SOCI 309/339
URBAN SOCIOLOGY

Session Twelve
Industrialization and Urbanization

Lecturer: Prof. Chris Abotchie, Department of Sociology
Contact Information: cabotchie@yahoo.com

godsonug.wordpress.com/blog
Session Overview

Introduction

- In this session, an attempt is made to explain the apparent connection between urbanization and industrialization and to suggest whether or not this connection is inevitable.

- The process of demographic urbanization – that is, the agglomeration of populations in the urban area appears inextricably linked up with the search for jobs in industries located strategically in the urban areas. The industrial gap between the rural and the urban areas has largely been responsible for the exodus of skilled, semi-skilled and unskilled youth, both male and female from the rural areas. Further, the low incomes available to farmers because of governmental, controlled prices and the attraction of the higher industrial incomes have all contributed to the agglomeration of populations in the urban area.

- This exodus for wage paid labor in the urban areas was precipitated in most Third World nations – particularly in Africa - by the monetization of the traditional economy in the wake of colonialism. Before the colonialists came, the exchange of goods and services were done by barter.
Session Overview - Monetization of the Economy

- The colonialists proscribed the local currency and instituted a new legal tender, namely, pounds, shillings and pence. They brought also, new commodities which the indigenous Africans found very attractive; namely, new clothes, cooking pots and pans, farming tools and alcoholic beverages—all of these can be purchased only using the new currency. Besides, the colonialists introduced the mandatory payment of taxes and school fees—all in the new currency.

- Further, the attainment of other social goals like getting married could only be achieved by the use of the new currency. Access to the new currency (pounds shillings and pence) was possible only through wage paid labor available only in the manufacturing and service industries in the urban area. This is how the connectivity between industrialization and demographic urbanization is explainable.
The main topics to be covered in this session are as follows:

- **Topic One:** Defining Industrialization and the Urban revolution
- **Topic Two:** The discovery of Iron and the Urban revolution
- **Topic Three:** Industrialization and urbanization – the linkage
Objectives/Expected Outcomes for the Session

On the completion of this session, you should be able to:

• Define industrialization and explain how the industrial revolution began.

• Explain the impact of the discovery of iron on the industrial revolution.

• Explain the connection between industrialization and urbanization.
Topic One
Defining Industrialization and the Urban Revolution

Introduction

• One of the main reasons for the migration of people to the urban areas is the absence of employment opportunities in the rural areas. This is what constitutes the industrial gap between the rural and the urban areas.

• Thus the availability of industries in the cities and the associated opportunities for job placement constitutes a significant economic attraction for migrants.

• It is in this sense that the process of urbanization has logically been attributed to industrialization. Industrialization is thus like a shadow of urbanization; wherever industries are found, there is a high likelihood of finding urban agglomerations as well.
Defining Industrialization

• Thus, industrialization and urbanization are bedfellows. But like the chicken and egg conundrum, which one came first - industrialization or urbanization?

• Definition
Industrialization refers to changes in productive technology; implying in a wider sense, the technification of agriculture and even of services, that is, of human relations. It means in the ultimate sense, the application of inanimate sources of power to the production and distribution of goods and services.

• Origins of Industrialization and Urbanization
If industrialization means changes in productive technology, then the industrial process has to be traced from the productive technology of early humans to enable us understand the changes that occurred up to the industrial revolution.
**Origins of Technology – Early Man – Stone Implements**

- Archaeological evidence has established that the earliest humans were organized in roving bands of hunters and gatherers who had no stable or settled communities because they did not confine themselves to any specific locations.

- During this stage of human evolution, early men used stone axes, stone knives, stone spear heads and other stone implements as the main components of their productive technology.

- Over ten thousand years ago in what was called the **Neolithic Revolution**, permanent settlements became possible following the emergence of organized agriculture. These settlements began to replace the nomadic hunting and food gathering patterns.
Early Man – Organized Agriculture

- Organized agriculture probably emerged by accident. In the course of their hunting and gathering escapades early man discovered by chance that broken off twigs from food trees/crops or seeds which fell in the soil began to germinate, triggering off the possibility of deliberate or organized reproduction of food plants from cuttings or seeds.

- Louis Munford (1966) suggest that the change from nomadic foraging (hunting and gathering) to organized agriculture created more time for child rearing which gave rise to permanence and domesticity.

- Prolonged staying in one location made it possible to observe the growth cycle of wild plants and to domesticate wild animals.
Organised Agriculture and the Urban Revolution

• These early settlements were however, very small villages with maybe up to 200 people. Gradually as agriculture became more productive some Neolithic villages grew into towns and grew from towns into cities.

• This fundamental community change was regarded as one of the most significant developments in history and was labeled by the English pre-historian Gordon Childe(1950) as the Urban Revolution.

• Childe used the term ‘revolution’ because a change from a town to a city involves a total transformation of the size, density and the traditional cultural values of the urban population.
Urban Revolution - Food Production

• One of the main characteristics of the city is the division of labor based on functional specialization. In other words, a city has a high concentration of people who do other things apart from growing their own food.

