5-2009

Dramatistic Language in Public Discourse About Water: A Case Study of the Red River Valley of the Upper Midwest

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DRAMATISTIC LANGUAGE IN PUBLIC DISCOURSE ABOUT
WATER: A CASE STUDY OF THE RED RIVER VALLEY
OF THE UPPER MIDWEST

by

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A Dissertation
Submitted to the Graduate Faculty

of the

University of North Dakota
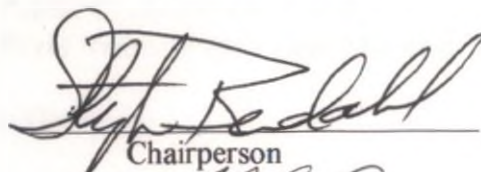
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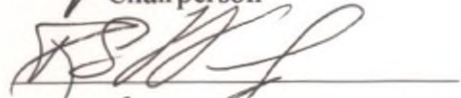
for the degree of

Doctor of Philosophy
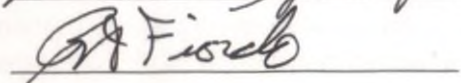
Grand Forks, North Dakota
May
2009

This dissertation, submitted by Taras (Terry) Wm. Lewycky in partial fulfillment of the requirements for the Degree of Doctor of Philosophy from the University of North Dakota, has been read by the Faculty Advisory Committee under whom the work has been done and is hereby approved.

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Chairperson

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This dissertation meets the standards for appearance, conforms to the style and format requirements of the Graduate School of the University of North Dakota, and is hereby approved.

_____
Dean of Graduate School

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April 17, 2008
Date

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ACKNOWLEDGEMENTS

I owe a debt of gratitude to the many individuals who participated freely with their time and comments in the various focus groups that provided the narrative data for analysis. Without your kind contribution this would not have been possible.
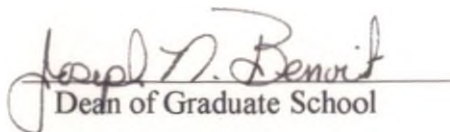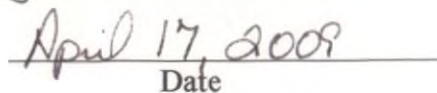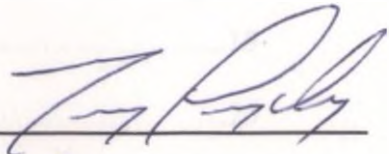
A very special thank you to my advisor and committee chair Dr. Stephen Rendahl who was always able to find the patience and provide the time for input, direction and encouragement. Similarly, I would like to thank the members of my committee, Dr. Richard Fiordo, Dr. James Mochoruk, Dr. Richard Shafer and Dr. Robert Wood for providing much appreciated insight and feedback.

A particular thank you to Mr. Reid Dickie for his encouragement, assistance, and support in all aspect of this dissertation. His participation in the focus group process, assistance in transcribing and coding, and final editing and critique were invaluable to the process and eventual outcome.

Finally, I would like to thank my wife Julie Haluszynski and my daughters Samantha and Jenna. Each contributed to the transcribing, editing and formatting of this document. Their acceptance and support for the program and this project provided an environment of stability.

Thanks to all.   Terry Lewycky
                                                                       Winnipeg, 2008

ABSTRACT

This study explored the use of dramatistic and repetitive language in public discussion about water within the bioregion of the Red River Valley of the Upper Midwest. With the benefit of Ernest Bormann's communication theory of symbolic convergence, theme and linguistic content analysis was applied to focus group narrative to explore the existence of a unified rhetorical vision within the region and to specifically identify possible language used in the understanding of that vision. The study is intended to complement our understanding of messaging language used in framing regional water resource communications and management issues.

The research includes an examination of the academic literature on community and resource definition, theories of hegemony, rhetorical vision and language priming, as well as ideas of hydraulic empires and community engagement in public policy. Applied research included the collection of narrative data from seven community focus groups and a triangulation process of theme and word count analysis. Manual coding identified primary themes in the discussions while content analysis of repetitive word use confirmed those themes and provided repetitive word comparison with keywords from local media articles, NGO/NFP web sites and government news releases. The study concluded with an analysis of select and key repetitive words by theme and individual session. The results of this case study identify definite common themes and consistent dramatistic and repetitive language used when discussing water in the Red River Valley... an area historically impacted by a natural water resource.

While participants found the river to be synonymous with thoughts of water, they also saw water as abundant and manageable that is either alive and in motion (flowing, melting, flooding) or dead and polluted (quality, nonrenewable, scarce). The research suggests that a gap may exist between the language used by the public in discourse about water and that used by the media, interest groups and government. This study also provides a functional and efficient mechanism for testing *hot button* language use in other environmental and resource issues. The findings will be of benefit in understanding and selecting messaging language for use in framing public resource policy issues to encourage public awareness and engagement in an increasingly cluttered media environment of sound bites and flash images.

CHAPTER ONE

INTRODUCTION

Increased concerns over the quality and depletion of natural resources are changing long established attitudes and perceptions about the use of those resources. With growing awareness of environmental degradation and the finite nature of our planet's assets, public interest and policy positions on ownership, protection, sale and transfer of natural resources, including fresh water, are shifting. The intense marketing of bottled drinking water has made us *tap defectors* while our public utilities struggle to maintain service and credibility. As governments and environmental interests advocate conservation and resource stewardship, agriculture and industry are promoting increased use and consumption. In a new environmentally sustainable economy we are adopting green credits as a currency and a new type of eco-friendly language for use in changing social networks and advocacy communities. In this type of dynamic information environment, there are many competing visions and contradictory messages about renewable and nonrenewable resources such as water.

Public communication and education about issues related to the management of water resources are being recognized as valuable operational tools for both public policy development and resource commercialization. Local, municipal, state and provincial governments, non-government/not-for-profit organizations (NGO/NFPs), and special interest groups all recognize the need for and benefits of proactive communication to

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promote and encourage public awareness and participation in the development of water resource policies. Increasingly government, public service and advocacy agencies use the public communication system to inform, warn and protect, build lobby groups, establish support networks and encourage participation and political feedback. Corporations have also recognized that advance communication and citizen consultation are essential components of any water sale, development or commercialization project (Feachem, 1980). Increased awareness of climate change has also precipitated an outcry for more transparency, consultation and efficient engagement where projects affect water resources within or near the community (Duffy & Omwenga, 2002). As communities search for new ways to develop and protect the use of their water resources, they must also find appropriate language and different ways of communicating to encourage public interest in these resources (Walesh, 1999).

It is increasingly difficult to break through the clutter of information to attract public attention, interest and involvement in understanding water issues and providing input into resource policy. Managing or selling a resource or convincing an audience to abstain from the use or disposal of that resource requires effective communication (Huntington Brown-Schwalenberg, Frost, Fernandez-Gimenez, Norton, & Rosenberg, 2002). The specific language used to frame policy issues, the audiences they attract and the apparatus and mechanisms established to encourage input and participation will define the nature and type of engagement and dialogue established within the community.

This study will explore shared, geographic or culturally imprinted *hot button* language used by individuals and groups in discussing water and water related issues in

the Red River Valley of the Upper Midwest. The project will identify the various themes and language that may exist in chained stories and discussions about common experiences related to water. It is hoped these themes will also converge into a consistent rhetorical form or vision used throughout the region when discussing water. Examples of rhetorical visions include the themes, images and meaning we associate when we hear of 9/11, Love Canal, or Three-Mile Island. This study will assess media use preferences and the consistency of language use about water between the media and public discourse in various locations throughout the Red River Valley. The intent of this analysis will be to assist in understanding the language used in the creation of a common regional vision and the implications of this understanding on the selection of future issue framing or messaging language used in local or regional water related public advocacy and education campaigns.

The communication theory of symbolic convergence and the use of dramatic themes and language in group discussion about shared experiences forms the foundation of this research project. As developed by Ernest Bormann in the early 1970s, this theory suggests that a group or community forms meanings, emotions, values and motives for action through the dialogue or rhetoric they create in making sense of common experiences. Bormann, using the earlier work of Robert Bales and Kenneth Burke on tension release and dramatism in small group discussions, measured the degree of connection between language, as developed and expressed through stories, jokes and metaphors, and the level of social cohesion within the group (Griffin, 2006). His symbolic convergence theory (SCT) maintained that "sharing of group fantasies creates a symbolic convergence" (Bormann, 1996, p. 5). It is through this process of symbolic

convergence that individuals build a sense of community or group solidarity and consciousness, which motivates and guides the group and the actions of the group members (Frey & Sunwolf, 2004). It is the chaining of this dramatistic mode of language as repeated in various dramatic scenes and themes that can be extended, or physically broadcast by the media, to create a larger rhetorical form or vision encompassing an entire community or geographic area.

This study is interested in the relationship that may exist between chained stories and language about a predominant resource such as water and a theory of group solidarity and convergence with a common rhetorical vision. The themes and stories about local natural resources (such as water, oil, coal, timber and minerals) frame the public policy environment, economic development history and regional image of much of North America. From authors such as K.A.Wittfogel (1957) who suggested the idea of hydraulic empires linked with hegemonic belief systems, to others like Joel Garreau (1981) who defined specific regions within North America by their natural resources, economic dependencies and life-style values and characteristics, we have many North American examples of regional identity and rhetorical vision. We have all seen the images and heard the language, stories and legends of the oil-field roughneck, Appalachian coal miner, New England fisher, Great Plains cowboy and prairie farmer.

Recently dramatic themes, chaining language and concepts of rhetorical vision have been explored by marketing experts like Dr. Clotaire Rapaille (2006) who suggests that the cultural imprints we form from our emotional and experiential influences imprint a type of "culture code" on how we relate to different products and services. The imprinted meaning of words creates unconscious associations (Rapaille, 2006). Similarly,

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the Republican Party pollster Frank Luntz (2004) in his recent investigation of American attitudes toward water and environmental communication, suggests that the meaning of words are shaped and shaded by the regional biases, life experiences, assumptions and prejudices of those who receive them. Dr. Luntz has gained notoriety by finding the most effective *words that work* in political rhetoric. It was Luntz who suggested to the Bush administration to use the term *climate change* instead of *global warming* and to replace the term *estate tax* with *death tax*. The empirical study of priming and messaging language, as researched by John Bargh (1996) also suggests that the strategic planting of certain dramatistic or hot button words can influence people's actions.

This is expanded upon in the work of Dr. George Lakoff (2006) in re-framing how we talk about public policy issues. Public policy models such as Debra Stone's (1989) view of the role of causal stories and Baumgartener and Jones's (2002) theory on focusing events have added to a growing interest in the language and influencing of public policy. In each case the authors have attempted to explore the relationship between the imaginative and culturally imprinted stories and language we use and the attitude or perception we may maintain toward a specific resource, product or issue.

The study is also of intense interest to this researcher, who as a private consultant, has worked on water awareness campaigns in different parts of the world. He presently lives in one area of the region while teaching and studying in another location of the region. The research is based on an appreciation that effective communication about water and water-related issues will be an increasing priority in the 21st century. As conflicts over availability, access and disposal of water increase, understanding the perceptions we hold and the language we use to discuss and negotiate regional resource

commodities will be of growing importance in a resource-scarce economy of the future. As demand for clean, fresh water increases and the availability decreases, we must learn the language of water.

