



Revista de Historia de la Psicología

www.revistahistoriapsicologia.es



Biotypology, psychotechnics, and gender in 1930s Argentina

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INFORMACIÓN ART.

Recibido: 10-10-2025
Aceptado: 30-1-2026

Key words
biotipología,
psicotécnica,
trabajo femenino,
género,
Argentina

Palabras clave
biotipología,
psicotécnica,
trabajo femenino,
género,
Argentina

ABSTRACT

The Argentine Association of Biotypology, Eugenics and Social Medicine (abbreviation in Spanish: AABEMS), founded in 1932, promoted the idea of an ideal man and woman aligned with the Latin race and the Catholic State, closely following Italian biotypology and psychotechnics. We examine how fascist Italy's frameworks were adapted in Argentina, emphasising the tension between universalist claims and local modifications, particularly regarding women's work. We argue that these adaptations were backgrounded by shared common "Latin" values, Catholicism, and gender hierarchy, producing specific and often contradictory classifications of women's skills and professional roles. By examining this tension, this study highlights the role played by social values in shaping scientific knowledge. It reveals how women occupied ambivalent positions within biotypological institutions as both objects of regulation and participants in the production and dissemination of expertise.

Biotipología, psicotécnica y género en la Argentina de 1930

RESUMEN

La Asociación Argentina de Biotipología, Eugenesia y Medicina Social (AABEMS), fundada en 1932, promovió un ideal de hombre y mujer en consonancia con la raza latina y el Estado católico, siguiendo de cerca la biotipología y la psicotécnica italianas. Analizamos cómo se adaptaron en Argentina los marcos

This research has been funded by the European Union under Marie Skłodowska-Curie Grant 101106744 and the Secretaria de Investigación of the Universidad Nacional de La Plata [Research Secretariat for at the National University of La Plata]. We are grateful to the guest editors and reviewers for their feedback, which enhanced this article. All translations from Spanish sources are ours.

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ISSN: 2445-0928 DOI: <https://doi.org/10.5093/rhp2026a14>

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Para citar este artículo/ To cite this article:

Molinari, V., Talak, A.M. y Lescano, A. (2026). Biotypology, psychotechnics, and gender in 1930s Argentina. *Revista de Historia de la Psicología*, 47(2), 103–113. Doi: [10.5093/rhp2026a14](https://doi.org/10.5093/rhp2026a14)

Vínculo al artículo/Link to this article:

DOI: <https://doi.org/10.5093/rhp2026a14>

conceptuales de la Italia fascista, haciendo hincapié en la tensión entre pretensiones universalistas y modificaciones locales en torno al trabajo de las mujeres. Sostenemos que estas adaptaciones tuvieron como trasfondo valores “latinos” compartidos, el catolicismo y la jerarquía de género, lo que produjo clasificaciones específicas y ambivalentes de las habilidades y roles profesionales femeninos. Este caso ilustra cómo los valores sociales configuran el conocimiento científico y, a la vez, cómo las mujeres fueron objeto de regulación y, a la vez, agentes en la producción y difusión de saberes especializados.

Introduction

The Argentine Association of Biotypology, Eugenics and Social Medicine (AABEMS), founded in 1932, promoted the idea of an ideal man and woman aligned with the “Latin race” and the Catholic State, closely following Italian biotypology and psychotechnics. This article examines how Argentine biotypologists sought to adapt Italian biotypological psychotechnics and vocational guidance to prescribe gendered roles, while tackling the realities of women’s participation in the workforce. We argue that, although these frameworks promoted a naturalised division of labour, based on women’s supposed biological predisposition towards motherhood, their application revealed tensions that can be divided into three fundamental areas. First, there was a gap between prescriptive models that confined women to maternal and caregiving roles and the diversity of women’s actual work experiences. Second, disagreements emerged over the definition of vocation and skills, particularly between religious and scientific approaches within psychotechnics and biotypology. Third, women’s participation within the AABEMS itself exposed contradictions in performing tasks and fulfilling responsibilities that were not recognised as “work,” but which challenged biotypological expectations of their role. Rather than viewing these tensions as inconsistencies, we tackle them as a reflection of the process of appropriation, adaptation, and production of biotypological knowledge in Argentina.

The analysis of the relationship between biotypology and psychotechnics must be framed within the widespread dissemination of eugenics during the first decades of the 20th century (Stern, 2016) and within a broader setting of a transnational fascist network between Italy and Latin America, which sought to expand the ideals promoted by Mussolini based on a common heritage of *latinitá*: a shared cultural legacy and a family of Latin-derived languages connecting Italy, France, Portugal, Spain, and Latin America. This term is inherently linked to processes of colonisation and was often used to maintain unequal power relations between Southern Europe and Latin America (Kaplan, 2019; Mignolo, 2010). Argentina held a prominent position within this scheme, because it had the largest Italian community in Latin America, shared the Catholic religion, and was expected to share pronatalist and traditional family values associated with Latin values (Finchelstein, 2010; Forcucci, 2010; Miranda, 2005). Historical studies on eugenic discourse and practice have focused on medicine, education, public health policies, their political dimensions, and the relationships with other international productions (Armus, 2016; Di Liscia & Salto, 2004; Miranda & Vallejo, 2005, 2012; Palma, 2004; Vallejo, 2008). There is also literature on

the relationships between biotypology and “Latin eugenics”¹, and their connection through Catholicism and fascism (Stepan, 1991; Vallejo, 2004; Vallejo & Miranda, 2004; among others already cited). Along these lines of inquiry, studies have also been published on how eugenics and biotypology contributed to the typification of the “mother” and the control of a population’s sexuality, at the crossroads between eugenics, historiography, and historical studies on women in science (Eraso, 2007; Miranda, 2020, 2023; Nari, 2004).

