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Disentangling war and disease in post-conflict Colombia beyond technoscientific peacemaking

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ABSTRACT

In November 2016, the Colombian government and the Revolutionary Armed Forces of Colombia (FARC) signed a peace agreement to end a 52-year war. In the context of the peace deal implementation, I ethnographically traced entanglements of biomedicine, public health and the armed conflict across shifting temporalities and realities of war and peace. Through an exploration of past, present and future (dis)entanglements of war and leishmaniasis – a vector-borne disease known by many in Colombia as “the subversive disease” or the “guerrilla disease” – this article traces a discourse that frames health problems, like leishmaniasis, only as scientific or technological challenges. Drawing on STS critiques of future-oriented timelines in technoscience and the concept of pharmaceuticalization, I argue that the expectations embedded in technoscientific innovation problematically limit the possibilities of disentangling leishmaniasis and war in post-conflict Colombia. In contrast, ethnographically exploring how health policies and biomedicine have nurtured violence and exclusion helps us destabilize the warfare-loaded meaning and experience of leishmaniasis. This approach enables us to move beyond imaginaries of *technoscientific peacemaking*, which I define as the excessive trust endowed to technoscience to (re)build a peaceful future, especially when we are faced with failures in understanding the involvement of technoscience in the production and perpetuation of violence.

KEYWORDS

Temporality; technoscience; peace; war; pharmaceuticalization

PALAVRAS-CHAVE

temporalidade; tecnociência; paz; guerra; farmaceutização

PALABRAS CLAVE

Temporalidad; tecnociencia; paz; guerra; farmaceutización

Desvendando guerra e doença na Colômbia pós-conflito, além da pacificação técnico-científica

RESUMO

Em novembro de 2016, o governo colombiano e as Forças Armadas Revolucionárias da Colômbia (FARC) assinaram um acordo de paz para acabar com uma guerra de 52 anos. No contexto da implementação do acordo de paz, eu segui as complicações da biomedicina, saúde pública e os conflitos armados, alterando prazos e realidades da guerra e da paz. Através de uma exploração do passado, presente e futuro (desenmarañamientos de guerra e leishmaniose, uma doença transmitida por vetores conhecidos por muitos na Colômbia como

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“doença subversivo” ou “guerrilha doença”, este artigo descreve um discurso enquadrando saúde, problemas como a leishmaniose, assim como desafios científicos ou tecnológicos. Com base nos comentários de STS de prazos de frente para o futuro tecnociência e do conceito de farmacização, argumento que as expectativas incorporadas na inovação tecnocientífica problematizam possibilidades limitadas de desembaraçar conflito leishmaniose e a guerra na Colômbia, em contraste, etnograficamente explorar como eles têm alimentado as políticas de saúde e biomedicina a violência e a exclusão nos ajudam a desestabilizar o significado e a experiência carregada de guerra da leishmaniose. Essa abordagem nos permite ir além das imaginações de tecnocientífica pacificação, que defino como excesso de confiança dado à tecnociência para (re)construir um futuro de paz, especialmente quando enfrentamos falhas na compreensão da participação da ciência e tecnologia na produção e perpetuação da violência.

Desenredando la guerra y la enfermedad en la Colombia postconflicto más allá de la pacificación tecnocientífica

RESUMEN

En noviembre de 2016, el gobierno colombiano y las Fuerzas Armadas Revolucionarias de Colombia (FARC) firmaron un acuerdo de paz para poner fin a una guerra de 52 años. En el contexto de la implementación del acuerdo de paz, rastree etnográficamente los enredos de la biomedicina, la salud pública y el conflicto armado a través de las cambiantes temporalidades y realidades de la guerra y la paz. A través de una exploración de los (des)enredos pasados, presentes y futuros de la guerra y la leishmaniosis, una enfermedad transmitida por vectores conocida por muchos en Colombia como “la enfermedad subversiva” o la “enfermedad de la guerrilla”, este artículo describe un discurso que trata problemas de salud como la leishmaniosis, solo como desafíos científicos o tecnológicos. Retomando las críticas orientadas al futuro de STS en la tecnociencia y el concepto de la farmacéuticalización, sostengo que las expectativas incorporadas en la innovación tecnocientífica limitan de manera problemática las posibilidades de desenredar la leishmaniosis y la guerra en la Colombia postconflicto. En contraste, una exploración etnográfica de las formas en las que las políticas de salud y la biomedicina han nutrido a la violencia y la exclusión, nos ayuda a desestabilizar el significado y la experiencia cargados de guerra de la leishmaniosis. Este enfoque nos permite ir más allá de los aspectos imaginarios de la pacificación tecnocientífica, que defino como la confianza excesiva otorgada a la tecnociencia para (re)construir un futuro pacífico, especialmente cuando nos enfrentamos a fallas en la comprensión de la participación de la tecnociencia en la producción y perpetuación de la violencia.

In August 2016, a month before going to Colombia to start my ethnographic field research, my partner and I decided to go for a 10-day vacation to Cuba. In Havana, we walked to the Palco Hotel early one morning to meet a tour bus. At the hotel, we saw a cameraman and a reporter interviewing Iván Cepeda, a left-wing Colombian senator who has played a

significant role in denouncing state crimes that have taken place during the more than 50-year long Colombian war. Later, we saw him walking away with Álvaro Leyva, a conservative prominent figure in Colombian politics and one of the key actors in the peace dialogues that were taking place at that time in Havana between the Colombian government and the largest and oldest guerrilla organization – the Revolutionary Armed Forces of Colombia, FARC. Unknowingly and without planning for it, we were at the hotel where peace in Colombia had been under negotiation for almost four years. As Colombians who had been heartedly and optimistically supporting the peace dialogues, my partner and I were enthusiastic.