Statement of Purpose

This study will use applied research to explore dramatic themes and shared, regional or culturally imprinted dramatistic language used by groups and communities in discussing water in the Red River Valley of the Upper Midwest. It is hoped this will further assist in understanding a possible rhetorical vision that may exist about water within the region, and the implications that may have in selecting future messaging language for use in public information and education about water related issues. The research will be directed by the following three questions that emerge from the literature review:

Research Question 1 (RQ1): What themes emerge in discussions about water and water related issues in the Red River Valley?

Research Question 2 (RQ2): What chained or dramatistic language exists within these Red River Valley themes?

Research Question 3 (RQ3): Does that language chain between public narrative, private dialogue in group discussion and our personal thoughts and impressions?

While much scholarly research exists about public information and environmental communication, little is known about the specific framing or messaging language of resources such as water. No formal research has been done on the existence of dramatistic or thematic language, on either side of the international border, in discussing water and water management issues in the Red River Valley of the Upper Midwest.

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Study Benefits

It is anticipated that this study will increase the breadth of literature on environmental communications and our understanding of regional and dramatistic language about resources. Whether we are guided by public narrative of owned media and interest organizations, the private conversations and dialogue of individuals or the old adage of *scratching others where we itch*, identifying hot button language that ignite public interest and engagement is a critical first step to any campaign. Results from this study may help government and advocacy organizations improve communication strategy research and find more effective messaging language to frame public policy issues and encourage community interest and participation. The study can also provide a functional and efficient research mechanism for identifying and testing language hot buttons on environmental and resource issues. Identifying more effective language for presenting issues and improving the quality of public information and communication campaigns in an increasingly cluttered media environment of web hits, sound bytes and flash images is the goal of this project.

This investigation will not make conclusive statements about the existence and nature of correct messaging language, but will identify priorities for additional research and speculate about the type of message language needed in a rapidly changing media environment. In order to examine the nature of themes and language and to assist with interpretation of the results, this research will confine its examination to focus groups conducted using a method described by Cragan and Shields (1981). Demographics compared in this study are age, gender, residency, and ethnicity.

Research Location

The research is restricted to the Red River Valley bioregion which has a defined

existence and dependency on a predominant natural resource of river water. The specific

geographic area under examination stretches 550 miles (885 km) from Breckenridge,

Minnesota north to Lake Winnipeg, Manitoba, providing an urban and rural population

mix, as well as a cross-border and cross-cultural environment (see map Appendix A).

This predominantly agricultural area is exposed, alternatively, to an overabundance of

water and a severe lack of water depending on the season. The area has experienced both

floods and droughts that have attracted local controversy and international attention.

Local issues such as dike expansion in the city of Grand Forks, North Dakota, water

diversion from Devil's Lake, North Dakota into Canada, and chemical and waste

pollution of ground water within the area of the Red River all reflect a dynamic water-

related public issue policy environment. The region also supports a diversity of opinion

with numerous active environmental and special interest groups, advocacy organizations,

community newspapers and radio stations.

Chapter II contains a comprehensive review of the literature, including literature

examining community and resource definition, theories of hegemony, rhetorical vision

and language priming, as well as ideas on community engagement and public policy.

Chapter III describes the method and limitations of this particular research design,

the population and selection of subjects, focus group procedures for collecting the

narrative data and both levels of data analysis. In Chapter IV, the results of the study are

presented. Chapter V summarizes the research and offers recommendations based on the

results including possible implications for future research.

CHAPTER TWO

LITERATURE REVIEW

The ocean of available reference material about water includes the history of water and conflict (Gleick, 1993), books about the chemical and technical language of water (Carlyle, 1984) and even literature on the hidden messages we can find within water itself (Emoto, 2004). The literary world has used water as a subject of novels and as a backdrop for stories of romance, conflict and intrigue (Moorehead, 1962). Poets have praised the merits and sound of water with waves, splashes and trickles (Merrill, 1962). Musicians from the Sons of the Pioneers *Cool Water* (1941) to Simon and Garfunkel *Bridge over Troubled Water* (1970) have rhapsodized about water. Painters and photographers have creatively captured the images and reflections of water. Science has recognized water and its chemical components as a basic compound of life, while religion talks of water and its mythical cleansing character (Falkenmark, 1990).

The vast amount of research and literature on the subject of water encourages investigation into its numerous mythologies, its changing definition and its narrative use within the public sphere. To that end, this literature review seeks to link modern definitions of community, the language communities use to describe their water experiences and the potential for using that language to improve communication about public policy issues relating to water.

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Specifically, this study will search for themes and language in chained stories and discussions about water in the Red River Valley. It is hoped these themes will identify a consistent rhetorical form or vision used throughout the region when discussing water. The literature review spawned the following questions which the study applies specifically to the Red River Valley: (RQ1) what themes emerge in discussions about water and water related issues, (RQ2) what chained or dramatistic language exists within these themes, and (RQ3) does that language chain between public narrative, private dialogue in small groups and our personal thoughts and impressions?

Areas of Inquiry

In arriving at those questions, the literature review addresses four areas of inquiry: 1) an examination of the academic literature on definitions and understanding of community and community resources; 2) the concept of the public sphere and theories of language use, symbolic convergence, rhetorical vision and priming language; 3) regional and cultural coding including a brief look at the notion of hydraulic empires and research conducted on media narrative and language use, and 4) the impact of language and communication on community engagement and public policy. The chapter ends with reflections on the actual history of the Red River.

Community

Water binds us all and challenges us to respect it as a world community resource and to find ways of using and sharing it cooperatively and peacefully. The discussion of water, as a shared resource, starts with a very general definition of the concept of community and of our understanding of the genesis and meanings of concepts like renewable, nonrenewable and the idea of community resource.

The notion of community, in its classical sense, first formally appeared in the social sciences with Ferdinand Toennies's theoretical essay *Gemeinschaft* and *Gesellschaft* (community and society) in 1887 (Brint, 2001). The binary opposition that Toennies revealed in evolutionary terms was between *Gemeinschaft* (community), a realm where people remained united in spite of all separating factors, and *Gesellschaft* (society), a space where people are separated in spite of all unifying factors. This dichotomy has formed the basis for our discussion about community for the past 100 years.

Defining community took on extreme importance in the early 1900s as social scientists tried to understand cycles of migration and immigration and started studying communities in terms of residency, networks and mobility. Brint (2001) claims it was Durkheim who first attempted to extract a more precise and narrowly defined concept of community. Durkheim saw community, not as a social structure or physical entity, but as a set of variable properties of human interaction (Brint, 2001). Various schools of thought mapped this social transformation through residency, networks and mobility to show that these structures were expressions of a meaningful social world constructed by interactions.

While numerous schools of thought and definitions of community have existed, three major lines of inquiry and study have persevered: 1) the community studies tradition or the study of physical places; 2) the elective community, such as: a) gamblers or devotees of subcultures within the community and, b) those who elect to actively participate; and 3) the comparative study of the structural characteristics of community (Brint, 2001).   Though some physical, place-based parameters of community may be

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needed in addressing legal and jurisdictional issues of resource management, there is also

a need to address and communicate with an *issue community* of self-interested

association. Understanding community in terms of natural groupings that summarize the

multiple relationships among its members allows for the existence of numerous sub-

communities, interest and association clusters or matrixes within a given radius (Young

& Larson, 1965). This matrix model of community provides a framework to understand

that groups involved in advancing causes and issues about resources in the community

may be more important than groups involved in the actual ownership of the resource. Our

operational definition of community as it relates to resource management

communications will include many sub-communities, social networks and associations of

interest.

<center>*Water Resource Communication*</center>

These networks, associations and interest groups have traditionally talked about

and defined water in technical or scientific terms as either renewable and replaceable or

non-renewable and non-replaceable. The implications of an overabundance or lack of

water is understood in measurements of volume, while cleanliness or impurity is

conveyed in a scientific jargon of chemical properties in parts per thousand. This

traditional form of ecological knowledge (TEK) and the technical information and insight

it offers is of limited use in stimulating general public interest. While technical language

may define the parameters and give meaning to terms like renewable or non-useable, it

does little to define how we talk about water or stimulate interest and engagement in the

issues of water.

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In their 2002 article on the use of workshops as a means of improving communication between traditional and scientific knowledge, Huntington et al., concede that most work to date has examined documentation and other methods of recording and disseminating statistical and scientific information rather than how to exchange information. As Katz (2003) further suggests in his article, "Leadership through Communication", the need for clear and understandable non-technical language is important at all levels of the communication process. Assuring effective internal communication about water management issues must be an integral part of an organization's communication strategy.

The ability to effectively generate and integrate scientific information with traditional knowledge, for the purpose of public communication, is expanded in a variety of articles in the *Journal of the American Water Resource Association*. In his article *DAD is out, POP is in*, S. G. Walesh (1999) suggests that the two major challenges facing water professionals are not only to find solutions to increasingly complicated water resource issues, but also to effectively interact with the public on these issues. The traditional use of technical language in a decide-announce-defend (DAD) approach is no longer appropriate given the public's growing understanding of water science and political action (Walesh, 1999). The more progressive and inclusive public-owns-project (POP) approach has become more acceptable and effective. Developing a public interaction program predicated on a POP approach and composed of three basic objectives: 1) demonstrating awareness; 2) gathering supplemental data and information and; 3) building a base of support, is critical to any water resources project (Walesh, 1999).

Moorhouse and Elliff (2002) further pursued the idea in their Texas case-study where they recommend the two goals of the public process as taking planning information out to the public and of providing a format for bringing the public opinion back to the planners and administrators. The overall goal was to encourage public input throughout the planning process that would facilitate the development of a water management plan acceptable to the public (Moorhouse & Elliff, 2002).

Social Learning

As the public takes an increasing interest in the environment, and its use and abuse, we are rejecting old clichés and moving away from a technical language of replaceable or non-replaceable, to a new definition of what is acceptable or not acceptable to the community. This approach of integrating traditional knowledge with scientific information to encourage social learning and public input is further explored in experimental projects conducted to explore the impact of information and communications in group agreement and strategies on water demands conducted by Tisdell, Ward and Capon (2004). Their experiment had participants acting as farmers faced with monthly water demands, uncertain rainfall and possible crop losses. The experiment measured individual and collective decision-making on water use issues by assessing costs against benefits (Tisdell et al., 2004).

The process of social learning that usually precedes collective decision-making is pursued in depth by Pahl-Wostl and Hare (2002) in their HarmoniCOP project. They developed a framework for social learning about resource management that could be described as combining content management with social involvement processes to achieve both technical and relational outcomes (Pahl-Wostl & Hare, 2004). By using a

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model of participatory agent-based social simulation, the actors assist in developing the model that is eventually used to promote social learning, public opinion and subsequent decision-making and strategy planning.

If community is defined as place, then participants with specific interests, their interrelationships, knowledge acquisition and the process of how they arrived at their goals suggest a further area of necessary investigation. The study now moves to the public sphere and how participant information is communicated and used.

