LECTURE 13

AUTOMOBILITY, AMERICAN CULTURE, AND THE ETHOS OF MASS PRODUCTION, 1910-1930

A. The ubiquity of large technological systems by 1920
   --electricity as an example
   --America fast becoming a mass consumption society

B. Automobility and the ethos of mass production
   a. T. P. Hughes definition of technology
   b. Table comparing railroad vs. sales of passenger cars, 1900-1920
   c. Table showing productivity at Ford, 1914-1923

C. The automotive system
   a. the extended system: tires, auto parts, car dealerships, gas stations, insurance
   b. the highway system (see Cowan, pp. 233-34)/gas taxes

D. Automobility and urbanization
   a. the growth of suburbia
   b. the 1920s building boom
   c. Foster Gunnison, “the Henry Ford of housing” (1932-48)

E. Other consequences of urbanization/automobility
   a. factory farms and the demise of the family farm
   b. worker tensions: Hugh Grant Adams on Ford’s assembly line (1927)
   c. environmental problems with the “sacred cow of American life”: urban congestion, noise, air pollution (Lewis Mumford)
Table Comparing Railroad vs. Sales of Passenger Cars, 1900-1920

<table>
<thead>
<tr>
<th></th>
<th>Miles of RR built</th>
<th>Factory sales of autos</th>
</tr>
</thead>
<tbody>
<tr>
<td>1900</td>
<td>4,894</td>
<td>4,100</td>
</tr>
<tr>
<td>1905</td>
<td>4,388</td>
<td>24,200</td>
</tr>
<tr>
<td>1910</td>
<td>4,122</td>
<td>18,100</td>
</tr>
<tr>
<td>1915</td>
<td>933</td>
<td>895,900</td>
</tr>
<tr>
<td>1920</td>
<td>314</td>
<td>1,905,500</td>
</tr>
</tbody>
</table>

What this table shows is that an extensive technological system based on autos was gradually replacing the railroad network as the national economy's prime mover after 1910. What began as a trickle during the 1890s had become a flood by the 1920s.

Mention has already been made about the Ford Motor Company's introduction of the mass production assembly line in 1913. Here is what Ford's production of the Model T looked like:

1914 – c. 300,000 units
1915 – 500,000
1919 – c. 800,000
1923 – 2 million Model T cars/trucks

By 1928, Ford's massive River Rouge factory near Detroit was turning out 6,400 Model A's a day.

And this was only one auto maker! Between 1921 and 1929, passenger car production more than tripled, reaching 4.8 million vehicles a year in the United States!