

Articoli/Articles

SERA-THERAPY, EXILE AND FRANCO'S REGIME. THE  
SURVIVAL STRATEGY OF THE RAVETLLAT-PLA INSTITUTE  
IN POSTWAR SPAIN

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SUMMARY

THE RAVETLLAT-PLA INSTITUTE IN POSTWAR SPAIN

*The aim of this paper is to analyse the scientific and commercial survival strategy of the Ravetllat-Pla Institute after the Spanish Civil War. Founded in 1923 by Ramon Pla (1880–1956) and Joaquim Ravetllat (1872–1923), it produced two sera: 'Hemo-antitoxin' and the 'Ravetllat-Pla serum'. When the Civil War ended and Ramon Pla was forced into exile, management of this laboratory was taken over by his daughter, Núria Pla Monseny (1918–2011) who had to deal with an extremely difficult economic, political and commercial situation. In this paper, I analyse the means by which the Institute survived. These involved the Institute's ability to construct different political symbols from 'Hemo-antitoxin'. I study how Franco's repression influenced this survival strategy and Ramon Pla's role in exile. I also analyse the part played in this scientific and commercial process by the Institute's scientific and commercial network in Chile.*

*Introduction*

An association between ideology and pharmaceutical products has become a recurrent theme. Studies on the invention, development, and distribution of penicillin have illustrated how medicine came to be a political image for the nation building of a country. Robert

*Key words:* Ideology - Tuberculosis - post Civil War Spain - Sera-therapy

Bud has analysed the controversy generated between the British and Americans over who could claim to have discovered penicillin. Alexander Fleming (1881–1955) discovered the mould from which penicillin is derived and, much later, Ernst Boris Chain (1906–1979) and Howard Walter Florey (1898–1968) produced and patented it. The British believed the Americans had appropriated the invention of penicillin, leaving them without their due economic benefits. For Robert Bud, this aggravation helped construct the notion of a ‘We’ in Britain prior to the Second World War. This ‘We’ rallied the British around the belief that they were the scientific power that had developed penicillin, although it was the United States which commercialised the drug<sup>1</sup>. Jean-Paul Gaudillière and Bernd Gausemeier have shown us how penicillin in France was a political image for the French resistance during Nazi occupation and, later on, a symbol of the scientific development that enabled France to construct a powerful pharmaceutical industry. However, in contrast, the production of penicillin in Germany signified moral rehabilitation<sup>2</sup>. In Spain, Franco’s Government focused his social and political might on the fight against Tuberculosis<sup>3</sup>. María Jesús Santesmases has studied penicillin imagery in post Civil War Spain. In this context, penicillin was associated with the image of Dictator Franco, who wanted to construct an idea of himself as the saviour and national hero of the ‘New State.’ Penicillin was presented as a heroic product, fighting against the illness that was sweeping through society at that time<sup>4</sup>. Beyond the relation between medicines and political imagery, we ask ourselves how this object could become a symbol. In his research on the political symbolism of penicillin in Great Britain after the Second World War, Bud presented various ideas of how a medicine or a scientist could come to represent the future, modernisation, the role of the state and academies, the need for industry and the creation of a national healthcare system. The construction of a myth was important in Western societies. The icons associated with the myths have

carried an important role in museums, enabling the construction of national identities. These icons could be objects that represent the moment of discovery, but also could be associated with individuals<sup>5</sup>. In the case of penicillin, the image of Alexander Fleming published in *The Times* in May 1944, together with the earlier reaction from the British press, helped construct the myth surrounding penicillin<sup>6</sup>. For France, the story of a boy suffering from meningitis, who initially improved when treated with penicillin but later died, caused a halt in penicillin treatment and transformed penicillin into a symbol of the Nazi occupation<sup>7</sup>. In contrast, in Spain the visit of Fleming in May 1948 was used by the Franco regime as political propaganda for the 'New State'. The visit was covered by the conservative Catalan newspaper, *La Vanguardia*<sup>8</sup>. The story of the sick boy in France and Fleming's visit to Spain were narratives used to structure the transformation of penicillin into an icon of a time of change.

