City/Campus Duality

An analysis of the spatial configuration of university campuses in relation to their

respective cities

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HYPOTHESIS

Following global league tables and university rankings it would appear that top performing universities are part of successful, vibrant cities.

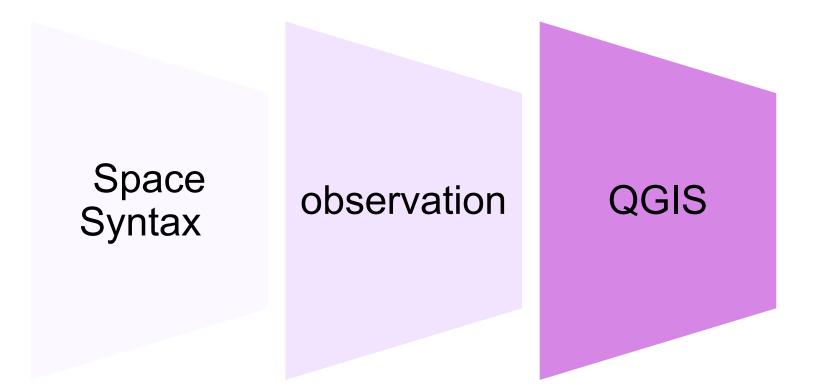
This suggests a **city-campus "duality"** where the performance of the university affects the performance of the city, and vice versa.

RESEARCH QUESTIONS

What are the spatial configurations of the University of Worcester and how do these impact on the spatial configuration of their respective city?

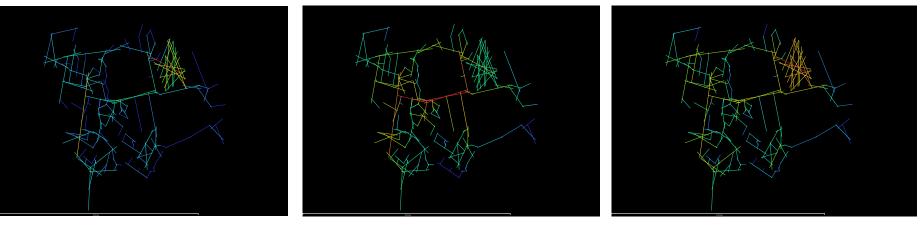


Methods



Depthmap: Axial line analysis

- Connectivity: Measures the number of neighbor axes directly connected to a space.
 - Integration: is a variable that refers to how a space is connected with other spaces in its surroundings.
 - Global integration (HH): It is a measure of integration, measured throughout the system
 - Local integration (R3): It is a measure of local integration, measured the local scale of the system.



