

Reading Quiz 0.2 - INTD290 ... Part I

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January 15, 2021

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:

**Schools of:
Mining (1792), Botany (1788), the Arts (1785)**

(b) Perú:

Laboratorio Químico-Metalúrgico (Chemicometallurgical Laboratory, 1792)

(c) Venazuela (Caracas):

Academia de Matemáticas (Mathematics Academy, 1760)

(d) Guatemala:

**Jardín Botánico (Botanical Garden, 1796)
The drawing and mathematics schools (1797)**

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).

Empiricism depends on experimental science, encouraging curiosity and making room for change and new discoveries. It led to the Latin American Enlightenment. This contrasts from scholasticism, which focuses on traditional theology and philosophy, and is not really a part of scientific culture anymore.

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?

These private libraries were owned by passionate intellectuals who were trying to create or document a past for their culture. Common libraries had plenty of books, but they were all traditional and religious. These scientific journals exist on the periphery, and faced such harsh censorship that they were smuggled in. Science in education was also reserved for more private institutions, so people without access to those higher educations would have no idea what Empiricism was or the contribution of scientific experimentation.

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?

The *Diario Literario*, published in 1768, was the first scientific journal and covered geography, agriculture, mining, and medicine. It faced backlash but paved the way for many other journals such as *Flying Mercury, with Important and Curious News about Physics and Medicine*, published in 1772 which talked about medicine. In 1777, a journal dedicated to chronometry and the construction of instruments was published. *Mercurio Peruano*, a magazine from 1791 wrote about Peruvian history and science.

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

In 1770, the Spanish were trying to assert more control over Peru and Mexico by implementing reforms on the silver mining process. Hispanic Americans disagreed with that and believed the patio process, discovered by a Mexican, was a better way. The European scientists, in trying to prove themselves, discovered their way achieved a better result in processing silver, and was only recognized 10 years later. Latin American science has often had to fight for recognition, but in this case, they got it and it made some of them rich.