Several works have investigated the use of experimental psychology techniques from Germany and France (Ibarra, 2014; Klappenbach, 2005; Lescano & Talak, 2022), the rise of psychotechnical institutes for professional guidance and applied psychology (Di Doménico & Vilanova, 2000; Lescano, 2024), including the Institute of Biotypology of Buenos Aires (Gómez Di Vincenzo, 2013b, 2013a; Molinari, 2018), as well as the relationship between the incipient psychotechnics present in initial psychopedagogy and experimental psychology and its connection with biotypology and eugenics (Gómez Di Vincenzo, 2013a; Haidar, 2011; Palma & Gómez Di Vincenzo, 2009).

Aimé Lescano’s doctoral research (2024) is fundamental, since it explores the relationship between developments in psychotechnics before biotypology and conceptions of women’s place in the labour market, as well as a subsequent connection with biotypological developments. However, the intersection between gender, psychotechnics, and biotypology remains underexplored. Building on this body of work, we aim to show how Argentine biotypologists adapted Italian discourse on women’s role in the division of labour to serve national and transnational fascist and eugenic interests, and how they dealt with the reality of working women both outside and within the AABEMS.

The methodology employed in this article consists of a qualitative and interpretive analysis of bibliographic sources (academic texts, documents from public institutions, political and academic proceedings, radio conference transcripts, books by representatives of biotypological psychotechnics in Argentina, and vocational guidance courses). We adopt a perspective that focuses on the relational dynamics of power in the production and uses of knowledge, the analysis of the social values underlying the assignment of gender roles, and how some women participate in these institutions, taking

¹ Latin eugenics is a term popularised by Nancy Leys Stepan and it refers to a regional variant of the eugenics movement characterised by Catholic eugenics and a neo-Lamarckian understanding of heredity and evolution, emphasising environmental influences and social reform over strict Mendelian genetics and bodily interventions (Stepan, 1991).

positions within the dynamics of cultural and scientific appropriation of European standards of knowledge (García, 2018; Harding, 1991). We also consider the transnationality of science in the 20th century. Transnational history analyses the relationships between scientific and academic institutions (not necessarily universities or state institutions); the mobility of scientists and intellectuals, which enabled the circulation of ideas, working methods, and patterns of social interaction; the distribution of scientific products, such as literature, technology, tests, methodological procedures, and administrative techniques, among others; and policies of scientific exchange promoted by non-scientific and non-academic institutions (Pierre-Yves, 2013; Turchetti et al., 2012).

We will first address the origins of biotypology in Italy and its implications for female labour based on the notion of Latin eugenics and pronatalism. Within this framework, we will analyse how biotypology and its view of psychotechnics were adapted in Argentina through transnational connections. Second, we will demonstrate biotypology's understanding of women's roles in society and the workforce. Third, we will discuss different understandings of vocation within biotypology and Catholicism, as well as technical models from Germany and the United States, and how these shaped biotypologists' professional recommendations. Finally, we will analyse how women participated in the AABEMS and promoted biotypological and eugenic programmes, often reinforcing gendered social norms.

Psychotechnics and Italian biotypology

Nicola Pende (1880-1970) coined the term "biotypology" in 1922, to describe a form of holistic medicine that viewed the individual as an indivisible oneness of body and soul. Drawing on endocrinology, constitutional medicine, and Thomistic psychology, he created a classificatory system that identified four biotypes (Brevilinear-Sthenic-Tonic, Longilinear-Sthenic-Tonic, Brevilinear-Asthenic-Atonic, and Longilinear-Asthenic-Atonic). These biotypes were synthesised within a "biotypological pyramid" that included heredity, body form, temperament, character, and intelligence. Biotypology promised to detect hidden abnormalities, assign individuals to suitable occupations, and guide preventive medicine from childhood onward through a system of vigilance and record called "Orthogenesis." Pende also conceived social life as an organic and natural entity in which individual actions and development could be controlled and guided (Pende, 1947). The biotypological pyramid represented human personality and provided a holistic understanding of a person's place in society.

Pende was interested in psychotechnics and career guidance as inherently biotypological pursuits. For Pende, biotypology would assign "each person to the least uncomfortable, most favourable, most productive, and least fatiguing job" (Pende, 1947, p. 469). In this way, he believed the working class could be more efficiently organised, and society would benefit from workers' optimal performance. He presented his programme to the Italian fascist regime as the scientific approach to achieving intellectual harmony, racial superiority, and economic and military strength (Galera, 2005). The State was to be responsible for coordinating and strengthening all social functions

naturally distributed throughout society. Pende was made an honorary member of the National Fascist Party in 1924. Two years later, in December 1926, the Biotypological Orthogenetic Institute was established in Genoa. In 1933, Pende was appointed senator, and, with Mussolini's support and the orthogenetic promise to improve the Italian race, the Institute was moved to Rome in 1936.

