

## **Preface**

This is a festschrift including nine scientific papers and six abstracts of papers written by Dr. Gerard Rushton or his former graduate students and colleagues to celebrate his retirement from teaching at the University of Iowa, Iowa City, Iowa, USA. The festschrift begins with Rushton's own review of his research advances in Behavioral Geography, Economic Geography and Health Geography that coincide with three recurring phases of his academic career during 45 years of teaching at the University of Iowa. Following this, each paper by a former student or colleague reviews the special personal and academic contributions of Rushton to him or her in one of those research areas. Each paper then proceeds to review the author's (or authors') contributions to scientific theory and empirical analysis that he or she (or they) has(ve) subsequently advanced or evolved from Rushton's original contributions. These papers are scientific contributions of interest to an academic readership, as opposed to personal or anecdotal recollections.

The seeds of this festschrift were in the much earlier comments of two of Rushton's former students in the same cohort as me, Sally McLafferty and Avijit Ghosh. I remembered their comments when Carolyn and Gerry Rushton announced in their annual Christmas card that Gerry was formally retiring from teaching in 2013. I subsequently compiled a list of Gerry's twenty former graduate students at the University of Iowa with their help as well as that of Dave Bennett and Cynthia Hernandez, respectively the chair and administrator of the Department of Geographical and Sustainability Sciences at the University of Iowa.

Seven of 13 contacted former students then presented draft papers in a one-day symposium at the University of Iowa in June 2013, with Gerry presenting his own concluding

paper. Eight former students and colleagues, including three who had not participated in the one-day symposium, subsequently presented draft papers in two special sessions during the 2014 annual meetings of the Association of American Geographers in Tampa, Florida, with Gerry again presenting a concluding paper. In total, eight authors or groups of authors submitted papers in this festschrift in addition to Gerry. The nine chapters are augmented with a tenth chapter of the abstracts of papers of six remaining former students who either presented during the one-day symposium, or would have presented if they had been able to attend it or the two special sessions.

Nine papers and six abstracts in this festschrift from a one-day symposium and two special sessions at a conference represent a sample of those in three research areas of Behavioral Geography, Economic Geography and Health Geography. Gerry Rushton in the first introductory chapter reviews his scholarly contributions in each of the three research areas during 50 years of professional life. Within these scholarly contributions are the inspirations for the research of former students and colleagues who are authors of the subsequent chapters.

Gordon Ewing is the author of the first of three chapters on research in Behavioral Geography written by Gerry's former students or colleagues. Gordon traces his original critical analyses of calibrated parameters for spatial interaction models, and his progression into discrete choice modelling of individuals' environmental and travel behaviors from Rushton's earlier research into consumer spatial behavior. Similarly, Tom Bell in the next chapter has returned with a different perspective than his original quantitative one to the interpretation of modern and historical central places providing goods and services to dispersed consumers. Somewhat differently, Alan Phipps critically reviews one of

Rushton's earliest published articles and its antecedents as bases for subsequent research into residents' decisions to move home.

In the first of two chapters on research in Economic Geography, Mike Goodchild compliments Rushton for contributing to his evolution from a graduate student studying karst geomorphology to a protagonist of geographic information science in the face of humanist critiques. Tom Eagle then demonstrates the application of Rushton's decision support system with spatial statistical analysis and GIS for predicting retail sales at existing and new stores of a client in the private sector.

In the first of three chapters on research in Health Geography, Kirsten Beyer critically analyzes Rushton's pioneering work in disease mapping for realizing positive impacts of lessons from Dr. John Snow, such as, about geographic scale in spatial patterns of disease, and translation of research findings into interventions to improve health. Ellen Cromley in the next chapter refines Rushton's analysis of individual-level geocoded health data for demonstrating the colocation quotient as a measure of spatial association among categories in a population who have global and local patterns of successful and unsuccessful aging. Sara McLafferty, Avijit Ghosh and Jamie Fishman in the final paper also apply Rushton's locational analysis research as a framework for an empirical analysis of inequalities in spatial accessibility to primary care physicians in the Chicago region, including those who are international medical graduates.

In sum, this festschrift's nine chapters written by former graduate students or colleagues of Gerry Rushton were inspired by his research during one of three recurring phases that I have referred to as Behavioral Geography, Economic Geography, or Health Geography. Even these students and colleagues who read Gerry Rushton's introductory chapter in

this festschrift may learn of not only the breadth and depth of the productive advances in his research, but also his motivations for these advances during a very long period of time. Reciprocally, Gerry and they may read the subsequent chapters and abstracts to discover how the research of those who were not their contemporaries has frequently advanced in unpredicted directions, just as Gerry advanced as a researcher from one phase to the next in his professional life.

Indeed, Gerry Rushton's former students and colleagues have similarly to him sustained their ability for advancing geographical research, especially from a scientific perspective, over a period of more than 40 years for some. This sustained interest in and ability for independent research may thus be the gift of Rushton to his former students and colleagues and, vice versa, the reciprocation of them to him. This respectful reciprocity would for sure explain why so many of them including Gerry were eager to present a paper in a one-day symposium and two special sessions. For all of this, I would like to give thanks to Gerry Rushton on your behalf – and on his behalf, to give thanks to all of you.

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