It took almost four hours for the bus to pick us up. As the morning progressed, we almost forgot about it and enjoyed observing how the hotel lobby became crowded with journalists and members of both delegations – the state's and the FARC's. Cuba's relaxed sense of time allowed us to have an unpredicted close-up look at a major event in Colombia's history that, until then, we had only witnessed from afar, through the media. Unexpectedly, it also gave us the unique opportunity to meet and talk for about three hours with Francisco,¹ a guerrilla member who was also at the hotel entrance waiting for someone to arrive. Once we found out that he belonged to the FARC delegation, I started asking him questions related to leishmaniasis,² the vector-borne and parasitic disease that was at the center of my research. He, a mid-rank commander with FARC for 28 years, had already lost count of the times he had suffered from leishmaniasis. However, he had never been asked about this illness, which is considered by many in Colombia "the subversive disease" or "the guerrilla disease."³ Thus, Francisco was happy to share his own experiences with leishmaniasis and the consequences of the state's restrictive control on the circulation of anti-leishmanial drugs. He was also curious to learn more about an illness that has affected almost every combatant of the Colombian war – soldiers and members of guerrilla and paramilitary organizations – as well as civilians who, for one reason or another, have become exposed to the *selva*⁴ and the leishmaniasis-transmitting sandflies that inhabit it.

I was about to start my field research on this disease as an illustrative instantiation of the ways in which biomedicine, public health and war have become closely related in Colombia. At that time, it was clear to me that the voices of guerrilla (ex) combatants had to be present in my work. Although I had already contacted people working for the state institution in charge of guerrilla members' processes of demobilization and reintegration into civilian life, authorization to conduct interviews with ex-combatants was a long and still

¹This name, as well as all the names of informants who participated in my research, is a pseudonym.

²Biomedicine describes two major forms of leishmaniasis: cutaneous and visceral. While the latter can be deadly and constitutes a serious problem in other countries, 97% of all leishmaniasis cases in Colombia correspond to the cutaneous form (MinSalud 2010), a disease that manifests as growing sores on the skin. Unless otherwise indicated, in this paper I use the term *leishmaniasis* to refer to cutaneous leishmaniasis, which is the illness my research is concerned with.

³In Colombia, leishmaniasis is not only viewed as an illness that is specific to guerrillas (see, for instance, Acevedo Serna 2012; El Tiempo 2008, 2015), but also as a disease that is characteristic of the armed conflict. More recently, after the peace agreements were signed, leishmaniasis has even been called "the post-conflict disease" (see Vélez and Pérez 2016).

⁴*Selva* is a Spanish word that is usually translated into English as "forest," "tropical forest" or "jungle." While both "selva" and "jungle" hold colonial, civilizatory and modernizing connotations (Ospina 2014; Rodríguez 1997), I draw on Kristina Lyons's (2016) take on *selva* throughout this paper. Choosing *selva* over other words avoids leading the reader to tropes that have more to do with histories and geographies of the British Empire and less with colonial and development struggles and debates in South America. I also choose the noun *selva* to highlight how reductionist it is to make it into "forest." "Forest" makes invisible the exuberant biodiversity underlying the messy, relational and metamorphic nature of *selva*, and also the ways in which *selva* becomes deeply entangled with human and more-than-human phenomena – such as leishmaniasis – that develop within it.



Figure 1. Cuban newspaper headlining its front page with “Colombia: the peace, a victory of all,” on August 25, 2016. Photo by the author.

uncertain process. Thus, I felt tremendously fortunate when Francisco told me by phone, some days after our conversation at the hotel, that it was possible to arrange a meeting in Colombia with FARC members to discuss their experiences with leishmaniasis. That meeting became possible half a year later, in February 2017, three months after the peace deal was signed.

I happened to be in Havana, in that hotel, in the very nick of time. Three days later, the government and FARC delegations pronounced the successful end of the negotiations, and went back to Colombia. Still in Cuba, I became aware of this unanticipated and truly remarkable news when I came across a *Granma* newspaper – the iconic daily of the Cuban regime – announcing peace in Colombia as “a victory of all” (Figure 1). Oscillatory temporalities and realities between war and peace marked my days in Cuba, as well as my entire research process of making sense of “the guerrilla disease” through the tactics of participant observation and ethnographic inscription. It was there, in Havana, that my research unexpectedly started and a crucial part of my fieldwork became suddenly possible. I had written a project to study the entanglements of

leishmaniasis and war, but I soon realized that my research was going to be about an illness and its becomings across an unfinished conflict and a nascent peace.⁵

