekly two-way SMS messages to facilitate daily dosing with PrEP. At 3 months into the trial there was 80% adherence but by 12 months, despite the different modes of support, only 9% were found to be continuing with PrEP (Celum et al 2019). This finding has provided the reasoning for a refashioned PrEP as the new solution.

However, what we shall see in the genealogy to follow gives cause for questioning the premise for refashioning of PrEP and more, broadly, the presumption that biotechnologies serve as a solution to 'end' the dynamic of HIV. Without refuting the importance of antiretroviral drugs for preventing HIV infection from becoming AIDS, they have not made the problem of HIV disappear but, rather, they have developed it in new ways. For instance, they have been shown to have contributed to an alteration in risk assessments and hence prevention practices (Blumenthal and Haubrich, 2014; Flowers, 2001; Holt and Murphy, 2017) and have introduced new issues to clinical practice (Newman et al, 2018; Nicholls and Rosengarten, 2019). When it comes to women, a complex nexus of situated factors suggestive of women's HIV needs (Fleck 2013; Valencia-Garcia et al. 2017), have become developed into a problem *of* the women. Indeed if, as Mariam Motamedi Fraser (Fraser 2009: 76) states, 'the best a solution can do ... is to do develop a problem', the solution of PrEP and also biomedical technologies for treatment have contributed to a shifting dynamic of new concerns.

A genealogy of the inheritances of 'research events'

The impetus for the SMART trial completed in 2019 was drawn from the findings of two of the largest PrEP trials with women, Fem-PrEP and VOICE, conducted between 2009 – 2012 (van der Straten et al. 2012). Together they enrolled 'over 5000 young single women' in Kenya, South Africa, Tanzania, Uganda, and Zimbabwe. FEM-PrEP (N = 2120) and VOICE (N = 5029). Areas with very high rates of HIV incidence in the

epidemiological category of young women. However, both trials were deemed to have failed in demonstrating PrEP's efficacy. The same number of women in the treatment groups became infected as those in the placebo groups. To understand how their failure was wholly unexpected by the HIV biomedical prevention field, and notwithstanding the iPrEX trial that found PrEP highly efficacious in the epidemiological categories of gay men, men who have sex with men and transgender women (N = (2499) (Grant et al. 2010), it is necessary to put the two trials in the context of another large trial called the Partners PrEP trial in Kenya and Uganda. This trial found PrEP to be highly efficacious in women who made up half the number enrolled (N =5000) (Baeten et al. 2012), as did a smaller study with heterosexual women and men in Botswana (N =1219) (Thigpen et al. 2012).

It would be an understatement to say that the 'failure' of both the Fem-PrEP and VOICE trials was baffling to the trialists. But since the trial protocols were based on what has come to be accepted as 'the gold standard' RCT mode and were entirely in keeping with what has been established as bioethical principles, no fault was thought to reside in the research practice or, indeed, its aims. That is to say, no questions were raised of the pre-determined assumption that PrEP, if found efficacious, is a solution to the HIV prevention needs of women. With this view consolidated and further scientific evidence based on follow up analysis of drug levels in the women's blood collected during the trial (Koenig, Lyles, and Smith 2013), we can see how a problem for women was rendered a problem of the women: although the women reported that were adhering to daily dosing, they had not only failed to take the drug, they had lied about doing so.

In 2013, a summary of Fem-PrEP was provided by Gus Cairns at AIDSMap. It was titled '*Magical thinking? FEM-PrEP trial may have failed because participants used testing as prevention.*' Noting that retention in the study was high, 82% of participants continued to attend monthly visits throughout its duration, Cairns reported on a follow up interview-based study with some of the women participants. The study concluded that many of the women remained for the monthly HIV tests provided by the trial but, in the words of Cairns: 'used the test, and participating in the trial itself, as a way of getting reassurance that they did *not* have HIV.' Cairns added: 'The trial itself, in the *minds of the women*, became the prevention method offered' [my emphasis](Cairns, n.d.). There are of course many explanations that could be offered for the finding of the qualitative study. Elsewhere, I have discussed the Fem-PrEP women's 'lack of dosing adherence' as a mode of recalcitrance (Rosengarten 2017). Although they gave the answer that they perceived scientists wanted, as often happens with human research subjects (Stengers 2011), their actions suggested that what was *relevant to them* was different to the scientists' requirement. Here, I suggest, by neglecting this difference a problem of the women themselves was able to take hold in the imaginaries of those invested in a biomedical solution and, as we have seen, apparent in the design of the SMART trial and, arguably, in the proposal for a refashioned PrEP.