The Public Sphere

Now that some boundaries and motivations of community have been identified, our inquiry turns to how communities are provided the information they need to make informed decisions and policy. Pahl-Wostl and Hare's model of participatory agency, combining content management with social involvement, moves our study beyond technical language and definition into public engagement and dialogue.

Bittner (1928) suggested it is the experience within the community that not only shapes opinion about the community, but also creates what he refers to as the *social mind*. His early work on understanding mental patterns and their semi-historic cause and evolution gives insight into the concept of culture and subsequently the formation of public opinion within a culture. Bittner suggests "the reality is to be found in the pattern; the totality of attitudes and opinions of the groups in any one community has a peculiar system of arrangement and a special meaning for that community" (p. 100).

It is understanding the role and impact of public dialogue, specifically within the community, and the formation of public opinion and group solidarity from that dialogue that is the basis of this inquiry. It is that process of combining personal experience with

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public dialogue and opinion that forms the perspectives we hold, the attitudes we maintain and the language we subsequently use. It is this area of mass communication theory that shapes the next area of our review.

Jürgen Habermas (1964) suggested that it is only in the public sphere that something approaching public opinion could be formed. He defined the *public sphere* as an area in social life where people can get together and freely discuss and identify societal problems, and through that discussion influence political action. This public sphere provides mediation between the private realm and the sphere of public authority or state. The study of the public sphere centers on the idea of participatory democracy and how public opinion becomes political action. Access to this public sphere must be guaranteed to all individuals because it is with a guarantee of freedom of association and assembly that citizens behave as a public body to freely express and publish their opinions. Habermas goes on to suggest that newspapers, magazines, radio and television are the media of the public sphere.

Public sphere theory maintains that political action is steered by the public sphere and that the only legitimate governments are those that listen to the public sphere. Opinions formed in the public sphere, whether fueled by gossip or filtered by the media, can lead and influence the opinions held by public authority. It is within the language, symbolism and stories of the public sphere that we create group cohesion, understanding and influence.

Symbolic Convergence

How we recognize and influence public opinion or sentiment in the public sphere leads to an examination of hegemonic influence and rhetorical vision. We start with

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Bormann's theory of symbolic convergence and understanding of a rhetorical vision.

Ernest Bormann researched links between the dramatic narrative and imagery that members use in the public sphere and the degree of group consciousness and solidarity they form. His research measured the degree of connection between imaginative language, as expressed in public stories, jokes, and metaphors and the level of social cohesion within the group (Griffin, 2006). Symbolic Convergence Theory (SCT) emerged in the 1970s as a theory that brought together both rhetorical humanistic assumptions and social-scientific assumptions in explaining the appearance of shared group consciousness. The theory explores the messaging process by which people socially interact, communicate, share reality using the quantitative method of fantasy theme analysis in small group settings where the starting point is not the speaker, the audience, the channel nor the situation but essentially *the message.*

Bormann, drawing from the work of Robert Bales on *show of tension release* argued that the message and language of dramatistic form is measurable (Jackson, 2000). It was Kenneth Burke in his earlier work on literary criticism who suggested that the message in most social interaction and communication is basically a form of drama made up of five recurring elements: act, scene, agent, agency and purpose (Griffin, 2006). However, it was Bormann who measured the ratio and intensity between elements of that *dramatic pentad* in small group discussions. This use of a pentad to define a dramatic scene, also suggested to Burke that language was only a mode of symbolic action, or a strategic, motivated response to a specific situation (Burke, 1966). It was Bormann that realized those dramatic scenes chained the fantasy themes that emerged allowing researchers to study specific communication contexts (e.g., interpersonal situations,

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speaker and audience) for the origination, chaining (spread), or mere presence of fantasy (Olufowolte, 2006).

As a social scientist, Bormann measured the increased energy within the group, the upbeat tempo in the conversation and common responses to the imagery. Whatever the theme, Bormann believed that by sharing common fantasies, a collection of individuals is transformed into a cohesive group. The theory maintains that "sharing of group fantasies create symbolic convergence" (Bormann, 1996, p. 5). The fantasies that Bormann refers to contain themes that, through narrative repetition, become a fantasy type, a general dramatization which group members can use (Griffin, 2006). Fantasy themes like experiencing a specific event or seeing a similar phenomenon are more detailed than fantasy types and are used when groups are just starting to interact and find shared meaning. Fantasy types are generally greater abstractions that use several concrete fantasy themes and exist when shared meaning is taken for granted (Bormann, 1995). Through this process of sharing fantasies a symbolic convergence occurs with individuals building a sense of community or group consciousness which motivates and guides the group and the actions of the group members (Frey & Sunwolf, 2004).

When the same set of integrated fantasy themes is voiced and discussed repeatedly across many groups, Bormann describes this as a rhetorical vision or a composite drama that draws group members into a common symbolic reality. Unlike Groupthink, where members may share a similar background and may be insulated from outside opinions and influences, the concept of rhetorical vision moves symbolic convergence theory beyond its original small group parameters into broader regional, national or even international context. The work of Habermas and Bormann prompts the

initial inquiry of this study resulting in Research Question #1 – what shared themes exist

within the Red River Valley when discussions focus on water and related issues?

Cultural Imprinting

A coherent rhetorical vision can be spread and reinforced to the broader

community through group interaction and regular media messages. Often an entire master

script of shared experience and understanding can be triggered by a single code word,

slogan, or nonverbal symbol that recalls a vision or event. Imprint examples such as 9/11,

evil doers or fast food trigger immediate images. Cloutier Rapaille in *The Culture Code*

(2006) refers to this master script as, "The combination of the experience and its

accompanying emotion creates something known widely as an imprint. Once an imprint

occurs, it strongly conditions our thought process and shapes our future actions. Each

imprint helps make us more of who we are. The combination of imprints define us"

(Rapaille, 2006 p.6). Once this experiential or cultural imprint occurs, it conditions our

thought process and inevitably shapes our language. These imprints create the

unconscious meaning we apply to things, including products, natural resources or

countries. Rapaille's applied technique for understanding fantasy types and cultural

imprints is consistent with research on consumer hot buttons referred to in advertising

studies.

The applied communication research undertaken by Cragan and Shields (1981)

gives unique insight into this humanistic technique and dramatistic approach to

understanding rhetorical vision. Next, our exploration turns to the consequences of these

shared imprints in rhetorical communities.

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Rhetorical communities come into being when members are bound by a collective consciousness and shared understanding of reality, thus being imprinted with a common shared experience. Membership can be strictly ideological (i.e., unobservable) or formalized through documentation, member ceremonies, or the paying of dues (Bormann, 1996). Bormann is convinced that symbolic convergence explains the meeting-of-minds, where those who participate in a rhetorical vision of shared fantasies through small group discussion eventually constitute a rhetorical community of shared experience.

What Bittner (1928) originally saw as expressions of public opinion in a community could be regarded as regional and social traits or elements of a cultural pattern. It was the interpretation of these types of cultural attributes and understanding their influence on local action that Flinn (1970) looked at in his study of community values and the influence of structural effects on innovativeness. At the time, most consumer research looked at personal attributes and values in understanding the nature of their audience. Flinn, using data originally collected by Everett Rogers and employing three methods of analysis, was able to determine that the analytical structure of values within the community definitely influenced innovativeness (Flinn, 1970). What commercial advertising and marketing saw as hot or cold buttons were not perceived as being necessarily positive or negative, but simply as influences.

Garreau, in his 1981 book *The Nine Nations of North America,* expands on our understanding of these types of cultural or regional traits and features by seeing North America as nine separate regions, or nations, based on their economic and cultural assembly of distinct traits. The Mex-America region of the southern United States

(including California, Arizona and New Mexico) is defined by dependence and reliance on adequate and consistent cycles of water availability and the use of Spanish language. Other areas, such as the Breadbasket (the Midwest states and part of the Canadian prairies), are defined by dependence on agriculture and especially one-crop cereal grain and livestock production. He argues that conventional national and state borders are largely artificial and irrelevant and that his *nations* provide a more accurate way of understanding the true nature of North American society (Garreau, 1981).

<p align="center">*Priming Language*</p>

Once language surrounding an issue is used with a specific intent or to influence or prime a certain fantasy type response and rhetorical vision, it can affect our basic understanding of the issue and possibly sway public opinion. Experiments conducted in the use of priming language include the work of John Bargh et al. (1996), who studied the strategic planting of suggestive words in influencing peoples' actions. After matching some students at New York University with lists of suggestive words like: "bold", "rude", "aggressive", "disturb", and "bother" versus other students who were matched with words like "respect", "consider", "polite", and "yield", Bargh and his colleagues then had the students wait in a hallway to speak to the professor after the exercise. By measuring the time each student waited in the hallway, before leaving in frustration without seeing the professor, with the words that they had been matched with, Bargh concluded that priming language did influence their subsequent action (Bargh et al., 1996).

The pollster Frank Luntz (2004) in his investigation of American attitudes toward water and environmental communication argues that the language we use will also frame

the impression we create. Luntz suggested to the Bush administration to use the term

climate change instead of *global warming* and to replace the term *estate tax* with *death*

tax. Both changes primed and influenced public perception of the issues. As Wood

(2006) points out in his comparative study of environmental policy change, "actors

outside the subsystem can reframe an issue, mobilize support among the previously

apathetic, and draw sufficient attention to the problem to shift the problem into the

macro-political agenda" (p. 2).

Similarly, Mendelsohn's (1947) findings in *Some Reasons Why Information*

Campaigns Can Succeed, recognized that practitioners who created communication

content were generally guided by subjectively derived principles of communications and

that the information campaigns based on these subjectively derived principles were

frequently ineffective (Mendelsohn, 1973). His research identified that publics who are

most apt to respond to mass mediated information messages had a prior interest in the

subject area being presented. Consequently, information directed to this segment of a

potential audience required totally different communication strategies and tactics from

information that was to be disseminated to an audience that was initially indifferent

(Mendelsohn, 1973 p.50). For Mendelsohn, delineating realistic targets along a

continuum ranging from those whose interest in a given subject area is extremely high to

those who literally have no interest in what may be communicated becomes an essential

step in developing effective public information campaigns.

Applying Rapaille's (2006) general methodology in uncovering 'reptilian hot

buttons' and Mendelsohn's (1973) realization of a continuum of interest and apathy in

public communication initiatives related to resource proximity and management, provides

the criteria and guides the assessment of water resource communication for this study. From their endeavours arises Research Question #2 - what chained or dramatistic hot button language exists about water in the Red River Valley?

Now that our study has acknowledged and explored the creation of rhetorical visions and communities with the use of intentional or dramatistic language in creating a shared experience and reality, it moves on to how language becomes regional in its use and understanding. It will look specifically at the language of water as it is understood in various locations and regions.

Regional Language and Water

Whether it is a politician attempting to link, in the public mind, resource values such as water to oil, or lobbyists struggling to grasp environments that are changing as rapidly as the public mood, the use of the media is an effective tool for building a rhetorical vision. Our study aims to discern if and how dramatistic media narratives shape public language.