This paper is part of a larger project that ethnographically traces the links between leishmaniasis, the Colombian armed conflict, and the aspirational logics of peace. Of course, leishmaniasis is not the only disease affecting combatants of the Colombian war, but I have decided to pay close attention to this non-contagious, non-deadly and curable disease because it is a highly emblematic instantiation of the ways in which biomedicine, public health and warfare have become entangled in Colombia.⁶ My research (Pinto Garcia [Forthcoming](#)) has allowed me to understand the state's restrictive control on antileishmanial drugs as a warfare strategy based on measures and arguments supported by global health guidelines, public health regulations, and biomedical knowledge and practices. Likewise, I expose how scientific research on leishmaniasis has been shaped by war and how the work and lives of leishmaniasis researchers have suffered from war; but also how the production of biomedical knowledge draws on and is organized around the violence and the structural inequalities faced by those affected by this disease in rural Colombia. I also explore the involvement of the state in the production of the stigma attached to leishmaniasis, something not necessarily exceptional or recent in the history of Colombia, but that very much resonates with the history of another skin and stigmatizing disease – leprosy (Obregón 1996, 2002; Platarrueda Vanegas 2008). In the course of my research, I have followed soldiers, guerrillas, military dogs, scientists, public health officers, and civilians through a multi-sited approach (Fortun 2009; Marcus 1995) involving various localities where the crossroads between the disease, war, and peace are traceable in the everyday. However, this paper draws on ethnographic experiences at three field sites in particular: the largest international scientific conference on leishmaniasis; one of the rural zones where FARC members gathered as one of the early steps of the peace deal implementation; and a town on the southern Pacific coast affected by both leishmaniasis and the conflict.

Entanglement is a powerful concept, inspired by quantum physics, which acquired recognition with Karen Barad's work (2007) and has been very productive in STS. In physics, two particles are said to be "entangled" when, although being separated in space, they cannot be independently described because the state of one is connected and dependent on the state of the other. Alex Nading (2014), for example, has heavily drawn on the notion of entanglement to illustrate the intricate, complex and unbreakable connections between objects, humans and non-humans that make up dengue – indestructible relations whose subtraction would render incomplete any understanding of this vector-borne disease. While my inquiry relies on *entanglement's* relational emphasis to describe how and why leishmaniasis and the armed conflict have established complex links to each other, I

⁵So far, I have used the words "peace" and "post-conflict" interchangeably. However, the use of these terms has been challenged in Colombia as a result of the transitional moment the country is going through. Although the government and the FARC signed a peace accord, violence is still very much present in the country, and the conflict is far from being over. In other words, speaking of "post-conflict" or "peace" does not yet reflect the lived reality. As a result, many avoid using that terminology and prefer to talk about the current period as *posacuerdo* (post-accord). I have chosen to use the words "peace" and "post-conflict" because this paper grapples precisely with the hopes and promises of a non-violent and healthy future. For a scholarly problematization of the multiple connotations, dangers, expectations, and war-mediated definitions of the term "peace," see the work of Sara Koopman (2017).

⁶The larger project framing this paper is a PhD thesis in Science and Technology Studies, institutionally based at York University in Toronto, Canada.

refrain from seeing these two phenomena as inseparable. I contend that leishmaniasis and war can break the ties that have attached them in war times and should constitute another type of relationship – a disentangled one – in peace times. In other words, I use *entanglement* to highlight the convoluted and messy relations holding together leishmaniasis and war in Colombia, but I also envision their disentanglement as a complex, yet possible and urgent task if peace inspires our ambitions.

Taking inspiration from Hochman, Liscia, and Palmer's work (2012), in this paper I am thinking of leishmaniasis as a disease that simultaneously carries the antithesis of the nation in war times and the promise of national redemption in peace times. I show how materialities, hopes and disputes brought about by the peace agreements framed the ethnographic present of my field research, but also narratives about past entanglements of leishmaniasis and the armed conflict, and the imaginaries of this disease in a forthcoming post-conflict scenario. An ethnography that is immersed in Colombia's unstable transition between war and peace is simultaneously involved in understanding our past violences and imagining what a non-violent future would look like. Through an exploration of what leishmaniasis should become in peace times, this text traces a discourse that commonly frames health problems – like leishmaniasis – only as scientific or technological challenges. As this discourse leaves aside the cultural, political and historical dimensions that make up an illness into both a social and a biological phenomenon, I argue that the expectations and promises embedded in technoscience problematically limit the possibilities of disentangling leishmaniasis and war in post-conflict Colombia. In contrast, an ethnographic understanding of the multiple ways in which health policies and biomedicine have nurtured violence and exclusion helps us destabilize the warfare-loaded meaning and experience of leishmaniasis. What is more, the ethnographic approach enables us to move beyond imaginaries and strategies relying on what I call *technoscientific peacemaking*. This is a term I use to refer to the excessive trust endowed to science, technology and innovation to (re)build a peaceful future, especially when we are faced with failures in understanding the involvement of technoscience in the production and perpetuation of violence.

The paper is organized in four sections. First, I theoretically frame the complexities of exploring a violent past and a hopeful future when the present is experienced as an unstable oscillation between war and peace. I also relate these oscillatory temporalities and realities of war and peace with critiques on future-oriented visions of technoscience. In the next two sections, I draw on ethnographic moments and experiences to illustrate the entanglements of war and leishmaniasis, and a discourse that problematically frames their disentanglement as a biomedical problem with a pharmaceutical solution. Finally, I conclude by exploring this discourse through the notion of *technoscientific peacemaking*, which problematizes the role science, technology and innovation can actually play in the construction of a peaceful future.