If we go further back in the biomedical record of the first planned PrEP RCTs in 2004/5, we can see another unexpected outcome for science but, also, how bioethics became established in a manner that enabled FEM-PrEP, VOICE and SMART to hold fast to the view that the research itself was beyond question. Two of these earlier trials were specifically targeted at female sex workers in Cameroon and Cambodia. A third trial, with people who inject drugs, was in Thailand. All three drew intense opposition from the research participants who were supported by civil society organisations for sex workers and people who inject drugs. The opposition was clear in denouncing the research for the manner in which it exploited the health and economic conditions of the targeted research participants (Women's Network for Unity, 2004). For a complex set of reasons following the opposition, the Cameroon and Cambodian trials with female sex workers were eventually cancelled. The Thai trial continued (Michael and Rosengarten 2013, Singh 2004; Singh and Mills 2005). However, what I want to pursue here is how the opposition to the trials was taken up as a serious concern for the viability of future HIV RCTs.

Two separate international consultations by WHO/UNAIDS (2006) and the International AIDS Society (IAS, 2005) were designed to study the controversies, taking into account longstanding issues pertaining to 'off-shore' RCT that often mean findings serve to benefit others in considerably more advantageous socio-economic locations. The goals of both consultations was captured in the IAS report: 'to develop guidance on processes for reaching agreements on the design, conduct and oversight of HIV prevention trials in developing countries'; and 'to build consensus on emerging issues in HIV prevention research and, hopefully, to develop norms and standards that can be used in this research' (IAS 2005:14). The consultations provided a series of recommendations to ensure the regulatory conditions approach would be met in the future. This included the provision of treatment and care as well as prevention interventions for research participants; ensuring they possessed an otherwise lacking research literacy; and inclusion of consensual community representatives in the planning of trials (see Michael and Rosengarten, 2013:40). As IAS goals indicate, the focus was on retaining and shoring up the future of RCTs. While 'research literacy' and 'community inclusion' were nominated concerns, they were rendered as necessary to the pre-decided importance of future RCTs taking place without opposition. What was to be provided in return was the instituting of bioethical parameters to guarantee levels of health care for research participants. Thus, despite what might be said of the attempt to appreciate the needs of research participants, the two consultations consolidated not only the authority of science in determining the problem but introduced an approach that would foreclose on discord. In effect, they took what was voiced in the opposition as politico-ethical concerns and rendered them as considerably narrower bioethical concerns. The contrast I am drawing here between the ethical and the bioethical pertains to whether we see ethics as immanent to a situation or dependent on an overlay of regulatory procedures addressing biomedical issues. To put this another way, insofar as bioethical rules and norms are presupposed to protect research participants, bioethics shares the same world view as science on what matters.

With the benefit of hindsight, the additional bioethical regulatory provisions worked or, more accurately, they worked for science. There have been no similar overt protests displayed against RCTs. Indeed, I shall go as far as to suggest that it inoculated SMART, FEM PREP and VOICE from any questions pertaining to the pre-determined problem for which evidence was sought to validate PrEP as a solution. And what I have suggested above of the recalcitrance of the women in the Fem-PrEP trial was simply understood as deception or, as Cairns suggests in reference to a qualitative study on their behaviour, due to a deficit in their logic.

I will finish this genealogy with a 'before' to PrEP and the achievement of antiretroviral drugs that now serve as the basis for U = U (Undetectable virus = Untransmittable) in the UNAIDS/WHO '90-90-90' goals. In the late 1980's, members of the women's health field linked with others to forge the Global Campaign for Microbicides (GCM n.d; Forbes 2013). The aim was to secure the development of 'barrier/contraceptive methods and virucides that could be woman-controlled and used 'without detection by their sexual partners'. As the feminist epidemiologist, Zena Stein stressed, evidence that condoms were efficacious for preventing HIV was irrelevant if a woman was unable to persuade her partner to use them (Stein 1990:2). While we might applaud the efforts of this early feminist movement to enlist science, what we have seen above is a series of selected inheritances that have led to a different conception of the problem.