Media and Narrative

The work of McComas and Shanahan (1999) in *Telling Stories about Global Climate Change* provide insight into the theory of cyclical patterns in media coverage and measuring the impact of narratives in these issue cycles. Their work based on content analysis of the *New York Times* and *Washington Post* from 1980-1995 shows how the media construct narratives about environmental issues and how these narratives may influence attention cycles. They conclude that a theory of cyclical media attention for environmental issues needs to account for and address more than the qualities of the issues themselves. Narrative factors in the media play a role in how attention to

environmental issues is constructed.

Dramatic considerations often guide media coverage of environmental issues. Greenberg, Sandman, Sachsman, and Salomone (1989) found that television network coverage of environmental risks was more often driven by the dramatic value of the story than by the actual risk of the environmental problem. For environmental issues, a narrative approach would hold that humans imbue environmental issues with meaning through the stories they tell. Environmental issues, as discussed in the public forum, therefore are subject to narrative considerations.

Wilkins and Patterson (1991) found thematic decisions influence media interest in an environmental issue. Their analysis of newspaper coverage of global climate change in 1987 and 1988 showed a shift from a science-oriented to a policy-oriented framework; in turn, they argue that global warming eventually disappeared from the media's agenda because no clear political symbol was attached to it.

What emerges from this research is the importance of narrative drama to the construction of news stories about environmental issues. How those stories can impact the rhetorical community and specifically the public policy community are of special interest. Our inquiry will now look for specific examples related to water and media and the interrelationship of the two in public policy development.

Water and Media Narrative

Kristen Cockerill (2000) undertook similar content analysis research to McComas and Shanahan (1999) in her dissertation, *Words and deeds: Assessing print media language influences on public perception and water management policy decisions.* Realizing that the interaction among print media language, scientific information and

policy development was not well understood, she provides a case study assessment of the connection between news language, public perception and water policy decisions. Using data from the Albuquerque, NM water supply and the 1993 Upper Mississippi River basin flood, she was able to identify a strong correlation between media language and public perception about the issues.

Of specific interest to our research are the assumptions that led her research. These were: 1) policy development relies heavily on public opinion; 2) the minimal scientific knowledge the general public possesses is learned via the mass media and; 3) very specific language use can contribute to how the general public perceives scientific issues and hence can influence their opinions and policy positions (Cockerill, 2000).

As Feachem (1980) suggests, "There is a chasm between what is being written about community participation, mainly by people who have never actually done what it is they are advocating, and what is seen to be necessary, practical and affordable by those charged with managing water supply and sanitation programs" (p.20).

Cockerill's (2000) work suggests that our inquiry into discovering similarities in language can span public narrative, private dialogue in small group discussion and our personal thoughts and impressions. It is this interest which predicates our Research Question #3 as it applies to the Red River Valley.

Language and Community Engagement

Public policy scholars have long questioned the role of media narratives, causal stories and focusing events in the formation of agendas for public policy consideration and action. Knowing how communities build agendas, carry them out and evaluate their efficacy - and the messaging language used to achieve all that - can provide real and

substantial benefits to implementing public policy. We now look at the impact of language and communication on community engagement and public policy.

Baumgartner and Jones (2002) elaborated on their previous theory of punctuated equilibrium where the balance of power between interest groups remains relatively stable over long periods, then is punctuated by relatively sudden shifts in public understanding, thus changing the balance of power on the issue. It may be a specific focusing event, like a flood or drought that shifts negative feedback to positive feedback in a short period. Prolonged media focus on a negative message can impact the policy image.

Applying post-modern constructivism, Schneider and Ingram's (1993) theory of social construction argues that there is no objective reality; and labels are constantly constructed and are malleable. They suggest that we understand real situations as existing because people agree to behave as if they exist or to follow certain conventional rules as mediated by ideas and those ideas in turn are created, changed and fought over in politics. Political actors use narrative story lines and symbolic devices to manipulate so-called issue characteristics, while making it appear as a simple description of facts.

Deborah Stone (1989) examined the effect of causal stories on the formation of policy agendas. How people tell stories about how problems are caused using symbols, numbers and stories about causes is an important part of the persuasive process and important to the choice of solutions that will fix the problem. Stone reflects on an old adage in political science that suggests difficult conditions only become problems when people come to see them as caused by human actions and amenable to human intervention. Problem definition is a process of image making, where the images fundamentally attribute cause, blame and responsibility. As she points out, one strand of

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thinking in policy agenda literature deals precisely with the deliberate use of language and symbols as a way of identifying this association and getting issues onto the public agenda.

From the symbolic world of language and images the literature now moves to a more democratic perspective of community decision-making by suggesting who and what actually influences the type of issues that make it on the agenda of decision-makers within a community. While causal stories move situations intellectually from the realm of fate to the realm of human action, they are also the key requirements in moving conditions into the *systemic agenda* or the set of issues up for general discussion in a polity.

Community Agendas

The level of interest and opinion within the community, in the form of participation and civic engagement, has long been recognized as a valuable approach to promoting public policy. South, Fairfax, and Green (2005) identify a number of differing, but not necessarily competing, rationales for the involvement of communities and the wider public in resource management and planning issues. From a rights-based perspective, linked to the notion of social justice, communities and individuals are seen as having a right to participate in determining priorities and action (Lasker & Weiss, 2003).

Applying those rights, community involvement can be regarded as essential to the democratization of access and management ensuring local accountability for services. Other rationales focus on community involvement in the assessment, prioritization and targeting of service delivery more effectively (South et al., 2005). Most essentially,

public participation is still defined as the process of engaging stakeholders, who will be most affected by a particular activity, in influencing the outcome of that activity (Duffy & Omwenga, 2002). Recent national policy directives in both the United Kingdom and United States have been in support of greater community involvement (South et al., 2005). Increasing the number of people who take part in public consultation and community engagement is now regarded by many as a desirable aim and objective of public policy (May, 2006).

However, in practice, community involvement and active participation still remains a complex and contested concept. This complexity creates significant practical and methodological challenges as to how it can be evaluated and what indicators can be used to measure progress. As a method and practice, community involvement encompasses a huge range of participatory activities, which differ in purpose and nature (South et al., 2005). These can include activities such as involvement in consultation events, participating in local surveys and needs assessment, or action through internet blogs, representation on decision-making bodies and in democratic forums.

The classic theory of community participation, or the Arnstein "ladder of participation", recognizes a power dimension and that the nature, and possibly the amount of power possessed by the people receiving services, changes. These evolutionary steps on the ladder from non-participation through degrees of tokenism to actual citizen power, reflect different elements of control on the ladder (May, 2006).

Other approaches to the same issue use different metaphors. The work of Crase, Dollery and Wallis (2005) provides a very practical insight into community consultation in public policy in the Murray-Darling basin of Australia, while John May (2006)

introduces us to ascending ladders, and schematic models of stars and triangles as a different approach to modeling community engagement. Moving different elements from an *hierarchical or ladder type* model or perspective, where participants ascend to different levels, to a *star type* model, with star points and valleys, not only recognizes the discontinuous nature of communication between agencies and publics, but may link participation directly to the managerial needs of public officials (May, 2006). The final or *triangle of engagement* model suggested by May (2007) focuses on the participants instead of the motivations or objectives of the practitioner agencies and organizations. It postulates that there are different ways or levels for the public to participate and each requires a different degree of engagement moving from the base up to the apex of the triangle - the higher up the triangle the greater the demand on peoples time and energy and the fewer participants (May, 2007). The *usual suspects* becomes May's reference for those who have the time and energy to move up the triangle of engagement on a particular issue. It is for this reason that the usual suspects should be cherished and respected for the time they devote (May, 2007). Sharp (2003) also provides a three point assessment for identifying direct participation and real community involvement. The question becomes one of how do we enlarge the pool of community activists.

Building on Social Capital

The Economic and Social Research Council of Australia looked at what motivates people to participate in community issues and found that around 80% were recruited by people they knew or by their social networks (May, 2007). Building social capital through how we connect with friends, neighbors and strangers becomes an important element in how we engage with the community. Social capital is usually understood to

embody various dimensions including norms of reciprocity, interpersonal trust, solidarity, and cooperation. They all seem to depend on social networks and civic engagement (Viswanath, Steele, & Finnegan, 2006). Viswanath et al. (2006) looked at the impact of social capital on message recognition in media. While they concluded that community size and the degree of differences influenced interaction among people and groups, they were unable to determine the precise relationship or the effect of this relationship on media message recall and its impact in developing further social capital within the community (Viswanath et al., 2006).

Others, such as Healy, Hampshire and Ayres (2004), looked beyond the local by studying the effect of institutions in developing social capital. While suggesting social capital is still a much-contested concept, they looked at the role of government, business and institutions in helping to build and advance social capital. Assessing three different models from the neo-classical (advocating little role for government and business in creating social capital) to a communitarian approach (also emphasizes the role of local civic institutions but remains ambivalent about local government) and the synergy approach (relies on local government institutions) they conclude that local network building between family and friends is much more intense than intervention from non-local institutions (Healy, Hampshire & Ayres, 2004).

Measuring and Assessing Community Involvement

It is difficult, because of the diverse dimensions of involvement and participation in building community, to define, measure or assess community involvement adequately. There are very few examples of good evaluation frameworks and indicators for use by public agencies. However, organizations must be able to monitor their actions and

measure the quality of their performance to ensure that they are effectively listening to and working with local communities and service users. Developing effective parameters and assessment tools for evaluating community involvement and creating social capital has become a priority as more public input is demanded in local policy issues.

The work of South and colleagues (2005) developed a set of benchmarks for community involvement including influence, inclusiveness, communication and capacity. Using pilot studies to test against these benchmarks the authors came up with a measurement framework tool called *Well-Connected*. This practical measurement tool contains specific measures to help organizations identify gaps in their strategic approach to community involvement. While concerns about *tokenism* are frequently expressed when assessing real community involvement, the *Well-Connected* tool provides a scoring system and criteria to allow a comprehensive assessment of practices across many different dimensions of community involvement.

While most research has looked at the characteristics and interpersonal relationship between decision-makers within a political process, authors like Barth and Johnson (1959) have postulated that it may be the content of the issue that describes the structures of community influence. While different types of issues may be selective of different types of leaders, it may also be suggested that not all issues come to the attention of the most influential decision-makers (Barth & Johnson, 1959). They conclude that the structure of the community influence system and the nature of the participants who share in the policy process, may vary with the different types of issues facing a community at any given time. The logic of this conclusion leads the authors into developing a typology of community issues and the eventual impact on decision-making

(Barth & Johnson, 1959). The various dimensions of an issue will then predicate whether it makes it onto the agenda and just what priority of action decision-makers may take. Deciding that an issue is sufficiently important to expend time and money to do a communication and public education initiative is dependent on other agenda items and priorities.

Predicting the eventual outcome of an issue will also have an impact on the level of attention and participation generated in its preliminary stages. While public opinion polling may provide some indication of the level of interest in a specific issue within the community, other models exist which will help to gauge the degree of interest or action required to promote or discourage an issue. The Miller-Form theory suggests that it is the combined social force of three factors which bring about a community decision on a general issue. Hanson (1959) summarizes these factors as: 1) the position of the institutional power structure; 2) the power arrangement or alignment within the community and; 3) the top influential solidarity and activity.

