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The Legacies of Suppression:

Jesuit Culture and Science. What was lost? What was gained?

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Late at night, on 21 August 1773, the Jesuit Joseph Mariano Parthenio touched with profound respect for the last time the pillars of the front courtyard of the Roman College, and then departed in confusion, sobbing and weeping. Five days before, soldiers had surrounded the college, escorted Cardinal Sersale into the building to read out the pontifical brief announcing the suppression of the Society of Jesus, and then occupied the premises, changing within a few days that institution's solemn academic atmosphere into one of noise and mayhem characteristic of a barracks and a marketplace.[1] About a hundred fifty years before this event, Galileo had walked across that courtyard to meet the Jesuit astronomer Christopher Clavius and obtain backing for his observations, which he did. Up till 1773, that courtyard had had many illustrious men of science, mathematics, and culture walking across it. But that summer of 1773 was changing all that. It is generally assumed that what happened to that courtyard reflects quite accurately what happened to the entire realm of Jesuit culture and science: an abrupt dissipation, a sharp decadence. Recent interest, however, in the

[1] A vivid, personal account is found in J. Mariano Parthenio, *Epistolae* (Roma, 1863), pp. 249-52; quoted in Riccardo G. Villoslada, *Storia del Collegio Romano* (Roma: Università Gregoriana, 1954), pp. 313-4.

possible causes of the suppression has indicated that such an account is too simple. The change was indeed major and traumatic, but Jesuit intellectuals and scientists constituted a group that was much more diverse than is often assumed. It is becoming increasingly clear that the way the suppression affected these Jesuits was correspondingly considerably varied. The question therefore arises: What can a micro-historical approach, focusing on individuals rather than on general cultural trends, reveal as regards the effects of the suppression? An answer to this question is important not only because it represents a further step in the exploration of what happened at grassroots level but also because it can throw light on the more general question regarding the extent to which European scientific culture depended on the Jesuits. In this chapter, therefore I will focus on five Jesuit scientists who lived through the suppression and who represent different lines, different forms, of empirical inquiry. I will highlight how they lived through the suppression in different ways, and how they adjusted their scientific work accordingly. After this first section I will engage in more general considerations, referring to some counterfactual situations, in view of evaluating the cultural and scientific cost of the suppression. Somewhat surprisingly, the results indicate that, as regards what the Jesuits were meant to accomplish, the overall effect of the suppression was not entirely negative.

1. Jesuit scientists through the suppression

The most illustrious individual in this category is undoubtedly Roger Joseph Boscovich (1711-87). Born in the city of Dubrovnik, then known as Ragusa, he attended the local Jesuit College, and then sailed to Rome to join the Society of Jesus in 1731. His studies included not only logic, philosophy and theology, but also mathematics and physics, in which he excelled. Always informed about advances in the sciences, he started publishing scientific

papers even before the end of his formal formation as a Jesuit – without neglecting his skill at writing poetry and improvising it in public. He soon embarked on a period of about fourteen years of productive academic life based at the Roman College in Rome, presently known as the Gregorian University.[2] For our purposes in this paper, the years 1744-58 may be called his academic period; the period 1758-73 the diplomatic period; and 1773-87 the post-suppression period.

The first period is marked by a quick rise to fame. He soon became known in the highest circles of society, where Cardinals, diplomats, and Italian aristocracy enjoyed the company of the most erudite intellectuals of the time. He was elected member of the *Accademia degli Arcadi*, a society established to defend high standards of Italian poetry and started publishing in science: substantial papers on the telescope, on mathematics, reports on astronomical observations, and commentaries on the major scientific innovations of the time. He also produced textbooks for students, which were approved by various centres of learning outside Rome. His first scientific excursion was in 1750, in the company of his Jesuit colleague Christopher Maire. This was a two-year project outside Rome to measure an arc of the meridian and to prepare a new detailed geographical map of the Papal States. This project resulted in a substantial report with a valuable contribution on the shape of the earth.