In some key respects, the early feminist efforts parallels those of gay activism to enlist science in dealing with the problem of HIV. But that has evolved in relation to an increasingly biomedicalised epidemic. What we have seen in my albeit brief genealogy is the consolidation of a biomedical solution to the problem of HIV prevention. The distinction between the biological and social has been developed on the premise of that the essence of the problem resides in an order of biological substances for which biomedicine has a solution but at risk from a lack in social conduct. In sum, the reality of HIV as a viral object that threatens life has grown in stature and, with it, a concern for biomedical advance in place of what makes the threat a relevant concern *for* the sociality of life.

Possibles in the becoming of a history without 'end'

In the remainder of this chapter, I want to reflect on the biomedically posed problem that renders the social as both external yet central to its achievement of '*turning off the dynamics of HIV*'. This conception of the problem has been arrived at through a series of elements selectively inherited in a manner that matches what has been achieved by scientific advance. That is to say, we have arrived at a situation where what was initially sought from science to deal with a problem understood to be posed by a virus, has developed or, perhaps more aptly, mutated to match a radically reduced conception of what is at stake in treatment and prevention. As Kippax and Stephenson (2012:789) see this in reference to prevention, biomedical solutions have become privileged but, in being so, they fail 'to realize that all HIV prevention interventions must engage with the

everyday lives of people and be integrated into their social relations and social practices'. While some might argue that the proposal to refashion PrEP to provide a semi-permanent drug delivery without requiring dosing, not unlike the instituting of bioethical principles to shore up the viability of RCTs, it does not address the question of what may or may not make it meaningful for those who are decided by biomedicine to require it.

Rather than concede to what is decided by science as the problem, in what follows I shall draw on a series of event thinkers, asking: what might enable an appreciation of the divergent realities that can be deduced in the relation between biomedicine and those for whom it presumes to act and, more so, decide for? How might a more relevant and, thus, ethico-practicable response be devised in place of what now appears as a sustained deficit or absence in those affected?

To do so, I begin with a summary account of Alfred North Whitehead's radical revision of the notion of an event (1920:106-110). While there are numerous elements from which we may make sense of the significance of an event, we inevitably select only a few and, with them, presume that the event is an independent happening. To be so, however, an event must be composed of stable sequential elements and that can be viewed in the same way by all. Yet, as Whitehead points out, it is not beyond our awareness that what we perceive is a partial aspect of the multiple dynamic relations of objects and relations; and, also that its discernment is achieved in relation to other events (1920:10). If we pause here to consider the event of HIV infection, it is not beyond awareness that there is more than what we make of it and that others may perceive it differently. It is also not beyond our awareness that its happening is "positive" in the sense that it makes a difference. Hence, counter to the view that what is at stake is a deficit or lack that presupposes an absence, this making of difference suggests that, on the contrary, there must first be a presence for its occurrence. To put this another way, any claim of a deficit is arrived at by way of a comparison between different 'things' and not *no* things. This leads me to a further aspect of Whitehead's account of events. The activity of the objects that constitute an event, what he terms 'adventures', 'determine the subsequent events to which they will pass on the objects situated in them' (Whitehead 1920;109). That is to say, elements are inherited into the making of a new event as we have seen with what has been made of the findings of research but, also, that I have suggested have become inoculated from challenge by the inheritance of a correlative notion of bioethics determinant of their unquestioned legitimacy.

It is this making of findings and what has been made of them in the design of new research events that brings me to the notion of *problems*. As Giles Deleuze states, although events may be understood as problematising they are not, he says, in themselves, problematic. That is to say, they do not define what is *formulated from them* as a problem (Deleuze 1990:54). Counter to the commonplace assumption that leads us to think 'problems are given ready-made, and they disappear in the responses or the solution' (Deleuze, 1994:158),

we have a role in their formulation and, hence, in the required response. In the words of Martin Savransky, problems ‘demand to be inherited, but they do not dictate the terms by which their heirs might inherit them’ (Savransky 2018:218). For Savransky this means that problems remain ‘open’ for what can be cultivated as a response to an event.

When reflecting on Steven Epstein’s (1998) history of the HIV epidemic in the United States, Savransky describes a radically different conception of the dynamic to that of Fauci’s. In Savransky’s words: ‘modes of togetherness involving viruses, medical specialisms, novel modes of gay activist socialities, antiretroviral drugs ... and prevention became together as provisional, evolving cases of solution to the problem posed by the event of HIV/AIDS’. With reference to my own work on the generative work of intervention, Savransky adds that in their inheritance: ‘these solutions have never ceased to mutate’ (Savransky, 2018:222; see also Rosengarten 2009). Arguably, the most topical example at the present time is the mutation of the initial normalization of condoms to prevent HIV. While their use was promoted in relation to the problematic posed by AIDS, they now serve as the benchmark for many of the debates that now circulate on the ‘whys’ and ‘wherefores’ for PrEP. Nonetheless, these debates also suggest that condom use signifies differently in the context of biomedical interventions (see Auerbach and Hoppe 2015; Blumenthal and Haubrich 2014; Cáceres et al. 2015; Race 2016; Rosengarten and Murphy 2019).