Fitzsimmon and Ferb (1977) take the discussion further by suggesting a community attitude assessment scale or an indicator to identify the level of community concern on issues. They suggest that the key concern of policy-makers is the assessment of whether programs and projects are responsive, relevant and efficient in meeting the community needs (Fitzsimmon & Ferb, 1977). The use of primary data like polling research and secondary data such as demographic information and data on program areas will assist decision-makers in understanding community attitudes toward issues. They suggest a basic operational assumption: people will form their attitudes toward the

community and its capability in meeting their needs based upon their experience in that community (Fitzsimmon & Ferb, 1977).

Although theoreticians such as Gramsci, Baudrillard and Foucault all dealt with cultural hegemony and power relations that exist within certain communities and social institutions, it was the publication of *Oriental Despotism* by Karl Wittfogel (1957) that first postulated a comprehensive theory of a *hydraulic empire* or hydraulic despotism as a government structure. As a hydraulic empire, power was maintained through exclusive control over access to water. The concept arises through the need for flood control and irrigation, which requires central coordination and a specialized bureaucracy. The idea can be generalized to cover any power structure or relationship maintained by exclusive control of a basic resource needed to live. Wittfogel, similar to Gramsci, understood this power and control to be a combination of force and consent. The notion of hydraulic empire is presented in our review as the far end of a continuum in the process of community decision-making, however, while difficult to suggest in a democratic polity it cannot be dismissed because of the need for central control and coordination in times of water management crisis.

Provoked by the need to identify and measure the relationships between social capital, dramatistic language and community agendas, as suggested by the work of Schneider & Ingram, Stone et al, this study will probe for relationships that can be identified and measured between themes of water in the Red River Valley.

Local History

Our literature review concludes with a brief look at some of the limited information available on the actual history of the Red River and bioregion. While there is

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much technical and geological information available on the Red River and its tributaries (Carlyle, 1984), as well as personal accounts and diaries of life around the river, specifically on floods that have occurred within the valley, there is no comprehensive history of the river and its settlements. Governments have generally been responsible for producing individual community histories and economic and technical profiles related to agriculture and recreation within the valley. One of the best and most comprehensive publication's about the river itself is Fred Bill's (1947) history of navigation and transportation on the Red River from 1857 to 1887. The book is a delightful read that chronicles the origin, evolution and demise of river transportation from Fargo, North Dakota to Winnipeg, Manitoba.

Summary

The use of religious, technical or scientific language in discussing issues related to water has established the parameters and meaning of terms like renewable or non-useable. However, as the public takes an increasing interest in the environment, and its use and abuse, it is rejecting old clichés and assumptions. As we move from traditional ecological knowledge (TEK) and information about water and water resources, we acquire a better understanding of how cultural and regional language can better break through media clutter to engage public interest and action.

This literature review has constructed an argument that began by examining the idea and boundaries of what we consider community and how we have defined renewable and nonrenewable community resources. It then moved on to understanding how we can influence the group vision and diverse opinion of that community by applying specific, often subtle, intent to language.

The transition into a more cross-cultural and hegemonic selection of language is further developed in understanding communication theories of rhetorical vision and priming language. While the literature has long recognized the role of the media in the public sphere and how media narrative and language can influence opinion and attitudes, we now have additional research on how culture and regional language influence public attitudes.

Reviewing very specific and contemporary research on the creation of group consciousness, solidarity and action led our literature review into an understanding of the public sphere and the use of causal stories, media narrative and priming language to encourage public policy engagement and action. The review ends by looking at how we measure public engagement and contribution.

The literature review has introduced the three research questions under investigation in this study.

Research Question 1 (RQ1): What themes emerge in discussions about water and water related issues in the Red River Valley?

Research Question 2 (RQ2): What chained or dramatistic language exists within these Red River Valley themes?

Research Question 3 (RQ3): Does that language chain between public narrative, private dialogue in small group discussion and our personal thoughts and impressions?

While not specific to this study, it is hoped this research can also assist in identifying an effective and inexpensive research mechanism for understanding and testing hot button language about environmental and resource issues at a local or regional level. This final area of interest in finding the *words that work* and the language we use to

frame the issues is an expanding area of social psychology and market research.

Several specific questions and discussion probes will be included in the actual applied research to guide and expand the discussion into broader areas including: 1) personal experiences with water, 2) natural disasters, 3) water management issues and 4) policy participation and involvement. Questioning will include: general top of mind attitudes toward water resources, personal memories and experiences, family history, legends, level of policy issue involvement (passive, active) and position on water management issues (positive, negative, critical, supportive). These session questions will stimulate the qualitative research in identifying the existence of dramatistic themes and subsequent dramatistic language that may exist within those themes.

In Chapter Three, the steps the researcher took to gather the data and the manner in which the data was analyzed are presented.

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CHAPTER THREE:

METHODS, SOURCES AND DEFINITIONS

To answer the research questions identified through the examination of literature, applied communication research will include the collection of narrative data from seven community focus groups and a triangulation process of theme and word count analysis. Manual narrative coding will identify major themes in the discussions while content analysis of repetitive word use will confirm those themes and provide keyword comparisons with local media and interest group narratives. No previous research has demonstrated the existence of specific language or regional themes related to the way we talk about water in the valley.

Three specific areas of the applied research are now discussed: the sample, the procedure and the analysis of the research. The sample section gives an in-depth description of the participants in the study. The procedures section explains definitions and how the sample was selected and the focus groups conducted. Lastly, the analysis gives an explanation of the method of analysis of the resulting focus group narrative.

Participants

The four to six participants in each session were selected by the researcher with the cooperation and assistance of numerous organizations within the bioregion of the Red River Valley of the Upper Midwest. The study region spanned an area from Fargo,

North Dakota in the south to Selkirk, Manitoba, Canada in the north and involved members of various types of communities including urban and rural dwellers, corporate and community interest groups and Canadian and U.S. citizens. The sampling, a self-selective *snow-ball* strategy involved an original e-mail request to local councils, libraries, schools, NGO/NFP organizations, government offices and media outlets within the region (see Map Appendix A) for referral of possible focus group participants. Telephone and e-mail solicitations (see Appendix B) were then sent to the referrals. Those who responded and were able to attend on a designated evening participated. An eligibility requirement for inclusion in the focus groups was that all participants were over the age of 18 and had lived in the region for at least 4 years. No incentives or monetary compensation was offered to participants of the study and all participants signed the University of North Dakota IRB release (see Appendix C).

Sample

On a post session participant survey, participants provided some brief demographic and lifestyle information. All focus group participants had lived in the Valley for at least four years and came from very different social, demographic and ethnic backgrounds. Of the 31 participants, 11 were female and 20 were male (see Table 1). Participants ranged in age from 23 to 70 years old. Twenty of the 31 participants were over 50 with 10 under and one age not provided. While it was difficult to recruit participants in certain locations with cold calls and no remuneration for their time, the prevalence of older participants was both due to availability and beneficial as they could relate more stories and experiences about water.

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Table 1. Focus Group Participant Gender.

Focus Group/Session	Percentage/Total			
	Males		Female	
	%	n	%	n
Morris	50	2	50	2
Winnipeg	66.6	4	33.4	2
Grand Forks	66.6	4	33.4	2
Selkirk	83.3	5	16.7	1
Fargo	75	3	25	1
Grafton	40	2	60	3
Total	64.5	20	35.5	11

In the broad category of "*Additional Personal Information Provided*", (see Table 2) 12 participants stated they were involved in public policy issues while 17 indicated they were not involved in public policy issues in their community. Participation in local community groups and organizations was split equally between those involved and those with no affiliation. Twenty-five participants indicated that they had been directly affected by water issues and six had not. Twenty-five considered themselves spiritual or religious. There were no specific characteristic idiosyncrasies or anomalies related to location.

Table 2. Focus Group Participant Profile.

Focus Group/ Session	Are you active in Public Policy Issues ?		Have you ever been directly affected by water issues?		Do you Considered yourself Religious or Spiritual	
	Yes	No	Yes	No	Yes	No
Morris	2	2	4	0	3	1
Winnipeg	5	1	5	1	4	1
Grand Forks	1	5	4	2	6	0
Selkirk	3	3	6	0	6	0
Fargo	n/a	3	3	1	3	1
Grafton	1	4	3	2	3	2
Total	12 (40%)	18 (60 %)	25 (80.6%)	6 (19.4%)	25 (83.3%)	5 (16.7%)

The header "Survey Question Response" spans the three question columns.

Note. n/a no answer

To further our participant psychlographic profile, of the 31 participants 14 regularly drank bottled water and 18 believed water was a renewable resource and all 31 thought themselves to be environmentally aware (see Table 3). While of limited validity it is interesting to note the consumption of bottled water is consistent with ratios in the general public and the fact that participants considered themselves environmentally aware in all sessions and on both sides of the international border

Table 3. Focus Group Participant Profile Part B.

Focus Group/ Session	Survey Question Response					
	Consider Yourself Environmentally Aware		Do You Drink Bottled Water Regularly		Do you Consider Water a Renewable or Non-Renewable Resource	
	Yes	No	Yes	No	Renewable	Non-Renewable
Morris	4		2	2	3	1
Winnipeg	6		2	4	3	2
Grand Forks	6		3	3	5	1
Selkirk	6		3	3	2	3
Fargo	4		2	2	2	2
Grafton	5		2	3	3	2
Total	31	0	14 (45%)	17 (55%)	18 (62 %)	11 (38 %)

The participants were asked about their media use preference as it related to both the information they get about local water management issues and the information they get about the water they use daily. While they could identify more than one media source for each issue, the majority identified local newspaper, radio and TV plus the internet as their major sources of information. Friends, neighbors and family were also identified as a major source of information with schools and libraries as the least used source of information. (See Tables 4 and 5).

Table 4. Media Preference (local water management issues).

Where do you get most of your information about local water management issues?	Morris	Wpg.	G.F.	Selkirk	Fargo	Grafton	Total
Local Newspaper	✓✓	✓✓✓✓	✓✓✓✓✓	✓✓	✓✓	✓✓	16
Local TV/ Radio	✓	✓✓✓✓	✓✓✓	✓✓✓	✓✓✓	✓✓	16
Library/ School	✓			✓			2
Internet/ Web sites	✓✓✓	✓✓✓	✓✓✓✓	✓✓✓✓			14
Public meetings	✓✓	✓	✓	✓✓		✓✓	8
Government representatives(elected, un-elected/administrative brochures)	✓✓	✓✓		✓✓✓	✓	✓	9
Friends, neighbors and family	✓✓✓	✓✓✓	✓✓✓	✓✓✓	✓	✓✓✓	16
Other (commercial retailers, interest groups, advocacy groups)	✓		✓	✓✓✓	✓	✓	7

✓ Indicates number of participants in each group that selected this media. Participants could select more than one.

Table 5. Media Preference (personal water use).