His second period, the diplomatic period, started when he was sent on a scholar-diplomat mission to Vienna to help resolve a dispute between the Republic of Lucca and Austrian Tuscany. He was received favourably by the Empress Maria Theresa and nearly all the elements of the dispute were resolved successfully. During his stay, in the quiet moments between his social and diplomatic engagements, he found time to complete various scientific

[2] I draw mainly from: Elizabeth Hill, 'Roger Boscovich: a Biographical Essay', in Lancelot Law Whyte (ed.), *Roger Joseph Boscovich, S.J., F.R.S., 1711-1787: Studies of his Life and Work on the 250th Anniversary of his Birth* (London: Allen, 1961), pp. 17-102. Other useful sources are: M. Bossi and Tucci (eds.), *Bicentennial Commemoration of R.G. Boscovich: Milano, September 15-18, 1987, Proceedings* (Milano: Edizioni Unicopli, 1988); Germano Paoli, *Ruggiero Giuseppe Boscovich nella Scienza e nella Storia del '700* (Roma: Accademia nazionale delle scienze detta dei XL, 1988).

publications, including a piece on the micrometer, and his masterpiece, the *Philosophiae Naturalis Theoria*, presenting an original understanding of atomism in terms of points within a force field. This view, according to him, represented the correct synthesis between Newton and Leibniz.[3] He was fully conscious of the risks as this view could easily be misunderstood and perhaps even condemned as dangerous to the faith. In fact, the first edition, published in 1758, was out of print within three months. He was back in Rome at the time of publication, but we see him sent abroad again, this time with no clear mission. The *Theoria* could have been the reason for this: perhaps the Roman College started to consider him too original, and therefore potentially damaging to its own reputation. What really happened, however, was probably that the Society of Jesus, with its vast experience of how best to employ people according to their skills, had realized that, as one historian put it, 'in his genius and stature he had outgrown his post in Rome'.[4] His first stop was Paris, where he intended to dedicate most of his time to writing. Turmoil however soon caught up with him. As elsewhere in Europe, Jesuits in Paris started becoming the target of vehement attacks. Even influential scientists like D'Alembert reviled the Jesuits as intriguers, breeders of sedition, Vatican spies, and a serious danger to the State. Boscovich never lost faith in his Order and determined to use his considerable influence and his many contacts in its defence. He left Paris and travelled to England, was elected to the Royal Society, and lingered there till 1760. As he had expected, during his absence from Rome, another Jesuit was permanently appointed to the professorship he had held. This uprooted him even further, and motivated him to strengthen his links with the highest circles of diplomats and scholars all over Europe. He travelled far and wide, even as far as Poland and Constantinople. On his return to Rome in 1763, five and

[3] For many scholars after Boscovich, the *Philosophiae Naturalis Theoria* was the essential point of departure for further work in this area. It certainly served as a model for Jesuit Newtonians like Charles Benvenuti in Rome, Paul Mako and Charles Scherfer in Vienna, Leopold Biwald in Graz, and Jean-Baptiste Horvarth in Tyrnau. See Michel Ulysse Maynard, *Des Études et de l'Enseignement des Jésuites à l'Époque de leur Suppression (1750-1773): Suivi de l'Examen Général de l'Histoire du Pontificat de Clément XIV, du P. Theiner* (Paris: Poussielgue-Rusand, 1853), pp. 167-9.

[4] Hill, 'Roger Boscovich: a Biographical Essay', p. 53.

a half years after his departure, he kept away from the Roman College, became engaged in various engineering projects, such as the draining of the Pontine marshes, and eventually accepted various scientific posts in Northern Italy, mainly in Pavia and Milan.

