

Editorial

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In this second part to the special issue 'STS and Global Health: Critique and Complicity', we explore some of the issues at the intersections of STS and Global Health raised in the first editorial (3/2017) through a constructed dialogue between an epidemiologist, an STS scholar and a critical activist. Such tongue-in-cheek dialogues and coffee house conversations offer a rough narrative and a fruitful form to tease out some of the different positions involved in encounter of STS and Global Health (see Hirschauer and Mol, 1995; Woolgar, 1989, 1993 for examples of the use of dialogues and conversations in STS). In the postscript to this special issue, Amit Prasad again picks up and further develops the concerns of integrating postcolonial theory and history into STS analyses of Global Health. Prasad urges to deconstruct the discursive emplotment of 'otherness' and how the west-centric divide –in latent or manifest form– spreads through representations of medical and scientific practices in places that are regarded as non-West.¹

Coffee time at the conference: The global health complex in action to tackle antimicrobial resistance

Dr. Epi(demiology), Dr. STS (Science and Technology Studies) and Dr. Activist have been sitting all morning in a dark and airless auditorium listening to speakers address the conference 'Global Solutions to Antimicrobial Resistance (AMR): A Joined-up Approach'. As a dazed stream of delegates shuffles out and into the coffee queue, Dr. Epi feels moved to state the obvious about AMR and in the process, strikes up a conversation with Dr. STS and Dr. Activist who are standing nearby. It quickly becomes apparent that said 'joined-up approach' is easier said than done. Can the three delegates reach a solution to AMR by the time the next Plenary starts?

Dr. Epi: AMR is essentially a problem of misuse of antibiotics, so aside from developing new drug products, can we also develop interventions that

solve the problem of misuse and non-adherence to these drugs? For instance, we could use mobile phones or electronic pill counts to curb the problem of non-adherence. There is already some literature showing that these work.

Dr. STS: We can't simply assume beforehand that the problem lies solely with patients not adhering to their drugs! Global Health rhetoric always blames the patients for not going where the technology is; it's a trap to believe that it is never the technology that is at fault.

Dr. Epi: But how can the drugs be at fault here when so much has been spent on R&D?

Dr. Activist: Antibiotics and other drugs are developed and produced through exploitative research processes, that's the problem! There is active exploitation of communities in the Global South, among vulnerable populations, to produce products for the benefit of people in the West. The pharmaceutical industry is rolling out easy solutions! We can see this in so many of the new vaccines. Look at the strains which are included in things like the Rotavirus and flu vaccinations - the strains of the viruses included in these vaccines on the market are not those affecting most of those in the Global South! They are only designed for the benefit of people in the West.

Dr. STS: It's not only the drugs. Just looking at how they work distracts attention from all the processes involved in producing and enacting antibiotics. It is also the public health systems delivering the drugs, with their protocols, guidelines, diagnostic devices, laboratory equipment, treatment categories and monitoring tools that is at stake. Antibiotics are global health technologies that encompass all these things and they in turn have an impact on whether the drugs work or not.

Dr. Epi: Hmm. [Dr. Epi does not look convinced]. But is that not a problem of health system strengthening? And in addition, can we find other technologies which might help us detect misuse and poor adherence?

Dr. STS: Well, a lot depends on how you define a health system and what you include in that category. My point is that technology needs work to function. And what makes it function are factors and elements that you epidemiologists would subsume under the heading 'health system', but it goes beyond that, it also involves the work that

patients need to do to access health centres and adhere to their drugs; the work of suppliers and distributors to ensure drugs are in stock and expiry dates matched; the work of the scientists, companies and donors involved in developing the drugs and deciding on components, dosages, marketing and availability. Assuming that Global Health technologies or interventions exist independently of this labour is naive. It does not do justice to the complexity going on here. And it is one of the reasons why many Global Health interventions fail and potentially why we have the problem of AMR in the first place! Not enough attention has been paid to what it takes to make antibiotics work and consequently research has not focused on these components and resources have not been allocated. One of the great strengths of STS is its ability to embrace complexity instead of arguing that complexity needs to be limited or simplified and to understand all the elements that make the technology, drug, and so on.

