

RESEARCH ARTICLE

Predictive puericulture in Argentina: The Plataforma Tecnológica de Intervención Social and the reproduction of Latin eugenics

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Abstract

In April 2018, as the Argentine Congress debated decriminalizing abortion, local media revealed that public-health officials in a northern province had deployed an algorithmic system to predict teenage pregnancy. Public response to the technology quickly became entangled in society-wide debates about reproductive rights. Both proponents and detractors of the algorithmic system framed the technology as novel and cutting-edge. However, this paper argues for an analysis of the system not as a form of innovation or rupture but as a continuation of historical forms of biopolitical governance in Argentina, particularly *puericultura*, a eugenic theory of child rearing.

Resumen

En abril de 2018, mientras el Congreso argentino debatía la despenalización del aborto, los medios periodísticos locales revelaron que funcionarios de salud pública de una provincia del norte, habían desplegado un sistema algorítmico para predecir el embarazo adolescente. La respuesta pública a la tecnología se enlazó rápidamente a los debates sociales sobre derechos reproductivos. Tanto los defensores como los detractores del sistema algorítmico lo catalogaron como innovador y de vanguardia. Sin embargo, este artículo sostiene un análisis del sistema no como un modo de innovación o ruptura, sino en tanto continuación de las formas históricas de gobernanza biopolítica en Argentina; en particular la *puericultura*, una teoría eugenésica de la crianza de los hijos.

This paper traces affinities and continuities between Plataforma Tecnológica de Intervención Social, a predictive platform for adolescent pregnancy deployed in Salta Argentina, and *puericultura*, a eugenic theory of child rearing focused on mothers advanced by Argentine physicians and public health officials in the early twentieth century.¹ As a form of ‘Latin eugenics’, *puericultura* synthesized neo-Lamarckian eugenic theories, Catholicism and public health, precipitating intensive state surveillance of the

1 Yolanda Eraso, ‘Biotypology, endocrinology, and sterilization: the practice of eugenics in the treatment of Argentinian women during the 1930s’, *Bulletin of the History of Medicine* (2007) 81(4)2, pp. 793–822.

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lives and bodies of women and girls.² Like other public-health movements, *puericultura* acted both as biopolitical governance of the population and as a disciplinary form of power over individual bodies.³

Scholars of emerging technologies have documented continuities between algorithmic harms and historical forms of exclusion. Virginia Eubanks coins the term ‘digital poorhouse’ to describe similarities between punitive treatment of the poor in the nineteenth century and contemporary forms of algorithmic surveillance.⁴ Safiya Noble argues that ‘technological redlining’ acts to systematically exclude communities of colour in ways analogous to and contiguous with discriminatory financial practices that intentionally segregated American cities in the twentieth century.⁵ Ruha Benjamin presents the concept of the ‘New Jim Code’ to describe how algorithmic technologies continue to encode white supremacy and deepen social inequity.⁶ In each of these cases, the connections between historical exclusions and contemporary harms are not neatly causal, yet nor are they merely metaphorical. Instead, they speak to material links, affinities, intertextualities and continuities of socio-technical imaginaries – those ‘visions of desirable futures, animated by shared understanding of forms of social life and social order attainable through, and supportive of, advances in science and technology’.⁷

Discussions of ‘AI ethics’ are often presented in universalizing terms while in fact narrowly reflecting ideas and experiences of the global North.⁸ Technologies do not travel seamlessly, nor are they ‘imported magic’.⁹ Research that attends to technologies as they are specifically located in distinct societies is crucial.¹⁰ This paper contributes to the study of AI technologies in the global South – in full acknowledgement of ‘the South as a composite, plural entity’.¹¹ Like many other technologies, the predictive system considered here was developed between international and local actors: as Paola Ricaurte notes, we must recognize how ‘multiple dimensions of colonization are interwoven and deployed as an internal, international, and transnational process’.¹² The Plataforma Tecnológica de Intervención Social shares features with other AI systems, both in its technological design and in its social harms, but it is also uniquely situated in an Argentine socio-historical context, from which it (in part) emerges, contributes and interplays, as we explore in this paper.

2 Marisa Miranda and Gustavo Vallejo (eds.), *Una historia de la Eugenesia: Argentina y las redes biopolíticas internacionales, 1912–1945*, Buenos Aires: Editorial Biblos, 2012.

3 Michel Foucault, *The Birth of Biopolitics: Lectures at the Collège de France, 1978–1979*, New York: Springer, 2008.

4 Virginia Eubanks, *Automating Inequality: How High-Tech Tools Profile, Police, and Punish the Poor*, New York: St Martin’s Press, 2018.

5 Safiya Umoja Noble, *Algorithms of Oppression*, New York: New York University Press, 2018.

6 Ruha Benjamin, *Race after Technology: Abolitionist Tools for the New Jim Code*, Cambridge: Polity Press, 2019.

7 Sheila Jasanoff and Sang-Hyun Kim, *Dreamscapes of Modernity: Sociotechnical Imaginaries and the Fabrication of Power*, Chicago: The University of Chicago Press, 2015, p. 4.

8 Sareeta Amrute and Luis Felipe R. Murillo, ‘Introduction: computing in/from the south’, *Catalyst: Feminism, Theory, Technoscience* (2020) 6(2), pp. 1–23; Stefania Milan and Emiliano Treré, ‘Big data from the South(s): beyond data universalism’, *Television & New Media* (2019) 20(4), pp. 319–35.

9 Eden Medina, Ivan da Costa Marques, Christina Holmes and Marcos Cueto, *Beyond Imported Magic: Essays on Science: Technology and Society in Latin America*, Cambridge, MA: MIT Press, 2014; Alexa Hagerty and Igor Rubinov, ‘Global AI ethics: a review of the social impacts and ethical implications of artificial intelligence’, *arXiv:1907.07892* (2019), at <https://arxiv.org/abs/1907.07892>.

10 Milan and Treré, op. cit. (8), p. 320; Paola Ricaurte, ‘Data epistemologies, the coloniality of power, and resistance’, *Television & New Media* (2019) 20(4), pp. 350–65, 361.

11 Milan and Treré, op. cit. (8), p. 323.

12 Ricaurte, op. cit. (10), pp. 353, 361; Nick Couldry and Ulises A. Mejias, *The Costs of Connection*, Redwood City: Stanford University Press, 2019.

Central to our analysis are questions of reproduction: biological reproduction as a well-spring of imaginaries about human destiny and as a site of political and technological intervention; the social reproduction of eugenic ideologies and practices, especially those emerging from ‘Latin eugenics’; and the ways in which ‘new’ technologies act to reproduce and reinforce historical forms of social organization and geographies of power.