Penicillin not only symbolised different national reconstructions, it also interconnected them, promoted the construction of the pharmaceutical industry in Europe and generated standardised models for research and drug production. After the Second World War, the production and distribution of penicillin served as drivers of change in the pharmaceutical industry and in medical therapies<sup>9</sup>. These changes triggered the need to look for new commercial strategies for pharmaceutical products. The association between a political ideology and a medicine served as a commercial strategy to reactivate the markets. The object of this work is to analyse how the same medicine came to be associated with different ideologies, and how these associations served as a commercial strategy to recuperate and activate markets. I will focus on the anti-tuberculosis serum, Hemo-antitoxin, produced by the Ravetllat-Pla Institute in post Civil War Spain. When Franco's army entered Barcelona on 26 January 1939, Núria Pla Monseny (1918–2011) became the director of the Ravetllat-Pla Institute. Due to his socialist affiliations, the previous director, her father Ramon

Pla Armengol (1880–1956), was forced into exile. Although separated for years, father and daughter remained in contact through letters. The correspondence between them had a common objective: to avoid the closure of the Ravetllat-Pla Institute, which after the Spanish Civil War was in a precarious situation<sup>10</sup>. The objective of this article is to analyse the strategy that Ramon Pla and Núria Pla implemented to avoid closure and revive the market. I am particularly interested in analysing how they were able to connect Ravetllat-Pla products with an ideology.

In this era, Spain was marked by the exile of republicans and Francoism. Republican exiles relocated to various places, particularly South America, and the scientific and medical activity within this community was historically significant. Countries such as Mexico were provided with a generation of well-prepared doctors who integrated into the medical community of the country<sup>11</sup>. Similarly, the Warsaw hospital constructed during the 1940s to assist exiled republicans, demonstrated a determination to construct a union of exiled republicans<sup>12</sup>. The rejection of fascist ideology acted as a political value to unite a scattered community throughout the world. However, at the same time they were also stigmatised by being expelled, defeated and subordinate. Even so, given the difficulty in maintaining common positions when members were integrating into their host countries, over time the exiled Spanish community lost its unity<sup>13</sup>. Francoism as a political ideology has been discussed at length in relation to the trajectory of power and strategic changes. It was a nationalising project in Spain with Catholic, authoritative, and paternalistic roots<sup>14</sup>. The immediate post Civil War era was characterised by malnutrition<sup>15</sup>, self-sufficiency<sup>16</sup> and political vengeance<sup>17</sup>. In these opposing contexts, the Ravetllat-Pla Hemo-antitoxin was commercialised not only as an anti-tuberculosis product but also as a political symbol for the exiled republican community and for Francoism. The case study of Ravetllat-Pla connects us to two op-

posing worlds, the era of Francoism and republicanism. The need to recuperate markets prompted the Ravetllat-Pla to seek to associate Hemo-antitoxin with political ideologies.

To implement this analysis, I have used materials from the Ravetllat-Pla Institute Archive located at the Autonomous University of Barcelona (AIRP-UAB) and Republic Archives at the University of Barcelona (ABPR-UB), specifically the correspondence between Ravetllat-Pla members and their commercial agents. In these materials, intense ideological references are conspicuously linked with medicine. This article is divided into four sections. First, I reconstruct the history of the Ravetllat-Pla Institute before the Spanish Civil War. In the second and third sections, I analyse Hemo-antitoxin in the context of the republicans, and in the context of Francoism respectively. Having presented the Hemo-antitoxin symbolism in republican and Francoist contexts, I then connect these symbolisms. I focus particularly on the Chilean context, as the strategies used to bolster the Hemo-antitoxin market there shed light on how this serum could connect Republicans and Francoists in the same national context.

### *The Ravetllat-Pla Institute before the Spanish Civil War*

In 1907, Joaquin Ravetllat Estech (1872–1923) published his first article on the tuberculosis research he had conducted on the immunisation of animals with inoculated tuberculosis materials<sup>18</sup>. From his first publication until his death, his scientific achievements in the area of tuberculosis were extensive and of great importance for the professionalization of veterinarians<sup>19</sup>. Joaquin Ravetllat was influenced by tuberculosis studies concerned with causations other than tubercle, Koch's bacillus, and classic clinical forms. He constructed an evolutionary theory on the tuberculosis bacterium, proposing three evolutionary forms of the germ – the attack form, the defence form, and the intermediate form—which changed only under specific conditions. The

defence form would be associated with Koch's bacillus and the attack form with the saprophyte of the Koch bacillus. Joaquin Ravetllat justified the necessity of accepting the three evolutionary forms by the fact that the casuist material of tuberculosis did not contain Koch's bacillus, despite being tuberculised<sup>20</sup>. Members of the veterinary community, galvanised by his studies on tuberculosis, perceived the possibility to professionalise and integrate themselves into the medical laboratory debate. This generated immense socio-economic help from veterinarians to enable Joaquin Ravetllat to accomplish his research. One publication, sent to the journal *Annals of Academic and Laboratory Medicine in Medical Sciences of Catalonia*, particularly interested the Catalan doctor and journal director, Ramon Pla<sup>21</sup>. From this time forward, Ramon Pla and Joaquin Ravetllat began to work together on bacteriological theory.