Dr. Activist: There is a moral problem underlying your approach to complexity. The Global Health complex and your 'complex' approach doesn't acknowledge that these networks are embedded in extremely steep power gradients. The networks are part of global neo-liberalist forms of capital-production that create extractive structures and systems of oppression. Looking at that complexity without a theoretical framework fails to see this and without addressing them makes you complicit in them. The way I see it is that Global Health projects don't alleviate health problems but instead create and re-create them. They allow rich expatriates to do research in fancy places while on some self-defined moral high ground, allegedly looking after the brown poor.

Dr. Epi: I can see why you would say that, but there are people working on health projects who really want to do the right thing.

Dr. Activist: There is no moral exteriority here - even publicly funded research projects are nested in a neoliberal funding structure. Can you deny the dynamics of race and colonialism at play in Global Health? International collaborations are, in effect, capitalizing on the poverty in those regions. They are silent about how to resolve the structures that cause the health problems that they are trying to tackle.

Dr. STS: But to take that argument to its logical conclusion, you are also making a living out of this...

Dr. Activist: (now seemingly offended): I am here to confront the power imbalances that medical research relies on, to address structural violence, rather than to walk in halls of fame.

Dr. Epi: Listen guys, take it easy, can we put politics and ideology aside for a minute and think about how we can solve this? We have people dying because antibiotics are not working and you guys are busy arguing about complexity. Instead, we could spend a minute to create a theory of change about how we can control all the variables of this, in order to change the use of antibiotics globally and...

Dr. STS: Change? We? Change?

Dr. Epi: Yes, obviously. Well, there is only so much we can do, and something is better than nothing! In the end, implementation is the responsibility of countries themselves. And new technologies such as m-health solutions or rapid tests can overcome dysfunctional infrastructure and weak health systems because they allow surveillance, counseling or testing without relying on transportation, laboratory infrastructure and well-staffed clinics... But the way that you talk is too jargony, no-one can follow that. So can we come back to how we can change practice? We are losing time arguing, when instead we should think about policy transfer and impact. I don't think it's enough that we publish in *Lancet Global Health*, so can we think who our stakeholders are? Does anyone know that WHO advisor for AMR, and national advisors? Can we get an appointment with them to organise a quick policy brief to disseminate our findings? Increasingly, that's the future, because if we wait for these systems to be strengthened then thousands of people will die. We need to act now with these technologies to save lives.

Dr. Activist: Your attitude is creating an artificial state of emergency, built on half-baked ideas and ill-thought through positions, which are rushed out onto the world's poor and also costs lives. Nobody wants people to die, but this 'something is better than nothing' attitude creates so many problems. Why can't you accept that the 'something' that you speak about is contingent on all sorts of things, including politics and money, and

often has very little to do with the best interest of the sick and dying? Many Ministries of Health are so donor-dependent in dealing with their infectious diseases problems, that they are limited in what they can spend their funds on. And it is often those items that can be counted - like drugs - that are being pushed by the big funders. So, it is the global community of scientists, donors, regulators, drug companies and policymakers that has a considerable influence here! We need to pay much more attention to the critical role of politics in Global Health.

Dr. Epi: But measuring is a good thing! We need evidence-based policies! We don't want to go back to the days when the WHO made policies based purely on expert opinion. We need to know what works, do cost-effectiveness analyses and systematic reviews of the evidence and when there is no data we can model it. Maybe we need more implementation research to address the problems you outlined with 'making antibiotics work'. You social scientists should do that!