The Biotypological Orthogenetic Institute was divided into five sections: the morphological and endocrinological department, the psychopedagogy department, the vocational guidance department, the experimental genetics department, and the psychological orthogenetics department. The psychopedagogy department assessed psychological functions, such as memory and intelligence, using psychological tests.² The vocational/psychotechnical department used psychological and physical assessments of perception (depth perception, motor strength, and pain sensitivity) and aptitude tests based on the VARF (Velocity, Ability, Resistance, Force) system, which simulated various work scenarios and measured speed, capacity, endurance, and strength. The four elements mentioned (speed, capacity, endurance, and strength) were considered to vary proportionally across biotypes, and it was hoped that their identification would enable more efficient population management (Beccalossi, 2020; Lescano, 2024). It is estimated that around 70,000 people visited the institute each year, and most of them were referred by their physicians (Beccalossi, 2018). To synthesise this information and formulate the necessary recommendations, the biotypological booklet was created. This was an individual booklet that recorded personal information from birth to adulthood. It contained photographs from different life stages, hereditary data (such as family illnesses, parental character traits, history of alcoholism, and significant events during pregnancy), and details about religion, occupation, sleep patterns, weather sensitivity, and climate preferences. Each age range was carefully examined with precise body measurements, and from age seven onward, the booklet also included psychological tests.

Biotypology aligned with the ideals of fascist pronatalism and Latin eugenics, which, intertwined with Catholicism, rejected sterilisation and emphasised the regulation of marriage, education, and motherhood (Beccalossi, 2020; Vallejo, 2012; Vallejo & Miranda, 2014). Following Latin Values, women were considered, above all, procreators of the nation. The fascist regime was particularly concerned with population growth. It implemented various policies to address this issue, such as economic incentives for the working class and public recognition and praise for women with more than five children (De Grazia, 1992; Forcucci, 2010). In this context, the state ordered a reduction in the number of women in public-sector jobs in 1938, resulting in 10% of working women losing their jobs.

Women's working conditions before Mussolini came to power were already tough. They mostly held low-skilled line jobs or worked as secretaries or shop assistants. Their wages were lower than men's, and they were rarely unionised. Women continued to work in factories and other low-skilled jobs while also being homemakers and mothers. However, the Fascist government believed that women

² Some of the techniques used included clinical observations, Decroly family surveys, Rorschach inkblot tests, De Sanctis' tests for intelligence and abnormality assessment, and the Binet-Simon intelligence scale (Pende, 1947, pp. 563-597).

should only be trained to be thrifty homemakers. Women's vocational schools primarily aimed to instil patriotic values within gender roles (Martinelli, 2020). Still, some women worked as teachers, nurses, lawyers, pharmacists, actuaries, engineers, journalists, and doctors, although female doctors were limited to paediatrics or gynecology. In the eyes of the government, teachers played a key role in educating children, even though they received exceptionally low wages and were prohibited from holding positions of authority, such as school headteachers. Women in other professions were allowed to work, if they did not aspire to positions in public administration. However, they were often slandered in the press, and patriarchal norms made it difficult for them to gain recognition or professional advancement (Willson, 2010).

The connection between biotypology and Italian fascism allowed biotypological practices to spread to other countries, based on the same concept of *latinitá* promoted by Mussolini, making Argentina a prime environment for Pende's biotypology to thrive, including the goal of creating the ideal Latin woman in alignment with national interests.

Psychotechnics and professional guidance initiatives at the AABEMS

The 1930 military coup in Argentina and the de facto presidency of José Félix Uriburu reinforced political, cultural, and scientific ties between Argentina and Fascist Italy, marking the beginning of the so-called Infamous Decade. Within this context, Catholic eugenics, and Nicola Pende's biotypology resonated strongly with conservative Argentine concerns regarding race, population welfare, and national organisation (Finchelstein, 2010; Vallejo, 2010). These affinities were institutionalised through academic exchanges, such as Pende's 1930 visit to Buenos Aires to teach endocrinology, organised by the *Instituto Argentino de Cultura Itálica* and Mariano Castex, head of the Clinical Medicine Unit at the University of Buenos Aires ("El Prof. Pende Visitó Esta Mañana El H. Rivadavia," 1930). Also, through the 1931 government-sponsored trip of physicians Arturo Rossi and Octavio López to the Italian Institute of Biotypology and Orthogenetics. The aim was to incorporate Italian progress in psychotechnics, eugenics, and social medicine into Argentine practices, and to create a similar institution aligned with Latin and Catholic ideals (Vallejo, 2004).

Through these transnational exchanges, the *Asociación Argentina de Biotipología, Eugenesia y Medicina Social* (AABEMS) was founded in 1933, with Rossi as director and Castex as president. Rossi was also a founding member of the Argentine Association of Friends of Italy, an organisation that promoted Italian heritage and Mussolini's Latin values (Finchelstein, 2010; Vallejo, 2010). Although Argentina's foreign policy shifted after 1932 toward closer relations with Great Britain, support for biotypological and eugenic initiatives persisted.³ These initiatives were based on two core principles: the nation's biological organisation and adherence to Catholicism (Escobar Saenz, 1933).