However, it is the ‘openness’ of problems raised by Savransky that I want to pursue in order that we might arrive at a different kind of problem to that formulated by biomedicine. Here I turn to Isabelle Stengers’ description of the response to what she terms the ‘AIDS event’ in France, prior to the advent of antiretroviral treatments. Although similar in manner Savransky’s conception of modes of togetherness, it adopts a more ‘human-centred’ approach to give emphasis to how a choice was made, in her words: ‘of not yielding to the urgency of the strictly medical problem, of resisting demagogic and security-seeking temptations’. Instead, as she puts this, it involved a choice ‘*to pose the problem [HIV] clearly*’ [sic] (Stengers, 1997:216.7). Her account does not detail the immense difficulties faced in making this choice, nor does it mention the inventiveness of cultivating the use of condoms as a protective barrier method *for sex*, in contrast to a public health insistence on abstinence (Kippax and Race, 2001; Rosengarten and Murphy, 2019). Nevertheless, it dramatizes the importance of a *formulation* of the HIV problem that is *relevant* to those who live the response to it. To put this another way, the problem of HIV was not taken as if self-evident as now seems so for a prevalent biomedical authority.

In a recent article, Dean Murphy and I have suggested that this early phase of the epidemic can be regarded as the cultivation of a pragmatic response to the problem of HIV. Pragmatic in the sense that foremost in the response was a concern that it should be relevant to *living with* the given reality or the prospect of such a

reality of a communicable infection and, moreover, without presuming to know in advance what would become (Rosengarten and Murphy 2019). By working with what was relevant to those affected by the event of AIDS, this early response to what otherwise seemed as a 'given' problem was effectively altered (Kippax and Stephenson 2012; Kippax and Race 2003).

If we now revisit the 'failure' of Fem-PrEP with the above arguments in mind, we can say that it was achieved by a selective process drawn from elements or characteristics known to comprise the trial protocol. For instance, bioethical requirements of consent forms, diagnostic technologies, research participants and so on. Elements that were assembled on the premise of a problem of a deficit in the body's capacity to ward off HIV and for which PrEP was decided as the solution. Contrary to what I have offered of an earlier pre-antiretroviral phase of the epidemic, this was not a problem posed by modes of togetherness to which the women contributed, and according to what was relevant to them. Rather, it was and continues to be a problem formulated and matched to the gains achieved by pharmaceutical interventions. To put this another way, the problem of 'failure' for which the women were able to be held responsible was a formulation based on isolating a 'certain chunk' in the transitory life of multiple relations and objects that made the trial an event. And, as part of that 'chunk', the women were able to be regarded as no more than a stable object of scrutiny. Bearing in mind what I have covered in this chapter and without presuming to know what might have become, we might nonetheless consider what other possibilities might have emerged with an appreciation for what the women provided. *Not a deficit in the course of the event but a difference as the event.* That is, a difference other than the authoritative determinations of biomedicine of events and what can become of them.

To refer again to the recent SMART trial, despite additional support provided by the trial that did not achieve the difference anticipated, the problem remains for biomedicine and global health as resolutely tied to a neglect. Hence, the problem has not disappeared but has been developed to require a more insistent mode of PrEP, that is, a mode intended to bypass whatever the women's reasons were for not using it. While we should not assume that the reasons will remain the same or that they were one in the same, we could agree that the heralding of PrEP in the form of longterm implants or injectables might have relevance. We could also agree that HIV incidence might well become reduced. But here we may remember Fauci's suggestion that biomedical technologies need to be implemented 'properly, aggressively'. In light of the complex dynamics that have reduced the problem of HIV to a deficit in the women, we might wonder about what this will demand of their diverse and evolving realities as well as those of others for whom biomedicine decides.

