

OLLI LECTURE #5

October 18, 2011

“Dissolving Certainties”

I was speaking last time about the revolution in Western thought that occurred in Victoria’s time, especially after the failed revolutions of 1848. First, we looked at the Darwinian revolution; next at the advent of revolutionary socialism. Now let’s glance at the arts.

The so-called “Age of Enlightenment” of the eighteenth century came to embrace neo-classical themes in the arts. Some of the best examples of its expression were the following:

- The paintings of Thomas Gainsborough (1727-1788) or the work of Jacques Louis David (1748-1825).
- The magnificent architecture of the newly-created capital city of the Russian Empire (also newly-created) as it was conceived by the Czar, Peter I (1682-1725).
- The poetry of Alexander Pope (1688-1744). [From the “Rape of the Lock” (1712), referring to a sprig of hair stolen from Miss Arabella Fermor]:

*Not with more glories, in th’ ethereal plain, The Sun first rises
o’re the purpled main, Than, issuing forth, the rival of his beams,
Launched on the bosom of the silver Thames. Fair nymphs, and
well-dressed youths around her shone, But every eye was fixed on
her alone. On her white breast a sparkling Cross she wore, Which
Jews might kiss, and Infidels adore. Her lively looks her sprightly
mind disclose, Quick as her eyes, and unfixed as those: Favors to
none, to all she smiles extends; Oft she rejects, but never once
offends. Bright as the sun, her eyes the gazers strike, And like the
sun, they shine on all alike.*

- The music of Wolfgang Amadeus Mozart (1756-1791) – [“The Jupiter”]

Even before the century ended, however, there was an aesthetic rebellion against neo-classicism. It would in time be styled “romanticism” and would reach its fullest expression in the Victorian period. To demonstrate my point, I would mention the following:

- The landscape paintings of John Constable (1776-1837).
- The architecture of Britain’s Westminster Palace, home of the parliament, which had been badly damaged by a fire in 1834. It was promptly rebuilt according to a design by Charles Barry (1795-1860), a celebrated architect who chose the Gothic style for its theme. Instead of harking back to the ancient Romans and Greeks, Westminster to this day recalls the great cathedrals of medieval Europe. That style would dominate Victorian structures and décor.
- The poetry of William Wordsworth (1770-1850) – [quote “Tintern Abbey”]

*To look on Nature, not as in the hour
Of thoughtless youth; but
hearing oftentimes
The still, sad music of humanity,
Nor harsh nor
grating, though of ample power
To chasten and subdue. And I have
felt a presence that disturbs me with joy
of elevated thoughts; a
sense sublime
Of something far more deeply interfused,
Whose
dwelling is in the light of setting suns,
And the round ocean and the
living air, and the blue sky,
and the mind of man;
A motion and a
spirit, that impels
All thinking things, all objects of all thought,
And rolls through all things.
Therefore am I still
A lover of the meadows
and the woods, And mountains;
and of all we behold
From this green earth;
of all the mighty world
Of eye, and ear—both what they half
create, And what perceive;
well pleased to recognize
In Nature and the language of the sense,
The anchor of my purest thoughts,
the nurse,
The guide, the guardian of my heart
and soul
Of all my moral being.*

Similar and equally elegant verses were being composed at the time by the German romantic, Johann Schiller (1759-1805) and many others.

- The music of Ludwig von Beethoven (1770-1827) – [6th symphony].

In contrast to neo-classicism, the Romantic movement placed its emphasis upon sentiment (not reason); tradition (not innovation); and the uniqueness of Nature (rather than the cosmopolitan universalism of the Enlightenment period).

Still, by the mid-nineteenth century, there was something else stirring in the arts. I want to use the works of two painters to illustrate my meaning. First, there's William Turner (1775-1851) whose canvases, "The Fighting Temeraire" and "The Snowstorm" demonstrate how artists such as he were coming to understand that the mere representation of life as we see it does not comprehend other forces at work on our perceptions, such as light and emotion. The late work of the Spanish artist, Francisco Goya (1746-1828) also anticipated the intrusion of the irrational into art as he attempted to depict his first-hand experiences of the Napoleonic invasion of his homeland. His "black period" sketches are part of the permanent collection of the National Gallery of Art and profoundly influenced the work of another Spaniard, Pablo Picasso (1881-1973), perhaps the most influential artist of the twentieth century.

The growing reaction in the late Victorian period against the sentimentality of romanticism is manifested in several ways, but for simplicity's sake let me boil it down to two responses:

- Realism – As in the literary works of Charles Dickens (1812-1870) such as Great Expectations and David Copperfield.

Victor Hugo (1802-1885) – Les Miserables.

