EXPERIENCE, SERENDIPITY, AND DIRECTION FOR AN APPLIED GEOGRAPHER

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My views on what constitutes an appropriate education of an applied geographer is, like others, framed by my own experiences, the opportunities made available to me because of suggestions from mentors or interactions with colleagues and peers, and a rather large contribution of serendipity. My journey as an applied geographer can be characterized as one starting at an uncertain origin, following a given route until an appealing side path became apparent, following that for however long the path lasted or another presented itself, and then following the next route. While the journey might be seen to end at Binghamton University, instead that destination provides the hub from which numerous other paths emanate.

The uncertain origin refers to my lack of direction upon entering my undergraduate years as Mary Washington College (now the University of Mary Washington). I had not had a geography course since middle school, so I did not come to geography directly. Indeed, I had thought I'd major in what was then called pre-foreign service (now more likely called international studies). After taking courses in this and numerous other disciplines, I was struggling to find something that truly grabbed my interest. It is hard to pinpoint what specifically attracted me to geography. Certainly, the geography faculty played an important role, and I attribute much of my passion for the discipline to their influences. In addition, I have since recognized that I am a visual learner (as the journey I described at the outset might reflect), and geography is the perfect discipline for someone like me. Of course, little if any attention was given to learning styles in the late 1960s and early 1970s, so it has taken me sometime to recognize why I succeeded as I did in geography, while I had less interest in and somewhat less success in other classes.

As a visual learner, I found myself drawn to real world problems where elements could be seen on the landscape. In 1970, my second year of college, the first Earth Day took place, and the first environmental course was offered at Mary Washington—taught by a geography faculty member. This solidified my commitment to geography as an important discipline to address environmental issues and led me to develop my knowledge about the relationships between the physical and human environments. And, I got to apply this in the field experiences led by Marshall Bowen.

From the academic uncertainty that dominated my early college years, I now knew that I wanted to be a professional geographer, but I remained unsure how best to go about it. As my undergraduate years were coming to an end, I found myself searching for employment that would allow me to use my newly acquired geographic knowledge and skills. At the same time, one of the geography faculty at Mary Washington, James Gouger, said: "Do me a favor and apply to at least one Masters' program." I did just that: applied to one program—at Oklahoma State University. I chose Oklahoma State for both academic and non-academic reasons. The academic reason was that it offered an interdisciplinary Environmental Science option that could be undertaken along with a Masters degree. The non-academic reason was that it was not in the Eastern United States. Though perhaps not the most well-researched decision of my life, the choice of Oklahoma State turned out to be a perfect one. I was able to develop my abilities to work with a variety of disciplinary experts, including engineers, geologists, and economists, while at the same time, strengthening my knowledge and skills in geography and hydrology. I was fortunate to have worked with Richard Hecock, who gave me the opportunity to be involved in a research project related to water-based recreation emanating from the development of a reservoir, while at the same time it supported my interests in environmental geography, and particularly in hazards research.

The latter came about because of flooding that took place as a result of Tropical Storm Agnes in June 1972. This was the summer before my last year at Mary Washington College. My home in Kingston, Pennsylvania, was flooded during this event, as was every building in Kingston. We were lucky, having "only" two feet of water (and mud and muck) on the first floor of the house. Others had as much on the second floor. The event was a milestone in my life, but I couldn't have known at that time how important it was. Some 16 months later, I was faced with the task of developing a thesis proposal in the Geographic Methods course taught by Richard Hecock. Between discussions with my peers and my advisor, I developed a thesis topic around residential relocations (or, as it turned out, the lack of residential relocations) as

a result of the flood. Little did I know at that time that hazards research would shape and to a large extent define my career. Little, too, did I realize that I would one day work with the editor of one of the publications that shaped my early ideas about human actions in the face of natural hazards, *Natural Hazards: Local, National, Global* (White, 1974).

