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) Mexico: schools of mining (in 1792), botany (1788), and the arts (1785) were created

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

   (c) Venazuela (Caracas): Academia de Matemáticas (Mathemat ics Academy, founded in 1760)

   (d) Guatemala: Jardín Botánico (Botanical Garden, established in 1796), the drawing and mathematics schools (in 1797) were set up by the Sociedad Económica de Amigos del País (Economic Society of Friends of the Country)

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 is the theory that all knowledge is derived from sense-experience and scholasticism focused on training people who would work as theologians, lawyers or doctors, and thus used works of theology, philosophy, medicine and law as a basis for study. In modern scientific culture, there was a shift from scholasticism and rationalism to empiricism due to the use of new scientific methods/instruments between the 16th and 17th centuries. These new instruments valued empiricism and its use of sensory knowledge (i.e. observation and experimentation).

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 brought on a new set of ideas and concepts that challenged those of the church and religions of Hispanic America. Therefore, teachings and concepts derived during this time were not accepted by the church. In efforts to censor what its people were learning they outlawed books that talked about these new scientific concepts and studies. It shows us that the modern books with their progressive ideals and

thought were perceived to be “unholy” or acts of treason. This is why these books were not found in common libraries in Hispanic America. Majority of Hispanic Americans being exposed to the teachings of the Enlightenment were those that studied in Europe and brought back their knowledge and studies back home with them when they returned. Which is why for the most part, modern science books only were only found in private collections/libraries. The “useful arts” in Hispanic America is an example of the birth of modern scientific culture that is more private. Scientific applications were applied to things like military machinery/architecture and agriculture to cultivate more efficient and stronger practices. and allowed it to progress.

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* (Literary Magazine of Mexico, established in 1768) this was the first properly scientific magazine of the American Enlightenment
- *Mercurio Volante, con Noticias Importantes y Curiosas sobre Física y Medicina* (Flying Mercury, with Important and Curious News about Physics and Medicine), published by José Ignacio Bartolache. This weekly newspaper was published in Mexico from October 17, 1772, to February 10, 177 3, this was the first scientific magazine dedicated to medical topics
- *Advertencias y Reflexiones Varias Condu- centes al Buen Uso de los Relojes Grandes y Pequeños y su Regulación: Papeles Periódicos* (Miscellaneous Warnings and Reflections on the Proper Use of Large and Small Clocks and Their Regulation: Occasional Papers) was also 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 and covered topics ranging from botany, agriculture and cattle, medicine, mineralogy, physics, Peruvian history and ethnography, so- cial and economic matters, teaching reforms, and theology
- *Semanario del Nuevo Reino de Granada* (New Kingdom of Granada Weekly) first published in 1808, wrote about works concerning agriculture (corn, wheat, nutmeg, potatoes, cacao, etc.), industry, statistics, roads, navigable rivers, moun- tains, soil crops, the exact sciences, eloquence, and history

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

It was significant because it showed the value and worth of modern science and its applications to daily life and work of Latin Americans during this time. The efficiency of these new developments and discoveries not only in the mining methods, showcased that modern science was winning the debate over Scholasticism, which was the previous ideology of people prior to the enlightenment era.