³ The military government pressured Uriburu to call for presidential elections and backed Agustín P. Justo's candidacy, who won the presidency through fraudulent elections and governed from 1932 to 1938.

While not all AABEMS members embraced fascist ideology or eugenics —making the association more open than its Italian counterpart— the organisation sought to replicate the institutional structure of the Italian Biotypological Institute. Its ideas were disseminated primarily through the *Anales de Biotipología, Eugenesia y Medicina Social* (ABEMS), published bimonthly between 1933 and 1941 under the motto "For the Betterment of Human Life." The journal became a key vehicle for promoting Latin eugenics in Argentina and facilitated exchanges with Italian and Spanish scholars. Pende was named the first honorary correspondent, and several of his works were published in it, in some cases in Italian. The AABEMS also exerted influence beyond academia, frequently advising national administrative and legal bodies (Coppa, 2019; Miranda, 2011; Reggiani, 2010).

The association was divided into seven sections devoted to studying the physical, psychological, and moral constitution of individuals; conducting psychopedagogical and criminological examinations; providing professional and psychotechnical guidance; researching genetics and genealogy; physical orthogenetics; nutrition; and occupational medicine (Boccia, 1937). Since there were no professional psychologists⁴ to conduct psychotechnical examinations, it was not always clear who had the knowledge and authorisation to undertake them. Each section was headed by male physicians, and testing was mostly conducted by female assistants or students from the Polytechnic School of Biotypology (Lescano, 2024).

Psychotechnics played a significant role in the AABEMS project, due to its potential to shape society in line with perceived national needs. Drawing on Pende's ideas, Rossi argued that a society consisting of healthy and strong men and women would enable the nation to become an "economic, military, reproductive, and spiritual power" (Rossi, 1941, p. 14). Within this framework, psychotechnics served two main purposes: identifying physical and psychological skills and ineptitudes to assign individuals to suitable occupations and preventing occupational accidents and diseases by identifying genetic predispositions (Vidoni, 1933).

Women in the workforce according to Argentine biotypology

Motherhood and work

Biotypology was considered fundamental to arguing in favour of protecting women and promoting their estrangement from the workforce. Physician Josué Beruti, president of the section "Eugenics, Maternity and Childhood" in the AABEMS, insisted on the need for the State to offer protection to women, as Pende was doing in Italy. Pende was in favour of banning female labour, since he thought that work could aggravate certain morbid predispositions, which in turn could be transmitted hereditarily. This is why he urged the State to take professional guidance seriously. If men and women were biologically different and differed in their physical and psychological aptitudes, then they should occupy different social roles:

⁴ Formal psychology degree programs in Argentina were not established until 1956

while nature has given men other missions and other aptitudes that have no direct relationship with sex, for example **psychomotor and mental skills necessary for labour** (...) women, in turn, all their physical, moral and intellectual being is doted and predisposed to correspond solely to the great mission of **companion and true and indispensable half of the man in the function of reproducing the species**. Either the woman is physically and mentally formed to be a wife to the man and a mother, or she is not truly a woman. (Pende, 1933, p. 2. Emphasis in the original)

In addition, he was persistent in his view that young women with no children, or only one child, turned to formal employment out of pure economic necessity, not out of desire or ability. Therefore, the State should support them with economic incentives so that they would withdraw from the labour market and dedicate themselves to motherhood. Pende was convinced that economic needs and the feminist struggle for gender equality were detrimental to women and to the future of the nation. If men could use their physical strength to serve industry or their intellect to hold positions of power, women were expected to serve the nation by being good wives and mothers (Pende, 1933). These ideas were not new, nor were they exclusive to biotypology, but they were now justified by holistic medicine and the prioritisation of the nation and the Latin race over individual development.

Following Pende, Beruti questioned “pseudo-feminism” since it disparaged the key role of mothers as the guarantors of the immortality of a Nation and thought it was an antinatural movement. He called Argentine authorities to follow the examples set by Fascist Italy and Nazi Germany, since he saw they valued female responsibility and provided State protection accordingly, namely by limiting women’s opportunities to educate themselves and take jobs outside the family household (Beruti, 1934). Within this framework, there were many proposals to prohibit female labour for all fertile women and to incentivise reproduction and Catholic family values, as was the case in Italy. In practice, however, the ban was applied only during the two to three months after childbirth (Lobato, 2000). In 1933, Beruti and Alberto Peralta Ramos, the director of the Maternity Institute of Buenos Aires, presented a “Plan for the organisation of motherhood and newborn welfare in Argentina” inspired by the Italian Opera Nazionale Maternità e Infanzia (also known by the acronym OMNI), a social organisation founded in 1925 in Italy. The plan included teaching Latin eugenics and providing special education for girls on female sexual development and motherhood (Peralta Ramos & Beruti, 1935). Their initiative would evolve into the Dirección de Maternidad e Infancia, a key department within the Ministry of Public Health in the 1950s (Ramacciotti, 2005).