Given my experiences, I didn't see myself in a Ph.D. program, but rather wanted to apply my geography skills directly to problem solving, so I became an environmental planner. I moved to Muskegon, Michigan and worked for the West Michigan Shoreline Regional Development Commission. There I was involved in recreation planning and in water management planning, two areas of expertise emanating from my work at Oklahoma State. While I found the research and report development associated with planning to be professionally satisfying, I discovered that I was either unprepared or unwilling to deal with the politics of public planning (especially in a regional planning agency). I subsequently took professional positions in both the private and non-profit sectors, but gained the most satisfaction in the lowest paying opportunity that I pursued at that time—as an adjunct instructor at a local college, teaching a course on urbanization and the environment. During a visit to Mary Washington soon after that experience, I found myself talking with Jim Gouger about my dissatisfaction with my current job and how much I enjoyed my teaching experience. I had decided that I wanted to "do geography" and not do things only related to geography. His response was, "If you could work with anyone in a Ph.D. program, who would it be?" After some reflection, I realized that natural hazards research embodied problem solving, interaction between the physical and human environments, and real world applications. The easy answer was Gilbert White. I soon found myself completing an application for the University of Colorado, and not long afterward arrived in Boulder. Once again, I applied to only one program—had I not been accepted, I have no idea where I would be today.

My time at Boulder was highlighted by serving as a teaching assistant with David Greenland, where I learned about teaching interdisciplinary courses, and with David Hill, where I learned about different teaching pedagogies, and came to see geographic education as an important undertaking in and of itself. As a research assistant to Gilbert White, I was able to work in Hazards House as we fondly called it (the building housing the Natural Hazards Research Applications and Information Center) with other graduate students interested in hazards research, including Eve Gruntfest, Tom Downing, and Clancy Philipsborn. I remain in contact with them, particularly Eve and Clancy, and we have worked together at various times throughout the ensuing years. Eve and I, in particular, have developed projects on

perceptions and hazard warnings (Montz & Gruntfest, 2002) and we have worked together in the United States and Slovenia. The collaborative environment found at Hazards House fostered by Gilbert White led to the development of these long-term relationships as well as an appreciation for the interests and skills of others. My dissertation reflects this collaborative emphasis. I was encouraged by Gilbert White to rework the results of surveys done by others (in addition to a survey I was going to undertake) to look at the influence of location on the adoption of hazard mitigation measures. The other surveys were undertaken with different research questions in mind, but elements of the surveys fit well with my interests, and they provided me with different case studies at a reasonable cost. Gilbert White also encouraged me to develop another area of expertise to complement my interests in hazards research—suggesting perhaps remote sensing or economics. I chose the latter and it has shaped much of my research since, both in the United States (Tobin & Montz, 1994) and in New Zealand (Montz, 1993).

The position at Binghamton University to which I applied in 1979, was a joint appointment between Geography and the Environmental Studies Program (housed for administrative purposes in the Geology Department), with an emphasis on environmental planning. Although I interviewed at other places, the Binghamton job description seemed to be written just for me. It would allow me to use my experience in environmental planning in an interdisciplinary setting, working with geographers and others. It didn't hurt that my "job talk" centered on public awareness of natural hazards, and I was in Binghamton the week after a major flood hit parts of the region. I arrived in Binghamton in August 1979, and the first Applied Geography Conference took place in Binghamton later that Fall. These conferences have since had a major impact on my career, and I currently serve as Co-Executive Director for the organization, along with Graham Tobin, University of South Florida.