Where do you get most of your information about the water you use every daily ?	Morris	Wpg.	G.F.	Selkirk	Fargo	Grafton	Total
Local Newspaper	✓	✓✓✓✓	✓✓✓✓✓	✓✓	✓✓	✓✓✓✓	18
Local TV / Radio		✓✓✓	✓✓	✓✓	✓✓	✓✓✓	12
Library/ School							
National Media		✓✓✓		✓✓	✓		6
Internet/ Web sites	✓	✓✓✓	✓✓	✓✓✓			9
Public meetings	✓	✓	✓	✓	✓	✓✓✓	8
Government representatives(elected, un-elected/administrative brochures)	✓			✓	✓	✓	3
Friends, neighbors, family	✓	✓	✓✓✓	✓	✓	✓✓	9
Other (commercial retailers, interest groups, advocacy groups)	✓	✓		✓✓		✓	5

✓ Indicates number of participants in each group that selected this media.

Many participants expressed appreciation at the conclusion of each group for the opportunity to participate and talk about water. Comments on the post session survey about the actual focus group included: "enjoyed the discussion", "great fun", "very congenial, informative", "provocative, good discussion", "thank you good discussion and insights", "interesting discussion", "interesting, entertaining, enlightening", "group was interesting, time went fast", "good session on a very important topic", and "fun". On the post session survey, participants also identified the following popular songs that came to mind when thinking about water: *Singing in the Rain (2), Raindrops Keep, Falling On My Head, Down by the Riverside, Big Yellow Taxi, Red River Valley (2), Cool Clear Water (3), Rollin' Down the River, Ferry Across the Mersey, Rainy Days and Mondays, Row, Row your Boat, Moon River, From a Distance, Yellow Submarine, Summertime, Jack & Jill, Beach Boys (2),*

In general, participants in the focus group session represented a qualitative cross section of the population. However, the study was limited in the number of focus groups and total participants. While six different focus group locations, all in close proximity to the Red River, provided adequate data for some qualitative generalizations, another four to six groups located further from the Red River may have provided sufficient quantitative data to make some valid assumptions between communities. This sampling scenario is a definite limitation to the generalization of the study and to what can be learned, however it was all that could be managed with the limited resources of the study. Age demographics were also skewed to over 50, as older participants were generally available to volunteer their time and had more experiences and stories to share. It is interesting to note all participants considered themselves environmentally aware and there were no outstanding or especially noticeable trends in media use preference.

Procedure

Seven community focus groups with a total of 31 participants, arranged in advance by the researcher, were held in six separate communities within the Red River Valley of the Upper Mid-West (see Appendix A). One and one-half to two-hour group sessions were held in the communities of Fargo, Grand Forks, and Grafton in North Dakota, and Morris, Winnipeg and Selkirk in Manitoba between March 26 and May 8, 2008. This time frame was chosen because it represented the most stable time of year, before any possible flood or drought, and was when participants were most likely to be able to attend the focus groups.

Validity of the Data

The groups were conducted in six different geographic communities within the bioregion to achieve a level of regional representation. After the first focus group was concluded (March 26, 2008), the researcher and assistant (Mr. Reid Dickie) discussed the responses to the guiding questions. During the second focus group (April 7, 2008), these questions were confirmed and then used consistently to generate group discussion and story chaining for the remaining four groups. The third group (April 21, 2008) was held in the U.S. to assure representation and consistency in technique and approach. The final three groups were concluded over a ten-day period from April 28 to May 8, 2008.

The focus group rooms were always set up with a single boardroom type table large enough to accommodate all the participants. Microphones were set up at each end of the table and the moderator and participants chose random seating around the table to create a small 3 to 6 person group. Once participants were seated, the moderator explained the informed consent sheet and asked participants to sign and to keep a copy

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(see Appendix C). At his home, the researcher retained a copy of the informed consent forms and all the data in a locked cabinet.

The moderator opened each focus group discussion by introducing himself and the research assistant. The moderator welcomed and thanked everyone and helped the participants feel comfortable. The moderator explained that the assistant would not participate in the focus group; the assistant was present only to observe, change tapes and take notes for comparison with the moderator's notes. The moderator explained the purpose of this research and gave an explanation why the participants had been asked to join the focus group. It was emphasized that the discussion was not about discovering issues, airing grievances or finding a consensus but rather about hearing the stories people have about water. Participants were asked to wear a label name card though in many instances the participants knew each other.

The research applied humanistic qualitative research techniques used by Cragan and Shields (1981) in identifying and understanding rhetorical vision in focus group discussions. In qualitative research, many researchers will usually choose an "emic" or "etic" perspective for the purpose of investigation. According to Speziale and Carpenter (2007), the emic point of view is the view of the insider, similar to the researcher being a focus group participant; conversely, the etic viewpoint is that of an outside observer. In this study, the researcher chose an etic perspective, observing and listening carefully to the focus group in order to ask brief questions and stimulate further chaining and discussion of points and ideas.

All groups followed a similar pattern of introduction and unaided recall based on a similar set of guiding questions reviewed by the study's primary investigator (see

Appendix E). The focus groups relied heavily on these guiding questions as sequenced by the moderator to encourage dialogue, maximize group participation and to stimulate and chain discussion between participants in generating narrative data. It was clearly explained that only one person should talk at a time to aid the eventual transcription process, however it was the group discussion that was required. Individual members of the group were encouraged to expand on what everyone else was describing. These open-ended questions were designed to explore outstanding attitudes, perceptions and specific language related to recent communication about specific water resource issues within the Red River Valley.

The moderator began the discussion with a top-of-mind warm-up question asking each participant to identify the first three words that came to mind when they thought of water. This approach gave participants an opportunity to introduce themselves while identifying with each other and feeling more comfortable with the group. It also provided the moderator background information to use in stimulating further group discussion. Participants in the focus groups were then asked questions about their first childhood memories or experiences related to water, memorable episodes or specific experiences related to flood, drought, erosion, pollution, favorite story, legend or biblical/religious references related to water, stories from their families and grandparents about water, specific heartfelt experiences and finally generally perceptions about the taste and quality of water in their experience. At the end of the discussion (usually 1 ½ to 2 hours) the moderator asked each participant to identify three words that come to mind when thinking about the future of water. Each participant also completed a short participant survey at the end of the session (see Appendix D).

To ensure accuracy, with the permission of the participants, all dialogue was audio taped (approximately 11 total hours) and the assistant and moderator took notes. All dialogue was transcribed in an electronic WORD.doc file by two separate and independent transcribers.

Theme Analysis

The transcribed narrative of approximately 130 pages (about 65,000 words) of full text was edited by the researcher to remove moderator questions but to allow benchmark questions and nicknames to remain providing context for the theme coding process. Session names were also changed to remain location-anonymous. Three copies of the remaining readable 80 pages of rich narrative were distributed to the primary researcher (moderator), the research assistant and a coding assistant for subsequent theme coding analysis. In order to obtain coders certified to analyze qualitative data, the primary researcher recruited assistants from the education and consumer research industry.

Strategies suggested by experts in qualitative research were used to ensure that the analysis was systematic and verifiable (Huberman & Miles, 1994). Assessment models by Cragan and Shields (1981) as well as Auerbach and Silverstein (2003) were also used in verifying themes and running content analysis on the final theme matrix.

During this process, notations were made in the margins of the narrative texts. The notations included words or phrases that summarized the contents of each chained story in each section. Next, a review of the notations was completed to identify what appeared to be emerging themes. Based on the assessment of the moderator and research assistant, after just three focus groups, the dialogue and discussions were following definite themes and patterns. Four primary themes were emerging from the focus group

dialogue. These four themes were recurring, repetitive and forceful whether revealed in the action of individual narratives or in total group narratives and chains. An original draft of the emerging themes was given to each coder to review and comment on as to the appropriateness or limitation of the theme to the narrative.

Four "chained out" major themes emerged in how we talk about water. These themes are very consistent with Cragan and Shields 's (1981) three structural dramas of the social, the spiritual and the material. The final theme was simply a theme of fact and prediction.

The first level of analysis involved the identification of stories using Burke's dramatistic pentad as our protocol. The individual sessions all shared similar stories with chained or evolved story plot lines with identifiable scenes, locations or settings, characters (dramatic personae/villain or sanctioning agent/hero), situation plot lines and definite forms of action or issues (positive, negative, neutral). Examples of government authorities directing actions and events with consequences, in specific situations like flood control, were numerous. Though Burke felt that all communication can be understood as a form of drama using the pentad, identification and the guilt-redemption cycle to identify fantasy themes, it was difficult finding each element in each story to suggest definite fantasy themes. The rich narrative data and dramatic themes, that did emerge, were then grouped using color-codes, by the three independent coders, into one of the four pre-identified major themes or categories using what information was available. The coders were instructed to identify any chained stories or dialogue that did not fit into one of the major themes. To maximize inter-coder reliability, the researcher and the qualified assistant researchers crosschecked the samples to ensure the same

themes were emerging for each coder. Identical themes emerged from data coded independently by the primary researcher, the assistant researcher and the assistant coder. These codes were then compared and totaled by the primary researcher (see Table 6. p. 55) The themes were also verified and compared through coder verification, line count, page count and word count.

<div align="center">Content Analysis</div>

In this section, we lay the foundation for the quantitative content analysis and how it is used in this study. According to John Sumser (2001), "We leave tracks . . . as we work our way through life . . . .These are like frozen bits of communication and behavior that can be analyzed to learn about who we are, what we think and believe, what we value, and what we do" (p. 199). Sumser also states, "Content analysis is capable only of discussing content" (p. 200), which is exactly what this study aimed to do: discuss the content of the dialogue about water. To which end, an analytic induction or comparison of similarities and repetition method of content analysis was used.

According to Sumser (2001), an important consideration in content analysis is the framework. He suggests that it is difficult to analyze the latent content or underlying meaning or implications of the message of a text without providing some analytic framework - in essence some system for organizing or making sense of data (p. 204). For the purpose of this study, the framework is that of symbolic convergence and a rhetorical vision.

The second level of language content analysis involved the use of ATLAS-ti linguistic word count software. Various analysis were done through an examination of the word content of the total narrative text from the seven focus groups and 11 hours of

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taped discussion. The rich narrative, organized by major themes, was saved electronically and then run through ATLAS-ti software to provide a specific count for the use of each word. Dramatistic language, for the purpose of this study, was defined as a mode of symbolic action rather than a mode of knowledge (Burke, 1966). The repetitiveness of the words used in each dramatic story provide validation that a motivated and strategic response to a specific situation does exist throughout the region. This can validate the existence of definite themes (scenarios) and also the presence of a rhetorical vision. By collecting the text for analysis in a tangible format, it ensured that that all comments and dialogue would be included in the review.

All the resulting data analysis was then transferred to an Excel software format to facilitate data manipulation, comparisons and graph production. All the focus group narrative mined by the ATLAS.ti program was then edited down to the 700 most recurring words with the following criteria which allowed the data to be more manageable: 1) deleted words mentioned less than five times; 2) deleted proper nouns / names; 3) deleted all pronouns; 4) deleted numbers and abbreviations (yeah, oh, etc.).

Comparative analysis was then run on various combinations of the top 10-15 words in ascending order for the total narrative, prompted top-of-mind words, theme sets and individual focus groups. A third and final level of analysis involved the comparison of these repetitive words against selected dramatic keywords extracted from media articles and NGO/NFP web pages and government news releases.