Here it may be helpful to consider what Fraser, cited earlier, says of her discipline of sociology with its particular reliance on concepts such as structures, capitalism, and power to bring about change: these, she says, are 'abstractions that make sociology relevant to itself' (Fraser, 2009:76). I suggest that the same may

be said of scientific concepts of bodies and viruses regarded as the essential stuff but also abstractions, in this case from the concreteness of HIV. As such they make science relevant to itself and, as I have sought to stress, have enabled it to increasingly extend its purview. While Fraser is not suggesting that we reject the perceptions of sociologists, nor do I suggest that we reject the perceptions of science. Rather, by treating events as the difference that is felt or registered between a 'before' and an 'after' – and not as if discernible according to an objective determination of time and space – we can appreciate, as Stengers (2000:66) proposes, what a scientist perceives of an event while, also, appreciating that they do not have a privileged knowledge of what the difference made signifies.

Conclusion

Insofar as some might wish to believe that at last the feminist goal is to be achieved with long term PrEP injectables or implants and that, the dynamic of the epidemic will be turned off, what I have endeavoured to suggest is that to see the epidemic in this way is to agree to what science has decided as relevant. To be sure, some *factors* in the dynamic may well become 'turned off'. We have already seen this to a significant degree with the introduction of antiretroviral drugs and the prevention of AIDS. But this has not made absent the inheritances of problems for which lay individuals and communities are held responsible and from which science is absolved. On the contrary, it has shored up a privileged scientific view of reality afforded by the licence provided by a conception of *bioethics*, that is, a set of transcendental principles added to what science pre-determines as relevant. ²

While HIV infection could well serve as the exemplar of the negative outcome of an event, that is, as creating a lack in the body's capacity to endure, it is nonetheless a happening involving not first and foremost an absence of elements but the very presence of elements to create the happening. It is the achievement of a felt experience, as are the solutions posed to the problems formulated from it. They are felt for the difference they make, a difference that impregnates the becoming of future events. Unwanted but real. If they weren't real we wouldn't be members of a field mobilised by matters of concern that I have argued are open to formulation. It is this that leads me to conclude that we have before us an unfinished history where events do not cease but, instead, remain generative due to the problematics they pose. A history where, to be sure, there is no guarantee of what will become, only the guarantee that a new difference will become of what has passed. And of which only some factors will acquire realisation in this difference. How they acquire realisation will depend on what will be taken up from prior events and by whom and/or what, including humans, viruses, research methods, publications and numerous other factors that may not be discerned. To put this another way, by assuming that problems are the bare fact of an event and due to a deficit or lack, we neglect its possibles. It is this that makes me hesitate about the promise of 'turning off the dynamics of the event' and doing so, as Fauci states, 'aggressively'. A promise that, for now, relies on first and foremost

correcting a deficit. In sum, as if what matters is an absence in what makes HIV a matter of concern rather than, as I have sought to suggest here, according to what is relevant to those presupposed as central to the concern.

References:

- Adam, Barry D (2006) Infectious Behaviour: Imputing Subjectivity to HIV Transmission. *Social Theory & Health* 4(2): 168–179.
- Auerbach, Judith D, and Trevor A Hoppe (2015) Beyond “Getting Drugs into Bodies”: Social Science Perspectives on Pre-Exposure Prophylaxis for HIV. *Journal of the International AIDS Society* 18(4 (Suppl 3)).
- Baeten, Jared M., Deborah Donnell, Patrick Ndase, et al. (2012) Antiretroviral Prophylaxis for HIV Prevention in Heterosexual Men and Women. *New England Journal of Medicine* 367(5): 399–410.
- Blumenthal, Jill, and Richard Haubrich (2014) Risk Compensation in PrEP: An Old Debate Emerges Yet Again. *The Virtual Mentor: VM* 16(11): 909–915.
- Cairns, Gus (N.d) Magical Thinking? FEM-PrEP Trial May Have Failed Because Participants Used Testing as Prevention, Aidsmap.Com. <https://www.aidsmap.com/news/jul-2013/magical-thinking-fem-prep-trial-may-have-failed-because-participants-used-testing>. [accessed January 9, 2020].
- Cáceres, Carlos F, Pedro Goicochea, Papa-Salif Sow, Kenneth H Mayer, and Peter Godfrey-Faussett (2015) The Promises and Challenges of Pre-Exposure Prophylaxis as Part of the Emerging Paradigm of Combination HIV Prevention. *Journal of the International AIDS Society* 18(4 (Suppl 3)).
- Deleuze, Gilles (1990) *The Logic of Sense*. Constantin V. Boundas, ed. Mark Lester and Charles Stivale, trans. Reprint edition. New York: Columbia University Press.
- Deleuze, Giles (1994) *Difference and Repetition*. Paul Patton, tran. New York: Columbia University Press.
- Epstein, Steven (1998) *Impure Science: AIDS, Activism and the Politics of Knowledge*. New Ed edition. Berkeley, Calif.: University of California Press.
- Fleck, Fiona (2013) The New Women’s Health Agenda. World Health Organization. *Bulletin of the World Health Organization* 91(9): 628–9.
- Flowers, Paul, and Mark DM Davis (2013) Understanding the Biopsychosocial Aspects of HIV Disclosure among HIV-Positive Gay Men in Scotland. *Journal of Health Psychology* 18(5): 711–724.
- Flowers, Paul. 2001. “Gay Men and HIV/AIDS Risk Management.” *Health: An Interdisciplinary Journal for the Social Study of Health, Illness and Medicine* 5 (1): 50–75.
- Forbes, Anna (2013) Mobilizing Women at the Grassroots to Shape Health Policy: A Case Study of the Global Campaign for Microbicides. *Reproductive Health Matters* 21(42). JSTOR: 174–183.
- Fraser, Mariam (2006) Event. *Theory, Culture & Society* 23(2–3): 129–132.

