

The Vance Model

Based on his work on the **eastern seaboard of America**, Vance (1970) developed a **five-stage “mercantile” model** to illustrate the **development of transport links and the growth of the urban hierarchy in North America**. Although primarily concerned with trade, his model is important in that it stresses the **impact of exogenous forces** on the evolution of transport networks and their associated spatial patterns.

1. In the initial stage, an accumulation of wealth in Europe prompted **overseas expansion of an exploratory nature**.
2. Stage 2 sees **the beginnings of the transatlantic trade routes based on the one-way trade** in staple products such as fish, furs and timber.
3. From 1620 permanent settlement occurs in North America: this results in **Atlantic trade in both directions as settlers begin to produce commodities for export and consume manufactured products from a rapidly industrializing Europe** (stage 3). Internal transport links are limited but all are externally orientated, a process that results in linear patterns both along the coast and stretching into the interior.
4. The fourth stage of the model is characterized by **the development of internal trade and an internal manufacturing industry**. Despite the lessening of mercantile ties with Britain after 1783, **the spatial impact of the first three stages remains strong**. The initial points of attachment with Europe assume an independent status and, in turn, **form the nodes from which the interior is settled**. Competition between the various coastal settlements resulted in a **number of east-west penetration routes**, first by water, then by rail. The growth of internal nodes is also the result of their long external links to the coast and, ultimately, Europe.
5. The final stage of the model is reached when **internal trade dominates North America and is matched by a mature transport and urban system in Europe**. Although North America was eventually to lead the world in transport developments, the historical evolution is still apparent in both its transport network and its urban system.