Summary

In this chapter, five sections were included to provide background and structure for the process that was followed: sample, procedures, data collection, theme and content

analysis techniques. Demographic characteristics were presented in Tables 1-3 to better understand who the individuals were that made up this sample. Additional personal information and media preferences (Tables 4 & 5) were also provided to complete the psychlographic profile. The focus group procedures were outlined in detail and the resulting narrative analysis techniques, involving a triangulation of theme, content and keywords, were identified.

In the next chapter, Chapter IV, the analysis and results are provided.

CHAPTER FOUR

ANALYSIS AND RESULTS

This chapter identifies the results of a data triangulation analysis conducted on the focus group narrative text to answer the three research questions previously outlined. The first level of analysis is a thematic coding of the text for dramatistic stories that have redundant, repetitive and forceful themes. The second level of analysis provides a content analysis through word count results run on the identified theme text. The third and final level of analysis looks at the relationship of media and NGO/NFP keyword narrative to actual group discourse and content. The section regarding Research Question 1 has four subsections in the form of major themes. The section regarding Research Question 2 has two subsections: and Research Question 3 is covered in one section.

Theme Analysis

The primary purpose of the study was to identify themes and language that is used in public discussion about water in the Red River Valley. The study analyzed audiotaped narratives from seven focus group sessions conducted in six separate communities in the Valley region. The tapes were transcribed verbatim and that transcription data was then analyzed "by hand" by the primary researcher and two assistants following thematic analysis methodology developed by Cragan and Shields (1981), Huberman and Miles (1994), Auerback and Silverstein (2003) and Keyton (2006). The questions asked during

the focus group sessions were to generate story chaining and were not directly linked to the research questions. Not every participant responded to every question, however all participants did respond to prompted top-of-mind questions as a technique suggested by Keyton (2006) for comparative purposes. While the interest of the study is in regional water themes and associated dramatistic language, some analysis by individual community focus group or session have also been included. However, due to limited participant numbers in each session or group any assumptions or comparisons between communities will lack validity. The selected participant quotations, included with the results, are actual participant comments taken from group stories.

The research employed an inductive process of comparing data within and across sessions to identify patterns and to compare and contrast new and old data. During this process, notations were made in the margins of the narrative texts similar to techniques recommended by Huberman and Miles (1994). The notations included words or phrases that summarized the contents of each chained story in each section. Next, a review of the notations was completed to identify what appeared to be emerging themes. Based on the assessment of the moderator and research assistant, after just three focus groups, the dialogue and discussions were following definite themes and patterns. Four recurring, repetitive and forceful themes were emerging from the narrative of individuals or in total chained group dialogue. Similar to work done by Auerback and Silverstein (2003), the data was then analyzed and coded by the primary researcher into sub-themes. An original draft of these emerging themes was given to each coder to review and comment on as to the appropriateness or limitation of the themes to the narrative. In order to obtain coders

certified to analyze qualitative data, the primary researcher recruited assistants from the education and consumer research industry.

The transcribed narrative of approximately 130 pages / 65,000 words of full text was edited by the primary researcher to the 80 pages / 47,000 words by removing moderator comments and questions again following a similar methodology provided by Auerback and Silverstein (2003). Certain benchmark questions were allowed to remain to provide context for the dialogue and theme coding process. Session names were also changed to remain location anonymous to the coders. The coders (primary researcher, research assistant and coding assistant) were then asked to read and theme code these 80 edited pages of clean, rich, hard-copy narrative text from the seven group sessions.

The first element of the theme analysis involved identification of the dramatic stories within the narrative using Burke's dramatistic pentad. The individual sessions all shared similar stories with a consistent scene presentation including evolved story plot lines with identifiable scenes, locations or settings, characters (dramatic personae/villain or sanctioning agent/hero), situation plot lines and definite forms of action or issues (positive, negative, neutral) (Cragan and Shields, 1981, p.6). Each story was then pre-assigned a specific color code. Using the Huberman and Miles (1994) method the coders were asked to identify, by the use of a color marker, when they detected a chained story in the narrative with what they considered to be one of the major themes. The coders were also instructed to identify any chained stories or dialogue that did not fit into one of the major coding themes. If possible, they also identified the basic sub-themes they noted in the chained stories. To maximize inter-coder reliability, the researcher and the qualified assistant researchers crosschecked samples to ensure the same themes were

emerging for each coder. A theme was then identified and calculated if two of the three coders agreed on the same chained story and theme, (see Appendix F). Coder noted sub-themes were also starting to emerge.

RQ1: What themes emerge in discussions about water and water related issues in the Red River Valley?

To answer this question, four "chained out" dramatistic discussion themes emerged from the focus group text coded independently by the primary researcher, the assistant researcher and the assistant coder. General themes that began to emerge as important were about: 1) the physical nature and presence of water, 2) emotional human experiences, 3) conflict, control and resolution and, 4) information, data and prediction.

The first three structural dramas (not including data and prediction) were very consistent with what Cragan and Shields (1981) references as, "William James' three types of self: the social, the spiritual and the material" (p.40). Of the 98 separate stories identified, there was total theme agreement by all three coders on 62 (63.3%) of the stories and partial theme agreement by at least two coders on 36 stories.

Table 6. Theme Occurrence and Agreement.

Chained Stories	Theme 1. Physical Presence	Theme 2. Emotional Experience	Theme 3. Control / Resolution	Theme 4. Info / Prediction	Total
All Three Coder Agreement	19	21	20	2	62 (63.3%)
OnlyTwo Coder Agreement	12	10	13	1	36 (36.7%)
Total	31	31	33	3	98

In no instances was there a total disagreement by all the coders on the story or subsequent theme. Also in no instances was a story not associated with a pre-identified theme or was a new theme identified by a story.

While not the most frequent theme, the material or *physical nature and presence of water* was in all cases one of the first themes to emerge. Participant had no difficulty in their description of water in the form of the river, a flood, wells or as snow and ice. The physical presence and in most cases, abundance, was an immediate discussion in all sessions. While sub themes about scarcity, quality (taste), flow, geographic proximity or source and conservation also emerged, it was the abundance of water that seemed to be the recurring story. A sample of participant comments:

> Fargo Participant: *That's one of the biggest memories most people have of water or the river, you say water I think, water and river are kind of synonymous, I don't think water is just an element, whatever, I think more what we can do with it, how we can use it*
>
> Morris Participant: *In 1996, we had a flood as well and in 2006 we had a flood. The two floods differed by less than two inches. In 96, we handed out over a million sandbags and in 2006, we couldn't get rid of even a thousand because nobody needed them. It was a flood of relaxing.... those are the hard realities of people that live in the floodplain today.*
>
> Morris Participant: *It's only been a generation that water has become assumed and accepted as a normal. The little village I grew up in Gretna, I remember when they brought water and sewer into town. Big sign outside of town, this is common for a lot of prairie towns "A town with water".*
>
> Winnipeg Participant: *When I was a kid water to us in south western Manitoba was mostly sloughs and dugouts. You never played in the dugouts. In the springtime, you had the sloughs and you could walk along. It was 4 or 5 feet deep, they warned us we might fall through the ice and of course we ignored that.*
>
> Winnipeg Participant: *There is nothing better than the sound of ice breaking up on the river. I love that sound. Breaking up and crashing. If you are working during the day you miss it but it's a spectacular sound. I love the sound of the ice crashing.*
>
> Selkirk Participant: *Well I work on Lake Winnipeg and we're seeing the big algae blooms now which is being fed and they say by, from what I understand, the*

fertilizers and it's very good for the fish, they're having a hay day out there catching fish, commercial fisherman are doing extremely well

Fargo Participant: *I think the soil is such that it holds water better, you get West and it starts getting a little sandier and lighter and its different. They say even in the 30s these guys never had a bad crop. In the valley, yah, that's what I've heard, they've always had it up, I mean its dry as a bone on top, you go down a bit and there's moisture.*

Winnipeg Participant: *I know other people are concerned about water scarcity but in the Red River Valley I can't get excited about water scarcity. It's the other problem. A hundred miles further west in southwestern Manitoba there is more concern.*

Winnipeg Participant: *Water tastes best when you are really thirsty. It's the situation. If you've been out on a run or something like that a cool glass of water tastes really delicious.*

Grand Forks Participant: *It was accepted as natural it was the course of the year we knew that it was the blizzard of the year get hit by so much and then late thaw, or the thaw, the snow melting and all of a sudden it gets cold again and another blizzard and just how all of a sudden things are melting and since the river flows north you know it just gets this whole on-set of water moving north at the same time and it just hit pretty hard.*

Winnipeg Participant*: My dad came to Manitoba because he heard there was lots of water in Manitoba. That's why I'm raised here. It was strictly a water issue. A dirty 30s issue. We were raised in Manitoba with too much water usually.*

The first theme to consistently emerge dealt with the physical nature or properties of water as either liquid, solid, in motion or stable, too much or too little. There existed a definite sense of Mother nature's overwhelming dominance as a sanctioning agent.

The second predominant theme involved expressions of *emotional human reaction and experience.* It was these stories of individual emotional reaction and experience with water that generally chained the discussion because they were the most personal and emotive. Everyone had a story to share that involved them personally and usually in an emotional situation or reaction. Sub-themes included high anxiety, concern, fear, enjoyment, happiness, good times and fun. Examples of participant comments include:

Morris Participant: *If I shiver, it's because I'm cold from the memory of that trip. We got on the boat finally at the house, went to the road, portage, got into this boat and drove for over an hour to get a mile because it had a 3 or 5 horsepower motor and going against current it took forever and a day. Some splashing.*

Morris Participant: *The memory most vivid for me is the night just a couple of days before we had to leave the farm because of the flood. Dad was loading up the grain in the yard and a thunderstorm moved in and it was lightning and thundering. The auger was running, the atmosphere was very tense because there was a lot of concern and pressure. We were trying to load these horses into the trailer and my Dad was standing there yelling at us, "Just leave them here and let them drown if you can't get them in the trailer". We were determined to get them in.*

Selkirk Participant: *I found a body once in the Assiniboine River, it's really interesting, in the Assiniboine park the river changes quite differently above there, into the forest, it's quite deep. I thought it was a mannequin but it wasn't it was actually a body, poked it with a paddle and knew it was body, called an ambulance.*

Morris Participant: *So I said to my manager Tim we're going to do it this way. The water - if you can't keep it out of the dyke there is just a short time, your vehicles are ready to go, you go in and shut off the power in the chicken barn and within a couple of hours they'll suffocate. (emotional) That's the quickest we could do that. In the pig barn you do the same thing and open the door and let the water in and the baby pigs will die right away and as quick a death as possible. I assisted farmers and they couldn't make a decision and I'd say why not? These are the criteria, the water is coming, they'll die here. I couldn't understand till the water pressure came and I had to make that decision. You can make decisions from the head but when it's your own, you start making them from the heart and those are not good.*

Fargo Participant: *I used to be terrified of thunderstorms and tornadoes. Every time there was a severe storm headed our way I would just freak out. Anyway, I remember being really scared one time that a tornado was coming toward our town. My dad told me that nothing would happen because the town sat in a valley at the fork of two rivers. So when I think of water I think of safety.*

Morris Participant: *I was very angry. A lot of times it was how the media portrayed what was going on. It wasn't real, wasn't accurate, was truthful, wasn't clear about what was really happening and it made me angry.*

Morris Participant: *Not as a springtime anxiety. There are anxieties that are carried over from the 97 experience and everyone who lived thru 97 carries with them a certain level of trauma*

Morris Participant: *That is when you help somebody and take care of somebody, somebody comes back and helps you. Neighbours helping neighbours. It's extremely humbling to ask someone for help but when we are all in the pickle...*

Grafton Participant: *I have a picture of myself in the kitchen at home drinking a glass of cold water, with my mom watching. My parents were very adamant about me drinking lots of water when I would play in the sun. To this day I love the taste of*

water, and know it is good for my health. I also remember mom saying we are lucky to have good clean water because some kids don't.