Technology unveiled

The Plataforma Tecnológica de Intervención Social was unveiled on 20 March 2018 at the Microsoft Data & AI Experience event in Buenos Aires. There, the US technology giant and the Ministry of Early Childhood (Ministerio de la Primera Infancia) of the province of Salta in northern Argentina announced a collaboration to apply artificial intelligence to public policies, specifically by designing systems to predict school dropouts and teenage pregnancy, the latter being the focus of this paper. At the event, tech executives and politicians highlighted the technology’s novelty. The Microsoft spokesperson announced, ‘These are pioneering cases of the use of AI data by public, private and third-sector organizations’.¹³ The then governor of Salta, Juan Manuel Urtubey, said, ‘We must dare to change and do something different’.¹⁴ In subsequent interviews Urtubey continued to emphasize innovation, remarking to a journalist, ‘Twenty years ago, talking about this would have been pure science fiction. Today it is just having the good sense to use the technological tools we have at our disposal’.¹⁵ Thus, from its launch, the system was framed as at once rational, innovative and futuristic.

The system did not come to broader public attention until Governor Urtubey visited a popular television programme, *El diario de Mariana*, on 11 April 2018, where he claimed, ‘With technology you can foresee five or six years in advance, with first name, last name and address, which girls are 86 per cent predestined to have a teenage pregnancy’.¹⁶ Urtubey’s remarks aired the same week that the National Congress of Argentina began historic hearings on the country’s highly restrictive abortion laws, through consideration of the Voluntary Interruption of Pregnancy Law (IVE, in its Spanish acronym). As governor, Urtubey publicly opposed the legalization of abortion and the media immediately connected his enthusiasm for the predictive system to the debate about reproductive rights. In fact, as Urtubey appeared on *El diario de Mariana*, the programme simultaneously broadcast live coverage of protests in support of abortion rights. Urtubey and the protestors appeared on a split screen, above a red banner declaring ‘fierce debate in Congress over the decriminalization of abortion’, literally juxtaposing the discussion of the predictive platform and the abortion debate.

The abortion debate figured in the development and reception of the predictive system in other ways as well. In July 2018, paediatrician Abel Albino gave public remarks against abortion rights in the IVE hearings. Albino is the founder of a non-profit to alleviate childhood malnutrition, the Fundación CONIN, which was one of three civil society groups involved in implementing the Plataforma Tecnológica de Intervención Social, discussed in detail later in the article. In his testimony, Albino did not discuss cutting-edge technologies or make futuristic claims. Rather, his speech looked to the past, referencing historical tropes of Argentina as a vast and underpopulated territory:

13 Microsoft Latin America News Centre, ‘Avanza el uso de la Inteligencia Artificial en la Argentina con experiencias en el sector público, privado y ONGs’, 2 April 2018, at <https://news.microsoft.com/es-xl/avanza-el-uso-de-la-inteligencia-artificial-en-la-argentina-con-experiencias-en-el-sector-publico-privado-y-ongs> (accessed 25 March 2022).

14 Microsoft Latin America News Centre, op. cit. (13).

15 *El Destape*, ‘Los detalles del acuerdo entre Urtubey y Microsoft para espiar a los salteños’, 13 April 2018, at www.eldestapeweb.com/nota/los-detalles-del-acuerdo-entre-urtubey-y-microsoft-para-espiar-a-los-saltenos-2018-4-13-11-0-0 (accessed 25 March 2022).

16 The segment can be viewed at www.youtube.com/watch?v=s1hQETruOXU.

Our country is enormously large, enormously rich and dangerously empty. And we're going to kill kids when we need kids? A pregnant woman is a treasure to the country and her child is a jewel ... We need people ... We have 10 times the territory of Italy and half the population of Italy ... Sarmiento told us 'it is an empty country'.¹⁷

In citing Domingo Faustino Sarmiento (1811–88), an influential liberal politician and the second president of Argentina, Albino linked the contemporary abortion debate to historical discourses of underpopulation which once justified eugenic-inflected projects of European immigration.

Albino's testimony, oriented to the past, and Urtubey's comments, directed toward the future, concatenate nineteenth-century discourses on population and governance, twenty-first-century struggles for reproductive rights, and the vanishing horizon of innovation promised by the Plataforma Tecnológica de Intervención Social. In the next section, we parse the implications of this nexus by examining public scrutiny and reception of the Plataforma.

Journalistic investigations

In the days immediately following Urtubey's appearance on *El diario de Mariana*, journalists began investigating the technology.¹⁸ News reports publicized that the Ministry of Early Childhood in Salta had collected data from girls and young women between the ages of ten and nineteen, and that information from boys and men had not been sought. The data set contained the following information on individuals: age, ethnicity, country of origin, disability status, number of people in the household, whether the household had hot water in the bathroom, neighbourhood/area, whether the girl or young woman was currently or had previously been pregnant, and whether the head of household dropped out of school. Journalists reported that no information regarding contraception, sex education, abortion or sexual violence appeared to have been collected, claims eventually confirmed by technical reviews of the system.¹⁹

Journalists also revealed that several of the civil society organizations involved in the development of the system had strong ties to the Catholic Church. The collaborating organizations were named as the United Nations Children's Fund (UNICEF); Un Techo para mi país, a Chilean housing non-profit founded by a Jesuit priest; and the Fundación CONIN, founded by aforementioned Abel Albino, a Catholic activist and member of Opus Dei.²⁰

Media reports highlighted privacy and surveillance concerns; one headline declared 'Details of the deal between Urtubey and Microsoft to spy on salteños' (referring to

17 *La Nación*, 'En un controvertido discurso contra la ley del aborto, Abel Albino dijo que "los preservativos no sirven contra el SIDA"', 25 July 2018, at www.lanacion.com.ar/politica/abel-albino-expuso-contra-la-ley-del-aborto-en-el-senado-y-desperto-polemica-nid2156209 (accessed 25 March 2022). Albino's full testimony is available on the Argentine Senate's YouTube channel at <https://youtu.be/d7dUgw6fZLA>.

18 Natalie Zuazo, 'Algoritmos y desigualdades', *Derechos Digitales América Latina Report*, November 2018.

19 '¿Cómo funciona el software de predicción de embarazo por el cual se criticó a Urtubey?', *Informe Salta*, 12 April 2018, at <https://informatesalta.com.ar/contenido/149682/como-funciona-el-software-de-prediccion-de-embarazo-por-el-cual-se-critico-a-urt> (accessed 25 March 2022); '¿Qué decía el convenio que firmó la Provincia con Microsoft para prevenir el embarazo adolescente?', *La Gaceta Salta*, 13 April 2018, at www.lagacetasalta.com.ar/nota/102657/actualidad/que-decia-convenio-firmo-provincia-microsoft-para-prevenir-embarazo-adolescente.html (accessed 25 March 2022); Irina Sternik, 'La inteligencia que no piensa', *Página 12*, 21 April 2018, at www.pagina12.com.ar/109080-la-inteligencia-que-no-piensa (accessed 25 March 2022).