His third period started more or less when the suppression of the Jesuit Order was formally announced. On hearing the news, he thought that the best option for him was to pursue his scientific work in his native Dubrovnik, but King Louis XVI invited him, by a handwritten letter, to go to France 'to dedicate himself to sublime meditations and to satisfy the passion for the progress of science'.[5] He therefore returned to Paris, enjoyed a French pension, and was eventually appointed Director of Naval Optics in the French Navy. This situation offered him various opportunities, even the time to develop his theory of the achromatic telescope. But the wind soon changed. Prominent scientists, even the famous Laplace, started to mount various kinds of attacks against him. He endured this courageously, and defended himself reasonably well, keeping up his contacts with the rich and the powerful, and publishing a new edition of his book *Les Eclipses.* Civil society was however changing rapidly. The new philosophy of D'Alembert's and Diderot's *Encyclopédie*, marked by anti-clericalism and a materialist conception of the universe, soon took centre stage and shifted Boscovich to the margin. The seminal ideas of the French Revolution were sprouting, making him feel like an odd specimen from the past, a voice from a bygone age. He asked to return to Italy for health reasons, and there he travelled incessantly, even restlessly, from city to city. With his powers of concentration deteriorating, he became melancholic, started suffering from a persecution complex, and became obsessed with the idea of having lost his reputation. He died in the former Jesuit College in Monza, near Milan, on 13 February 1787. After his

[5] Maynard, *Des Études*, p. 168.

death, the French prominent scientist Jérôme Lalande dared to publish his eulogy in the *Journal des Savants* (February 1792) even though the French Revolution was in full swing.[6]

The second Jesuit scientist in our list is the Polish-Lithuanian Martin Odlianicki Poczobut (1728-1810).[7] He became a Jesuit in 1745, and, after his graduation from Vilnius University in 1751, he continued studying Greek, Latin, mathematics and astronomy, mainly at Prague University. He also spent some fruitful time at the Marseilles Observatory in France where he collaborated with the French Jesuit astronomer Esprit Pézanas. Poczobut started his career at the Vilnius Jesuit College, which had been founded about two hundred years before, in 1570, and had then become the *Academia et Universitas Vilnensis Societatis Jesu*. It incorporated the Vilnius Observatory that had been established in 1753 by the Duke of Lithuania and King of Poland with the financial backing of the Polish Countess Puzynina. The first director of the observatory was Tomasz Zebrowski, and, on his death in 1758, Poczobut took his place and was eventually also appointed professor of mathematics and astronomy. Poczobut contributed to the refinement of cartography in Eastern Europe and introduced many scientific innovations, including the installation of several instruments and the observations of the orbit of Mercury. His wide correspondence increased his fame. In 1769 he was elected fellow of the Royal Society of London, and in 1776 was accepted as a corresponding member of the *Académie des Sciences* of Paris.

The suppression of the Jesuits meant that the college and the observatory had to have a change of administration. Countess Puzynina, with her keen interest in astronomy, ensured that this change did not affect the Vilnius Observatory. She supported it financially and ensured that Poczobut continued as Director and also as professor of mathematics and astronomy. Poczobut therefore continued to develop the observatory which soon became one

[6] Maynard, *Des Études*, p. 169.

[7] I draw mainly from Agustín Udías Vallina, *Searching the Heavens and the Earth: The History of Jesuit Observatories* (Dordrecht: Kluwer Academic Publishers, 2003), pp. 31-2. Material directly on Poczobut is mainly in Lithuanian, e.g. Rudreckis Algirdas, 'Martynas Počobutas, Vilniaus Akademijos mokslinikas ir rektorius,' *Naujoji Viltis*, 11 (1978), 100-118.

of the richest and most famous in Europe, with an impressive range of instruments bought mainly from London.[8] Among his many scientific achievements, we find his calculation of the eclipses and phases of the Moon, his observations of the transit of Venus, and those of various comets and asteroids. He eventually managed to secure the patronage of King Stanislas II of Poland, and the observatory was eventually given the title of Royal Observatory. His career attained even greater heights when he was nominated Rector of the University (1780-99), a position that allowed him to carry out various reforms of the programme of studies. On his retirement from this post, he continued to work on his observations and was finally able to publish all of them together in thirty-four volumes. In spite of all his academic success, however, his love for the Society of Jesus had never subsided. In 1808 he asked to join the small group of Jesuits who had remained in existence under the protection of Catherine II in White Russia, and he died two years later in 1810, as a Jesuit. Historians continue to acknowledge Poczobut as a man of impressive scientific and networking abilities, one who was in contact with 'all the mathematicians of his time'.[9] He is one of the only four Jesuits who were elected fellows of the Royal Society of London.[10]

