

Pixelating Policy:
Visualizing Issue Transformation In Real and Virtual Worlds

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(ABSTRACT)

This study seeks to identify and examine issue transformation in public policies, and to understand the relationship between issue transformation and policy change. The focus for this investigation, the information resources management (IRM) policy subsystem, is examined as a 28-year case study, concluding at the end of 2002. Study results are documented textually, and visually in an exploratory, "virtual reality-based" Policy World.

This study examines the questions: "In what ways are the core issues underlying public policies transformed over time, and what is the relationship between issue transformation and policy change?" Using the advocacy coalition framework (ACF) for explaining policy change over considerable periods of time, this research identifies and examines the issues over which policy coalitions contend, and seeks to identify issue transformation in the IRM policy subsystem's 28-year history. Augmenting the traditional paper-based dissertation is an exploratory, "virtual reality-based" case study, called "Policy World," that visualizes both the policy subsystem environment and critical elements of the external policy system. Visually depicting the richness, texture, and artifacts of policy activities aids policy learning, and promotes understanding of the dynamic and complex environment of issue transformation and policy change.

In confirming issue transformation, this study contributes to the advocacy coalition framework by detailing the initiation and maturation of a policy subsystem. In demonstrating issue transformation's role as facilitating policy continuity through policy change, this study contributes to policy theory. As a chronology of IRM's issue transformation and policy change, this study documents the rise of IT-enabled governance for public administrators and educators.

Policy World provides an interactive, experiential learning environment for public administration scholars and practitioners wanting substantive knowledge of both policy theory and Federal IRM policies. Public administration literature notes both the need for and the lack of an information resource management component to public administration education. Information visualization concepts are combined with interactive designs and hosting on the World Wide Web, to provide wide access to Policy World and extend educational opportunities in public policy and information resources management wherever desired.

Dedication

To Kathy
your impatience kept me focused;
your patience allowed me to finish;
your love made it worthwhile.

To my mother,
Selma Thomas Toavs
who always hoped I'd be a teacher.

To my father,
Frank Niklaus Toavs
for his wisdom –
“I don't mind you making a mistake,
that's a part of learning.
It's repeating a mistake that I don't like!”

Acknowledgements

On a grey afternoon in the fall of 1995, Ken Pimental was installing the first virtual reality system in the VR Lab of the Information Resources Management College, National Defense University. Dean of the College John Carabello stopped by on his way home to see this new technology that excited several of his faculty members. “What can you do with it?” Carabello asked as Pimental installed specialized hardware and software. “For example, can you create a model of Congress?” Looking up at John Carabello as if he was a bit nuts, Pimental first frowned, then chuckled. “Well, I must admit I’ve never thought about doing *that*, but I see no reason why you couldn’t!” An idea, sparked by that conversation, provided the genesis of this project. Few of my IRMC students, or public administration students for that matter, will take the time to read this dissertation; I hope they will take the time to interact with Policy World’s depiction of information resources management policies.

Many special people have played a part in this project; all of you collectively I thank. A special note of appreciation is due the Chair and members of my dissertation committee. To Dr. Philip Kronenberg, thanks for your patience, insight, and intellect; you’ve been a great teacher, mentor, and friend. Thanks to each of the committee members, Dr. Charles Goodsell, Dr. John Dickey, Dr. Karen Hult, and Dr. Steve Knode, for inspiration and encouragement, especially given the length of time it has taken to craft the idea and create the approaches for visualizing the abstractions of a policy subsystem.

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Note: Individuals interested in Policy World are asked to contact the author via email at toavs@ndu.edu.

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