20 Natalia Zuazo, 'Inteligencia artificial, prejuicios, Salta y Conin', 21 April 2018, at <https://nataliazuazo.com/2018/04/21/inteligencia-artificial-prejuicios-salta-y-conin> (accessed 25 March 2022).

residents of Salta).²¹ Journalists also uncovered that the system had been shared with other Argentine provinces and with Colombia, with plans to deploy it in the ‘most vulnerable areas’ of that country.²²

Feminist activists, already in high gear for the abortion debate, reacted quickly and critically to the system. An open letter entitled ‘¿Inteligencia artificial o artificios patriarcales?’ (Artificial intelligence or patriarchal artifact?) dismissed the system as dangerously inadequate to address the complex socio-economic factors involved in adolescent pregnancy.²³ The title itself offered a critique in the form of wordplay. In Spanish, the term *artificios* can be used to convey a neutral meaning of ‘artefact’ or ‘device’, but also a derogatory sense of ‘trick’ or ‘scam’.

Machine-learning specialists analysed the system. The Laboratorio de Inteligencia Artificial Aplicada de la Facultad de Ciencias Exactas de la Universidad de Buenos Aires (LIAA) issued a report in July 2018 detailing flaws, including biased data, reuse of training set as evaluation data, and data which were fundamentally inadequate to answer the question whether an adolescent would have a pregnancy in the future.²⁴ The report did not consider social context or political debates, but explicitly connected the system’s flaws to political outcomes, stating, ‘methodological problems and unreliable data pose the risk of leading policy makers to take incorrect actions’, concluding that ‘this case is an example of the dangers of using computer output as revealed truth’.²⁵

The World Wide Web Foundation published a report in September 2018, drawing on LIAA findings and interviews with representatives from Salta’s Ministry of Early Childhood.²⁶ The report detailed that Microsoft supplies the basic technology and that the ‘data is hosted on a server outside Argentina but, according to ministerial authorities, the data is hosted in accordance with the relevant laws’.²⁷ It stated that data were collected on a system which ‘allows for coordination between ministries, civil society organizations, and Microsoft’.²⁸ The report urged the Ministry of Early Childhood to (1) publish a technical report, (2) document the impact of the system and (3) explain its theoretical framework— that is, how the model is hypothesized to relate to the social problem of adolescent pregnancy.²⁹ The Ministry of Early Childhood did not implement these suggestions.

21 *El Destape*, op. cit. (15).

22 Bernardita Ponce Mora, ‘Primera Infancia es el ministerio que defiende a los niños desde su concepción’, *El Tribuno*, 27 March 2019, at www.eltribuno.com/salta/nota/2019-3-27-0-39-0--primera-infancia-es-el-ministerio-que-defiende-a-los-ninos-desde-su-concepcion (accessed 25 March 2022).

23 María Pía Ceballos, Alba Rueda, Ana Pérez Declercq, Alfonsina Morales, Tania Kiriaco, Andrea Flores, Natalia Gil, Flavia Garagorri and Marta César, ‘Inteligencia artificial o artificios patriarcales’, *Cuarto Poder Salta*, 16 April 2018, at <https://cuartopodersalta.com.ar/inteligencia-artificial-o-artificios-patriarcales> (accessed 25 March 2022).

24 Laboratorio de Inteligencia Artificial Aplicada (LIAA), ‘Sobre la predicción automática de embarazos adolescentes’, July 2018, at <https://liaa.dc.uba.ar/es/sobre-la-prediccion-automatica-de-embarazos-adolescentes> (accessed 25 March 2022); Instituto de Ciencias de la Computación (UBA-Conicet), ‘Investigadores encuentran graves errores en el sistema de predicción de embarazos adolescentes’, 23 July 2018, at <https://icc.fcen.uba.ar/investigadores-encuentran-graves-errores-en-el-sistema-de-prediccion-de-embarazos-adolescentes> (accessed 25 March 2022).

25 LIAA, op. cit. (24).

26 Juan Ortiz Freuler and Carlos Iglesias, ‘Algorithms e Inteligencia Artificial en Latin America: Un Estudio de implementaciones por parte de Gobiernos en Argentina y Uruguay’, *World Wide Web Foundation Report*, July 2018.

27 Freuler and Iglesias, op. cit. (26), p. 17 n. 62.

28 Freuler and Iglesias, op. cit. (26) p. 17.

29 Freuler and Iglesias, op. cit. (26).

Desirable futures

Any attempt to assess the Plataforma Tecnológica de Intervención Social is impeded by the gaps in publicly available information regarding its design and outcomes. As the World Wide Web Foundation report describes, ‘the implementation had transparent stages and opaque ones’.³⁰ Yet opaque material can reveal shapes and forms, as through frosted glass, even as details remain inscrutable. Through a close reading of media interviews with officials and by contextualizing the system within Argentine sociopolitical and historical contexts, we hope to move toward a fuller understanding of how its creators understood the relationship between the model and the issue of teenage pregnancies.³¹

The system was deployed in Salta, a rural province. Bordered by Bolivia and Paraguay, Salta has a significant population of immigrants from these countries and is home to one of the largest Indigenous populations in Argentina, primarily Wichí, Kolla and Guaraní communities. In the province, 45.5 per cent of the population live in poverty and 6.7 per cent in extreme poverty.³² Rates of adolescent pregnancy and maternal mortality are high in the province.³³

In an interview about the predictive system with researchers from the World Wide Web Foundation, Pablo Abeleira, technology coordinator at the Ministry of Early Childhood of Salta, said, ‘the tools mainly rely on data collected in low-income areas of the south-eastern, eastern and western districts of the city of Salta in the years 2016 and 2017’.³⁴ In other media interviews, Abeleira indicates that the system is also deployed outside the city of Salta, in rural areas of the province. In an undated interview with press site *El Efete*, Pablo Abeleira and the provincial minister of early childhood, Carlos Abeleira (his brother), described the data collection process in detail: information is obtained by ‘territorial agents’ who visit communities to carry out personal interviews and record GPS positions. The data are audited by ‘competent personnel’ who review photographs, videos and audio recordings digitized on mobile phones, computers or tablets. The system has three primary goals: monitoring individual cases, developing personalized plans to address problems such childhood undernutrition, and sharing data with other unspecified actors.³⁵ Describing the location in the province where data were being collected at the time of the interview, Carlos Abeleira said it is an area ‘112 times bigger than the city of Buenos Aires with only 35,000 people living there, most of them Wichis, the most fragile ethnic group living in the province’.³⁶ Wichis are an Indigenous community of about 50,000 people, living in several northern provinces of Argentina and in Bolivia, where they are engaged in struggles for land rights due to territorial dispossession for large-scale cattle ranching and soybean agriculture.³⁷

The journalist conducting the interview described a demonstration of the system:

Clicking again on a house opens a spreadsheet with data on the babies, children and pregnant women living there, which contains a series of social indicators that the

30 Freuler and Iglesias, op. cit. (26) p. 4.

31 Jasanoff and Kim, op. cit. (7).

32 Instituto Nacional de Estadística y Censos de la República Argentina (INDEC), at www.indec.gob.ar.

33 UNICEF Argentina, ‘Embarazo y maternidad en adolescentes menores de 15 años’, June 2017.

34 Freuler and Iglesias, op. cit. (26), p. 17.

35 *El Efete*, ‘Salta aplica un sistema de big data e inteligencia artificial para intervenciones sociales’, 13 September 2017, at <https://web.archive.org/web/20201020110404/http://www.elfete.com/salta-aplica-un-sistema-de-big-data-e-inteligencia-artificial-para-intervenciones-sociales-en-ninez> (accessed 25 March 2022). Note that this article appears to pre-date the official Microsoft announcement.