1. Oscillating times

Feminist philosopher of biology Elizabeth Grosz (2004) has drawn attention to the nicks of time, disruptions when time's relentless movement forward becomes noticeable – instances in which temporality comes to the fore. She writes that "we can think [time] only in passing moments, through ruptures, nicks, cuts, in instances of dislocation,

though it contains no moments or ruptures and has no being or presence, functioning only as continuous becoming” (2004, 5). After more than 50 years of ongoing war, the signing of a peace deal in Colombia marks that kind of nick in time, introducing a crack in the narratives, realities and materialities of war. As a new reality many of us have not known in our lifetime, peace’s unfinished, open-ended and emergent lifeworld flows from causal connections in the past and induces new modes of being and thinking about both previous events in history and the futures we want to bring into existence.

When I decided to embark on an ethnographic study about leishmaniasis and the armed conflict, the peace dialogues between the FARC and the government of the two-term President Juan Manuel Santos (2010–2014 and 2014–2018) were well underway. When the negotiations officially started in 2012 in Havana, few Colombians imagined they would last almost four years and even fewer thought they would be successful. The dissertation proposal I wrote in mid-2016 talked about a hopeful and optimistic, but still hesitant, temporally unpredictable, and yet-to-be-seen peace deal. My ethnographic fieldwork, however, began two weeks after FARC leader Rodrigo Londoño – better known by his war name ‘Timochenko’⁷ – and President Santos signed the peace accords, and one week after the plebiscite seeking popular support for the ratification of the final agreement had been rejected with just 50.2% of the population voting against. In other words, my field research started at a rupture in time where Colombia entered into a very uncertain situation, felt by many as a political and historical limbo from which the government came out weakened, and the right-wing opposition – the ones campaigning against the peace agreements – strengthened.

By popular vote, the “no” to the peace agreements had won by a slim majority. The government devised a quick-fix to this unsettling situation by signing a revised version of the peace deal on November 24, 2016, which was ratified by Congress less than a week later. Finally, there was a peace agreement in place, but the popular and political support across society was – and still is – far from uniform. During the negotiations, peace became a highly contentious issue and, with the plebiscite results, the subsequent implementation of the peace agreements suffered even more from this polarization within Colombian society. In spite of the fact that the FARC acronym no longer belongs to a guerrilla force but to an unarmed political party,⁸ and that the homicide rate in 2017 was the lowest in 42 years (El Espectador 2018), we are still struggling to build peace amidst continuing violence, insufficient political will to materialize the agreements, and the unresolved murders of 343 social leaders since January 1, 2016⁹ – a number that continues to grow tragically week by week as this paper goes to publication. Moreover, the right-wing candidate Iván Duque won the presidential elections in June 2018. During his government, which began in August 2018 and will last four years, the peace agreements run the risk of being neglected or torn apart.

The field research I conducted between October 2016 and December 2017 would not have been possible without the guarantees of the peace agreements. Practicing

⁷Names within single quotation marks are *nombres de guerra* or war names guerrilla members choose and start using once they become part of guerrilla organizations.

⁸The acronym FARC used to stand for Fuerzas Armadas Revolucionarias de Colombia (Revolutionary Armed Forces of Colombia). As a result of the peace deal signed in November 2016, ex-guerrilla members founded a political party in August 2017 and, since then, FARC stands for Fuerza Alternativa Revolucionaria del Común (Common Alternative Revolutionary Force), a new name people in Colombia are still unfamiliar with.

⁹This is the figure provided by the Defensoría del Pueblo (Ombudsman’s Office) as of August 22, 2018.

ethnography in such a context – negotiating access to a variety of field sites, traveling through conflict-ridden territories, conducting participant observation and in-depth interviews with actors from different sides of the conflict – has shaped the modes of inquiry I ended up adopting, the conversations I engaged in, and the broad spectrum of emotions I experienced as an ethnographer in her homeland. In other words, my ethnography is both a product and a struggle of that transition. While I have been able to do ethnographic research because of the promises, imaginaries and materialities of peace, I have also struggled to see peace, avoid violence and open up spaces of hope for myself and others. Thus, my research turned into a daily and embodied corroboration that “peace is never clearly distinct from war” and “is not a separate end point to achieve in time or space” (Koopman 2017, 1).

Taking inspiration from Grosz’s affirmation of “the value of the nick, the cut or rupture” (2004, 14), I have come to see my ethnographic tracing of the links that hold leishmaniasis and the armed conflict together as situated within an oscillating temporality between war and peace. This means that I do not hope to claim any sort of stability or consolidation for the accounts, views, relations, things, stories, beings and connections I have been able to trace by navigating a present that is always borrowed and elusive. On the contrary, I have embraced what Biehl and Locke have named an *anthropology of becoming*, a mode of attention that is both open to and unsettled by a sense of *unfinishedness*.

Becoming troubles our ways of knowing and acting. It pushes us to think against the grain, to consider the uncertain and unexpected in the world, and to care for the as-yet-unthought that interrogates history and keeps modes of existence open to improvisation. We are tasked with the otherwise. (Biehl and Locke 2017, x)

During my fieldwork, I have not done away with the convoluted, uncertain, contradictory and pessimistically hopeful world that the oscillation between war and peace has produced in Colombia. Trying to stay emotionally attuned and keep pace with the rapidly changing lifeworld in which I became embedded, I have paid careful attention to (usually contradictory) notions and imaginaries of time – past, present and future – that discursively and materially define what leishmaniasis was (in war times), is and should be (in peace times). What I am doing here is an exploration of “the temporal horizons of [my] own work and thought, as they unfurl in [my] own relations with others” (Pandian 2012, 549). Thinking with Pandian, I am making the vicissitudes of the political reality of Colombia my own, letting them suffuse the ways in which I have explored and answered questions about the past, present and future (dis)entanglements of leishmaniasis and war.