Ramon Pla graduated from the University of Barcelona medical school in 1901 and received his doctorate in 1904. His thesis focused on both nutrition and toxic infections<sup>22</sup>. His professional career was marked by an increasing interest in tuberculosis. He interned at the Holy Cross Hospital and collaborated with 'Obra Antituberculosa'<sup>23</sup>, the anti-tuberculosis foundation of the Catalan bank 'La Caixa', and with the Catalan Board against Tuberculosis<sup>24</sup>.

Ramon Pla was particularly interested in Ravetllat's tuberculosis studies because they contained similar ideas to his own. Ramon Pla argued that the tuberculosis bacterium was only virulent in certain environmental situations related to poor social and working conditions. The fight against the disease should therefore be accompanied by social and political action. Ramon Pla found his environmental visions integrated with the evolutionary theory of the tuberculosis germ put forward by Joaquim Ravetllat. However, the exclusion of the Ravetllat-Pla theory from medical academic circles shaped Ramon Pla's political and medical vision<sup>25</sup>. He felt that the theory was excluded because of three events. The first occurred dur-

ing the Third Congress of Physicians of the Catalan Language in 1919, at which they presented their first ensemble studies. Joaquim Ravetllat had previously asked for support from Felip Proubasta Masferrer (1866–1939), President of the Medical Science Academy in Catalonia from 1916 to 1918. He replied that he could only support Joaquim Ravetllat if his theory was accepted by Alvar Presta Torns (1868–1933), President from 1919 to 1920. The Ravetllat-Pla theory was discussed during the congress, but Proubasta revealed he had doubts about the three forms of bacteria<sup>26</sup>.

After the Congress, Ramon Pla and Joaquim Ravetllat developed the Ravetllat-Pla Hemo-antitoxin and Ravetllat-Pla serum following their bacteriologic theory. They intended to provide their products to general physicians, but discarded the idea of establishing a laboratory. Instead they offered their author's rights to 'La Caixa' so the organisation could make their products. Ramon Pla wrote in his memoir that the pair wanted society to reap any resulting economic benefits. However, 'La Caixa' refused, on the basis that their theory was not accepted in Paris, London or Berlin<sup>27</sup>. Despite their unwillingness to found and manage a private laboratory for serums, Ramon Pla and Joaquim Ravetllat founded the Ravetllat-Pla Institute in 1923. After it had opened, another public discussion with members of the Medical Science Academy and Alfonso XIII National Institute of Hygiene took place. These institutions again raised doubts about the Ravetllat-Pla theory and the effectiveness of their products. In 1925, the Alfonso XIII National Institute of Hygiene rejected their scientific proposition<sup>28</sup>. Francisco Murillo Palacios (1865–1944) was collaborating in this institution as chief of the serotherapy section. Ramon Pla considered this to be sabotage, as Francisco Murillo was interested in producing their serums<sup>29</sup>. When the Medical Science Academy invited Ramon Pla to present the Ravetllat-Pla theory in a special session, he refused, believing that their scientific work did not need the support of those in academic circles<sup>30</sup>.