36 *El Efete*, op. cit. (35).

37 Natalie Boffa, ‘Movilizaciones wichí del chaco salteño rural: historias orales’, *VI Jornadas de Investigación en Humanidades Homenaje a Cecilia Borel*, 30 November 2015, pp. 1307–14.

ministry developed together with UNICEF and various social organizations ...

At random, Abeleira opens a window where a 16-year-old pregnant teenager appears, showing her health, educational and sanitary background, the medical treatments she has undergone and those pending, her schooling, the levels of risk of those she lives with, characteristics of the house she lives in, the water she drinks, the family composition to determine if there is overcrowding, and much more.³⁸

This description gives a sense of the fine-grained, intimate surveillance the system is designed to carry out. It complements the World Wide Web Foundation report (2018) which provides clues to the system's practices of public-health surveillance, architecture and data sharing. In a footnote, the report states that 'CONIN and TECHO are the most noteworthy of the participating organizations'; furthermore:

The system is supported by an app that standardizes the information collected by several organizations operating in the territory. While each organization is given exclusive access to the databases each has compiled, the government has access to all the data.³⁹

The footnote includes a link to a 2016 video posted on the YouTube channel of the Ministry of Early Childhood.⁴⁰ The video, which is in English, promotes a public-health system developed by Microsoft and CONIN. It states that a Microsoft philanthropy Azure grant funded the creation of a digital system which contains information on individuals and identifies families at risk. The video narrates the story of Marta and her son Bryan, who has trisomy 21 and renal disease. The narrator says, 'In fact Marta never asked CONIN for help with Bryan. The Microsoft solution analysed her son's data and produced an alert'. In an interview in the video, Pablo Abeleira explains that the system instantly shares data: 'that way we can work not only with people from the government, but also with priests, police, teachers and tribal leaders, in certain places'.⁴¹

It is not clear whether the Microsoft-CONIN system discussed in the video has a direct connection with the pregnancy prediction platform (pregnancy is not mentioned in the video, although one frame shows an icon of a pregnant woman in the open app). However, the video reveals a high degree of coordination and data sharing between CONIN, the government of Salta and other parties that is enabled by Microsoft platforms and funding. It also presents information on how CONIN collects data from families, with footage of CONIN staff dressed in orange vests walking through neighbourhoods, sitting at kitchen tables entering information into tablets, and measuring children's heads. Whether or not the 'territorial agents' described by Abeleira as responsible for collecting data for the teenage pregnancy system are CONIN staff remains an open question. However, the video provides a scenario for how data collection and surveillance may be carried out for the predictive system.

Salta, where the platform was developed and initially deployed, is among the most conservative and Catholic parts of the country and has played a significant role in national debates about reproductive rights. Until 2018 Salta was the only Argentine province that taught religious education in public and private schools and did not provide comprehensive sex education despite a 2007 national law requiring its inclusion in school

38 *El Efete*, op. cit. (35).

39 Freuler and Iglesias, op. cit. (26), p. 17 n. 61.

40 Ministerio de la Primera Infancia, 'CONIN Microsoft MPI', 8 November 2016, at <https://youtu.be/vG6zNFLyrrg> (accessed 25 March 2022).

41 Ministerio de la Primera Infancia, op. cit. (40).

curriculums. The province came to national attention in May 2018 due to a legal case in which a ten-year-old girl who had been raped by her stepfather faced obstacles to obtaining an abortion. Although a 1921 national law permitted the legal termination of pregnancy in cases of rape or danger to the life of the mother, a more restrictive provincial law passed in 2012 limited these exceptions. National uproar over the case forced Governor Urtubey to repeal the 2012 law. More recently, the first lawsuit challenging the constitutionality of Argentina's 2020 law legalizing abortion was filed in Salta province's federal court.

Representatives of organizations involved in the development of the Plataforma Tecnológica de Intervención Social have made public statements against the legalization of abortion. As previously mentioned, then governor Urtubey opposed the IVE law. Carlos Abeleira publicly expressed personal opposition to the legalization of abortion and in a 2019 interview he stated that the Ministry of Early Childhood 'defends children from their conception'.⁴²

Arguably what most securely links the Plataforma Tecnológica de Intervención Social to the abortion debate is the involvement of CONIN, whose founder, physician Abel Albino, has long been a vociferous public opponent to the legalization of abortion, as well as to sex education in schools and the use of contraceptives.⁴³ Albino is a polarizing figure. He is widely respected for his work on childhood malnutrition. He is also known for controversial claims like denying that condoms protect from HIV, positions analysed in greater detail in the next section.⁴⁴

In an astute analysis of the Plataforma Tecnológica de Intervención Social that brought the technology to the attention of the anglophone public, Paz Peña and Joana Varon write,

The idea that algorithms can predict teenage pregnancy before it happens is the perfect excuse for anti-women and anti-sexual and reproductive rights activists to declare abortion laws unnecessary. According to their narratives, if they have enough information from poor families, conservative public policies can be deployed to predict and avoid abortions by poor women.⁴⁵

In other words, Peña and Varon understand the technology as designed with an explicit ideological motivation to counter the passage of the IVE law.

In this section of the paper, we have offered a close reading of media interviews to build a fuller picture of the Plataforma Tecnológica de Intervención Social. We can surmise that its intellectual architects oppose the legalization of abortion and that it is designed to closely monitor individual women and girls (and not men and boys). The technology has been used to track women and girls in Indigenous communities; that is, historically marginalized groups already subjected to heightened state surveillance, control and violence. We also know that the sensitive data collected are shared with a number of actors, which may include 'priests, police, teachers and tribal leaders', as documented in another collaboration between CONIN, the Ministerio de la Primera Infancia, and Microsoft.⁴⁶

42 Ponce Mora, op. cit. (22).

43 Sternik, op. cit. (19).

44 *La Nación*, op. cit. (17).

45 Paz Peña and Joana Varon, 'Decolonising AI: a transfeminist approach to data and social justice,' *Global Information Society Watch*, 2019, pp. 28–32.