We come now two Jesuit scientists who can be considered together, being both from Latin America and both engaged in natural history: Juan Ignacio de Molina (1740-1829), a Chilean, and Francisco Javier Clavijero (1731-87), a Mexican. Their story will remind us how science and politics often interlock in very significant ways. Here we are shifting from astronomy to natural history, a subject that had always attracted the attention of many Jesuit missionaries working in various continents. This was not due simply to sheer wonder at the new kinds of flora and fauna they encountered. It was often motivated by missionary concerns. For instance in South America, missionaries seeking to influence and educate

[8] Anita McConnell, *Jesse Ramsden (1735-1800): London's Leading Scientific Instrument Maker*, (Ashgate Publishing, 2007), pp. 79–80.
[9] Maynard, *Des Études*, p. 170.
[10] Udías, *Searching the Heavens*, p. 5. The others are R. Boscovich, Angelo Secchi and Stephen J. Perry.

peasant communities had, first of all, to engage in the delicate politics of the local shaman, whose claim to power often lay in his extensive and closely guarded knowledge of herbal remedies. The Jesuits often sought to undermine such claims by explaining to the communities that herbal powers were nothing more than natural facts, available to everyone.[11]

In a way, the two Jesuits to be considered here continued in this tradition of science-involving politics, but had to face another kind of challenge, much more complicated and international than that of tribal-community shamans.[12] When the Jesuits were expelled from the Spanish dominions, by the decree of Charles III in 1767, they arrived in Italy and found themselves in the thick of a strange cultural movement: the New World Disputation, involving a scientific form of anti-Americanism articulated and defended by influential European thinkers like Georges-Louis Leclerc, comte de Buffon, and the Dutch philosopher, geographer, and diplomat, Cornelius de Pauw. The basic idea was that American organic species were inferior to those of northern and western Europe because American climate and types of habitat caused degeneration, making animals and plants weaker, smaller and less fertile. This approach to the New World, quickly adopted by many European intellectuals, assumed that the American continent was either very old, whence the degenerative conditions, or else very young, and therefore immature. Human beings, of course, were no exception: Native Americans were inferior, degenerated Caucasians. As can be expected, such views triggered the Jesuit naturalists to defend their homeland with all the ammunition available, especially their first-hand observations. Their acquaintance with both European and American natural history gave them the perfect position to tackle this kind of ideology. Their

[11] Andrés I. Prieto, *Missionary Scientists: Jesuit Science in Spanish South America 1570-1810* (Nashville, Vanderbilt University Press, 2011), p. 41.

[12] For most of this section, I draw from Silvia Navia Méndez-Bonito, 'Las historias naturales de Francisco Javier Clavijero, Juan Ignacio de Molina y Juan de Velasco' in Luis Millones Figueroa and Domingo Ledesma (eds.), *El Saber de los Jesuitas, Historias Naturales y el Nuevo Mundo* (Frankfurt, Madrid: Iberoamericana-Vervuert, 2005), pp. 225-50; and from Prieto, *Missionary Scientists*.

assault remains for us a striking example of how empirical evidence is often the only remedy for philosophical speculation running wild.[13]

We can start with de Molina. On arrival in Italy, he started working on his *Compendio della Storia Geografica, Naturale e Civile del Regno de Chile*, which he eventually published in Bologna just three years after the official suppression of the Society. He wrote this from memory because, before his exile to Europe, he had already completed the book, but the original draft had been confiscated during his journey. Such a strenuous effort and such determination show his deep motivation to engage in this debate. He did not stop there. Once the confiscated draft was recuperated, we find him correcting the first edition, making additions, and republishing it twice (in 1782, and in 1810).[14] He adopts a writing style that is restrained and technical, avoiding anything that might look unscientific even though some of his discussions come across as somewhat apologetic. For instance, as regards biological fertility, he argued that it is certainly not obvious that the Old World is better than the New World. Contrary to what de Pauw and Buffon had claimed, some European species adapt well in the Americas, and some American species do not adapt well in Europe. The ultimate authority in this issue should be empirical evidence, and what this showed was that nature is too complex to be reduced to simple generalizations. For him, controversial and interdisciplinary lines of argument caused confusion and should therefore be avoided. For instance, he stayed away from the then current speculation that the reason why the American ecosystem was different could have been that the Deluge described in the Bible never affected the distant Americas. What was important for him was the correct understanding of the relevance of climate and the correct interpretation of biodiversity. He used all available evidence in his arguments, including for instance the fact that some animals had local names in the indigenous languages, and were therefore not descended from European species but

