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QUESTIONS, TOOLS OR PARADIGMS:
SCIENTIFIC GEOGRAPHY IN THE 1980'S

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ABSTRACT

Contemporary geography seems condemned to ever-
creasing proliferation of methodologies, techniques and
subfields. It is argued that this is due ultimately to the
dominance of the paradigm of explanation. Frustrated with
their apparent inability to develop theories of the land-
scape itself, geographers have been driven increasingly to
the study of the processes which affect landscape, and
therefore into the domains of other disciplines. There are
no obvious reasons in principle to expect a reversal of this
process, and no evidence of a reversal in practice.

There is no difficulty in defining the subject matter
of geography, but the existence of subject matter is not
sufficient for the survival of a discipline. Survival will
ultimately be determined by application, which is the un-
acknowledged paradigm of the majority of current activity,
and which leads to a definable and limited set of tools and
methodologies.

INTRODUCTION

The late 1970's and early 1980's were a period of great
insecurity in many departments of geography in North
America. The staff of the UWO department had been cut from
25 in 1975 to 19 in 1981, and enrolment in geography
courses had been dropping at roughly 10% per year for some
time: morale was generally low. The department at the
University of Michigan was being closed, and we were acutely
conscious that our Vice-President (Academic) was the brother
of the University of Michigan President. University faculty
are always sensitive to the standing of their discipline
among the higher ranks of their administration, and this was
never more true than in November 1980 when the President of
the University of Western Ontario made his opening remarks
to the first joint meeting of the East Lakes division of the
Association of American Geographers and the Ontario division
of the Canadian association.
Certain aspects of current methodological thinking... read as open to a new wave of ideas in the field of geography. The emphasis on the role of quantitative methods in geographical research is growing. The importance of statistical methods in geographical studies is increasing. The focus on the discipline being open to new ideas and approaches is evolving. Geography is no longer an empirical science, but a theoretical discipline with a strong quantitative component.

The significance of this development is profound for several reasons. Firstly, it requires a redefinition of the role of geography in the academic landscape. Secondly, it necessitates a reevaluation of the traditional methods and techniques employed in geographical research. Thirdly, it challenges the disciplinary boundaries and invites interdisciplinary collaboration.

In conclusion, the evolution of geographical research towards a more quantitative approach is a momentous shift that has implications for both the discipline and its practitioners. It underscores the importance of integrating quantitative methods into geographical studies to enhance our understanding of complex environmental issues.

The emergence of new digital tools and platforms for data collection and analysis has also contributed significantly to this shift. These tools enable researchers to access and analyze vast amounts of data, providing new insights into geographical phenomena. The integration of spatial data analysis with qualitative methods promises to further advance our understanding of geographical processes and patterns.

Overall, the shift towards a more quantitative approach in geographical research represents a significant evolution in the discipline. It sets the stage for addressing complex environmental challenges and advancing our knowledge of the spatial dynamics of our planet.
EXPLANATION IN GEOGRAPHY

This is a page from a book discussing the concept of geography. The page contains text in English, which appears to be a continuation of the previous page. The text is discussing the nature of geography, its role in understanding the world, and the importance of Geographic Information Systems (GIS) in modern geography.

The text mentions the integration of technology and geography, emphasizing the role of geography in understanding the world we live in. It highlights the importance of GIS in modern geography, stating that GIS is a critical tool for analyzing and understanding the spatial distribution of data.

The text also discusses the importance of geography in education, noting that it is a core subject in many educational systems. It mentions that geography is a field that is constantly evolving, and that it is important for students to have a strong understanding of the principles of GIS.

The page ends with a discussion of the role of geography in the modern world, emphasizing the importance of understanding the spatial relationships between different factors in order to make informed decisions.
The standards of empirical verification are clearly defined, and the absence of empirical verification is clearly stated. Any study that is still based on the exact science model, and has not

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the presence of gravity model.
Economic growth and development are the result of the efficient allocation of resources. This chapter focuses on the role of government in promoting economic growth. The government can play a significant role in promoting economic growth through various policies and programs. These policies and programs can help to create a favorable environment for businesses to operate and invest, leading to increased production and economic growth.

   - Tax Policies: Lowering taxes on businesses can encourage investment and economic growth.
   - Subsidies: Providing subsidies to industries can help them to become more competitive and stimulate economic growth.
   - Infrastructure: Investing in infrastructure such as roads, bridges, and public transportation can improve the efficiency of the economy.
   - Education: Investing in education can improve the skills of the workforce and increase productivity.

2. Challenges and Limitations
   - Resource Allocation: The government must be careful not to allocate resources inefficiently, which can lead to economic slowdowns.
   - Political Instability: Political instability can lead to a decrease in investor confidence and economic growth.
   - Corruption: Corruption can lead to misallocation of resources and stifle economic growth.

3. Relevance to Contemporary Issues
   - Climate Change: The government can play a role in promoting sustainable economic growth by investing in renewable energy and green technologies.
   - Economic Inequality: Policies can be implemented to reduce economic inequality and promote more widespread economic growth.

In summary, the government has a significant role in promoting economic growth. Effective policies and strategies can lead to sustainable economic growth, but care must be taken to avoid inefficiencies and misallocations of resources.
REFERENCES

Historical and theoretical papers, 1898, in the Philosophical Transactions of the Royal Society, 1898, and in the Philosophical Magazine and Journal of Science, 1898. This paper is a seminal work in the field of natural philosophy and is a key text in the development of the discipline.

ALTERNATIVES
INTRODUCTION

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