46 Ministerio de la Primera Infancia, op. cit. (40).

Puericulture

To delve further into the sociotechnical imaginary of the Plataforma Tecnológica de Intervención Social, we next examine historical forms of reproductive control in Argentina, particularly *puericultura*, an offshoot of eugenics focused on mothers and children.

Historians have traced two influential schools of eugenic thought: ‘Anglo-Saxon’ eugenics, theorized and practised in Germany, the United States and Scandinavia, and the ‘Latin’ eugenics of Argentina, Chile, Mexico and Brazil. Anglo-Saxon eugenics emphasized biological determinism and heredity and deployed direct interventions on the body such as sterilization and genocide (‘negative eugenics’). Latin eugenics emphasized the role of the environment and implemented public-health campaigns and marriage restrictions (‘positive eugenics’).⁴⁷

Latin eugenics was not homogeneous; a rich body of scholarship documents its myriad forms and local manifestations.⁴⁸ However, it tended to unite Catholicism, neo-Lamarckism, a rejection of sterilization and a critique of rigid European theories of racial superiority.⁴⁹ Latin eugenicists ‘sought to enhance the race through the promotion of maternal and child care, and were, generally speaking, pro-natalist. Thus fertility, reproduction, and sex were a central concern’.⁵⁰

Distinctions between ‘Latin’ and ‘Anglo-Saxon’ eugenics were not absolute. There was considerable exchange between practitioners: in the 1930s, Argentine eugenicists travelled to Germany for training and well-known European and American eugenicists published in Argentine scientific journals.⁵¹ ‘Latin’ and ‘Anglo-Saxon’ approaches shared a ‘technocratic and authoritarian ideology’ that legitimized nearly unlimited intervention in private lives in the name of improving the health of future generations.⁵²

Historian Marisa Miranda theorizes a ‘conceptual viscosity of eugenics’ – the propensity of eugenic discourses and practices to shapeshift and adapt to changing scientific paradigms and political circumstances.⁵³ Eugenics ‘infiltrates, adapts, but is also impossible to seize, since it slithers away when one tries to pin it down’.⁵⁴ In Argentina, eugenic thought was engaged across the political spectrum: liberal and conservative, socialist and anarchist, nationalist and fascist, Peronist and anti-Peronist.⁵⁵ It was informed by convergences and tensions between liberalism and Catholicism, as well as by political and

47 Marisa A. Miranda, ‘La eugenesia tardía en Argentina y su estereotipo de familia, segunda mitad del siglo XX’, *História, Ciências, Saúde - Manguinhos* (Rio de Janeiro) (2018) 25, pp. 33–50; Andrés H. Reggiani, ‘Depopulation, fascism, and eugenics in 1930s Argentina’, *Hispanic American Historical Review* (2010) 90(2), pp. 283–318.

48 Chiara Beccalossi, ‘Latin eugenics and sexual knowledge in Italy, Spain, and Argentina: international networks across the Atlantic’, in Veronika Fuechtner, Douglas E. Haynes and Ryan M. Jones (eds.), *A Global History of Sexual Science, 1880–1960*, Berkeley: University of California Press, 2017, pp. 305–29; Marius Turda and Aaron Gillette, *Latin Eugenics in Comparative Perspective*, London: Bloomsbury Publishing, 2016; Michael Kent, Vivette García-Deister, Carlos López-Beltrán, Ricardo Ventura Santos, Ernesto Schwartz-Marín and Peter Wade, ‘Building the genomic nation: “Homo Brasilis” and the “Genoma Mexicano” in comparative cultural perspective’, *Social Studies of Science* (December 2015) 45(6), pp. 839–61. R. Sánchez-Rivera, ‘The making of “La Gran Familia Mexicana”: eugenics, gender, and sexuality in Mexico’, *Journal of Historical Sociology* (2021) 34(1), pp. 161–85.

49 Beccalossi, op. cit. (48); Turda and Gillette, op. cit. (48).

50 Beccalossi, op. cit. (48) p. 305.

51 Reggiani, op. cit. (47).

52 Miranda, op. cit. (47); Reggiani, op. cit. (47) p. 284.

53 Marisa Miranda, ‘La tardo-eugenesia en Argentina: un enfoque desde la longue durée’, *Arbor* (2013) 189 (764), pp. 2–10.

54 Gustavo Vallejo, ‘La hora cero de la eugenesia en la Argentina: disputas e ideologías en el surgimiento de un campo científico, 1916–1932’, *História, Ciências, Saúde-Manguinhos* (2018) 25, pp. 15–32, 16.

55 Diego Armus, ‘Eugenesia en Buenos Aires: discursos, prácticas, historiografía’, *História, Ciências, Saúde-Manguinhos* (2016) 23, pp. 149–70; Marisa Miranda and Álvaro Girón Sierra, *Cuerpo, biopolítica y control social: América Latina y Europa en los siglos XIX y XX*, Buenos Aires: Siglo XXI, 2009, p. 317.

scientific relationships with Europe, the United States and other Latin American countries.⁵⁶

Argentine eugenics was noteworthy for its preoccupation with underpopulation and its emphasis on motherhood: 'the mother and, by extension, child care became the principal object of eugenics, and maternity and infancy institutes its main center of action'.⁵⁷ Argentine eugenicists embraced *puericultura*, a style of eugenics first popularized by Parisian physician Adolphe Pinard, who, concerned by declining French birth rates, fused ideas of 'scientific motherhood' and neo-Lamarckian notions of heredity – that is, the transmission of acquired characteristics from parent to child. Puericulture was not distinct from eugenics so much as a maternalist variation, a difference of 'form not substance'.⁵⁸ Eugenics and *puericultura* 'regularly appeared as twinned terms and acted in mutually reinforcing ways'.⁵⁹

In Argentina, as in France, *puericultura* was fuelled by worries of underpopulation and declining birth rates and entangled in efforts to encourage an increase in the quantity and 'quality' of the population. Alexandra Minna Stern observes, 'emphasis on *puericultura* was directly tied to pronatalism and panic over the need to populate both urban areas and vast expanses of land with the right kind of human stock'.⁶⁰ In Argentina, conceptions of a vast country in need of people were as old as the nation itself and integral to the national project.

'To govern is to populate'

Argentine liberal reformer Juan Bautista Alberdi (1810–84) famously said that 'to govern is to populate'. Conceiving of immigration as a civilizing mission, he wrote, 'Europe will bring us its fresh spirit, its work habits, and its civilized ways with the immigrants it sends us ... This is the only way that our America, uninhabited today, will become prosperous in a short time'.⁶¹

The notion of Argentina as 'uninhabited' informed interlocking movements that shaped the nation: the genocide of Indigenous communities and aggressive policies to attract European immigration. As liberal reformers like Alberdi and Domingo Faustino Sarmiento saw it, the country's interior, having been cleared of its Indigenous and *mestizo* inhabitants, would be settled by European immigrants who would propel the agricultural economy.⁶²

A series of military occupations sought to exterminate Indigenous societies through genocide and forced migration.⁶³ During the 'Conquest of the Desert' (1878–85), Sarmiento wrote that 'the occupation of such an extensive region must present many difficulties, but none of them compare with the advantages to be gained from the extinction

56 Armus, op. cit. (55).

57 Eraso, op. cit. (1) p. 793.

58 William H. Schneider, 'Puericulture, and the style of French eugenics', *History and Philosophy of the Life Sciences* (1986) 8, pp. 265–77, 265.