Dr. Activist: Well, I think that many social scientists will take objection to what you're suggesting here. Social scientists do more than listen and talk and social science methods do not exist solely to research how best to implement your research findings! Besides, there's lots of data that already exists in the social science literature about why people might not take a full course of any medication, including all the work that has been done charting the social lives of medicines. So when you say 'data', I think what you really mean is *numerical* data. I think that what lies at the heart of this is that qualitative data are not taken seriously as providing evidence unless they're collected specifically for each and every research project wanting to implement its particular findings. Well, if you want to talk about a waste of resources we can start with this point... Anyway, coming back to the drug/adherence intervention development processes: the current Global Health intervention designs and products are not relevant to those in the Global South because they fail to understand the local context. Southern partners are excluded from the design process and Northern partners have all the say. As I said before, these are historically-based structural processes that have not changed much from colonial times!

Dr. STS: Clearly technologies also embody assumptions about the users, norms, values, and logics of the places that they are designed in and for. We saw this with the latest Ebola outbreak. Tracking mobile cell phones was supposed to be the answer to all the problems and they were supposed to be used as a means of keeping track of people and the epidemic as it unfolded. Yet we now know that many people in the Global South have a different relationship to their phones to those in the Global North, where one person owns one phone and that phone is closely tied to their personal identity. In West Africa, it is common to have more than one phone with multiple sim cards. So depending on who is involved and consulted, design and implementation choices differ.

Dr Epi: OK, point taken, community engagement is needed in order to cope with AMR. I would suggest that we reach out to patients and members of the public and ask them.

Dr. Activist: Community engagement does not exist to mop up your poorly thought-through projects. Besides, are there any community members at this conference?

Dr. Epi: Ahem... the organisers should probably have invited patient representatives and clinicians.

Dr. Activist: Even if they had, I've been to those kinds of meetings and - no offence intended - but they are nearly always with nursing mothers and the elderly unless they're with 'hard to reach' groups, in which case you get these expert participants there to make a living out of their identity. Very little proper consultation takes place with a wide range of people, including working professionals. Honestly, I've heard scientists working in areas with close to 300,000 people talking about a handful of people as community engagement representatives without saying how those people were selected! Why that handful and not another?! When quizzed they always say things like "these reps were chosen by the community", so creating a circular problem around what a community *is*, such that it can select these handful of reps! So-called participatory research is also exploitative if people in the Global South are taken advantage of as tokens for community engagement activities. As such, it is yet another neoliberal gesture that by-passes the state in favor of philanthropic Global Health actors. Unless it is activist,

citizen science, and led by communities on their own terms, it remains exploitative. Because how can communities in the Global South take part in these processes? The rules have already been set by the Westerners and are not easy to comply with if funding or capacity is scarce. Also, certain forms of scientific knowledge count more than others, but require research infrastructure, funding and access to journals.

Dr. Epi: This is why research capacity building is so important! And it is a very clear policy recommendation: build local research capacity to deal with the AMR threat.

Dr. Activist: Well I think, that before we go any further it's important for you to know that many people prefer to use the concept of *capacity strengthening* as it suggests that there is already some capacity there, whereas as *building* gives the impression that there is nothing there to begin with. Anyway, yes, capacity strengthening is important, but the form it takes is just as important. If you're going to provide training to healthcare staff to use a specific piece of technology which helps them to detect the active pharmaceutical ingredients in each batch of antibiotics they receive then it's possible to argue that this is capacity strengthening. But is it the most effective use of resources, and are transferable skills being developed here?

Dr. STS: Communities of patients and healthcare workers are not the only users of AMR technology or interventions that matter here. I feel like I'm repeating myself. Donors, distributors, technicians, scientists, policymakers, guideline makers, regulators, and so on also matter. You need to think about your non-users as well, like the private doctors, who in many countries are treating the majority of patients when they first seek care. Besides, why is it always the capacity of those in the Global South that needs strengthening? Surely, in the interests of symmetry we should also be talking about strengthening the capacity of the scientists and those in the Global North to appreciate how technologies and drugs work in the real-world.