Fedor Dostoevsky (1821-1881) – Notes from the Underground and The Brothers Karamozov.

- Unrealism – That's a term I chose to apply to those artists and writers in the latter Victorian period who dared to delve into the irrational and the extra-

sensory. We've already looked at a canvas by William Turner, "The Fighting Temeraire" where a steam tug hauls away a proud old wooden battleship. The theme of the painting is touching enough because it represents an acknowledgment of the passing of an age, but more important is Turner's use of light which is really more important than the painting's subject matter. Here's another of his works, "the Railroad." Light and power are the subject; not the locomotive itself.

Turner's work was celebrated by John Ruskin (1819-1900), the most important art critic of his day. Across the Channel, Claude Monet (1840-1926) was captivated by Turner's paintings and began to incorporate his style into his own depictions of his surroundings in Argenteuil and soon his canvases sparkled with light. His friend, Eduard Manet (1832-1883) quickly picked up the approach and in 1874 these "impressionists" held a public display of their works in Paris and nearly caused a riot among art lovers.

As early as 1819 the irrational figured prominently in The World of Will and Representation by the German philosopher, Arthur Schopenhauer (1788-1860). According to him will, not reason, advanced mankind and thus the theme of unreason, the irrational, was introduced into the considerations of German and later Western academic writing.

And then there was more from France. The great poet Charles Baudelaire (1821-1867) published in 1867 his shocking Les Fleur du Mal, verses that did not shy away but boldly embraced erotic themes. Even before, Gustave Flaubert (1821-1880) published his first novel, Madame Bovary (1856), which was considered to be so scandalous that Flaubert was placed on trial for indecency. He was acquitted and the novel became an overnight sensation and still ranks as one of the classics of French literature.

You haven't signed up for a course in art history and there are hundreds of names I could mention that in the course of the late nineteenth century brilliantly assailed the limits of "realism" and blurred the world of sensory

perceptions with color, imagination, and light. It was at this time also that photography emerged as a kind of art. In fact, Queen Victoria was the first British royal to have a photograph made of her. As you might guess, the Greeks and Egyptians had experimented with the idea of a “camera,” but it wasn’t until Victoria’s time (1837) that the first photograph was taken by yet another Frenchman. He was Louis Daguerre (1787-1851) and his “daguerreotypes” now give us remarkable insights into the past as his subjects squint and pose rigidly into his camera since the process took more than a minute to work.

I would mention here the work of yet another Frenchman—Ferdinand de Lessups (1805-1894). He was a brilliant engineer and also a magnificent promoter. Building upon the findings of French archeologists who had accompanied Napoleon on his disastrous 1798 expedition to Egypt, de Lessups learned that they had discovered clear signs that in the ancient past attempts had been made to link the Red Sea to the Mediterranean. Of course, all those efforts had been carried out with human labor. De Lessups was convinced that steam power could make that ancient dream possible. Thus he was the moving force behind the formation in 18** of the *Compagnie Universelle du Canal Maritime de Suez*. Backed by finances from the Ottoman sultan, British investors, and French interests, he began work on the project in 1859 and the 102 mile-long ditch was completed 10 years later. It used no locks and was 26 feet deep. As you might guess, steam alone couldn’t do all that work and thousands of Egyptian peasants died in digging their way to the entrance of the Red Sea. Once the waters rushed in, the time for travel from Britain to India was cut by several weeks.

Complimenting this triumph of science and engineering was the launching in 1858 of the gargantuan *S. S. Great Eastern*, an iron-clad, 692 foot-long side paddled steamer, the largest vessel ever constructed to that date. She was designed to carry as many as 4,000 passengers around the world. Unfortunately, her draft (30 feet) was too deep to steam through the Suez Canal. Not all the great scientific achievements of the Victorian Era were

as successful as de Lessup's canal project. I will not catalogue all the disasters that plagued the *Great Eastern* throughout her career (which ended in 1889 when she was broken up for scrap). Suffice it to say that her scheduled launch was delayed because no one had the equipment to move her; there was a boiler explosion on her maiden voyage across the Atlantic; she lost her paddle wheels in a storm on the third voyage; and struck a rock in Long Island Sound on her fourth. In the end, the vessel was relegated to cable-laying duty and thus took part in putting down the first trans-Atlantic cable (which subsequently broke and needed costly repair). Sadly, the *Great Eastern's* designer, Isambard Brunel (1806-1859) suffered a stroke just before the vessel's launching and died just ten days into her maiden voyage. He had been one of the Victorian period's great engineers: the driving force behind the construction of Britain's first major railway (the Great Eastern) and the designer of the *SS Great Britain*, the first propeller driven vessel to cross the Atlantic.