Science and technology studies (STS) have developed a rich critical analysis on what Maria Puig de la Bellacasa has succinctly termed *technoscientific futurity*, “the hegemony of future-oriented timelines in technoscientific societies” (2015, 693). This notion encompasses the predominance of a modernist vision that associates the future with advancement and locates science and technology along a progressivist timeline that irreversibly moves forward. According to this critique, the past implies a negative backwardness and the future is always promissory, full of expectations regarding what innovation can bring (Borup et al. 2006). Science and technology acquire legitimation through this vision, which mobilizes not only actors and resources

but also affects. Adams, Murphy, and Clarke (2009) have paid attention to *anticipation*, a future-oriented way of thinking and feeling that is especially evident at the junction of life and technoscience. “As an affective state, anticipation is not just a reaction, but a way of actively orienting oneself temporally. Anticipation is a regime of being in time, in which one inhabits time out of place as the future” (Adams, Murphy, and Clarke 2009, 247). As such, technoscientific futurity is problematically driven by uncritical and often unrealistic expectations about what science and technology can do in the future, with the confidence that it will be for the better and almost never for the worse (Brown 2007).

Future-oriented expectations around biosciences and biotechnologies have also drawn attention from sociologists and anthropologists of health and illness studying processes of *pharmaceuticalization* – “the redefinition or reconfiguration of health ‘problems’ as having a pharmaceutical solution” (Williams, Martin, and Gabe 2011, 721; see also Dumit 2012). The tendency of using medicines to address a broad variety of problems and situations, even non-medical ones, is embedded in future-oriented narratives, imaginaries, and affects in which trust endowed to scientists and hope linked to pharmaceuticals play a crucial role (Brown et al. 2015). Trust in scientists and hope in medicines importantly shape the horizon of possibilities people envisage in ways that let them bracket fearful uncertainties in the time to come while focusing on positive futures (Brown et al. 2015).

Drawing on these conceptual frameworks about the temporality of science and technology, I will now discuss how oscillatory experiences of time, brought about by the signature of a peace deal in Colombia, have shaped how leishmaniasis is regarded across shifting tenses.

2. A war (disease) in the past?

WorldLeish is the largest scientific conference on leishmaniasis worldwide, organized since 1997 and every four years in a leishmaniasis-endemic country. The last version of this event – WorldLeish6 – took place in Toledo, Spain in May 2017, which gave me the opportunity to include this conference as one of my field sites. After registering for the conference, I was astonished when I received an e-mail with the program and realized that the keynote speaker giving the closing lecture was not a scientist but a Colombian politician – Alejandro Gaviria, Minister of Health, whose talk was entitled *Health and Conflict in Colombia: A Tragic Story with a Promising Future*.

I did not have big expectations about Gaviria’s talk. I thought he was going to frame the relationship between the conflict and leishmaniasis as public health and biomedical discourses in Colombia usually do – by merely describing the former as a social determinant of the latter, period. But he did not. It was the first time I listened to a high ranking politician – the Minister of Health! – publicly recognizing that the association between these two phenomena implied much more than a circumstantial and unfortunate coexistence between leishmaniasis-transmitting sandflies and combatants in the *selva*. In fact, he acknowledged to an international audience of almost 1500 scientists that the Colombian state has played a fundamental and reprehensible role in shaping the link between leishmaniasis and the war:

Leishmaniasis was a disease of conflict in Colombia, was almost a symbol of our long and terrible conflict. Historically, leishmaniasis was used as an instrument of war . . . I grew up in the city of Medellín . . . I was in my early twenties. One night, the doorman of the building, a quiet man, came to our apartment. He knocked on the door lightly. He looked worried and scared. He told me he needed to talk to my father. My father had been mayor of Medellín and was perceived as a man of influence . . . He [the doorman] told my father that his brother had been infected with leishmaniasis, with *pito*,¹⁰ P-I-T-O, and that it had been impossible to get the medicine. I remember that my father blushed. I noticed immediately that he was very angry, full of moral indignation. The Army is retaining the medicine, he told me afterwards. They, he told me, are using this medicine as a weapon of war. Two weeks ago, only two weeks ago, I went to one of the transitional zones where the guerrilla [the FARC] is concentrating to hand-in their arms. I went to the pharmacy, and it was well stocked with the [leishmaniasis] medicine, with Glucantime. Now the medicine is provided by the government. A lot has changed in Colombia, I thought. Leishmaniasis is still a complicated health challenge, but it's no longer a symbol of indignity, it's no longer an instrument of war.¹¹

Astonished and positively surprised by Gaviria's statement, I found his assessment also naïve and a bit demagogic. I was bothered by Gaviria's use of the simple past form of the verb to be – “was” – to talk about leishmaniasis, as if the ties holding together this disease with warfare didn't exist anymore since my own research suggested otherwise.