- Fraser, Mariam (2009) Facts, Ethics and Event. In *Deleuzian Intersections in Science, Technology and Anthropology*. Casper Bruun Jensen and Kjetil Rodje, eds. New York: Berghahn Books.
- Global Campaign for Microbicides <http://www.global-campaign.org/about.htm> [accessed December 2019]
- Grant, Robert M, Peter L Anderson, Vanessa McMahan, et al. (2014) Uptake of Pre-Exposure Prophylaxis, Sexual Practices, and HIV Incidence in Men and Transgender Women Who Have Sex with Men: A Cohort Study. *The Lancet Infectious Diseases* 14(9): 820–829.
- Holt, M. and Murphy, D. (2017). Prevention optimism related to HIV pre-exposure prophylaxis: shifting the focus from individual to community-level risk compensation. *American Journal of Public Health*. *American Journal of Public Health*, 107(10): 1568–1571.
- IAS (International AIDS Society (2005) Building Collaboration To Advance Hiv Prevention: Global Consultation On Tenofovir Pre- Exposure Prophylaxis Research. https://library.iasociety.org/MediaView.aspx?media_id=3391. [accessed July 2012]
- Kippax, S. and Race, K. (2003) Sustaining safe practice: twenty years on. *Social Science & Medicine*, 57(1): 1–12.
- Kippax, S. and Stephenson, N. (2012) Beyond the Distinction Between Biomedical and Social Dimensions of HIV Prevention Through the Lens of a Social Public Health. *American Journal of Public Health*, 102(5): 789–799.
- Koenig, Linda J., Cynthia Lyles, and Dawn K. Smith (2013) Adherence to Antiretroviral Medications for HIV Pre-Exposure Prophylaxis. *American Journal of Preventive Medicine* 44(1): S91–S98.
- Michael, Mike, and Rosengarten, M. (2013) *Innovation and Biomedicine: Ethics, Evidence and Expectation in HIV*. 1 edition. Palgrave Macmillan.
- Newman, Christy, Shana Hughes, Asha Persson, Hong-Ha M. Truong, and Martin Holt. (2019) “Promoting ‘Equitable Access’ to PrEP in Australia: Taking Account of Stakeholder Perspectives.” *AIDS and Behavior*, 23 (7) pp 1846–1857.
- Nicholls, E. & Rosengarten, M (2019) ‘PrEP (HIV pre-exposure prophylaxis) and its possibilities for clinical practice’ *Sexualities*. doi:10.1177/1363460719886556
- Race, Kane (2012) Framing Responsibility: HIV, Biomedical Prevention, and the Performativity of the Law. *Journal of Bioethical Inquiry* 9(3): 327–338.
- Race, Kane (2016) Reluctant Objects: Sexual Pleasure as a Problem for HIV Biomedical Prevention. *GLQ: A Journal of Lesbian and Gay Studies* 22(1): 1–31.
- Rosengarten, Marsha (2009) *HIV Interventions: Biomedicine and the Traffic between Information and Flesh*. In Vivo. Seattle: University of Washington Press.
- Rosengarten, Marsha (2017) Pluralities of Action, a Lure for Speculative Thought. In *Speculative Research: The Lure of Possible Futures*. Alex Wilkie, Martin Savransky, and Marsha Rosengarten, eds. Pp. 71–83.