In spite of the *Great Eastern* debacle, the natural sciences scored some astounding advances during the Victorian Era. Take, for example, the Second Industrial Revolution. We've spoken so far in this course of many revolutions, but few were so profound as the one that took place in the latter years of Victoria's reign. To understand what I mean, imagine the urban landscape (say of London) at night in 1750. It would have been exceedingly dark with fire and candlepower supplying the illumination. Skip ahead a century to 1850 and things would brighten up considerably with natural gas lighting the homes of the wealthy and even some of the streets. Advance only 50 years and by 1900 the power of electricity was challenging the darkness of urban societies on both sides of the Atlantic and extending even into the vastness of Russia. Coal produced the first Industrial Revolution; electricity powered the Second during Victoria's reign.

The first use of the word "electricity" didn't enter the English language until 1646, following the publication in 1600 of a volume called De Magnete by William Gilbert (1544-1603), a physician in the court of

Elizabeth I. Gilbert had been experimenting with the strange force and recorded its odd manifestations. Luigi Galvani (1737-1798) discovered that same strange force at work in cells that transmitted messages to human muscles. In 1800 another Italian, Alessandro Volta (1745-1827) constructed the first battery. Twenty-one years later Michael Faraday (1791-1867) built the first electric motor using Volta's power source. Then it was in 1861 that James Maxwell (1831-1879) published his seminal work, On Physical Lines of Force, which finally linked electricity to magnetism. Having established that link the West was off and running. Alexander Bell had already developed a workable telegraph and soon to follow were great electric engines that would power industry and build the fortunes of such innovators as George Westinghouse (1846-1914), Werner von Siemens (1816-1892), and Thomas Edison (1847-1931).

Allow me to take you back to the urban landscape of 1750. Although Europe's cities were growing, sanitation remained pretty much as it had been since the fall of the Roman Empire—dump waste of all sorts in the streets hoping that the pigs and dogs would eat it or municipal authorities would eventually pick it up and dump it in the closest river. That was until cholera began to reappear (it had devastated the cities of ancient Rome); first in Asia and then spreading to Europe. It struck Paris in 1832 and killed 20,000. The same thing happened in London that year, taking the lives of 53,000. It appeared in Britain again in 1853, killing 26,000; and once more in 1853 taking the lives of 26,000.

It wasn't until 1854 that a Dr. John Snow (1813-1858) definitively established the connection between putrid water and cholera, dispelling the prevailing "miasma" theory. The work of Louis Pasteur (1822-1895) confirmed those findings in 1860 leading to the "Pasteurization" of milk and vaccines against rabies and anthrax. With that knowledge in hand, Western governments proceeded to clean up their urban water supplies. Perhaps the best example of this transformation of Europe's cities was the work of Baron Georges von Haussmann (1809-1891), Napoleon III's chief engineer/architect. It was he who designed a new urban plan for Paris

with immense water and sewer projects and the broad boulevards that are still the envy of the world. His sanitation efforts dramatically reduced urban disease (and also made it difficult for Parisians to build barricades on the streets).

You may recall that I entitled this lecture “Dissolving Certainties” but recently I have been describing some of the great triumphs of nineteenth century science and engineering—Suez, the harnessing of electricity, the medical science that developed “germ theory.” However, just at the close of the century a curious thing happened. A young Polish scientist, married to a Frenchman named Pierre Currie found that a mineral named “uranium” emitted energy on its own. Her name was Marie Currie (1867-1934) and in 1898 she and her husband announced that their studies of uranium had discovered a new element which they called “radium” that produced a kind of energy on its own that was inexplicable by contemporary scientific theory. She carried samples of this new element around in her purse and in 1903 became the first woman to receive one of the newly-established Nobel Prizes. What was this stuff? It would take a few years for science to produce an answer.

Another new element, an irrational one, was also in the air—RACE. As the Victorian era drew to a close it was hard to escape the conclusion that the European races, especially the dominant north Europeans, had essentially conquered the globe. How else to explain this hegemony but that the sons and daughters of the Germanic peoples (the English and the Germans) were somehow racially superior to all the other peoples of the earth? Etymology was in its primitive phase as a science but had already discovered that there was a cultural link between the Indo-European languages, the grammar of conquering peoples who had captured the lands of present-day India, Persia, and Europe. Just as the Grimm brothers, Jakob (1785-1863) and Wilhelm (1786-1859) had attempted to capture the folk tales of rural Germany, so also did Richard Wagner (1813-1883) seek to dramatize in music a mystical and pure Germanic past. His music and his anti-Semitic pronouncements captivated thousands.

[Conclude with the "Valkyries"]