My time at Binghamton has been punctuated with various opportunities to address applied geographic topics in different venues, including a workshop on coping with flash floods in Italy (Gruntfest & Handmer, 1999), research as a visiting research scholar and as a Fulbright Scholar in New Zealand, looking at the effects of hazard area designation on property values, on developing measures of risk and vulnerability to multiple hazards, and looking at warning systems and responses in Slovenia. Of course, much of my work has taken place in the United States, addressing these same issues. All of these examples share similar characteristics: they address real problems affecting an area, but always undertaken in the context of a strong conceptual framework. This is probably one of the most important elements of the education of an applied geographer—the ability to address a problem or issue at

a location, but at the same time, to understand and incorporate a conceptual or theoretical foundation that allows for consideration of how the issue relates to other places or other times. To achieve this, students need to be exposed to the skills and techniques needed to analyze a problem, but also to coursework that addresses relevant geographic foundations. The topics of concern will change over time and from place to place, so it is critical that geographers understand how to approach a problem, no matter what that problem is.

My experiences have also shown the importance of collaboration. My career has been strengthened by long-term professional collaborations with colleagues, most notably Graham Tobin at the University of South Florida, and Eve Gruntfest at the University of Colorado, Colorado Springs. These relationships have resulted in publications, grant proposals, conference sessions, and, in the case of the Applied Geography Conference, whole conferences. These are the products that have resulted, and there is no doubt in my mind that the products are much stronger and have had a bigger impact because of the collaborations. Our individual ideas have developed and evolved over time, but they have been transformed by our interactions. We have seen the field of natural hazards change in its theoretical underpinnings. Indeed, the publication I mentioned earlier that had an early influence on my work (White, 1974), has been criticized as having an American approach to understanding perception and ignoring the context in which others develop perceptions. We have since come to recognize the context in which people develop perceptions and make decisions, and our work has incorporated this (see Montz & Tobin, 2006 for an example). This happens in individual work, as well, but it is through collaboration that ideas can be shared and developed fully.

Another critical component of the education of an applied geographer is having venues in which to share ideas, approaches, and results. I was fortunate to have studied at three institutions that valued application, and to have peers and professors who provided opportunities for such discussion and development. I continue to have that at Binghamton. Another important venue for this is conferences, and, in particular the Applied Geography Conferences, now in its 30th year. Not only do these conferences provide a venue for geographers in academia, government, and business to come together, but they also are student-friendly. With respect to the former, the conferences have sessions devoted to different areas within applied geography, including business geography, physical geography, environmental issues, and geographic techniques, to mention only a few. Recent business geography sessions have focused on what a curriculum for business geography should consist of as well as work being done by geographers in the retail industry. Recent environmental sessions have centered on development

issues, environmental equity, and the use of remote sensing to document land use change. These conferences are small enough for students to present their work and receive feedback from practitioners and academics, as well as to meet and interact with geographers working outside of academia. In addition, these conferences provide an opportunity for geographers to learn about the important work of others who apply their geographic background to problem solving. Further, the publications emanating from the Applied Geography Conferences provide a record of topics that have interested applied geographers over time, ranging from the first (Frazier, 1979) to the most recent (Harrington & Harrington, 2006; http://www.appliedgeog.binghamton.edu).

My interest in and passion for addressing real world problems have only gotten stronger as my career has evolved. I have been fortunate to have been mentored by individuals who share this attitude and who believe, as I do, that geographers have a responsibility to apply their knowledge and skills to the betterment of society. I am not convinced that a set curriculum can do this. There is little doubt that geographers need and traditionally have received a mix of courses that variously emphasize techniques, skills, theory, methods, knowledge, and approaches. The skills I tried desperately to master in my cartography courses, to little avail I must admit, are of little value to me now with GIS so widely available. However, the approach and ideas that were taught continue to have salience today.

Geographers have a great deal to offer in the public and private sectors, as the other essays in this volume show. Training others to be successful applied geographers requires strong mentoring, an appreciation by both the mentor(s) and the student for the contributions of others (including those outside of geography), and an understanding of the foundations required to evolve with the field and the problems to be faced. Binghamton University, then, has been the hub of my activities; an institution that has allowed me to grow and learn while participating in my love of applied geography. I have been very fortunate; my academic career has been successful because of many different paths and influences on my life, not least being those wonderful mentors, and most of all, of course, Gilbert White.

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