[13] The Jesuits mentioned here were not the only ones involved in the dismantling of this kind of anti-Americanism. See Méndez-Bonito, 'Las historias naturales', p. 228.
[14] Méndez-Bonito, 'Las historias naturales', p. 226.

had already been flourishing in pre-Colombian times. Historians are now convinced that de Molina's work, even though at times clearly patriotic, is of great value. It was up to date on all the contemporary philosophical and scientific theories, and it represented an attempt to heal European ideologies through the honest use of science.

Francisco Javier Clavijero's first work, which was on the natural history of Mexico, was composed before the suppression but published afterwards, with the Italian title *Storia Antica del Messico* (1780). The scientific content is presented within the broad panorama of the civil and cultural history of Mexico. The book is indeed comprehensive, moving from physical geography to climate, and then to the various minerals, plants, animals, and arriving finally to a discussion on the Mexican people. In all this, objections to European anti-Americanism remain somewhat restrained. Adopting the same attitude as de Molina, Clavijero avoids unfounded fantastic reports and maintains a clear-headed scientific attitude throughout his work. Nevertheless, he sometimes departs from the accepted scientific taxonomy and adopts one that reflects Mexican terminology. This was a major issue for him. He accused the first Europeans of having neglected the original Mexican way of naming and classifying their species, and of having thereby imposed an erroneous framework onto the American ecosystem. Some species had been classified in line with an alleged resemblance to a European counterpart, when in fact they had nothing in common with that counterpart. The erroneous taxonomy was a quasi-deliberate attempt to present the Mexican ecosystem as a degenerated version of the European one. Clavijero strove to correct this. He not only reclaimed the original native names but also highlighted the need to distinguish between three kinds of classification: one including species that had been transported from the Old World and were new to the New World, another containing species that are found in the New World without any counterpart in the Old World, and another containing those species that are common to both worlds. As regards the arguments of the Comte de Buffon and de Pauw, he

was convinced that the scientific facts should be clearly distinguished from the philosophical and political debates. So he placed the natural history in one section and his arguments against Buffon and de Pauw in a final section, entitled *Dissertaciones*. Here his philosophical strategy was twofold. He countered the idea that the American climate was detrimental to proper growth by arguing that, since the continent shows great variety, there is no such thing as *the* American climate. Moreover, he argued that, in general, the kind of reasoning that armchair philosophers like Buffon and de Pauw used to denigrate America could also be used, with the same efficiency, to denigrate Europe. With hindsight, we can now see how 'Clavijero's refutations show the stark ethnocentrism that dominated the theories of the Europeans'.[15] In other words, his scientific work helped European academia shed some of its layers of encrusted prejudice.

For our last case study, we consider the Spaniard Lorenzo Hervás y Panduro (1735-1809), whose work in linguistics and anthropology will help us appreciate how Jesuits were engaged with the empirical method in a broader sense. Hervás was born at Horcajo de Santiago, in the province of Cuenca, Spain, in 1735, and joined the Jesuits at Madrid in 1749. After the usual formation, he was ordained priest in 1760, and assigned to teach in various institutions, including the Royal Seminary in Madrid.[16] With the expulsion of the Jesuits in 1767, he joined many of his confreres and went to Italy: first at Forli, then to Cesena, and finally to Rome in 1784. A number of scholars agree that this move to Italy was extremely important for him not only personally but also intellectually. He found himself in a new environment which opened up for him new horizons that would never have been accessible had he remained in Spain. In fact, it was as a consequence of his expulsion from Spain that he

[15] *Ibid*., p. 241.