• Cities can develop only where there is a surplus of food grown outside the city and where there is some way of acquiring that surplus and transporting it from the farm.

• Because food is so critical for the survival of the city, its production and protection led to the development of other institutions.
The Urban Revolution Contd.

• According to Kingsley Davis (1973) the need to grow and defend food resources in the earliest cities led to the development of many new institutions and specialists, such as armies, taxation and other administrative, governmental officials.

• The freeing of many persons from the task of producing food encouraged the development of still other specialists including artisans, traders and the priesthood. Perhaps more significantly it led also to the creation of a relevant mechanism of social control.

• The earliest known towns and cities were built along the river banks of the Middle East from about 6000 – 5000 BC.

• Ur, which was one of the earliest known cities, was estimated to have had a population of about 5000 people.
Question

If we assume that the need to grow and defend food resources in the earliest cities led to the development of many new institutions and specialists, such as armies, taxation and other administrative institutions, what new challenges, in your opinion, explain the development of modern governance institutions?
Topic Two
The Discovery of Iron and the Urban Revolution

Introduction

• We understood from our last discussion that men and women who lived as nomads, hunting and gathering during the early stages of human evolution used stone axes, stone knives, stone spear heads and other stone implements as the main components of their productive technology.

• You may wish to visit a museum (if you have not done so already) – especially the one in the archaeology department of the university of Ghana to see the empirical evidence of these stone implements. You will then be convinced of how difficult it may have been to use those stone tools effectively in hunting and gathering for their survival.
Iron and the Urban Revolution – Better Transportation

• The stone tools could easily chip off or become blunted after prolonged usage and be rendered ineffective. Thus the emergence of iron about 1000 BC was a significant stage in human evolution. Iron brought about the efficacy of technology leading ultimately to the invention of machines which inaugurated the industrial revolution.

• The widespread use of iron facilitated a number of things relevant to industrialization:

• **Better transportation:** In the wake of the invention of the wheel, wheels of carts and horse drawn chariots made of iron, and other forms of transportation became more durable and efficient;
Iron and the Urban Revolution – Effective Tools, New Inventions

- **More effective tools**: agricultural tools such as hoes, cutlasses, knives, various types of axes, were sharper, durable and more efficient and therefore led to increased productivity and increased urban populations;

- **New inventions** such as money, writing, mathematics; the calendar, as well as bronze, copper and brass were indirectly associated with the use of iron, as a result of an increasing rate of innovations;
Iron and the Industrial Revolution - Machines

- These improved conditions of life in turn encouraged further urban growth and led also to the development of new democratic institutions in response to the increasing urban populations;

- Iron was largely used in the production of machines which formed the basis for the industrial revolution which was to take place in the seventeenth century in Europe.
The Urban Revolution – The Decline of other Cities and the Prosperity of Rome

The City of Rome

- During the earlier period of the urban revolution, no other city apart from Rome exceeded the population of several hundred thousands because it had the productive technology capable of supporting this size of population.

- The failure of other cities to become as prosperous as Rome was due to a number of factors, among which Kingsley Davis listed:
  - **Agricultural methods were very inefficient.** It took in these other cities, at least 75 farmers to support one city inhabitant.
  - **There were no large scale manufacturing industries** capable of sustaining a large labor force.
The Urban Revolution – Why Rome Prospered

- Further, political and other cultural mechanisms were not well developed and were thus not capable of effectively uniting large heterogeneous populations.

- In the absence of scientific medicine, the large concentrations of people posed serious health hazards – that is, epidemics commonly killed many city dwellers.

- The implication is that these conditions were adequately satisfied by Rome and Athens which is the reason why they survived as city states and prospered.
The City of Rome – Effective Social Control

• In other words, Rome had well organized and efficient agricultural systems which had the capacity of feeding the people. Further Rome had large scale manufacturing industries capable of sustaining a large workforce.

• Importantly Rome had effective social control mechanisms to ensure discipline among its people, and an efficient healthcare delivery systems to keep them going.

• Iron therefore contributed to significant changes in productive technology which accounted for the ability of the city to support increasing populations and the concomitant cultural development.
The City of Rome – Impressive Public Works

- During this period, Rome and Athens embodied the concept of the city as centers of learning, power, wealth and progress.

- By the second century AD Rome had become a huge metropolis of over a million people and as well, the center of a global empire. Wealth poured in from its military conquests and extensive commerce.

- The Roman emperors lavished great sums of this wealth on civic constructions and monuments. It was estimated by Munford that ancient Rome had 28 libraries, 500 fountains and approximately 10,000 statues adorning hundreds of palaces and parks. Compare ancient Rome to modern Accra!
The Decline of Rome

- After the downfall of Rome, urban communities throughout Europe, began to decline dramatically in population and remained weak throughout the Dark Ages.

- It was not until the eleventh and twelfth centuries that cities once again began to play an active commercial and cultural role.
Question

In which sense can the failure of some cities in Ghana to become prosperous be explained by the factors which Kingsley Davis listed as contributing to the demise of cities which could not flourish as Rome did?
Introduction

- In the introduction provided for the previous section, I indicated that the availability of industries in the cities and the associated opportunities for job placement is a major attraction for migrants. It is in this sense that the process of urbanization has been associated with industrialization.

