

Reading Quiz 0.2 - INTD 290 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) Mexico: schools of mining (1792), botany (1788), and the arts (1785) were created

(b) Peru: Laboratorio Químico-Metalúrgico (1792) was created

(c) Venezuela (Caracas): Academia de Matemáticas (1760)

(d) Guatemala: Jardín Botánico (1796), the drawing and mathematics schools (1797) were set up by the 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).

Empiricism demonstrates a use of works of theology, philosophy, medicine and law as a basis for study. Empiricism is explained as the theory that all knowledge is derived from sense experience and scholasticism focused on training people who would work as theologians, lawyers or doctors. There has been a shift from scholasticism and rationalism to empiricism, in order to produce a use of new scientific methods and instruments between the 16th and 17th century.

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 is more private than public or nationalized?

The Enlightenment period brought on a new group of concepts that challenged those of the church and religions of Hispanic America. In the result of the new ideas being challenged, teachings and concepts that were obtained during this time period were not accepted by the church. In attempts to limit the people's learning ability during this time period, there were many books that were prohibited in which talked about the new scientific studies and teachings. As a result of books of new scientific teachings being banned, these books were very difficult to get a hold of and were sometimes even absent in libraries in Hispanic America. The people who were disclosed to the teachings of the Enlightenment, were the people who were able to study in parts of Europe and brought back their learnings to their homes in Hispanic America. In Hispanic America an example of the useful arts would be the birth of modern scientific culture as it is more private in learning. These scientific methods and concepts were gathered in by the people and were applied to things like military machinery/architecture, basic architecture and engineering, as well as agriculture to encourage efficient and reliable practices.

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?

- ❑ *Diario Literario de México* (1768) was the first proper scientific magazine of the American Enlightenment.
- ❑ *Mercurio Volante, con Noticias Importantes y Curiosas sobre Física y Medicina* was published by José Ignacio Bartolache. This weekly newspaper was published in Mexico for a little less than four months. From October 17, 1772, to February 10, 1773, this was the prime scientific magazine that was dedicated to topics of medicine.
- ❑ *Advertencias y Reflexiones Varias Conducidas al Buen Uso de los Relojes Grandes y Pequeños y su Regulación: Papeles Periódicos* was another that was published in Mexico, by Diego de Guadalajara beginning in 1777. It was dedicated to chronometry and the construction of instruments.
- ❑ *Mercurio Peruano*, published in 1791, covered a variety of topics for people who were invested in learning and expanding their studies. The topics ranged from botany, mineralogy, physics, medicine, teaching reforms, theology, agriculture and cattle, social and economic matters, as well as Peruvian history and ethnography.
- ❑ *Semanario del Nuevo Reino de Granada* was first published in 1808. This journal highlighted the works concerning agriculture (corn, wheat, cacao, etc.), roads, rivers, mountains, soil crops, statistics, industry, exact sciences, eloquence, and history.

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

The significance of the debate over mining methods demonstrated the value of modern science and its applications to the daily lives of Hispanic Americans. There was also an application to the work of these Hispanic Americans as they demonstrated use of these specific methods. Modern science won the debate over scholasticism, as there were a great number of new developments and discoveries in the use of the mining methods.