- Rosengarten, Marsha, and Dean Murphy (2019) A Wager on the Future: A Practicable Response to HIV Pre-Exposure Prophylaxis (PrEP) and the Stubborn Fact of Process. *Social Theory & Health*.
<http://link.springer.com/10.1057/s41285-019-00115-y>, [accessed August 25, 2019].
- Savransky, Martin (2014) *The Adventure of Relevance: An Ethics of Social Inquiry*. Palgrave Macmillan.
- Savransky, Martin (2018) The Social and Its Problems: On the Problematic of Sociology. In *Inventing the Social*. Noortje Marres, Michael Guggenheim, and Alex Wilkie, eds. Pp. 212–233. Manchester UK: Mattering Press.
- Savransky, Martin, and Marsha Rosengarten (2016) What Is Nature Capable of? Evidence, Ontology and Speculative Medical Humanities. *Medical Humanities* 42: 166–172.
- Schillmeier, Michael (2017) *Eventful Bodies*. 1 edition. Routledge Oxfordshire and New York
- Sehgal, Melanie (2018) Aesthetic Concerns, Philosophical Fabulations: The Importance of a “New Aesthetic Paradigm.” *Substance* 47(1): 112–129.
- Sheth, Anandi N, Charlotte P Rolle, and Monica Gandhi (2016) HIV Pre-Exposure Prophylaxis for Women. *Journal of Virus Eradication* 2(3): 149–155.
- Singh, Jerome A (2004) Standards of Care in the Antiretroviral Rollout World. *The Lancet* 364(9438): 920–922.
- Singh, Jerome A, and Edward J Mills (2005) The Abandoned Trials of Pre-Exposure Prophylaxis for HIV: What Went Wrong? *PLoS Medicine* 2(9): e234.
- Stengers, Isabelle (2011) Sciences Were Never “Good.” *Common Knowledge* 17(1): 82–86.
- Stengers, Isabelle (2000) *The Invention of Modern Science*. Daniel W. Smith, tran. Minneapolis: University of Minnesota Press.
- van der Straten, Ariane, Lut Van Damme, Jessica E. Haberer, and David R. Bangsberg (2012) Unraveling the Divergent Results of Pre-Exposure Prophylaxis Trials for HIV Prevention. *AIDS*, 26(7): F13-19.
- Thigpen, Michael C., Poloko M. Kebaabetswe, Lynn A. Paxton, et al. (2012) Antiretroviral Preexposure Prophylaxis for Heterosexual HIV Transmission in Botswana. *New England Journal of Medicine* 367(5): 423–434.
- UNAIDS (2019) 19.6 million girls and women living with HIV
<https://www.unaids.org/en/resources/infographics/girls-and-women-living-with-HIV> [accessed November 2019]
- Valencia-Garcia, Dellanira, Deepa Rao, Lara Strick, and Jane M. Simoni (2017) Women’s Experiences with HIV-Related Stigma from Health Care Providers in Lima, Peru: “I Would Rather Die than Go Back for Care.” *Health Care for Women International* 38(2): 144–158.
- Whitehead, Alfred North (1920) *The Concept of Nature*. Reprint edition. Cambridge: Cambridge University Press.

WHO/UNAIDS (2006) Creating Effective Partnerships for HIV Prevention Trials: Report of a UNAIDS Consultation, Geneva 20–21 June 2005: *AIDS* 20(6): W1–W11.

Women’s Network for Unity, Cambodia (2004) Protests Drug Trial Recruitment Tactics, 15 June. Public statement released by WNU Secretariat.

Young, Ingrid, Paul Flowers, and Lisa McDaid (2016) Can a Pill Prevent HIV? Negotiating the Biomedicalisation of HIV Prevention. *Sociology of Health & Illness* 38(3): 411–425.

Endnotes

¹ The interview is titled ‘ Dr. Fauci Discusses Ending the HIV Epidemic from the 2019 IAS Conference on HIV Science’. It was conducted by Anne Rancourt available online at <https://www.niaid.nih.gov/news-events/ias-2019-fauci-discussion> [accessed November 2019]

² For process thinkers, ethics can be more constructively appreciated as immanent to the value created by the dynamics of its situated happening (see for example: Savransky, 2014; Sehgal 2018).