- Industrialization is thus like a shadow of urbanization; wherever an urban community is found, there is a high likelihood of finding industrial establishments as well. The two phenomena thus appear to be bedfellows.

- The question that this topic will attempt to answer is, can one of these two phenomena occur without the other? In other words, is it possible to have urbanization without industrialization; or industrialization without urbanization?
The Industrial Revolution

The Industrial Revolution

• The modern era of rapid urbanization – the movement of people from the rural to the urban areas and the resulting increase in the proportion of a society’s population that resides in urban communities, did not begin until the 18th and 19th centuries when the industrial revolution which first occurred in England transformed the European economy.

• As indicated earlier, this revolution involved significant changes in productive technology – implying the use of machines (inanimate sources of power) for the production of goods and services.
The Industrial Revolution - Rural - Urban Migrations

• The ability to use machines in the place of human energy in the production process led to the emergence of a variety of industries and increased employment opportunities. These opportunities attracted both skilled semi-skilled and unskilled youth from the rural countryside to the urban areas in search of wage paid labor.

• By 1800, the population of London was close to one million in the wake of the migrations.

• Thereafter, Western Europe began to grow rapidly. In the late 18th Century, the enormous growth of employment opportunities and productivity made possible by the industrial revolution led to large scale migrations which provided a large labor force.
Linkage between Urbanization and Industrialization?

Inevitable Linkage?

- It must be emphasized however that there is no inevitable technical connection between urbanization and industrialization.

- The two are independent variables. In other words, urbanization can take place without industrialization; and at least a small scale industrialization is possible without urban agglomerations.
Urbanization without Industrialization – Cape Coast

• In the first case where it is possible to have the emergence of urban areas in the absence of industrialization, the nature of the urbanization is often in response to factors other than the existence of industries.

• These types of urban areas are often political administrative centers where there is often an agglomeration of people who work in the administrative and other service industries.

• A good example is Cape Coast. Cape Coast was originally the seat of the colonial government – that is, the capital city of the Gold Coast.
Cape Coast - Centre of Colonial Administration and Learning

• As a result, a large number of public servants found themselves accumulated there in the administrative service departments in the city.

• Later, several educational institutions were built in Cape Coast which also attracted a large number of the youth and other service providers.

• Thus even without large manufacturing industries, there is an agglomeration of populations in Cape Coast, satisfying the demographic definition of urbanization.
Industrialisation without Urban Agglomerations - Bonwire

• The second example of small scale industrialization without urban agglomerations can also be identified.

• Bonwire – the home of kente in Ghana is a comparatively small settlement dominated by the kente industry. The kente industry currently uses traditional looms which are the equivalents of machines. The use of machines is the dominant characteristic of industrialization.
Bonwire - Dominated by Weaving Machines

- Visitors to Bonwire cannot escape encountering the legion of weaving looms that dominate the town.

- Wherever the visitor turns, he bumps into a weaver using the machine.

- Demographically however, the population of the town is basically indigenous and comparatively small. Thus it does not, as at the time of writing this, satisfy the large scale high density and heterogeneous populations required of settlements to qualify as urban communities.

- Thus Bonwire represents the example of small scale industrialization without urban agglomeration of populations.

- Think of other illustrative examples in Ghana.
In this Session you learned that:

- The industrial process can be traced from the productive technology of early humans and the changes that occurred up to the industrial revolution.

- The discovery of iron by 1000Bc facilitated the production of machines which formed the basis for the industrial revolution which took place in Europe in the seventeenth century.

- Iron therefore contributed to significant changes in productive technology which accounted for the ability of the city to support increasing populations and the concomitant cultural development;
• In the wake of the Neolithic Revolution, permanent settlements became possible following the emergence of organized agriculture.

• These early settlements were however, very small villages with maybe up to 200 people. Gradually as agriculture became more productive some of these villages grew into towns and grew from towns into cities.

• This fundamental community change was regarded as one of the most significant developments in history and was labeled by Gordon Childe, as the Urban Revolution.
• There is no inevitable technical connection between urbanization and industrialization. The two are independent variables.

• In other words, urbanization can take place without industrialization; and at least small scale industrialization is possible without urban agglomerations.

• Thus it is possible to have urban areas developing without significant industrialization. The city of Cape Coast is typical. These urban communities often develop in political administrative centers where people accumulate and work in administrative and other service industries.
• The second example of small scale industrialization without urban agglomerations can also be identified.

• Bonwire – the home of kente in Ghana is dominated by the kente industry using the traditional looms which are the equivalent of a machine.

• However, demographically, the population of the town is small and without the high density and heterogeneity required of urban communities.
Question

What type of urbanization, in your view is ongoing in Ghana – urbanisation without industrialization or small scale industrialization without urban agglomerations? Support your view with illustrative examples.
References


• Childe, V. G. (1950) The Urban Revolution in Town Planning Review Vol. 21 pp 3-17