Rossi, on his side, echoed this pro-fascist stance on motherhood as a patriotic and religious duty and believed that women’s roles should reflect this. Rossi argued that female education should differ from male education because women were thought to have more “moral energy,” while men had greater “muscular energy and abstract thought” (Rossi, 1944, pp. 684–685). Based on popular ideas about female education (Ostrovsky, 2011) and the orientation of Italian schools in terms of female trades, he argued that women’s education

should promote both femininity and motherhood through intellectual and physical training. This approach was also supported by concerns that participation in male-dominated activities, such as competitive sports, could result in “virilisation” or hormonal imbalances in women (Rossi, 1944).

However, the material reality for most women was quite different: they not only fulfilled their roles as mothers and wives but also worked in factories, offices, shops, and upper-class households. Women’s work in factories developed rapidly in Argentina’s major cities, especially Buenos Aires, from the end of the 19th century onward. Women from lower classes worked primarily in the textile and food sectors, as well as in small shops, education, healthcare, and domestic service. At the beginning of the 20th century, they began unionising. Their concerns focused on women’s working conditions, seeking the regulation of factory labour and domestic service. They fought for equal pay between women and men, a minimum wage, reasonable working hours, and protection for mothers and future mothers (Lobato, 2000).

While Argentine biotypologists acknowledged the reality of women’s participation in the workforce, they were still concerned about the threat of the masculinisation of female workers in large industries. For example, Donato Boccia, a professor of Occupational Medicine at the Polytechnic School, described them as victims of an “irremediable degeneration” (Boccia, 1942, p. 16). They worried that poor working conditions were creating a new type of “indefinite amalgam between the two sexes” that would harm society and the human species (Riatti, 1934, p. 13). They also believed that the risks of factory work were deemed particularly high, as exposure to fumes and other toxins could lead to complications in pregnancy and even to miscarriages.

Still, they promoted tutelage for factory labour and called for adaptations to factory environments to make them more suitable for female psychology. For example, they celebrated the Italian experience in Fiat, in which factory regulations were adjusted following female psychology recommendations to increase female productivity: “In the men’s section, there are large signs prohibiting talking. In the women’s section, on the other hand, there is a large sign that says: “*si puo cantare*” (Riatti, 1934, p. 14).

Suitable occupations for women

According to Rossi, young and capable women could and should be employed. Still, he recalled his Italian counterpart and agreed with the prevailing view that considered women’s employment to be transitory, since they would leave the labour market upon having children, and their salaries would be complementary to men’s. Rossi described various professional activities suitable for women, for example, ironing: “This trade, in which there is a lack of manpower, is suitable for strong, physically active young women who are not prone to hernias or varicose veins; indispensable qualities of care and cleanliness; at least average size” (Rossi, 1944, pp. 684–685).

Psychotechnics and biotypology would evaluate women’s physical and mental constitution, as well as the occupational requirements of each activity, to determine the right correspondence between the

biotype and the job. Prospective female textile factory workers were tested for visual sharpness, chromatic sense, muscular sensitivity, and a sense of proportion (Riatti, 1934). Biotypologists also exalted female beauty and the physiological constitution for motherhood, but their analysis of work skills in relation to the female biotype required a broader lens. In examining specific occupations, such as telephone operators, they emphasised the fact that the job demanded aptitudes and skills unrelated to beauty or femininity:

It will make little difference whether she is defective, one-eyed, or lame, tall or short, thin as a thread, or fat as a barrel. If they serve us well when we ask them for communication, we will all be delighted with them. (Olives, 1936a, p. 7)

The AABEMS promoted an approach to occupational medicine that sought to maximise industrial performance and the “somatopsychic wellbeing” of the worker. This approach rejected integral Taylorism, defended the hygienic protection of work, and promoted professional orientation through biotypological examinations and psycho-technical tests. Rossi (1932) stated that Taylorism was unscientific, because it focused solely on how humans could be more productive and generate more money. He criticised Soviet psychotechnics because workers were forced to adapt to any working conditions. In turn, Italy was the only country that had understood that the “machine should be adapted to man, and not man to the machine” and quoted Pende saying: “thanks to this **typically Italian** science progress, work is not a punishment from God, but a necessity of the civilized man to contribute, by virtue of his own muscles and his own brain to the continual progress of human life conditions.” (Pende in Rossi, 1932, p. 62. *Emphasis added*). Rossi’s alignment with Italian biotypological fascism over American Taylorism and Soviet psychotechnics was not merely geopolitical: it also reflected a particular understanding of gender as a natural organising principle of the division of labour. As Joan Scott (1990) argues, gender functions not only as a descriptor of social roles but as a primary field through which power relations are constructed and legitimised. In this sense, Rossi’s psychotechnics was not simply applied to women, it was constituted through a gendered logic that naturalised hierarchy as a biological fact.

From Pende’s quote, it is also possible to understand vocation as a natural inclination that would emerge from a person’s abilities and the drive for the common good of humankind. Within this framework, vocation was defined as a particular inclination towards a career, provided the person possessed the natural abilities for it. This meant that professional guidance would recommend an appropriate career or occupation, considering both the individual’s disposition and the specific requirements of each profession (Rossi & Olives, 1936).

