# UNIVERSITY COLLEGE LONDON

## University of London

## EXAMINATION FOR INTERNAL STUDENTS

For The Following Qualification:-

*M.Sc.*

**ESGA19: Principles of Spatial Morphology**

COURSE CODE       :   **ENVSGA19**

DATE              :   **14-MAY-04**

TIME              :   **10.00**

TIME ALLOWED      :   **3 Hours**

**TURN OVER**

## Principles of Spatial Morphology Examination Questions

ANSWER THREE QUESTIONS: 3 hours
*Wherever possible you should illustrate your answer by reference to examples from your experience or from the literature.*

1. This year you participated in a research training exercise involving a study of the Royal Festival Hall. In the light of your experience, if you were asked to design a project to introduce space syntax research methods to architecture students at Master's level what would you consider it important to include and what aspects of space syntax methodology would you leave out and why? Describe the structure of your proposed project.

2. In what ways might computer simulation contribute to our understanding of architecture, urbanism and social culture?

3. The axial map is often used in space syntax research. What kinds of axial maps are you aware of? Describe the procedure you would use to prepare a fewest line map. What difficulties might you expect to encounter and how would you overcome these? The axial map is sometimes criticised as being "ill defined". Outline the grounds for this criticism and assess its validity.

4. Ian Hacking describes the 'creation of phenomena' as an important part of the scientific process. In what sense does space syntax make use of created phenomena? Give three different examples of phenomena creation in space syntax analysis and describe the insights they give in an analysis of architecture or urban form.

5. What is an isovist? Describe what you understand by the term "isovist field" and list as many measures as you can that could be represented by such a field. How do isovist fields differ from Visibility Graph Analysis and how might you use each in the analysis of architectural space?

6. There are a range of measures of the graph used in space syntax research. Describe four measures you consider to be useful. Define these and describe how you might interpret their results.

7. Compare and contrast <u>two</u> research strategies that solicit information directly from building users and describe <u>one</u> research method for capturing information that is appropriate to each strategy. Describe the advantages and disadvantages of each approach? Illustrate your answer by reference to examples.

8. Discuss the differences for the researcher between contemporary censuses and censuses which are over 100 years old. How would you overcome the limitations of contemporary censuses in investigating the relationship between social processes and the fine scale spatial configuration of the city?

9. Space syntax analysis is sometimes used to support decisions during the design process. Describe how this takes place. What are the strengths and limitations of this approach?

**END OF PAPER**