

Reading Quiz 0.2 - INTD290 ... Part I

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1 How to Submit this Assignment

Once you answer the questions, take a picture of your work and convert it to a PDF. Submit the PDF to the assignment link on Moodle.

2 Hispanic America's Historical Dynamics

1. The author lays out the central argument of the chapter in this section, which is the connection between merchant guilds, the domestic economy, and the constitution of enlightenment institutions. Please list some of the institutions, like colleges and botanical gardens (think of these as research institutes), mining guilds and corporations, etc. Give the dates, organized by country below:

(a) México: School of mining (est. 1792), School of Botany (1788), School of the arts (1785)

(b) Perú: Laboratorio Químico - Metalúrgico (est. 1792), Tribunal de Minería

(c) Venezuela (Caracas): Academia de Matemática (est. 1760), business consulate

(d) Guatemala: Jardín Botánico (est. 1796), drawing and mathematics schools (est. 1797), Sociedad Económica de Amigos del País

3 Modern Scientific Culture

1. Discuss the significance of *empiricism*, or the use of observations from instruments, on scientific culture. How was this different from Scholasticism? (Feel free to look up the definitions of these terms).

In Europe the rise of empirical science led to a shift in how and where science was conducted. The new scientific method drew scientists away from theologically influenced scholasticism and allowed for the expansion of scientific institutes in the age of reform and Enlightenment. With this expansion, science became more and more prestigious and valued.

4 Hispanic American Scientific Culture

1. Notice the discussion of *Scientific Libraries*. Discuss the significance of the formation of private scientific libraries in Enlightenment period Hispanic America. What does the existence of these collections of new, modern books tell us about scientific culture at the time? Why were these books not in common libraries? What are a few other examples of the birth of modern scientific culture that more private than public or nationalized?

The unstoppable rise of private libraries and book smuggling was demonstrative of the success of empiricism. Despite the efforts of the church and homeland to maintain traditional scholasticism (by keeping modern texts out of common libraries in favor of traditional ones), Enlightenment →

2. Notice the discussion of *Scientific and Technical Journals*. Give several examples of scientific and technical journals emerging in the culture. When were they created and what did they cover?

1768 - The *Diario Literario* was one of the first hispanic American scientific journals and it sought to fill in research that was previously overlooked or underresearched. Interestingly the author encouraged a form of peer review and encouraged others to publish news. This was followed by many other →

3. What was the significance of the debate over mining methods? Who eventually won the debate and why?

The debate over mining methods for minerals such as silver and Gold showed just how much science in America had expanded by the late 1700s.

"discovery" of "superior" mining methods by European researchers had really been known in America for years and the methods proposed in America were still superior. The Europeans slowly came around to acceptance of the new practices, but more importantly, this demonstrated the slow independence from Europe as a result of scientific expansion in America.

1. cont.: even science prevailed. Of course it was all very privatized in private libraries and the formation of small communities of scientists who had access to these modern texts. Soon, however bookstores and more distribution of books proliferated in hispanic America.

2 Cont.: journals such as *Mercurio Volante*, *Las Noticias Importantes y Curiosas sobre Física y Medicina* (1772), *Asuntos Varios sobre Ciencias y Artes* also published by Alzate, *Advertencias y Reflexiones Varias conducentes al Buen Uso de los Relojes Grandes y Pequeños y su Regulación*, *Papeles periódicos* (1777), *Observaciones sobre la Física, Historia Natural y Artes Útiles* (1787), and more.