Female vocation: Between faith and science

According to Heriberto Brugger, a Viennese psychologist based in Argentina, professional aptitude was strengthened when a central vocation guided it—for example, healing in the case of physicians or educating in the case of prospective teachers, interpreting these missions as the result of individual psychological structure and divine purpose (Brugger, 1945). Brugger directed the Applied Psychology

section of the Institute of Biotypology from 1941, after having headed the Psychotechnical Laboratory at the National Military School. For Brugger, work harmonised with each person’s divine purpose. Psychotechnics made it possible to establish the “structural psychological picture” of each profession, revealing the psycho-physiological demands using psycho-technical tests conducted by a “psychological specialist” (Rossi & Olives, 1936, p. 15). Although the professionalisation of psychology in Argentina began in the 1950s, the demand for expertise in psychotechnics and professional guidance led to the first organised training programme in the country.

However, important internal tensions emerged within the psychotechnical biotypological enterprise. Ángel Olives, director of the Psychotechnics and Professional Orientation section of the AABEMS, considered psychotechnics a branch of experimental psychology and, therefore, was not keen on awarding religion or pure national interests such a significant role in professional and vocational guidance (Olives, 1936b). He had been trained at the Psychotechnics and Professional Orientation Institute of the Argentine Social Museum, the rivalling, nationwide psychotechnics institute. The Psychotechnics and Professional Orientation Institute was founded in 1925 in Buenos Aires under the direction of German psychologist Carl Jesinghaus, and followed an American perspective focused on vocation and personal success (Lescano & Talak, 2022). The institute had several branches across the country and was annexed to the Argentine Social Museum⁵ in 1931, where it operated as its professional guidance section until 1947. Jesinghaus and his followers focused on physical and psychological aptitudes but not necessarily on a strict definition of personality or a holistic consideration of the human being. Among its objectives, the Institute set out to guide students in choosing their profession based on the science of psychotechnics and experimental psychology, which included measuring their mental and physical aptitudes.

Following his training, Olives stressed that guidance should direct the individual’s vocation and aptitudes to a suitable profession, assessing moral, cultural, physical, and psychological requirements (Olives, 1936a). He believed that academic success and intellectual ability alone were insufficient to ensure appropriate vocational choices, making vocational guidance and professional orientation necessary. Olives illustrated this through the case of a teacher who fell ill due to a vocational choice unsuitable for her physical constitution. For the author, “the lack of a psychophysiological examination upon entering the Normal School has ruined a life in her youth. She could have been an excellent pharmacist, and her health would have been saved” (Olives, 1940, p. 18). Within this framework, a career in pharmacy was deemed appropriate because of its connection to health and caregiving. It was expected that women’s work would be governed by their natural love for children:

Women must do the work that is written in their bodies. Close to the child, to children. As a teacher, physician, nurse, head of a charity, defender of minors, creator of literature, children’s

⁵ The Museo Social Argentino, founded in 1911 by Tomás Amadeo, was a key institution that functioned as an observatory on social issues. In its first decades, it promoted debates and initiatives for the State to address emerging social problems based on a progressive ideology. But from 1930 it adopted a more conservative approach, becoming a vehicle for elite nationalism.

fables, toy artisan, etc. If the care for children guides female work... that job is dignified. (Rietti, 1934, p. 14)

Even when career choices were suitable in principle, such as teaching, it was necessary to examine whether their motivation for their choice was well justified. Olives recalled the answer a young woman gave when asked about her future career: "I confess that I am studying to be a teacher because I think teachers have good salaries, and since I am a little lazy and do not like to work, I would like to practice this profession" (Olives, 1935, p. 17). Olives then stated that those who pursued this profession for economic or purely practical reasons, rather than from a "natural" inclination to care, were seen as "deviating" from their true vocation, revealing how gendered ideas influenced vocational selection. Olives's work within the AABEMS was based on ideas that went against the association's main approach. He followed American and German models, emphasising individual success over national interests and basing vocational guidance on natural inclination rather than religious calling. Despite this, he held a prominent position as Head of the Psychotechnics area and published regularly in the *Anales*, often together with Rossi, who, as shown in the previous section, held the opposite view.

In practice, the AABEMS prioritised biotypological data booklets and ergonomic or work-based tests over general aptitude testing. These tests replicated actual occupational tasks to assess physiological and psychological capacities in real contexts (Fingermann, 1954). This approach informed proposals for regulating driver selection and other occupations, drawing on models from Spain, the United States, France, Germany, and Italy (Olives, 1935). The association also promoted VARF tests and the "worker's biotypological data booklet," which included an examination of heredity, morbid antecedents, morphological biotype, instinctive activities and tendencies, ethical and social conduct, temperament, will, and intelligence (Boccia, 1937). The "worker's biotypological data booklet" complemented psycho-technical work examinations by collecting information on heredity, medical history, morphological biotype, and instinctive activities, as well as on nutrition and property-related traits (e.g., being prodigal, thrifty, or generous). It also included a detailed survey of the individual's current profession, alongside other dimensions tailored to the workplace context (Lescano, 2024). In the same vein, the AABEMS promoted the creation of a Central Office for Psychotechnics and Professional Guidance, to be annexed to the National Education Council. These offices were intended to include an experimental psychology unit and a national archive of professional monographs detailing psychophysical requirements and economic opportunity statistics for each profession. The AABEMS proposed that vocational guidance should complement school education, so each student would receive an annual school data booklet recording psychophysiological aspects, health, intellectual capacities, and personal preferences, serving as a basis for vocational orientation at the end of primary school.⁶ The school biotypological data booklet

was intended to track students' physical, sexual, psychosensory, and intellectual development, as well as their aptitudes and character traits, following the model of the Genovese Orthogenetic Institute (Rossi, 1933). These offices were to be staffed by alumni from the Institute of Psychotechnics and Professional Guidance at the Argentine Social Museum and from the Biotypology Institute, the majority of whom were women ("Centro de Estudios Psicotécnicos," 1937).