[16] I draw mainly from Gerda Haßler, 'Teoría Lingüística y Antropología en las Obras de Lorenzo Hervás y Panduro', in Manfred Tietz and Dietrich Briesemeister (eds.), *Los Jesuitas Españoles Expulsos: Su Imagen y Su Contribución al Saber sobre el Mundo Hispánico en la Europa del siglo XVIII*, Actas del coloquio internacional de Berlín, 7-10 de abril de 1999 (Madrid: Iberoamericana; Frankfurt am Main: Vervuert, 2001), pp. 370-99.

had the unique opportunity of gathering information from the many expelled Jesuits who had converged to Rome from distant parts of the world. Fifteen years later, he was allowed to return to his native Spain, but stayed only for four years, after which he sailed back to Italy where he remained till he died. Appreciated by the highest authorities and nominated prefect of the Quirinal Library and member of several learned societies, he published his first enormous work on cosmography in Italian *Idea dell'Universo* – twenty-one volumes. The most significant part of this work dealt with the classification of all known languages according to clear criteria, from which he derived the origin and ethnological relationship of different nations. Even though at times erroneous and inaccurate, this study is now recognized as having been a valuable source of inspiration for later researchers.[17] The impact of his work can be appreciated from various angles, but I will highlight two aspects only: his particular way of endorsing the empirical method, and his original work regarding deaf-mutes.

For a correct evaluation of his use of the empirical method, we need to see him as a man of his time, with a conceptual framework quite different from the one we have today. For him, empirical research was an integral part of the broader dimension of culture and religion, not a criticism of it. Coherence and consistency being of the utmost importance, the main task for Jesuits like him was to show that empirical observation never belies the Bible. Because of his interest in language, this task for him took the form of showing that empirical observations do not contradict the Biblical story of the Tower of Babel, in which the first human community is described as having its common language diversified through divine intervention. He therefore engaged in an assiduous search for those linguistic radicals that are common to all languages. For him, these were like valuable fossils of the original common

[17] Some biographies claim that Hervás had been a missionary in Latin America where he had allegedly collected information about the Amerindian languages that he writes about in his books, but this is erroneous. See Haßler, 'Teoría Lingüística', p. 380.

language of humankind.[18] He saw his task as a way of harmonizing religious thinking with the new philosophy of the Enlightenment. He was convinced that theology and philosophy were distinct, the former dealing with Revelation, the latter with human nature. This framework allowed him to endorse the empirical method and yet retain an anthropology that included the spiritual dimension. The most precious empirical datum for him was the arbitrariness of the linguistic sign. He argued that the diversity of languages, which is an objective fact, was undeniable evidence that there had indeed been divine intervention in the course of history. Had humans developed language themselves, in a natural way, there would not have been such diversity. A naturalistic explanation of the origin of language, which he accepted, obliges us to admit that the same perceptual organs should result in one language for all. Therefore, if we take the empirical data seriously, linguistic diversity becomes very significant because it manifests the harmony between science and religious belief.

He augmented such reflections with his work involving deaf-mutes. Many investigators before him had recognized that the way these individuals communicate among themselves might be a significant factor in this debate. Hervás became interested in this issue probably because, after his exile from Spain, his new residence in Rome was located near a school for deaf-mutes. With his previous work on linguistic radicals that are common to all languages, he soon became fully immersed in the project of studying deaf-mutes so as to reconstruct the unique, original mother language, the one from which all living languages emerged. There is no doubt that this project benefitted enormously from his meeting the many exiled Jesuits flocking to Rome at the time of the suppression, some from distant countries with exotic languages Europe had never heard of before. As mentioned already, he returned to Spain for a brief period, during which he was instrumental in founding the *Escuela Municipal de Sordomutos* in Barcelona in 1795. While there, he also published his

[18] This aspect of Hervás's work seems to resonate well with current research inspired by Noam Chomsky, who defends the claim that all languages have a common structural basis, called universal grammar.

book *Escuela Española de Sordomutos*, in which he revised the history of deaf-mute education and presented a number of interesting ideas about the natural basis of sign language.[19] For him, the language of deaf-mutes was important because it was, in a sense, uncontaminated. These individuals differed from normal humans in that their mental grammar was not hybrid, part natural and part artificial, as in the case of normal humans, but purely natural. He concluded therefore that the word-order that deserves to be called natural is the one that corresponds to the order of gestures used in the communication between deaf-mutes. The difference between the grammar that is natural in this sense and the grammar of artificial languages used normally in human communication is enormous. From such empirically based reasoning, he derived the same kind of theologically relevant proposal as before. He argued that, since the basic, natural language must have originally been common to all humanity (in fact it is shared to some degree even with non-human animals), the enormous diversity of actual languages indicates that these languages could not have arisen naturally but only by divine intervention.

