

HOW WELL DO THE MODELS OF BURGESS AND HOYT DESCRIBE THE URBAN STRUCTURE OF HARLOW NEW TOWN?

A Geographical Information System (GIS) Investigation

1. Introduction

It has been widely suggested in geographical textbooks that urban models can be used to describe the generalised shapes and patterns that towns and cities will develop. For example, if many urban models suggest that a town's Central Business District (CBD) will be found in the settlements geographical centre, what sort of weight should we give to such statements? This investigation is largely about considering such issues.

Two of the oldest and most widely quoted models in urban studies are those of Burgess (figure 1) and Hoyt (figure 2). Both models were developed in the 1920s and 1930s in the United States.

Burgess Model:

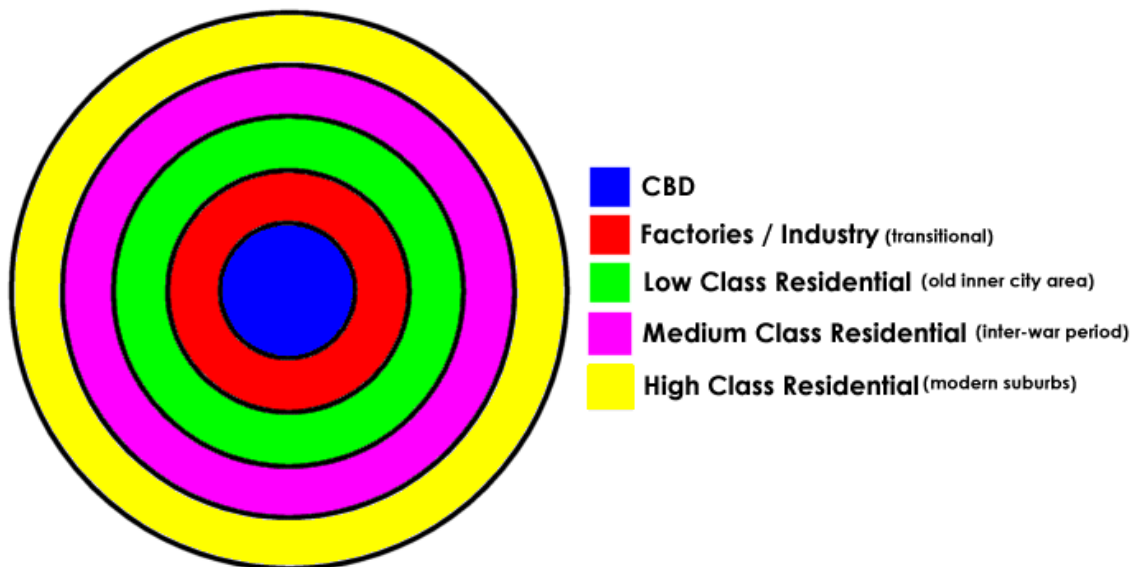


Figure 1: The Burgess Model

Hoyt Model:



Figure 2: The Hoyt Model

Burgess's study of Chicago led him to suggest that the CBD was the most likely function to be found at the geographical centre of most cities. He suggested that all other functions develop around this centre in a circular pattern. The circles were based on the age of houses and the wealth of their occupants, with occupants becoming wealthier and houses becoming newer with increasing distance from the CBD. Hoyt's model takes into account the development of public transport. His model suggests that urban areas develop in sectors alongside the main transport routes into and out of a city. He also claimed it would be unlikely that high class residential housing would be found near to factories or lower quality housing zones. In this way his model suggests a clear physical separation between the rich and the poor.

2. The Importance of Critical Assessment in the Advancement of Geographical Knowledge

In developing geographical knowledge it is important to constantly assess the accuracy and reliability of theory in the light of new observations. Such assessments allow new questions to be asked leading to the development of an improved understanding of the places in which we live. Using this principle we will ask the following questions in relation to the accuracy of the Burgess and Hoyt models:

- 1) How well do the models of Burgess and Hoyt describe the land use patterns of a UK town?
- 2) How well do the models of Burgess and Hoyt describe the social and economic patterns found in a UK town?