Although many of these initiatives were not fully implemented, elements of the biotypological approach, particularly the systematic health monitoring of workers, were later adopted during Juan Domingo Perón's government, reflecting the lasting impact AABEMS debates had on labour, health, and professional guidance in Argentina (Ramacciotti, 2005).

Female Participation and Work within the AABEMS

Women were active within the AABEMS. Although a man formally headed each section of the AABEMS, women led several subsections within the Institute of Biotypology and were particularly active within the "maternity and childhood" social service. They also held positions of authority at the Polytechnic School (Dovio, 2022; Rustoyburu, 2012) and worked closely with the Sociedad de Beneficencia [Charitable Society], led by elite women, often wives of government officials and AABEMS members such as Elisa Alvear de Bosch, celebrated in the press as the ideal woman due to her spirit of religious sacrifice in service to the nation (Soiza Reilly, 1931).

In addition, they contributed articles to *Anales*, primarily addressing eugenics and biotypology as they related to public health, with particular attention paid to childhood and to the normative conceptions of women's social roles (Dovio, 2022; Rustoyburu, 2012). In 1933, María Zulema Díaz Armesto, secretary of the AABEMS' education section, stated that Argentine women were "especially called by the Association to contribute with their collaboration to the physical and moral enhancement of our people ... so that welfare is not just individual but essentially collective and in consequence national" (Díaz Armesto, 1933, p. 22). She further urged women to place their trust in men's scientific work and to support them in the fight for "social prophylaxis and a real and healthy renovation of moral values" (Díaz Armesto, 1933, p. 22). This dynamic illustrates the circulation of scientific knowledge while paying attention to the positional asymmetries between producers and disseminators (García, 2018). Women within the AABEMS occupied a structurally subordinate position in the production of biotypological knowledge, yet they were essential to its dissemination and legitimation. Their participation demonstrated that the values embedded in biotypological science could be internalised and reproduced by the very subjects it sought to regulate.

⁶ From 1934 until 1936, the AABEMS conducted four rounds of the application of data cards for school children, with a total of 1260 children from lower classes surveyed. At the end of 1936, the association set up a psychotechnical office, which conducted only 27 counseling consultations. This is the last record of such initiatives, suggesting that this initiative had limited success (Lescano, 2024). The irregular numbers could be explained by two main reasons: on one hand, their primary

purpose seemed to have been to facilitate professional practice for students at the Polytechnic School, rather than to serve as an accurate record of the general population visiting the office independently; on the other hand, there was never an actual consensus regarding the benefits of implementing the biotypological data booklets, particularly in schools (Gómez Di Vincenzo, 2013b).

In 1934, the Association established the Escuela Politécnica de Biotipología, Eugenesia y Medicina Social [Polytechnic School of Biotypology, Eugenics, and Social Medicine], and by 1937, the school had 250 female students. The school offered three special courses aimed at teachers and graduates from the Red Cross and the Argentine Social Museum. They could choose between three courses: School Assistants, Hospital Assistants, and Social Assistants, each responsible for applying biotypological data cards in specific settings: schools, hospitals, and dispensaries, or factories and prisons (“Inauguración de Los Cursos de La Escuela Politécnica de Biotipología, Eugenesia y Medicina Social,” 1934). These courses lasted three years but lacked official recognition. At the graduation ceremony in 1937, Graciela A. de Videla, speaking on behalf of her class, declared:

The first legion of biotypologist graduates [...] will orient aptitudes toward their destinies: women, identified with the indestructible concept of mother and child, and men, the creative force, potency, stronghold of family and society; everyone, toward a constant longing for progress under the cover of our flag and the protection of God. (“Entrega de Los Diplomas a Los Primeros Alumnos Egresados de La Escuela Politécnica de Biotipología, Eugenesia y Medicina Social,” 1937, p. 4)

In a sense, these women would work to guide women to their true calling in motherhood at the service of the nation and God. As part of the Polytechnic School, students participated in several initiatives aimed at prospective mothers. In 1936, the AABEMS launched “Mother and Child Week” on December 20–25, mirroring a fascist Italian initiative from 1933 that had moved Mother’s Day to Christmas Eve to align motherhood with the Virgin Mary. During this week, female students at the Polytechnic School were to broadcast childcare and nutrition advice on the radio and organise talks at hospitals. At the same time, newspapers proclaimed: “the hand that rocks the crib is the hand that rules the world” and stressed the religious significance of this initiative “to connect the protection of mothers, to safeguard the health of the lineage, with the promotion of the family ideal celebrated by the Christian world through the birth of Jesus” (“La Semana de La Maternidad y de La Infancia,” 1936).