Alfredo Molano Bravo (2017, 9–10) writes that there is no verb tense capable of apprehending the current Colombian reality, the constant oscillation between conflict and peace. Currently, we cannot talk about war as if it were in the past and we cannot talk about peace as if it were in the future.¹² After so much work has been done for decades – primarily by the state – to stigmatize, harm and exclude leishmaniasis-affected people, it was highly misleading to assert that, with the arrival of peace, leishmaniasis was no longer a war symbol or part of the continuous social interactions reproducing violence in Colombia's present and (near) future. It was also distorted to imply that antileishmanial drugs were now easily accessible to anyone in rural Colombia. I had also been in a transitional zone where members of the FARC guerrilla gathered for disarmament as agreed in the peace accords. However, the reality I witnessed there was quite different from that portrayed by Alejandro Gaviria.

In late February 2017, I spent four days at the Transitional Zone for Normalization in Colinas, Guaviare.¹³ A few hours after my arrival, I was talking with several guerrilla commanders in the sketchy and temporary house – *la caleta* – of 'Mauricio Jaramillo', the FARC's Eastern Block commander. In that conversation, these men defined the drug

¹⁰Depending on the region, leishmaniasis is popularly known in Colombia as *pito*, *gualal* or *yateví*.

¹¹Excerpt from the public speech given by Alejandro Gaviria, Colombia's Minister of Health, at the WorldLeish6 conference in Toledo, Spain, on May 20, 2017.

¹²Carolina Sanín, a columnist of the Colombian magazine *Arcadia*, also wrote (2017) a beautiful reflection on this (my translation):

I wonder in what verbal tense we, Colombians, should narrate the war now, during the post-conflict: should we do it in *imperfecto*, which is the tense we use to tell dreams and nightmares that can come back and are always present, even if they happen somewhere else? Or should we do it in *pretérito simple*, which indicates that something is in the past and finished? Or should we use the historical *presente*, to make war more vivid? Or the present of the second-hand story, with which we tell the story or the film that someone else composed?

¹³During the early implementation of the peace deal, 26 so-called Zonas Veredales Transitorias de Normalización (transition and normalization zones) were established in rural areas of Colombia for FARC members to gather for months and lay down their arms. Two of these zones – Colinas and Charras – were located in Guaviare, a *departemento* (state or province) in the southern central region of Colombia whose capital is San José del Guaviare.

used to treat leishmaniasis – Glucantime – as the link connecting the disease with the war. They were specifically referring to the state’s restrictive control over this treatment which – echoing the words of Alfredo Molano Bravo (2005) – they described as a perverse anti-subversive strategy.

Francisco, the FARC mid-rank commander I had met in Havana and re-encountered in Colinas, said the following:

The disease itself has no relation to the armed conflict, the relationship with the armed conflict is the medicine to cure a tropical disease that affects the military, peasants, guerrillas, all the inhabitants of the Colombian rurality. The involvement of leishmaniasis with the armed conflict is fictitious. It is the medicine, the way in which the disease is treated, that in an irregular conflict like ours, like all irregular conflicts, is full of traps, trickeries, feints.¹⁴

All the FARC members I talked to during my stay in Colinas had had leishmaniasis at least once in their subversive lives. While I was there, among the nearly 500 guerrilla members that had concentrated in Colinas, there were six suspected cases of leishmaniasis. Although *raspados* – smear samples – had been collected a month prior by healthcare practitioners working for the public hospital in San José del Guaviare, these six *guerrilleros* and *guerrilleras* had not received the diagnostic test results. And without a parasitological confirmation of leishmaniasis – the observation of parasites under the microscope – Glucantime could not be provided by the state, let alone administered.

Two scruffy and dusty boxes of this drug, one with 5 and the other with 3 ampoules, was all that was left in the FARC infirmary in Colinas (Figure 2). They would have only covered 3 out of 20 days of treatment for a single patient.¹⁵ Both boxes came from Venezuela, were produced in January 2013 and would expire in less than a year. Despite what the Minister of Health had said at the WorldLeish conference, these boxes were not provided by the state. Instead, they were part of the Glucantime stocks that the FARC either bought from the black market which supplied(s) the medicine from Venezuela or Brazil, or purchased from clandestine “entrepreneurs” within the Army – corrupted military or infiltrated guerrilla collaborators – who sold (or sell) the ampoules to guerrilla organizations at exorbitant prices.

I met one more person with leishmaniasis in Colinas: Javier. He was not a FARC member but a civilian – a young peasant who approached his guerrilla cousin to ask for help in getting the treatment against leishmaniasis. Appealing to the legitimacy I supposedly had from having seen hundreds of leishmaniasis lesions during my fieldwork, one of the FARC commanders asked me if I could have a look at this young man’s skin ulcer. Javier took off his hat with some shame, gently grabbed his left ear with the tip of his fingers, and moved it a little forward. The lesion was huge, supremely infected, and was about to perforate his cartilage. Worried, I thought Javier could lose his ear and told the FARC commanders that the young man needed antileishmanial medicines as soon as possible. This peasant told us he had been diagnosed positive for leishmaniasis in San

¹⁴ I have written elsewhere about my ethnographic work in Colinas (Pinto García 2017).

¹⁵ Glucantime is the first-choice drug used in Colombia to treat leishmaniasis. The treatment consists of two intramuscular injections, one for each buttock, over the course of 20 days. The dose of pentavalent antimony – Glucantime’s active compound – is calculated based on the patient’s weight. According to the guide standardizing the clinical practice for leishmaniasis in Colombia (MinSalud 2010), a person weighing 70 kg, for example, would require 17.29 ml of Glucantime each day, for 20 days. This corresponds to 60 Glucantime ampoules, that is, 12 full boxes of the 5-ampoule ones that were available in Colinas.