These three events marked Ramon Pla and his medical and political career. The Ravetllat-Pla Institute was excluded from medical academic circles; however they could still produce their serum as legislation during this period was not interventionist. Jorge Molero and Isabel Jiménez have proposed that exclusion-inclusion processes are not simultaneous acts, but neither are they necessarily conflicting. For example, something excluded from a group could be included in another at the same time, as in the case of the Ravetllat-Pla Institute<sup>31</sup>. While it was excluded from official medicine, Ramon Pla created a commercial and scientific network that was to be an inclusive space. This inclusive space was formed through different acts. Firstly, his theory considered that every person's body contained tuberculosis bacteria and, therefore, was pre-tubercular. Secondly, his commercial network sought out a local physician in order to integrate his knowledge into their discussions about tuberculosis. Finally, they created a new space for discussion and communication<sup>32</sup>. As Ramon Pla considered everybody to be pre-tubercular, he believed a national public health system should be established in order that action could be taken immediately when any primary symptoms suggested a patient could have tuberculosis. He therefore proposed that local physicians be integrated into the tuberculosis debate, as they were the first to look for primary symptoms of disease. Tuberculosis had previously only been debated by a small circle of tuberculosis experts. Ramon Pla could then construct a commercial and scientific network to distribute their products in Latin America and parts of Europe. In spite of being excluded from the official debate, Hemo-antitoxin achieved commercial success. Ramon Pla's commercial strategy was to supply Hemo-antitoxin to all tuberculosis patients, necessitating direct contact with general physicians (GPs). Once the sales agents had formed a network, they edited their own medical literature about their studies and distributed these directly to GPs. One such example was the review, *The Clinic*, founded by Ramon

Pla in order to publish articles about tuberculosis and construct a new space for discussion outside the official context<sup>33</sup>.

As we have seen, the Ravetllat-Pla theory was constructed by Ramon Pla and Joaquim Ravetllat's studies on tuberculosis. Exclusion of the theory from medical academia prompted the creation of new spheres within the tuberculosis debate. This generated a commercial and scientific network: an inclusive space integrating local physicians. The Ravetllat-Pla Institute was identifiable by the position of its bacteriological theory in its network and Hemo-antitoxin was transformed into a symbol that represented its exclusion from the academic medical community.

*Ravetllat-Pla Hemo-antitoxin in a Republican context.*

Parallel to his professional career, Ramon Pla also had a political career which led to him being a deputy in the Spanish Parliament in 1936. Throughout his youth and until 1919, Ramon Pla defended Catalan and leftist positions, and became a member of the Catalanist Union, where he met Manuel Serra Moret (1884–1963). The year 1919 was one of immense social upheaval, culminating in a general strike. In that year, Ramon Pla collaborated with the anarchist union, the National Confederation of Labour<sup>34</sup>, and promoted the creation of a medical union, the Trade of Medicine<sup>35</sup>. After 1919, Ramon Pla disagreed with the political strategy of the Regionalist League, a splinter group of the Catalanist Union. At the same time, the Catalan Federation of Spanish Socialist Workers Party (FC-PSOE) changed its strategy in Catalonia, moving closer to Catalanism. Ramon Pla became a militant member of the FC-PSOE, and the party president between 1931 and 1932. In 1933, he belonged to a commission that attempted to unite the FC-PSOE and the Socialist Union of Catalonia (USC), a party founded in 1923 by his friend, Manuel Serra. The failure of these negotiations and a charge of indiscipline brought by the FC-PSOE, resulted in the expulsion of Ramon Pla

and his joining the USC<sup>36</sup>. On 16 February 1936, Ramon Pla was elected a USC Member of Parliament.

When the Spanish Civil War broke out in 1936, Ramon Pla co-founded the Socialist Unified Party of Catalonia (PSUC), a communist party<sup>37</sup>. He also decided to flee to Belgium, together with his family. This act led to his expulsion from the PSUC, which had joined the USC. Furthermore, he was accused of being a ‘traitor to the public’ and called ‘Mister traitor’ by Joan Comorera Soler (1855–1960), the secretary general of the PSUC<sup>38</sup>. During the Spanish Civil War, he lived in Belgium, although he temporarily relocated to Barcelona where he had commercialised his products since 1927<sup>39</sup>. His political exile began in 1939 when the Francoist troops entered Barcelona and lasted until 1948, when Núria Pla processed a permit allowing him to return<sup>40</sup>. During this period, Ramon Pla lived in Paris from 1939 until 1940, subsequently moving to Montpellier. The Mexican government was offering asylum to republican exiles and in 1942, Ramon Pla relocated to Mexico, residing there until 1945 when he temporarily moved to France until he could finally return to his own country<sup>41</sup>. Despite his political expulsion from the PSUC, Ramon Pla continued to be a Congress deputy, maintaining contact with his closest political colleagues, particularly Manuel Serra, and attending the Congress’ of Deputies held in Paris in 1939 and in Mexico in 1945.