Furthermore, Dr Mercedes Rodríguez de Ginocchio, General Secretary of the Biotypological Institute and Prophylaxis Head of the Social Service in the Maternity Ward at the Hospital Alvear, reinforced the idea that women—especially Latin women—were particularly called to care for their family in the service of the nation, even if they were workers. Rodríguez de Ginocchio was the Argentine representative at the VII Pan-American Conference held in Montevideo in 1934 and published her views on debates about women across the Americas. On the issue of equality between men and women in terms of civil and political rights, Rodríguez de Ginocchio stated:

Wanting to equate women with men is illogical and anti-biological; therefore, it is a perfect mental imbalance. I could almost be sure that our first suffragists or feminists are the only ones to blame for the little sympathy and disrepute that women experience in our country’s politics. They make a woman a hybrid and take away her personality. (...)

Wanting to imitate the North American woman is to want to step outside our orbit of life. It is possible that she is happy with her system. It is the emanation of her psychology; it is the consequence of race, in a country more cerebral than sentimental, in opposition to ours. The problems of the home do not interest women; they aspire to public life—at least that is what Northern delegates defend. I understand that the Argentine woman has her own personality, in which matters of the home and the children are paramount, **even for women who lead lives of intense intellectual or office work.** (Rodríguez de Ginocchio, 1934, p. 16, emphasis added)

Rodríguez de Ginocchio aimed to explain the female abnegation of child-rearing based on race. She framed Argentine women in direct opposition to their “northern” counterparts by prioritising family life above all else, yet faced the reality of women who were active in the workforce. Such statements reveal the tension within the Association: although women participated in public activities, sometimes held professional roles, held relatively important positions within educational and sanitary institutions, and contributed to *Anales*, their participation remained limited by paternalistic expectations of male leadership. This was not rare at the time; as some works on the involvement of women in the history of science show, the role of women in science was usually limited to various kinds of assistance tasks, with little recognition (Ramacciotti & Valobra, 2011; Rossiter, 1982). However, women within the association were able to perform charitable and professional work of various kinds while belittling women’s role in society themselves.

Throughout the 1940s, female political participation expanded, culminating in women’s suffrage in 1947. Institutions such as the Biotypological Institute (1950), the Directorate of Biotypology of Working Women (1951), and the Instituto del Hombre Argentino were created to integrate biotypology into public health planning. Under Ramón Carrillo, biotypology was promoted as a means to improve the population’s biological conditions, reinforcing the idea that human life was an economic resource for national development (Ramacciotti, 2004).

Conclusions

Italian biotypology used psychotechnics and vocational guidance as part of larger social control projects rooted in Latin eugenics. In Argentina, specialists adapted this model to reinforce gender roles, supporting a national rebuilding effort and a transnational fascist movement. Argentine biotypologists sought to replicate Italian practices in full, aligning with Latin values, Latin eugenics, and Catholicism, partly due to Argentina’s sizable Italian community. In a sense, members of the AABEMS considered themselves European, particularly Italian, with the biological and cultural foundation of biotypological psychotechnics and women’s societal roles being taken for granted. Still, there were three main points of tension.

First, regarding women’s place in society and the workforce. Biotypologists celebrated women’s supposed natural vocation for maternity, while warning them of the dangers of “masculinisation”

and pushing for occupational guidance programmes that steered women toward caregiving, domestic, or auxiliary roles. However, in reality women worked in factories, offices, shops, hospitals, and schools, and participated in unions and political movements seeking better working conditions and greater equality. In the face of this reality, for Argentine biotypologists, it was acceptable for a woman to pursue a degree in teaching, law, or medicine (as well as a career in education and pharmacy), provided it aligned with her natural predisposition and divine calling for childcare.

Second, there were significant contradictions in relation to the definition of vocation. Olives, a central figure bridging both psychotechnics and biotypology, conceived psychotechnics as experimental psychology rather than as part of biotypology. He rejected religious notions of vocation, favouring the scientific and technical models developed in the United States and Germany. He also supported models of personal success rather than national interest. Still, Catholicism was central to the biotypological enterprise, both in Italy and Argentina, and aligned vocation specifically to the common good of the nation. This shows that what appeared to be a unified project was underpinned by a foundational disagreement, which in turn shaped how vocational guidance was implemented, justified, and institutionalised in practice.

Third, even within the AABEMS, women took on visible roles. The AABEMS provided some opportunities for women's professional development within the association, its sections, and its outreach programmes, although most of these positions were likely unpaid, and women remained underrepresented. Though women within the AABEMS appear to have accepted male tutelage in their work, they gained authority in areas related to childhood and families, which were at the core of the Argentine biotypological project. Overall, women's place in the workforce was shaped by social values that confined them to caregiving roles consistent with a patriarchal division of labour. Even when women gained positions of authority within the AABEMS, they largely reinforced a gendered order in which Latin women were expected to trust male-produced biotypological knowledge and occupy roles deemed congruent with their biology and religious calling.

These tensions were not failures of the system, but the very conditions that enabled biotypology to function within the Argentine social and political context. The gap between prescriptive ideals and lived realities, the disagreements over vocation, and the ambivalent position of women within the AABEMS were not obstacles to the consolidation of biotypological knowledge; they were its productive matrix. It was precisely through the negotiation of these contradictions that Argentine biotypologists adapted, justified, and institutionalised their practices.

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