Connectivity value University of Worcester

Global integration value University of Worcester

Local integration value University of Worcester

Case Studies

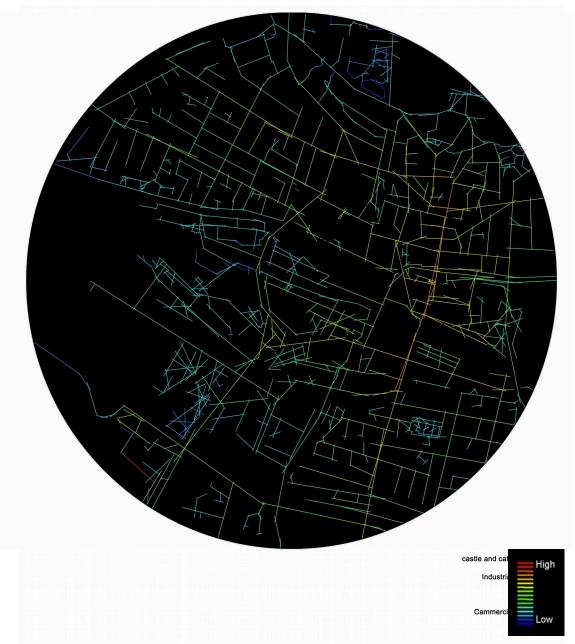
City of Worcester



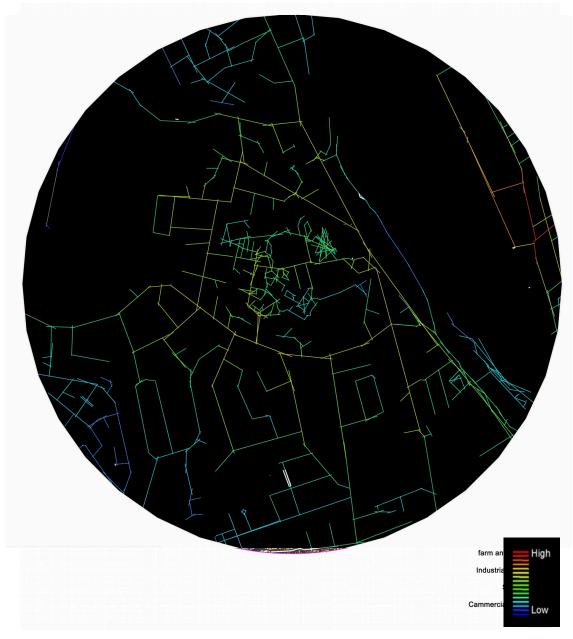
City of Lincoln



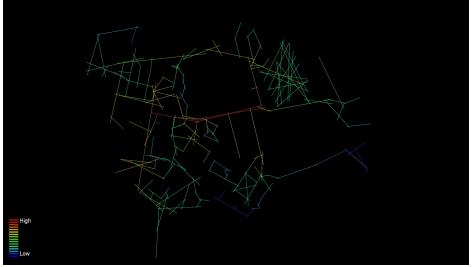
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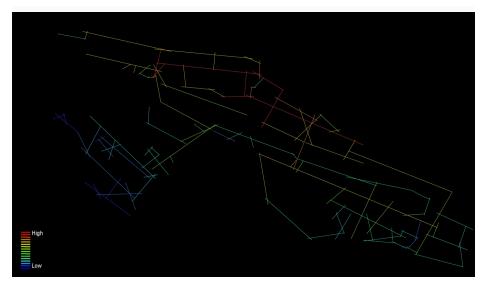
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University Campuses

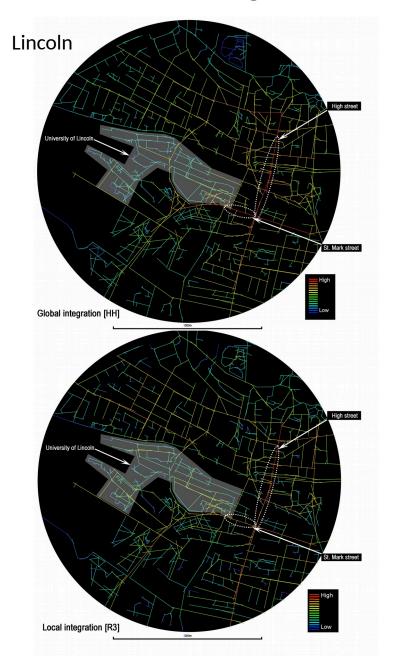


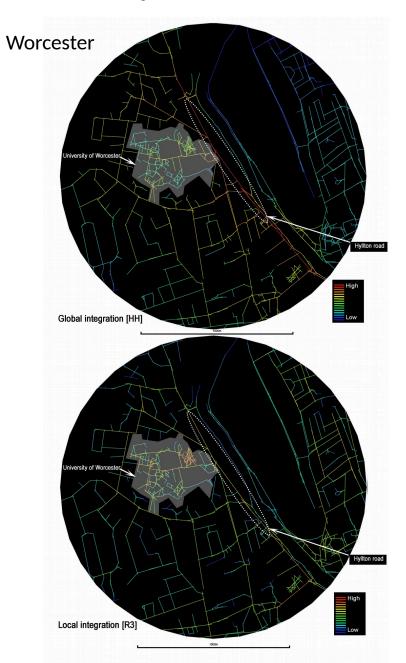
University of Worcester



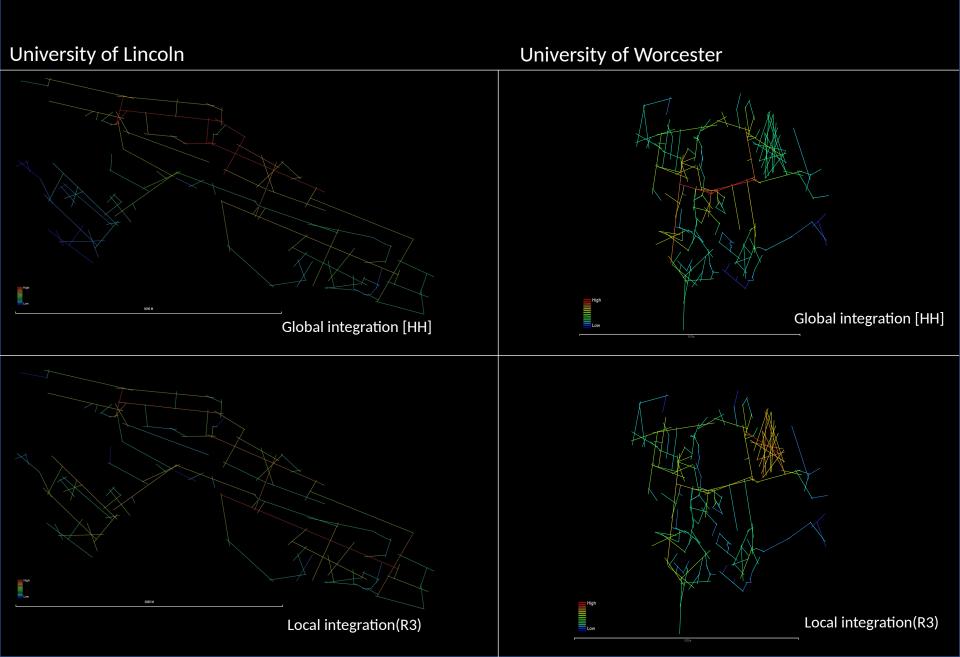
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Integration Measures Analysis