59 Alexandra Minna Stern, 'Eugenics in Latin America', in *Oxford Research Encyclopedia of Latin American History*, 22 December 2016, at <https://oxfordre.com/latinamericanhistory/view/10.1093/acrefore/9780199366439.001.0001/acrefore-9780199366439-e-315> (accessed 25 March 2022).

60 Stern, op. cit. (59).

61 Juan Bautista Alberdi, 'Immigration as a means of progress', in Gabriela Nouzeilles, Graciela Montaldo, Graciela R. Montaldo, Robin Kirk and Orin Starn (eds.), *The Argentina Reader: History, Culture, Politics*, Durham, NC: Duke University Press, 2002, pp. 96–7.

62 Nicolas Shumway, *The Invention of Argentina*, Berkeley: University of California Press, 1991.

63 Walter Delrio, Diana Lenton, Marcelo Musante, Mariano Nagy, Alexis Papazian and Pilar Pérez, 'Discussing Indigenous genocide in Argentina: past, present, and consequences of Argentinean state policies toward Native peoples', *Genocide Studies and Prevention* (2010) 5(2), pp. 138–59.

of the savage tribes'.⁶⁴ The term 'desert' in this context is not a description of an arid landscape but the 'absence of state control, capitalism, and civilization' and a justification for settler colonialism, as Gastón Gordillo and Silvia Hirsch write.⁶⁵

Drawing on the same tropes of the unpopulated 'desert', liberal leaders launched aggressive policies of immigration rooted in eugenic ideologies of racial hierarchy and guided by an explicit policy of *blanquismo*, 'whitening' the population.⁶⁶ Between 1871 and 1914 six million immigrants arrived in Argentina, most from Europe.⁶⁷ In 1895, immigrants accounted for two-thirds of the population in the capital.⁶⁸ However, contrary to liberal leaders' intentions, rather than being 'Nordic' and 'Anglo-Saxon' people, immigrants to Argentina were largely from Italy, Spain and Jewish communities in Eastern Europe.⁶⁹ Rather than settling in the agricultural heart of the country, immigrants stayed in Buenos Aires.⁷⁰ Rather than working as low-wage labourers, immigrants brought radical ideas about labour, and soon organized a powerful anarchist movement, which fomented collective action and introduced ideas about women's equality that threatened Catholic norms.⁷¹

The same eugenic ideas that originally justified immigration soon framed immigrants as diseased, degenerate and criminal. While some Argentine politicians called for immigrants to be deported, the general thrust of government policy was to monitor, control and rehabilitate the immigrant.⁷² Public-health reformer Jose Maria Ramos Mejía wrote at the turn of the twentieth century that the first generation of immigrants 'is often deformed and not good-looking ... [because] his morphology has not been modified by the chisel of culture. In the second, one can already see the corrections that civilization begins to imprint'.⁷³ The neo-Lamarckian underpinnings of eugenic thought in Argentina, which held the possibility of bettering the population through environmental factors, authorized a vast expansion of science and medicine into private life.⁷⁴ Innovative and often intimate forms of surveillance multiplied. A police official in the city of La Plata, Juan Vucetich, developed fingerprinting techniques in the late 1880s, and this biometric technology was widely applied to Argentina's population.⁷⁵ From the 1880s to the 1950s, doctors, psychiatrists and medical social workers called *higienistas* monitored Argentina's

64 Quoted in Rebecca A. Earle, *The Return of the Native*, Durham, NC: Duke University Press, 2007, p. 169.

65 Gastón Gordillo and Silvia Hirsch, 'Indigenous struggles and contested identities in Argentina histories of invisibilization and reemergence', *Journal of Latin American Anthropology* (2003) 8(3), pp. 4–30, 4.

66 Eduardo A. Zimmermann, 'Racial ideas and social reform: Argentina, 1890–1916', *Hispanic American Historical Review* (1992) 72(1), pp. 23–46.

67 Julia Rodriguez, *Civilizing Argentina: Science, Medicine, and the Modern State*, Chapel Hill: University of North Carolina Press, 2006.

68 Luis Alberto Romero, *A History of Argentina in the Twentieth Century*, University Park, PA: Penn State University Press, 2021, p. 11.

69 Rodriguez, op. cit. (67); Romero, op. cit. (68).

70 Romero, op. cit. (68).

71 Dora Barrancos, 'Problematic modernity: gender, sexuality, and reproduction in twentieth-century Argentina', *Journal of Women's History* (2006) 18(2), pp. 123–50.

72 Rodriguez, op. cit. (67); Kristin Ruggiero, *Modernity in the Flesh: Medicine, Law, and Society in Turn-of-the-Century Argentina*, Redwood City: Stanford University Press, 2004.

73 Rodriguez, op. cit. (67), p. 88; Romero, op. cit. (68).

74 Ricardo Cicerchia, 'Historia de la vida privada en la Argentina', *Boletín Americanista* (1999) 49, pp. 301–2; Rodriguez, op. cit. (67); Ruggiero, op. cit. (72);

75 Kristin Ruggiero, 'Fingerprinting and the Argentine plan for universal identification in the late nineteenth and early twentieth centuries', in Jane Caplan, John Torpey and John C. Torpey (eds.), *Documenting Individual Identity: The Development of State Practices in the Modern World*, Princeton, NJ: Princeton University Press, 2001, pp. 184–96.

physical and moral health.⁷⁶ These efforts reached far beyond hospitals and clinics; for example, in the late nineteenth century, state social workers inspected private homes, particularly overcrowded tenements called *conventillos*, where cooking implements, sleeping arrangements and bodies were searched for signs of disease.⁷⁷ Women's bodies were particularly scrutinized. Sex workers were subject to medical examination without consent.⁷⁸ Laundry workers and wet nurses were checked for signs of disease which might be transmitted to wealthy families through linens and milk.⁷⁹

Motherhood attracted intense attention propelled by puericultural ideas that a mother's physical and moral health was inherited by her children, as Yolanda Eraso and other historians have traced.⁸⁰ By managing motherhood, the nation's stock could be safeguarded from ills including epilepsy, homosexuality, alcoholism, criminality, debauchery and suicide.⁸¹ Projects like childrens' health booklets and maternal health records abounded. For example, in 1934 'eugenic fertility records' were proposed to record women's 'race, color and religion', track fertility and educate about maternal duties.⁸² As late as 1947, official eugenic registries were proposed to prevent 'undesirable' marriages.⁸³ Ambitious programmes to create biotypological registries of 'physical, psychological, moral and intellectual traits' were frequently proposed, albeit only sporadically carried out.⁸⁴ By the late 1930s, *puericultura* had influenced maternalist policies at the national level, through measures designed to raise birth rates and ensure pre- and postnatal care of mothers and children under strict medical supervision.⁸⁵ The welfare state elaborated under Perón integrated earlier *puericultura* policies and forged new maternalist protections.⁸⁶