Of course, to twentieth century readers, the project of trying to reconcile empirical data with the Biblical narrative about the Tower of Babel appears bizarre. The merit due to Hervás, however, does not derive primarily from such efforts at concordism but from his recognition of the fecundity and heuristic power of the empirical method. All in all, his writings in this area remain remarkable especially in the way he brings empirical observation to bear on fundamental philosophical issues related to reason and language. He even explored the political repercussions of his investigations, arriving at the idea that the diversity of languages teaches us something not only about anthropology but also about the way national boundaries should be drawn. He was convinced that the study of languages constitutes a

[19] See Alejandro Oviedo, 'Sobre la vida de Lorenzo Hervás y Panduro (1735-1809)', www.cultura-sorda.eu/resources/Lorenzo_Hervas_y_Panduro.pdf (accessed 26/04/13).

genuine and effective way to study history. He was even ready to claim that a study of languages can correct historical errors.[20]

2. Gains and losses

Each of the five Jesuits portrayed above merit of course a much more detailed study, but even the little presented here is enough to allow some fruitful reflections on the general impact of the suppression. There are two questions included in the title of this chapter: What was lost? What was gained? One way to start answering these questions is to revisit the five case studies and engage in some counterfactual considerations: How would events have developed had the suppression never occurred? Of course, counterfactual history is an intriguing subject in itself, irrespective of the particularity of the suppression. To respect the complexity of all the issues involved here, therefore, I will first highlight some basic features of counterfactual history in general, and then explore, with reference to the cases described above, what counterfactual history can teach us regarding the particular case of the suppression.

What is counterfactual history? If we think of history as a chronological record of events in view of better understanding, we often tacitly assume that events are the result of various causal chains that extend into the past and crisscross one another in very complex ways. The basic task of the historian, therefore, is to understand what actually happened, how it actually came about, and what it can actually teach us today. On such a view, the emphasis is on actuality. Investing energy in figuring out what *could* have happened, therefore, seems a waste of time. There is an element of truth in this. Within certain parameters, however,

[20] Very little is available in English on Hervás, apart from a short entry by Gerda Haßler in the *Encyclopedia of Language and Linguistics*, Keith Brown (ed.), 2nd ed., (Oxford: Elsevier 2006), vol. 5, pp. 283-4. For a book-length study, see Calvo Pérez, *Lorenzo Hervás y Panduro: Un Científico a caballo entre Dos Mundos* (Excma. Diputación Provincial de Cuenca, 1991).

counterfactual history can offer some genuine benefits. For instance, it can help us distinguish the contingent factors from the natural determinations that brought about the actual event we are studying. It can therefore disclose points of indeterminacy at particular junctures in history, reminding us that things could easily have developed differently and that applying laws of nature is never enough, especially in situations where we have the intrusion of human agency. Of course, we need to make sure that counterfactual considerations do not become an arbitrary rewrite of history.[21] The method should ultimately lead to a deeper appreciation or understanding of the actual world, not to an evasion from it.[22]

Within these parameters, therefore, it seems not only possible but also interesting and advantageous to engage in some counterfactual considerations as regards the suppression of the Jesuits, always in view of attaining a better understanding of the actual gains and losses incurred during this dramatic period.