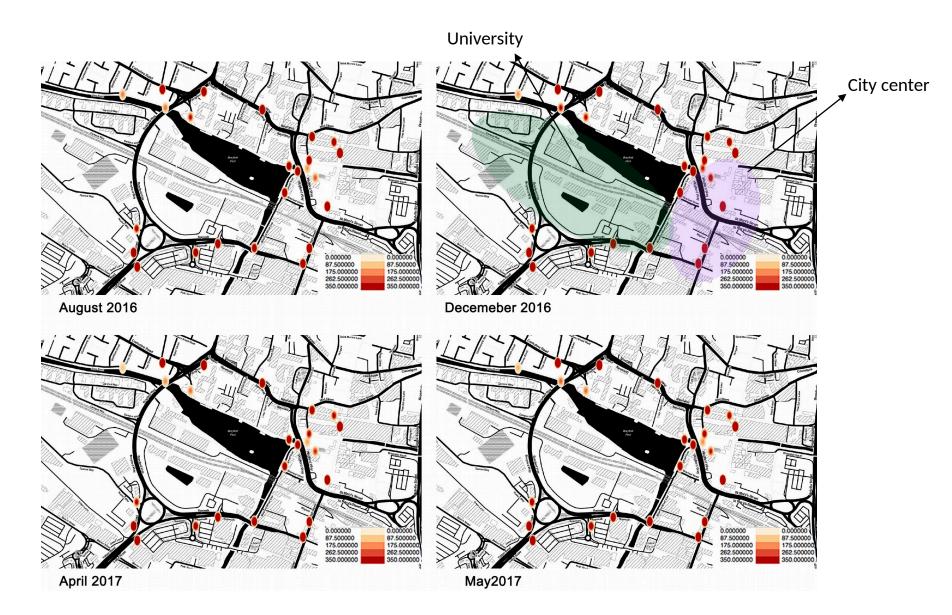




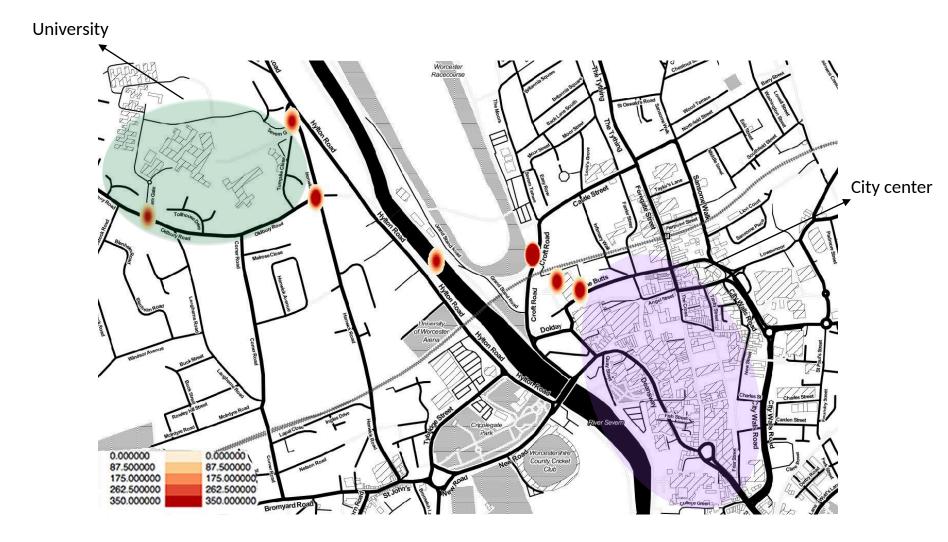
Integration Measures Analysis



City Of Lincoln Heat Maps



City Of Worcester Heat Maps



Conclusion

- Good integration between University of Lincoln and city
- University of Worcester campus has the potential to intensify spatial connectivity with the surrounding area, which will enhance social and movement patterns

The combination of the integration value and observation data, it can suggest that the spatial morphology and physical location of campuses are the most influential factors on the physical relationship between the city and university.

Key References

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