Figure 2. One of the two boxes of leishmaniasis treatment available at the FARC infirmary in Colinas, in February 2017. Photo by the author.

José.¹⁶ Glucantime, however, was not available in the public hospital of this municipality, which is not even a rural, remote or dispersed town – one of the excuses you often hear when Glucantime is nowhere to be found in public healthcare facilities – but a *departmen-to's* main urban center, the capital of Guaviare.

Despite the fact that peace had started – at least on paper – three months before I was in Colinas, guerrilla members in their transition to becoming ex-combatants still faced (and probably still face as this goes to publication) problems accessing treatment. And the restrictive control the state has on the circulation of Glucantime has continued to affect rural populations who have systematically been stigmatized by the state, paramilitary groups and the media – often with deadly consequences – as guerrilla collaborators. Javier's case is not an isolated one. Most people in the Colombian rurality still confront multiple obstacles in accessing both diagnosis and treatment for leishmaniasis. For this

¹⁶See footnote 13.

disease to become “no longer a symbol of indignity” and “no longer an instrument of war” – as the Minister of Health said – much more is needed than a simple declaration. “It is still necessary that, as a result of the peace process, the veto against the medicine that cures leishmaniasis is lifted, it should not be restricted anymore,” said Francisco. “That is something that was not discussed in Havana,” said the other FARC commanders with regret.

3. A peace (disease) in the future?

Post-conflict, we know, is not going to be easy. Peace is not going to solve all our problems. Peace, by itself, is not going to end leishmaniasis. But I have reasons for optimism. There are many good things going on in Colombia. We have increased our capabilities . . . Many research groups in the country are trying new things, innovation in treatments and in new medicines, they are an example to the world and a source of pride for our country. Let me celebrate, ladies and gentlemen, the leadership of Colombia in leishmaniasis, in Chagas, in access to medicine, and so on. The presence of 50 Colombian researchers and public officials in this congress is a sign of this leadership. We want to show to the world that we are ready for peace, that we are ready to engage and lead a way in tropical medicine and other areas of knowledge. Peace is irreversible in my country. We want to leave behind a legacy of human suffering and disease. We are conscious of the many challenges ahead, but we are confident in our collective capabilities. We strive, every day, to be a good example for the world in building a peaceful and healthy society. It's life we want, no more, no less than that.

These were the closing words of Colombian Minister of Health Alejandro Gaviria's speech at the WorldLeish conference. Here, Gaviria links pharmaceuticals, innovation, scientific knowledge and scientists with a hopeful imaginary of peace that lies in the future of Colombia. According to this view, the social practice of science and the development of biomedical treatments and vaccines – under a progressivist and anticipatory logic – will help us leave our violent past behind and bring us to a peaceful scenario where the capacities of Colombian scientists will become materialized into pharmaceutical solutions to our long history of war. It is as if leishmaniasis was asked to simultaneously embody Colombia's pathological past and the promise for a national redemption that would bring Colombians closer to peace (Hochman, Liscia, and Palmer 2012). Under Gaviria's perspective, biomedical technologies and scientific innovations are just enough, just what is needed for leishmaniasis to become disentangled from violence and represent something different than “an instrument of war.” In Gaviria's discourse, trust in scientists and hope in medicines will bring us to a sort of pharmaceuticalized peace in which leishmaniasis – but also war and violence – will be overcome.

This view is shared by some patients who see their involvement in clinical studies on leishmaniasis as crucial for the promissory cures that science will bring to them and others in the future. Ernesto Mina, a social leader in the rural area of Candelario¹⁷ – a town in southwestern Colombia that has been profoundly affected by both the conflict and leishmaniasis – suffered from the disease some 25 years ago. He is part of a group of community members who help a biomedical research institution, with a clinical facility in Candelario, to recruit leishmaniasis patients, mainly for clinical studies. Remembering the painful Glucantime injections he had to receive in the past, Ernesto told me this:

¹⁷This name is a pseudonym.

that's why now I have volunteered for this, for the research projects on leishmaniasis, for a new cure that comes in the form of pills. I've devoted myself 100% to this to avoid the suffering of future generations that might get this disease.

Similarly, in the opinion of Martha Díaz, one of the researchers of this biomedical institution, one of the main reasons why leishmaniasis patients agree to participate in clinical studies conducted by the organization she works for is because

people want to help, people feel that if that helps for something then they participate because that will be useful for something. People feel that it does contribute something to humanity. People say "if I can contribute to the management of this disease and that others benefit, I participate"

But Martha is also well aware that finding a new cure for leishmaniasis, as Ernesto and the Minister of Health hope for, is far from realistic. Pentavalent antimonials such as Glucantime constitute the main treatment against this disease since the 1940s. It is also a highly toxic drug that is injectable, painful, has a long treatment duration and, sometimes, does not even work. While there exist other drugs (miltefosine, amphotericin B, paromomycin), each has its own drawbacks, mostly related to high levels of toxicity (see, for example, Didwania et al. 2017; Oliaro et al. 2018). As such, one of the statements I heard over and over at the WorldLeish conference was that there is currently no satisfactory treatment for leishmaniasis and the situation will be the same for another 5–7 years if not more. Moreover, the enormous diversity associated with leishmaniasis was repeatedly highlighted as a major challenge – it is almost impossible to come up with drugs or vaccines useful for all the species of *Leishmania* parasites, all types of patients, all clinical manifestations of the disease, in different regions of the world, for all and everybody (see, for example, Akhoundi et al. 2017). Another related question is how willing or able are Colombian scientists to participate in the development of new drugs or vaccines. While there are some biomedical researchers in Colombia working with this goal in mind,¹⁸ many of them regret that the lack of funds, infrastructural and technical capacities, and time needed to engage in the full development of pharmaceuticals constitute a significant challenge that only large pharmaceutical companies can assume if that represents an economic advantage for them – not exactly the case for leishmaniasis.

