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THE NEED FOR FEMINIST APPROACHES TO SCIENCE COMMUNICATION

Questioning the feminization in science communication

Tania Pérez-Bustos

Abstract	This comment discusses feminization of science communication as a process that is related to the professionalization of the field, but also with the subordination of its practices to certain ideas of science that have described as androcentric. It argues that science communication can play an important role in questioning this subordination and contributing to democratizing science bringing gender diversity into it. For this, the comment presents the case of a Colombian transgender scientist whose public presence in media has being important to destabilize scientific subjectivities in the country and also has opened the possibility to think of science from a care-ful perspective.
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Traditionally, feminization has been described as a demographic phenomenon — that is, it highlights the tendency of a field being more populated by women than by men. For science communication it means that nowadays there are more women being active and visible in this field. However, this demographic tendency is a symptom of a broader cultural phenomena. We have to think of feminization as a process, in which values and practices associated with that what we consider "feminine" are more central to the description of a field, especially by its outsiders. In this context, the increasing presence of more women in a field like science communication is a consequence of this process of something becoming more feminine, not its result [Griffiths, 2006; Pérez-Bustos, 2010]. So, science communication was not always feminized. When popularization of science became an institutional and developmental goal in the global north, back in the 1950s, it was science men who assumed this responsibility of taking science to the public. But it is when science communication professionalizes that it starts to feminize as well [Avellaneda and von Linsingen, 2011].

Thus the fact that more women have entered science communication during the past 70 years implies that certain feminine values culturally defined are now more

at the core of how this craft is being practiced. In this vein we need to ask, what those values are, and how they are shaping the field? But most of all, we also need to understand that this is a phenomenon that has to be understood historically. To say that science communication *is* a field for women is to say that it has *become* a field for women and this means that in the social imaginary it appears as subordinated to science (in the same way that education in general is subordinated to knowledge production and is also a feminized field). By subordination I mean that science communication contributes to the mobilization and popularization of a certain idea of what science is, as if science communication was not a field of its own, but a field dependent on the field of science.

To explain this, we have to talk about the gender values attributed to science, not just those attributed to science communication. Feminist authors have largely argued that science is an androcentric field [Schiebinger, 1999], not just because the bodies, values, traditions and behaviors that we associate with technoscientific knowledge production are usually not those embodied by women in general, or women and men of color in particular, but also because in fact there is a lack of women in general and people of color in particular in STEM [Moss-Racusin et al., 2018]. Science communication plays a huge role in reinforcing this idea of what science is and who is a scientist [Pérez-Bustos, 2014a], so science communicators have the responsibility of asking themselves: what are the scientific subjectivities they are contributing to standardizing throughout their practices?

What is interesting for me, however, is not just how science communication can contribute to this reinforcement, but how it can also play a role in contesting this idea. Science communication can, not just show that there are women and men who do not fit into the cultural standard of an androcentric science, and so contribute to in the sense of bringing diversity and democratization of technoscientific knowledge. But science communication can also show how science can be done differently: sometimes by women and people of color, by people from the global south, by people with disabilities, all of whose experiences of the world affect and shape the way they perceive and live in the world and so are keener to perceive imbalances that work against them (such as discrimination practices).

Now, these bodies and experiences that are marginal to normal or hegemonic science are also keener to embody another ethos of science, especially because of their marginal experiences: an ethos that can be care-ful of those communities that they embody, an ethos that can be attentive to those communities and to their needs. An example of this is the case of transgender women scientists. The public presence of transgender women scientists in media accounts of science contributes highly to destabilizing, not just the imaginaries that people have about transgender women in general, but also to question the idea of who is science for in itself and how we produce it and why [Knobloch-Westerwick, Glynn and Huge, 2013].

Let me briefly delve into this example to make my point clearer [Pérez-Bustos, 2014b]. Brigitte Baptiste is a biologist. She was born biologically male and began her transition to become a transgender woman in 1998. Three years before publicly assuming her transgender identity, she started working as a researcher at the Alexander von Humboldt National Institute of Biodiversity in Colombia. In 2011, she became the institute's director, a position she continues to hold (see Figure 1).



Figure 1. Photo of Brigitte Baptiste in a fashion magazine in Colombia. Source: https://www.fucsia.co/edicion-impresa/articulo/briggitte-baptiste-directora-delinstituto-von-humboldt/60065. Since assuming this role, her presence in the public sphere has grown enormously. She has been widely interviewed about her personal experiences as a transgender woman, and she has been called upon by the media to speak as an expert about controversial environmental issues. Her views on sexuality and gender, as well as on the environment, are seen as progressive and, by some, as polemical. She recently gave a TED talk in Uruguay saying that there was nothing queerer than nature. What happens to the imaginaries of people about scientists as modest witnesses of facts and to the imaginaries of transgender women as hairdressers or prostitutes when public media take the risk of talking about and talking to scientists as Baptiste? What happens is that the public media widen the idea of who are meant to be scientists, gives them a body and a place within science that is legitimate to science, but also unmarks those bodies that are marginalized and left without privilege of knowing and understanding the world.

Asking those questions, about who is a scientist, how science is produced and why, but doing it having in mind that we can produce knowledge paying attention to that that is neglected (as for example marginal lives of both humans and more than humans), brings back responsibility into science.

By responsibility I mean the ability to give account for what we study and the way we do it, to be able to respond for that reality and for our practices of studying it [Pérez-Bustos, 2016]. Here, one has to consider that realities we, as scientists, study are not alien to us, but are realities which we become (humans and scientists). This is what I call an ethos of care, a caring science, one that I would like to emphasize is not just produced by scientists, but made by science communication in all of its practices.

So when we think of science communication as feminized, we can think of how this field is subordinated to particular hegemonic ideas of what science is about or not about. Feminization of science can also bring care into science communication practices and politics; by care, I mean the speculative commitment to neglected things [Puig de la Bellacasa, 2017]. We can bring care into the way science is produced and circulates. We can bring a commitment to marginal voices, to subjectivities that embody science and contest it, to ways of doing research that are open to publics, to listening, to collaborating responsibly. A politics of care that has this horizon is in itself a feminist agenda, one that can transform science communication as a field that is able to shape a caring science.

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