Dr. Epi: You really like to make things more complicated! How should we practically involve all these people in our research projects? Who should pay for this? Where should they meet?

Which countries, regions and social strata should they be from? They will never be representative of all users! And what if they do not reach consensus? I understand that we need to incorporate the preferences and values of patients and clinicians into guideline development processes and ideally also get some feedback from them in the development of new drugs and interventions. Social scientists should do more studies on preferences and values that we can use in global guidelines and decision making processes, and we could make an argument for generating more funding for those kinds of studies alongside trials. But beyond this, shouldn't we leave technical design decisions to the technical experts and subject the outcomes to proper scientific evaluation? We can then optimise roll-out with implementation research studies after the technologies have been designed.

Dr. Activist: Not only are such ideas based on a top-down notion of expertise (most likely also white, male and middle class), and a hierarchy of knowledge, they are also based on ideas about diffusing technologies and interventions that rely on a techno-cultural construction of the 'West versus the Rest'. To subvert these structures would take a lot.

Dr. STS: Hold on, social science research produces proper scientific evidence! It's just not handled as such by the Global Health community, which is obsessed with trials and systematic reviews! Have you ever tried to publish a social science piece in the *Lancet Global Health*? I mean 3,500 words! Besides, all scientific practice is localized and situated and so is enacting technologies. It's essential for the Global Health community to recognise this, since its mission is to develop technologies that work across different places.

Dr. Epi: Ok, ok, I'm starting to be convinced by your arguments that there's more than one way of thinking about AMR. But what does this mean in plain English and practically-speaking? How would you intervene to save people's lives?

Dr. STS: We cannot establish a norm as to what types of technologies (whether fluid, locally or participatory designed, or not) travel well from one place to another - this is always a question of how the different elements that enable the technology to function interact. And then different actors might define the success of a technology

or intervention differently. There are just no magic bullets. While all practices are situated there are also stabilizing and standardizing elements across situations and time. STS scholars have also argued we shouldn't take Global Health technology for granted, but should problematize it in terms of how the local and the global relate to and are reconfigured by each other. How do different actors talk about the local and the global and how are these discourses tied into specific practices? Answering these questions requires more than qualitative interviews as off-shoots of scientific projects; we would need detailed ethnographies of Global Health technologies and interventions across local and global sites over longer periods of time.

Dr. Activist: On this we agree. If someone could point me to a bigger oxymoron than the phrase 'rapid ethnography' I would be most grateful. What we're talking about here really needs detailed, theoretically informed ethnographies!

Dr. Epi: So your proposal is to include more and more varied ethnography? Are you not running the risk of producing a new knowledge hierarchy? Should everybody just listen and follow ethnographers' interpretations and advice, instead of the RCTs and systematic reviews by epidemiologists? What you Dr. STS seemed to say earlier would suggest something else, more like broad, interactive interventions that would place those involved with development, evaluation and implementation of Global Health technology, ethnographers and local knowledge on the same footing in seeking to improve antibiotics treatment adherence and prescription across the local health practices and related actors. This could be a viable strategy for creating something long-lasting and truly inter-disciplinary. What do you think?

The three delegates finally reach the end of the coffee queue, just as the call for the next Plenary is announced. Dr. Epi stumbles into her friend Dr. Health Economist and before she leaves she turns to Dr. STS and Dr. Activist: "Just think about it, we could start something together, we could apply funding to do just that". Though hesitant at start, Dr. STS and Dr. Activist see the potential of collaboration for changing Global Health from inside, and the intellectual challenges this would bring. Dr. Activist feels vindicated; he takes a cup

of Cafédirect Fairtrade Colombian coffee and returns to his seat on the edge of the auditorium. Dr. STS looks at the available options on the table; she can't decide between Café direct Fairtrade

Colombian coffee and Twinings English Breakfast tea. Within herself, she is worried that her position could become more exploited, and that her sure footing is potentially lost for good.

References

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Notes

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