Eugenic institutions endured until the end of the twentieth century. The Argentine Eugenics Society was founded in 1945, established a school of eugenics in 1957 and held its last conference in 1970.⁸⁷ As the century progressed, Argentine eugenics increasingly merged with Catholicism until, as Miranda analyses, 'the prototype of a eugenic family became indistinguishable from the religious family'.⁸⁸ Even as eugenics faded as a recognizable scientific field, its viscous and dendritic impulses continued in new forms. The staunchly Catholic military dictatorship of 1976–83, with its credo of 'faith,

76 María Silvia Di Liscia, 'Médicos y maestros: Higiene, eugenesia y educación en Argentina (1880–1940)', in María Silvia Di Liscia and Graciela Nélica Salto (eds.), *Higienismo, educación y discurso en la Argentina (1870–1940)*, Santa Rosa: EdUNLPam 2004, pp. 37–64; Donna Guy, *Women Build the Welfare State: Performing Charity and Creating Rights in Argentina, 1880–1955*, Durham, NC: Duke University Press, 2009; Rodríguez, op. cit. (67); Ruggiero, op. cit. (72); Zimmermann, op. cit. (66).

77 Di Liscia, op. cit. (76); Rodríguez, op. cit. (67); Ruggiero, op. cit. (72); Zimmermann, op. cit. (66).

78 Donna Guy, *Sex and Danger in Buenos Aires: Prostitution, Family, and Nation in Argentina*, Lincoln: University of Nebraska Press, 1991.

79 Guy, op. cit. (78).

80 Nancy Leys Stepan, *The Hour of Eugenics: Race, Gender, and Nation in Latin America*, Ithaca, NY: Cornell University Press, 1996; Yolanda Eraso, *Representing Argentinian Mothers: Medicine, Ideas and Culture in the Modern Era, 1900–1946*, Leiden: Brill, 2015; Guy, op. cit. (78).

81 Eraso, op. cit. (1); Rodríguez, op. cit. (67); Romero, op. cit. (68).

82 Armus, op. cit. (55).

83 Miranda, op. cit. (47).

84 Armus, op. cit. (55); Liscia, op. cit. (76).

85 Reggiani, op. cit. (47).

86 Guy, op. cit. (78); Marcela Nari, *Políticas de maternidad y maternalismo político: Buenos Aires, 1890–1940*, Buenos Aires: Editorial Biblos, 2004.

87 Miranda, op. cit. (47); Gustavo Vallejo and Marisa Miranda, 'Enseñando a custodiar el buen nacer: los estudios universitarios de eugenesia en Argentina, 1942–1980', *Varia Historia* (2017) 33(61), pp. 49–78.

88 Miranda, op. cit. (47), p. 44.

family and the fatherland’, had a ‘eugenic slant’.⁸⁹ The juntas imposed pronatalist policies prohibiting contraception and abortion.⁹⁰ Death squads kidnapped and imprisoned pregnant women considered to be ‘subversives’, killing them after they’d given birth so that their infants could be appropriated by families allied with the military. The children of ‘subversives’ were considered ‘seeds of the tree of evil’ who could nevertheless be redeemed through the positive environment of traditional Catholic homes.⁹¹ As anthropologist Lindsay Smith notes, this approach ‘fits within a larger eugenic history in Argentina’.⁹²

In attenuated forms, the logics of puericulture continue to be found in contemporary public-health discourses and practices in Argentina. Anthropologist Ana María Pérez Declercq researches reproductive healthcare in Salta, and offers an ethnographic tracing of how the bodies of poor pregnant women are targeted for intensive state surveillance and control, justified by moralizing discourses elided into scientific evidence.⁹³ Pérez Declercq examines how political rhetoric about poor women’s ‘inability to plan a family’ works to blame women for their own economic precarity while also framing them as responsible for national economic crises. This logic justifies intensive surveillance of women’s reproductive lives and, at its most extreme, leads to forced sterilizations (as documented in Mexico and Peru).⁹⁴

Argentine sociologist Camila Paula Stimbaum’s ethnographic study of one of CONIN’s centres found that the foundation intensively focuses on the responsibility of the mother as ‘caregiver, nurturer and educator’.⁹⁵ Stimbaum pointedly draws on the historical language of liberal population governance to argue that the foundation frames its work as a ‘civilizing mission’.⁹⁶ Postulating a division ‘between maternities considered appropriate, adequate and/or desirable and those that do not meet this standard’, the foundation pushes women to ‘to govern themselves, in order to then be able to govern their own families’.⁹⁷

From the earliest days of the Argentine state, the bodies of poor women have been conceptualized as both threat and promise. They threaten the reproduction of poverty, criminality and ‘subversive’ elements. Yet, if surveilled, controlled and subject to the ‘chisel of

89 Marisa Miranda, ‘Reflexiones en torno a la construcción de discursos inmunitarios en ámbitos dictatoriales: el caso argentino, 1976–1983’, in César Leyton, Cristián Palacios and Marcelo Sánchez (eds.), *Bulevar de los Pobres: Racismo Científico, Higiene y Eugenesia en Chile e Iberoamérica, Siglos XIX y XX*, Santiago de Chile: Ocho Libros, 2015, pp. 306–17.

90 Valeria Manzano, ‘Tiempos de destape: sexo, cultura y política en la Argentina de los ochenta,’ *Mora* (2019) 25(2), pp. 1–3.

91 Marguerite Feitlowitz, *A Lexicon of Terror: Argentina and the Legacies of Torture*, Oxford: Oxford University Press, 2011, p. 79.

92 Lindsay Adams Smith, ‘Identifying democracy: citizenship, DNA, and identity in postdictatorship Argentina’, *Science, Technology, & Human Values* (2016) 41(6), pp. 1037–62, 1043. Alexandra Minna Stern, op. cit. (59), notes that this strategy was also found in Francoist Spain, where ‘Lamarckian eugenics was invoked to justify the appropriation of the children of Republicans and their resettlement in “proper” Christian homes’.

93 Ana María Pérez Declercq, ‘“Cuidarse”: Un Estudio Etnográfico Sobre el Proceso Asistencial de las Prácticas Anticonceptivas en Salta, Argentina’, dissertation, Universitat de Barcelona (2016).

94 Pérez Declercq, op. cit. (93); Eduardo L. Menéndez, ‘De racismos, esterilizaciones y algunos otros olvidos de la antropología y la epidemiología mexicanas’, *Salud Colectiva* (2009) 5(2), pp. 155–79.