But beyond whether it is realistic or not to involve Colombian scientists in the development of pharmaceuticals, the most important question here, I argue, is whether it is sound to frame the disentanglement of war and leishmaniasis as a biomedical problem with a pharmaceutical solution that should primarily come from scientists working on drug and vaccine development.

4. Technoscientific peacemaking and its future-oriented premises

Technoscientific futurity is what underlies the discursive and affective set of expectations about the promises of science and innovation for Colombian peace. As noted by Adams, Murphy, and Clarke (2009), the futuristic orientation embedded in technoscience mobilizes all sorts of emotions, means, hopes and actors. Thus, it is ingenious

¹⁸Scientists at PECET (Program for the Study and Control of Tropical Diseases from the Antioquia University), Caldas University and the National University in Bogotá, for example, are working on the early stages of drug development for cutaneous leishmaniasis.

and strategic to tap into that discursive resource. Undeniably, achieving the signature of the peace agreement in Colombia was not easy at all, and the implementation of this agreement is currently at risk and facing multiple obstacles. Therefore, politicians like Gaviria resort to the optimism that science and technology discursively evoke, as well as to many other discourses that – perhaps unrealistically and naïvely – provide some hope.

But this strategy has its own pitfalls as it is also the result of failing to understand the intricate entanglements of war and leishmaniasis that have discursively and materially been constructed throughout a long history of violence. Interested in the pharmaceuticalization of peace – the redefinition or reconfiguration of war as a health problem with a pharmaceutical solution – I devised the term *technoscientific peacemaking*.¹⁹ This notion highlights how the promissory expectations underlying the virtue of science, technology and innovation are readily harnessed to bring peace into existence, while at the same time neglecting and denying the ways in which technoscience itself has participated in the production and perpetuation of violence.

My ethnographic work aims at making visible the ways in which leishmaniasis-related biomedical knowledge, health policies and the materialities and discourses they sustain are entangled with the Colombian war. I have done this with the hopeful goal that, once recognized, we can take apart the links that have attached war to every socio-cultural corner of our society, including biomedical science, healthcare practices and public health. “To think about our attachments to war is something we cannot afford not to do” (Terry 2017, 9). Above all, the construction of a peaceful society demands a deep examination and subsequent dismantling of the multiple ways and mechanisms through which violence and logics of warfare have discursively and materially spread to sustain everyday militarization. This is what is needed for leishmaniasis to be disentangled from war, for its meaning as “the guerrilla disease” to be destabilized so it can start symbolizing something different than a stigmatizing guerrilla mark and a legacy of warfare. Thus, trusting blindly in technoscience does not fix but deepens the problem. It allows the complex mechanisms through which violence has been materially and discursively installed everywhere in Colombia – even in the seemingly aseptic terrains of biomedicine and public health – to remain untouched and unaltered. It is crucial to demand that scientists play a major role in the peacebuilding process in Colombia. However, this cannot be done by outlining a bright future of technoscientific innovation that, at the same time, erases the involvement of technoscience in warfare.

Oscillations between a violent past and a peaceful future suffused my ethnographic experience and the questions I asked of my field sites and my informants. Willing to think about the past and compelled to dream about the future – “tasked with the otherwise,” as Biehl and Locke (2017, x) nicely put it – I have imagined different ways in which, I believe, the meaning of leishmaniasis can start being transformed and set apart from violence. Therefore, here I have questioned modes of thinking about the temporalities of leishmaniasis, war and peace. On the one hand, these problematic perspectives do not

¹⁹Drawing on a classic work of peace studies (Galtung 1976), I prefer the term *peacemaking* over *peacebuilding* because peacebuilding denotes the transformation of the structural, historical and complex conditions that have enabled violence and war. In contrast, peacemaking refers only to preventive measures undertaken to avoid the reappearance of violent conflict, disregarding an in-depth understanding of the roots of violence that would make their transformation attainable.

deal with the past but, instead, embrace anticipation as a regime in which time is inhabited in a future-oriented way. On the other hand, technoscientific expectations are projected towards a peaceful future that is hardly attainable and unrealistic, partly because it denies where the entanglement of leishmaniasis and war comes from and the involvement of biomedicine, public health, scientists, public officials and state agents in the making of leishmaniasis as “the guerrilla disease.” We should think beyond technoscientific peacemaking if we want to build a future where biomedicine and healthcare can move away from enabling and producing war and injustice, and be repurposed towards the construction of a more peaceful and equal society. This is not only valid for leishmaniasis but for all the multiple ways in which healthcare, illness, biomedical science and armed conflicts have become entangled in Colombia and other parts of the world.

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