The correspondence between Ramon Pla and Manuel Serra reveals Pla’s disappointment with the Spanish republican political strategy. During his exile, Ramon Pla distanced himself from official republican spheres, although he maintained political relationships with those, such as Manuel Serra, who had defended the Ravetllat- Pla theory. He was an active member of the Medical Treasury Foundation – the treasury of the Medical Union – and also of the Catalan Choral Society, whose objective was to join together exiled medical communities. Furthermore, he passively participated in Republic Action, an organisation that promoted the return of the Republic in Spain:

‘All the emigration politics is only something that we do, doing nothing or almost doing nothing for Spain or the Republic and consequently it is completely not useful to actively practice these politics’<sup>42</sup>.

Ramon Pla continued to distance himself from republican politics. In his correspondence with Manuel Serra he expressed his opinion that the State should not interfere in science or society, thereby identifying himself with the anarchist movement<sup>43</sup>. Behind the guise of control over pharmaceutical products, Ramon Pla suspected a new form of intellectual official intervention. During his exile, he anonymously authored *Nosotros... los sabios* which was edited by Minerva, an editorial founded by the anarchist Ricardo Mestre (1906–1997)<sup>44</sup>. In this book, Ramon Pla reaffirmed his heterodoxy and accused intellectual officialdom of imposing its ideas on society.

The imagery of Ramon Pla as a heterodox physician was reinforced in light of his admiration for the Catalan physician, Jaume Ferran Clua (1851–1929), who proposed that tuberculosis bacteria could mutate into different forms and produced an anti-tuberculosis vaccine called Anti-alfa<sup>45</sup>. Before the Spanish Civil War and as an elected member of the Spanish Parliament, Ramon Pla proposed creating a grant without scientific control in tribute to Jaume Ferran. He continued to laud Jaume Ferran during his exile, writing an article in the republican journal *España* defending his heterogeneous medicine and the non-intervention in science by the State<sup>46</sup>.

This symbolism enabled him to connect with a public that had lost the war and identified with exclusion and exile<sup>47</sup>. In the context of republicanism, the consumers of Hemo-antitoxin associated this product with Ramon Pla and his heterodoxy to a republican ideology.

#### *Ravetllat-Pla Hemo-antitoxin in a Francoist context*

Ramon Pla's daughter, Núria Pla, was studying Medicine at the Autonomous University of Barcelona when the Spanish Civil War

broke out, which meant she could not finish her studies until 1942<sup>48</sup>. Núria Pla went with her father and mother, Assumció Monseny (d.1948), to Belgium when the war started. Unlike her father, during the war she moved with her mother to Burgos, where Franco's government had its headquarters, and became a member of the Spanish Phalange, Franco's party, enlisting as a physician in the Francoist army. While Ramon Pla was in republican exile, Núria Pla was in Barcelona to prevent the closure of the Ravetllat-Pla Institute by the Regime<sup>49</sup>. When the Francoist army entered Barcelona in 1939, Núria Pla was the director of the laboratory and remained in contact with her father, consulting him before making decisions. Ramon Pla knew of his daughter's political participation in Phalange, but this was not a problem; their aim was to reconstruct the Ravetllat-Pla Institute. Núria Pla faced different difficulties relating to Francoist persecution. At that time the Political Responsibilities Tribunal was prosecuting those out of favour with the new regime, and confiscating their properties. In 1939, the tribunal began investigating Ramon Pla, accusing him of affiliating with socialist parties (even having been elected as member of the Catalan socialist party to the Spanish Parliament)<sup>50</sup>.

Núria Pla argued that the Ravetllat-Pla Institute was founded with her mother's fortune and that she herself was the director. By employing this argument, Núria Pla hoped to disassociate Ramon Pla from the Ravetllat-Pla Institute and connect the laboratory to her mother and to herself, a member of Spanish Phalange party. Núria Pla also presented another argument: if the Ravetllat-Pla Institute were to close, Ramon Pla could open another in a foreign country, meaning Spain would lose the economic and scientific capital. This argument was presented within the context of Franco's autarchy, in which the government wished to present Spanish industry as a model of modernity<sup>51</sup>.