It is important to realise when considering these questions that the answers will not be straight forward and recognising the limitations of your views is an important geographical skill to develop.

3. New Tools to Aid Geographical Investigation

During this investigation you will be using an important piece of geographical technology called a Geographical Information System (GIS). This is a very advanced type of geographical software used extensively by organizations like the Police, Defence Forces, The Environment Agency, The Geological Survey, Local and National Government. The skills you will learn while carrying out this investigation are the same as those used by senior analysts in the types of organizations listed above. The software links complex tables of data to maps to reveal the underlying patterns that the data contains. Using this software will also allow us to access the latest available information on this topic. In this way you will be able to examine the same information as used by current university researchers.

4. Harlow – A New Town in the South East of England

The location of Harlow is shown in figure 3. In 1944 sites for new towns located around London were proposed in the Greater London Plan. Harlow was to be one of these towns with its purpose to house people from the London area. It was necessary to move people away from the London area at the time to allow the regeneration of parts of the city.

Harlow was designed for a population of 80,000 people. The basic plan for Harlow was to define distinct areas for living in the form of residential areas, industry and services. The residential areas and other functional zones are connected to one another and to the region by a series of main roads and the whole town is surrounded by green belt. The town planners who designed Harlow wanted the settlement to be as self-contained as possible with its residents having no need to travel to other locations to access jobs or services. The original plan for Harlow New Town is shown in Figure 4.

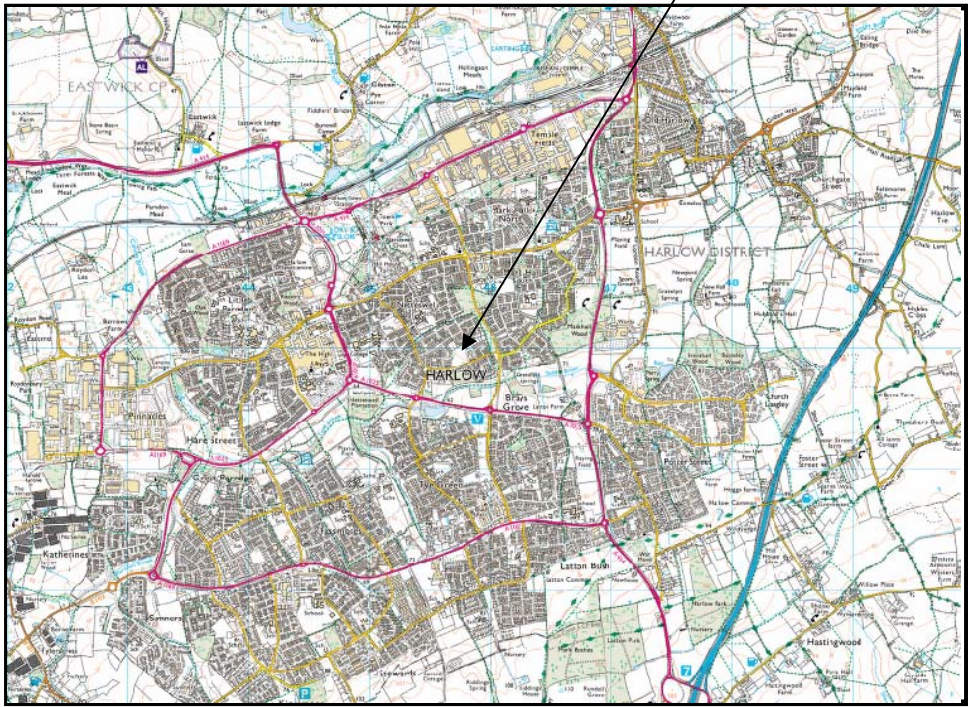


Figure 3: The location of Harlow New Town in the South West of England. Source: Ordnance Survey, UK.



Figure 4: The original plan for the structure and layout of Harlow New Town. Source: F. Gibberd (1980). *The Design of Harlow*. Published by Harlow Council.