In the space available, I can highlight only a few, well-selected counterfactual trajectories, taking the five Jesuits one by one. If the suppression had never occurred, Boscovich would probably have continued in the style of life that characterized his diplomatic period: he would probably have remained engaged more in politics than in doing science or in teaching it. It is very probable that he would never have had the opportunity of working as Director of Naval Optics in the French Navy. Poczobut would not have had the direct support from Countess Puzynina which was essential for the Vilnius Observatory to become so prominent in Europe. Moreover, the suppression does not seem to have been particularly problematic for his career. On the contrary, one is inclined to say that his various appointments to positions of higher academic and scientific responsibility were indeed

[21] In this context, some scholars use the minimal-rewrite rule: the author must specify antecedents that require altering as few 'well-established' historical facts as possible. See Philip E. Tetlock and Aaron Belkin (eds.), *Counterfactual Thought Experiments in World Politics: Logical, Methodological, and Psychological Perspectives* (Princeton University Press, 1996), p. 18.

[22] See Simon T. Kaye, 'Challenging Certainty: The Utility and History of Counterfactualism' *History and Theory*, 49 (2010), 38-57; Niall Ferguson, 'Virtual History: Towards a "Chaotic" Theory of the Past', in Niall Ferguson (ed.), *Virtual History: Alternatives and Counterfactuals* (London: Picador, 1997), pp. 1-90.

boosted precisely because of the suppression. His Jesuit formation had supplied him with the excellent academic and diplomatic background, quite rare at that time, which was essential for extended influence in many European centres of learning. Had the suppression never occurred, the Latin American natural theorists, de Molina and Clavijero, would probably not have engaged so directly, so energetically, in the anti-Americanism debates that were fermenting in far away Europe. The kind of arrogance inherent within anti-Americanism, allegedly scientifically based, would have taken much longer to overcome had there been no massive influx into Europe of exiled Jesuit scholars from the New World. The Comte de Buffon's dominance was such that, within Europe's cultural centre, academic and social promotion was available only to those who argued for the superiority of European culture and civilization. Through the suppression, many Jesuits became cultural outcasts, socially impoverished, and yet, precisely because of this, they became liberated from such structures of approval and promotion. They gained more freedom to argue for the truth as they saw it, come what may. Had the suppression not occurred, therefore, it seems likely that Jesuits like de Molina and Clavijero would have remained somewhat contained within the strict parameters of political correctness. And finally, a word about Hervás: as we saw, this Jesuit was fascinated by the richness and diversity of languages, and sought, among other things, various ways of interpreting the presence of common linguistic radicals. This project was certainly possible even had the suppression never occurred. It became, however, much easier for Hervás to encounter first-hand witnesses of the linguistic variety he was investigating precisely because of the many exiled Jesuits converging onto Italy from all parts of the world.

Of course, these counterfactual considerations are not the only ones that can be made. I am highlighting them because, apart from being probably true, they seem to contrast sharply with the more popular belief that, had the suppression never happened, Jesuit science and culture would have been, on all fronts, better off. This popular idea, according to which the

suppression was a vast disaster in every sense, is indeed supported by much evidence. There is much to show that the glorious reputation of the Order, including its scientific and cultural dimension, was completely dismantled, and that, as far as public image was concerned, the sons of Ignatius became regicides, subverters of social order, corruptors of youth, and devious operators of papal supremacy against monarchical and secular power.[23] Nevertheless, the reflections presented above seem to point in the opposite direction. I am not denying that the suppression was devastating. I am not denying that this event indeed meant a radical deterioration, a deterioration that can be likened to what happened overnight to the courtyard of the Roman College, on 16 August 1773. My point is rather that, once we accept the vast negative impact of the suppression, the fact that, on some fronts, we can also identify some repercussions that turned out to be positive is surprising, and worth highlighting. As regards what Jesuits were meant to accomplish, the suppression meant innumerable losses. But there were some gains as well.

[23] Let us not forget that Jesuit scientists were not exempt from such deterioration; for instance, some ended up selling their souls, as it were, by joining the Free Masons. See Antonio Trampus, 'I Gesuiti Austriaci e Italiani dopo la Soppressione tra Nuove Forme di Sociabilità e il Dibattito sulla Libertà dell'Uomo: Problemi di Metodo e di Interpretazione' in P. Bianchini (ed.), *Morte e Resurrezione di un Ordine Religioso: Le Strategie Culturali ed Educative della Compagnia di Gesù durante la Soppressione (1759-1814)*, (Milano: Vita e Pensiero, 2009), pp. 133-54.