The Political Responsibilities Tribunal ruled in Núria Pla's favour. Although Ramon Pla was condemned, the Ravetllat-Pla Institute

could continue its commercial and scientific activities. Núria Pla's participation in Franco's army as a medical doctor during the Spanish Civil War and her subsequent unwavering affiliation with the Spanish Phalangist Party contributed to this decision, enabling Núria Pla to manage the Ravetllat-Pla Institute:

*'Although they were part of a Marxist family, given that the daughter and wife of Ramon Pla gave backing to the Franco regime, [This tribunal] advises imposing a fine of one million pesetas, equivalent to the property of Ramon Pla, excluding any laboratory buildings and property'<sup>52</sup>.*

Núria Pla was judged to be a woman surrendering to the homeland and to Francoist ideology. During the first years of Francoism, the Regime consisted of two power groups fighting to take control of the state; Spanish Phalange and the National-catholic group represented by the army and the catholic spheres<sup>53</sup>. The construction of the concept of 'being a woman' during Francoism was disputed by these two forces with Spanish Phalangism promoting the idea of a 'political women' and the National-catholic group arguing in favour of a 'traditional woman', subordinate to the family<sup>54</sup>. The sentence written by the Political Responsibilities Tribunal considered Núria Pla subordinate to Ramon Pla due to her being a woman, exonerating her of her father's Marxism or socialism. Considered to be a victim, Núria Pla was not condemned, and the tribunal allowed her to manage the Ravetllat-Pla Institute.

Núria Pla associated herself with the Ravetllat-Pla Institute and Hemo-antitoxin. The image she projected to the regime was that of a 'suffering woman' and a 'victim of Marxism', and helped bring about the favourable sentence. At the same time, Hemo-antitoxin was considered an economical and national patrimony that Spain could not afford to lose. Núria Pla used Francoistic ideas about women and a nationalistic discourse to associate Hemo-antitoxin with Francoist ideology.

*Hemo-antitoxin in the Chilean context*

Up to this point I have analysed Hemo-antitoxin in the contexts of republicanism and Francoism separately. But these contexts do not function as separate entities; rather, they have always been in contact, as can be seen through the correspondence maintained between Ramon Pla and Núria Pla. A commercial and scientific network was established by the Ravellat-Pla institute in different countries and, after the Spanish civil war, between republican and Francoist circles. Hemo-antitoxin was not just a medicine that symbolised a single political value within a national context, it could symbolise several different ideologies within one country. The Chilean market was an exemplary case where Hemo-antitoxin symbolised both a Francoist and republican product. Here I will focus on the case of Chile to demonstrate how the same product can be associated with several different political symbols.

After the Spanish civil war, sales of Hemo-antitoxins on the Chilean market fell, and a campaign was initiated to raise sales to the level before the civil war. There were also numerous other problems throughout the forties. The first stumbling block was the halting of commercial relations between Spain and Chile, prompted by the chair of the Chilean government led by the radical and progressive Pedro Aguirre Cerda (1879–1941) receiving the Spanish republicans<sup>55</sup>. While commercial relations were suspended, Hemo-antitoxins could no longer arrive in Chile, and by the time restrictions were lifted, the Chilean government had instigated a program controlling pharmaceutical products, creating major difficulties for the Ravellat-Pla institute.

At that time, the laboratory was represented by the commercial agent, Ignacio Parés Serra (1880–1952). Born in Catalonia, before immigrating to Chile he was the president of the Traditional Catholic Circle of Barcelona in 1924, and a councillor on the Barcelona Council. In Chile he was a sympathiser of the Group of Spanish

Action, created during the civil war by the Phalange groups, which promoted the Francoist cause. During the diplomatic confrontation, the Group of Spanish Action protested and organised demonstrations against the Chilean government<sup>56</sup>. The letters that Ignacio Parés wrote to the Ravetllat-Pla Institute, in which he passionately defended Franco's ideology<sup>57</sup>, and criticised political intervention by the Chilean government<sup>58</sup>, show his support for the 'new Spanish State'. His political position bought him into confrontation with members of the Chilean administration. His request for a licence for Hemo-antitoxins was rejected. Ignacio Parés wrote to the Institute, claiming the Health Commission was biased and accusing the director of being Anti-Ferriano – in reference to Jaume Ferran – and of wanting to produce Hemo-antitoxins. In the same letter, he explained the doctor was an exiled republican who Ramon Pla perhaps knew. Ignacio Parés explained that this doctor frequently visited Mexico and suggested Ramon Pla speak to the doctor and attempt to change his opinion. According to the same agent, similar ideologies could help change the director's opinion<sup>59</sup>. With Ignacio Parés being unable to obtain a licence, different commercial entities and distributors of pharmaceuticals contacted Ravetllat-Pla offering to represent the product<sup>60</sup>. The interest various pharmaceutical companies had in representing Hemo-antitoxin leads one to think there was significant credibility concerning its effectiveness. This suggests the prohibition of Hemo-antitoxins could have its origins in the Franco political regime that maintained their representative, Ignacio Parés.