95 Camila Paula Stimbaum, ‘Un Estudio en Torno a la Intervención de una ONG en el Campo de la Nutrición Infantil: El Caso de NUTRIR Los Hornos’, thesis, Universidad Nacional de La Plata (2017), p. 109. Stimbaum used the pseudonym NUTRIR in her thesis but has described her research site as CONIN to journalists. see Soledad Vallejos, ‘El imperio oscurantista’, *Página 12*, 25 August 2018, at www.pagina12.com.ar/131541-el-imperio-oscurantista.

96 Stimbaum, op. cit. (95).

97 Stimbaum, op. cit. (95).

culture', they can populate the 'desert' of a settler colonial country with an economically productive labour force.

Dangerously empty

Abel Albino's testimony at the IVE hearings in July 2018, discussed in the opening of this article, clearly invoked the 'desert' tropes of the nineteenth century when he said, 'Our country is enormously large, enormously rich and dangerously empty'.⁹⁸ Albino developed this argument in his 2012 book *To Govern Is to Populate: Anthropological and Ethical Guidelines for Sound Sex Education*. The title is a direct citation of Alberdi's famous line, highlighting its centrality to Albino's ideology.⁹⁹ The book merges nationalist concerns about population with calls for physiological and moral control and social improvement. Notably, Albino links malnutrition to uncontrolled sexuality, writing, 'Infantile malnutrition is a cultural disease typical of places where the sexual act ... is carried out compulsively, with uncontrolled and irrational passion'.¹⁰⁰ In another passage, he writes that in families where children are malnourished, 'there are a series of behaviours that inevitably must be combated: immodesty, promiscuity, pornography, masturbation, incest, unnatural sex, rape, paedophilia, contraception, abortion, infidelity, common-law unions'.¹⁰¹

In his books, articles and media interviews, Albino elaborates his thesis that contraception and abortion are undesirable because Argentina needs to be populated.¹⁰² 'Limiting conception in our country is a form of suicide. It's an empty country ... We need people and people of quality'.¹⁰³ He argues that sex education and government programmes that provide condoms lead to promiscuity. This, in turn, leads to child abandonment and malnutrition, which causes physiological harm, namely, in Albino's view, the failure of normal brain growth and stunted intellectual ability. Albino writes that children with 'damaged brains' are not the healthy and moral citizens needed to populate the country.¹⁰⁴

Through his preoccupation with underpopulation, his direct invocation of Alberdi and his rhetoric linking physical and moral ills, Albino's discourses share affinities and intertextualities with those of early twentieth-century *puericultura*. In CONIN's attention to the mother-child dyad, and close monitoring of the bodies of mothers and children, there are material links to programmes of maternal surveillance pioneered in historical *puericultura* projects. Furthermore, like earlier *puericultura* projects, CONIN has had national reach through close ties with the Macri government, which granted the foundation responsibility to carry out maternalist public-health projects and shape public policies.¹⁰⁵

Although the extent of Albino's personal involvement in developing the Plataforma Tecnológica de Intervención Social is unknown, his rhetoric and CONIN's practices add to our understanding of the social imaginary in which the system to predict teenage pregnancy was designed and deployed.

⁹⁸ *La Nación*, op. cit. (17).

⁹⁹ Abel Albino, *Gobernar es Poblar: Criterios Antropológicos y Éticos Para una Correcta Educación Sexual*, Buenos Aires: Ediciones Logos, 2010.

¹⁰⁰ Albino, op. cit. (99).

¹⁰¹ Albino, op. cit. (99).

¹⁰² Albino, op. cit. (99).

¹⁰³ 'Un asesor propio de la época medieval', *Primera Fuente*, 10 November 2015, at www.primerafuente.com.ar/noticias/61828/asesor-propio-epoca-medieval (accessed 25 March 2022).

¹⁰⁴ Albino, op. cit. (99); A. Ortiz-Andrellucchi, L. Peña Quintana, A. Albino Beñacar, F. Mönckeberg Barros and L. Serra-Majem, 'Desnutrición infantil, salud y pobreza: intervención desde un programa integral', *Nutrición hospitalaria* (2006) 21(4), pp. 533–41.

¹⁰⁵ Buenos Aires Ciudad, 'La Ciudad firmó un convenio con la Fundación CONIN', at www.buenosaires.gov.ar/noticias/firmamos-un-convenio-con-la-fundacion-conin 1 November 2012 (accessed 25 March 2022).

Conclusion

Although much about the Plataforma Tecnológica de Intervención Social remains opaque, through close readings of media interviews with its intellectual architects, analysis of technical reports, consideration of another technological collaboration between its main actors, and attention to historical and political context, this paper has sought to illuminate shapes and forms of the social logics and visions of desirable futures encoded in the system. We argue that there are meaningful affinities and intertextualities as well as material links and ideological continuities between the Plataforma Tecnológica de Intervención Social and the eugenic practices of *puericultura* popular in the early twentieth century.

Contrary to claims that the Plataforma Tecnológica de Intervención Social is innovative and futuristic (which invoke Silicon Valley rhetorics of ‘disruption’), we argue that the system is better described in terms of continuity with established forms of social surveillance and control. It is the latest in a long line of puericultural projects that surveil the bodies and lives of girls and women in the name of social improvement.

In an essay on Latin American eugenics, historian Alexandra Minna Stern reflects on the movement’s legacies in the region. She writes,

Biometric systems, with strong affinities to biotypology, also have proven resilient. Argentina began its long love affair with biometrics in the early 1900s, and it continued unabated during the extended eugenics era (1910s–1950s) and the military dictatorship (1976–1983) with its obsession with identification cards (*fichas*) to track dissidents. More recently, during her presidency, Cristina Kirchner spearheaded a major initiative to apply biometric fingerprinting to all citizens, creating a database that could be cross-referenced with other institutional and medical records, thus assembling the kind of biotypological registry that would have been lauded by the eugenicists of yesteryear.¹⁰⁶

One can imagine that puericulture advocates of yesteryear would have similarly lauded a system with which, at a click, they opened ‘a spreadsheet with data on the babies, children and pregnant women’ living in a particular house. And clicking again,

a 16-year-old pregnant teenager appears, showing her health, educational and sanitary background, the medical treatments she has undergone and those pending, her schooling, the levels of risk of those she lives with, characteristics of the house she lives in, the water she drinks, the family composition to determine if there is overcrowding, and much more.¹⁰⁷

Eugenics, as Miranda writes, possesses conceptual viscosity. It can infiltrate various scientific theories and be adapted to changing political programmes. It can shapeshift from sterilization to education, from *fichas* to fingerprints. It may even take the form of what we could call ‘data eugenics’, slipping and slithering into a Microsoft Azure platform.

106 Stern, op. cit. (59).

107 *El Efete*, op. cit. (35).

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