Given the inability of Ignacio Parés to activate the Chilean market, another exiled Catalan doctor was posited to represent the Ravetllat-Pla Institute. Miquel Cunillera Rius (1904–1975) was a member of the Republic Left party from Catalonia and deputy in the Catalan parliament in 1935. In September of 1947 he wrote to Ramon Pla accusing Ignacio Parés of sympathising with Franco's ideology and asking Ramon Pla himself to represent the institute. Thanks to their

friendship, Miquel Cunillera was chosen for the position. The consequences were instantaneous: Hemo-antitoxin was licensed without any mention of its biological character and two new studies were developed. The first of these was concerned with the nutritional effects of Hemo-antitoxin in children and teenagers, and was realised by the same Chilean administration that had refused to commercialise it years before. Using a group of public school children to verify the effects of the product, the Children's Department of the Chilean government concluded that it improved their health<sup>61</sup>. Miquel Cunillera therefore contacted Juan Grau Vilarrubias (1917–2009), head of the Department of the Respiratory Tract at the Saint Borja Hospital, to promote a second study combining streptomycin with Hemo-antitoxin in the treatment of pulmonary tuberculosis. This study concluded that Hemo-antitoxin prevented antibiotic toxic effects and attacked the resistance of tuberculosis bacteria<sup>62</sup>. Together with his being an exiled republican and having useful contacts, Cunillera's strategy played a central role in re-promoting Hemo-antitoxin.

In Chile, Hemo-antitoxin was associated with the ideology its commercial agent represented. While Ignacio Parés was its sale agent the serum was considered a Phalangist product by the Chilean government, but with Miquel Cunillera's representation it became republican. As the Chilean government was close to republican ideology, Hemo-antitoxin could then be registered and distributed. This interesting national context has enabled me to analyse how the same serum could represent different political symbols in the same nation.

### *Conclusions*

The objective of this article was to analyse the strategy carried out by Núria Pla and Ramon Pla to prevent the closure of the Ravetllat-Pla Institute and reactivate markets. This strategy led the same medicine, Hemo-antitoxina, to be associated with different ideologies.

From the time of the Ravetllat-Pla Institute's foundation, Ravetllat-Pla theory and Hemo-antitoxin were considered heterodoxical due to their exclusion from medical officialdom. The Ravetllat-Pla network represented an opportunity to include different medical discourses, and thanks to Ramon Pla's heterodox imaginary, the institute expanded its commercial and scientific contacts. Hemo-antitoxin symbolised the exclusion of the heterodox Ravetllat-Pla theory from the commercial and scientific network.

Before the Spanish Civil War, Ramon Pla used the figure of Jaume Ferran to reinforce his heterodox discourse. Although his political activities were not important in the republican context due to his disappointment with exiled politics, Ramon Pla was interested in paying tribute to Jaume Ferran, promoting his image of heterodox medicine, and recuperating markets lost during the Spanish Civil War.

Núria Pla fought to separate Ramon Pla's ideologically leftist image from the Ravetllat-Pla Institute when the Political Responsibilities Tribunal was prosecuting her father. She presented herself as a woman surrendering to the Homeland and to Francoism, and a victim of her communist father. She argued that if the Ravetllat-Pla Institute was closed, Ramon Pla could open a similar laboratory in a foreign country and Spain could lose its medical and economical patrimony. This argument was effective and the institute continued its medical and pharmaceutical activities.

Discussing Ravetllat-Pla in the Chilean context, I contrasted the symbolism relating to Hemo-antitoxin. While Ignacio Parés was a sale agent of the Ravetllat-Pla Institute, Chilean authorities associated Hemo-antitoxin with Francoism. However, when the exiled republican, Miquel Cunillera, became the sales agent for Hemo-antitoxin, the product was licensed and sold, abandoning its marginal status to be used in nutrition research by the Chilean government. The association between Hemo-antitoxin and the republican agent, Miquel Cunillera, reactivated Ravetllat-Pla's Chilean market. In addition,

Miquel Cunillera's strategy of combining streptomycin with Hemo-antitoxin in the treatment of pulmonary tuberculosis was effective. Moreover, this led to further uses for the drug being established.

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