Morris Participant: *You work yourself into frenzy beforehand; you just go nuts, with the first experience. My grandfather clock, my pictures, do I take what? I only had so much time. I packed up the clothes, I took the toys, my pictures and the clock. I put it in the truck, everything was packed up and I said to hell with it and I closed the door and we left. I felt good because there was nothing there that couldn't be replaced. The things I took could not be replaced. The things I left did not mean anything, they were things we could do without. There is a time to let go and I think I learned that. There is a time to let go. I really learned that.*

The theme of *emotional human experience,* while the easiest to chain in the discussion, covered the entire gambit from intense joy and happiness to immense fear and anxiety. Everyone had an emotional experience and memory about water. The scene and plot lines were clear and detailed. It was the one theme where intense emotions could not be restrained.

The most recurring theme, the third theme was about the social or *conflict, control and resolution* related to water. Participants talked about conflict, control, struggle and resolution. Although not of a personal nature in most cases, there was a constant underlying sub-theme of struggle and a fear of control. Whether with nature, a neighbour, local or national authorities, there was a sense of struggle related to water. Sub-themes like man versus nature, ownership and possession, political conflict and commercialization were predominant. Participant examples include:

Fargo Participant: *So...controlled water is fun but natural water is scary and to be feared.*

Grafton Participant: *Sure without water we could not survive. But that doesn't mean I have to like it. As a Roman Catholic, I use holy water when entering and leaving a church. that doesn't bother me putting it on my forehead but walking through water and getting wet does. To me, water is a nuisance. Considering the majority of Earth is composed of water, its' unbelievable how many suffer without it. Again it becomes a nuisance we have too much, others too little.*

Winnipeg Participant: *We started over 100 years ago, we had to break the soil, we had to conquer nature. Now we recognize we can conquer nature and destroy it but*

now we say we can't destroy it, we gotta protect it. When people first settled this country they were out to conquer nature...the climate.

Winnipeg Participant: *As a kid I remember, I still did it with my daughter when she was growing up, almost using spring melt as an opportunity for backyard engineering to try to drain water out of your yard, what implements cut the best channel into the snow and the water still frozen. Trying to guide the water away from your house, garden, getting rid of it.*

Morris Participant: *Yup and the old saying: whisky's made for drinking and water's made for fighting. We heard that a lot because we've fought a lot about water. And till this day we're still fighting some of the water issue related to the '97 flood.*

Winnipeg Participant: *We have fights in our province over water. Farmers in the spring want to get the water off the fields as quickly as possible and it's not all that unusual for a farmer to get a backhoe and dig a entrench across a road to get the water out. There is also a fight between Manitoba and North Dakota over a road that runs along the border and that's caught up in issue of Devil's Lake. Manitoba promised to put culverts in...*

Winnipeg Participant: *The fear is more that I have not faith in the politicians. That's the real fear but we may not be around when the crunch hits. It'll be too late by then. But no faith that there is a recognition of scarcity of water.*

Morris Participant: *We choose to live here. No one has tied us down stacked us in. We choose to live here. But we know what are our adversities and we know how to handle them. That's because we live on a flat land and we can see it coming. (laughter)*

Winnipeg Participant: *That's more of expression of very clever marketing, more than anything else. I think bottled water is really an expression of a very smart marketing move by a lot of beverage companies because they recognize many people are trying for healthier lifestyles. Maybe juice in a box or water in a bottle. That's really market driven and containerizing that.*

Winnipeg Participant: *There is big debate about whether water should be considered a human right or something people can trade buy and sell. Considering the necessity of water to human life I think there is justified worry for it being turned over to the market but that does open up a valid area of inquiry which is how can we get to be more responsible.*

Winnipeg Participant: *I think it is dangerous when you start selling it to countries because they want to make a profit and just thought of not being able to having tap water, I don't know it kind of scares me. That can happen not necessary in our countries but in a lot of the other countries.*

Fargo Participant: *They built the canal, I think they got as far as 10 miles west of McClusky and that was the end of it because of the politics. .....Washington. Water rights are going to take the future*

Fargo Participant: *No. During the summer we don't have droughts but we have restrictions on how much water we can use, when it's been really dry and really hot for a*

couple of weeks, they have restrictions like you can't water the garden you can only do it twice a week or so or something like that, there's a lot of restrictions on it

Morris Participant: *You are not in control. You are not in control. Events control you ultimately. I'm a control freak so...*

Winnipeg Participant: *There is kind of a vacuum for the government to do something to monitor, manage and regulate the use of water. Perhaps its our democratic duty to say what the heck are you guys doing out there, whether through financial ways or other types of mechanisms. Privatization is becoming an issue. People are saying, here's something we can sell.*

The theme of *conflict, control and resolution,* while a bit more difficult to identify, usually involved some type or degree of direct and immediate action being initiated in direct response to a dire situation. The characters and dramatic personae or sanctioning agents were very recognizable, while the action was harder to determine because of emotions or a lingering sense of anxiety. There was always a sense of conflict whether with nature or other individuals, but in most cases a sense of resolve in the story.

The fourth and final theme that participants raised was simply one of *information, data and prediction.* By quoting statistics or known information and data, stories would chain with participants suggesting actions that were either underway or would possibly happen. Stories with this theme usually involved factual information on construction of road grades, pumping station, floodway expansion, etc. Sub-themes included facts, predictions, projections and plans. It is interesting to note how little factual information and data cam up in the discussions.

Morris Participant: *There are predictions the prairies will be drier and have a major economic effect. That's one prediction.*

Morris Participant: *Yeah. What are the four factors, which the early explorer to the Red River Valley identified a wet spring, wet summer, saturated soil, a lot of snowfall and a quick thaw. Those are almost a guarantee in the Red River Valley.*

Morris Participant: *When I see a snowfall coming and the snow bank in my yard getting bigger and bigger and bigger and I see the plows coming up. I think what the water will do. Will there be a flood this year?*

Winnipeg Participant: *What pops into my head is what we were taught in junior high.. We were taught that three water issues are too much, too little, too polluted.*

Selkirk Participant: *Lake Winnipeg changes its water very quickly it's only, something like 2 or 3 years and its gone, scientists love it because you can drop something at one end and eject it at the other end a short time later Yah, in the space of 2 to 3 years, , some lakes would be 25-30 years. So where does the water go? Well out of Lake Winnipeg every tributary comes in and only one goes out and that's the Nelson River going to Hudson Bay*

Winnipeg Participant: *I think that the farm community has a huge responsibility to control nitrogen and phosphorous and everybody has to do their part and 40% of the phosphorous comes in from the US down the Red River so we have to work in larger sense with the Americans to do that too. I know other people are concerned about water scarcity but in the Red River Valley I can't get excited about water scarcity. It's the other problem.*

Grafton Participant: *I remember when I was about 12 years old and our 6th grade teacher told the class that in 25 years our fresh water supply would run out. So I have always associated water with survival. Our body is 96% water and humans need it for survival and I always in the back of my mind wonder what will happen if the world runs out of water.*

The narrative data revealed a definite consistency between the theme coding done by the three separate and independent coders. Generally, the coders had no difficulty in identifying the presence of a chained story and of the dramatistic theme under discussion. As stated previously in no instance was there total disagreement about a theme. Two themes – (1) physical presence and (2) emotional human experience - occurred almost the same amount (31 occurrences each). It was the discussions of (3) control and resolution that dominated the chained stories at 33 occurrences.
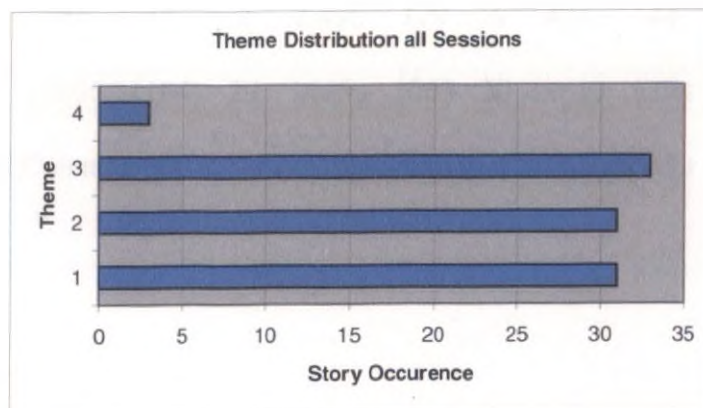

Figure 1. Individual Theme Occurrence / Total Text All Sessions

While independent researcher "hand" coding offered one approach to theme analysis of the total narrative, further quantitative content analysis was also conducted to confirm theme priority. Unlike Cragan and Shields (1981) who developed a Q-sort analysis to further assess their themes, the intent of this study was to only identify themes for the purpose of conducting further discourse analysis in the form of word counts. The following tables further report the occurrence of theme discussion by number of words, lineage and pages devoted to each theme in each group.

Table 7. Comparative Analysis of Individual Theme Occurrence by Word, Line & Page.

Session	#	Theme 1 Physical Nature and Presence			Theme 2 Emotional Experience			Theme 3 Conflict and Resolution			Theme 4 Info, Data and Prediction		
		Word	Line	Pg	Word	Line	Pg	Word	Line	Pg	Word	Line	Pg
Morris	1	1,520	110	3	1,712	120	4	5,210	359	8	323	25	2
Wpg	2	4,020	313	7	1,747	117	4	5,471	403	9	727	56	2
Gr.Forks	3	2,937	219	6	3,850	259	7	3,758	261	7	481	35	2
Selkirk	4	3,534	306	7	4,240	324	8	773	65	2	211	14	1
Fargo	5	1,944	161	4	865	64	3	2,936	242	5			
Grafton	6	731	75	2	2,436	179	4	471	44	2			
Total		14686	1184	29	14850	1063	30	18619	1374	33	1742	130	7

Note: Session #3 combines both focus groups conducted in Grand Forks

Word, line and page counts indicate that in all but the Selkirk and Grafton sessions the majority of discussion measured by word count was about *conflict, control and resolution*. Discussion about *emotional human experience* had a similar word count to *physical nature and presence*. The least discussed theme as identified by coded stories and word count was about *information, data, and projections*. This confirms the original hand coded theme identification. One can conclude that for people living in the Red River Valley there is an underlying and definite theme of *conflict, control and resolution* related to water. This is combined with very strong and intense emotional and physical human experiences that people have with water. Figure 2 provides a visual representation of theme distribution by word count.
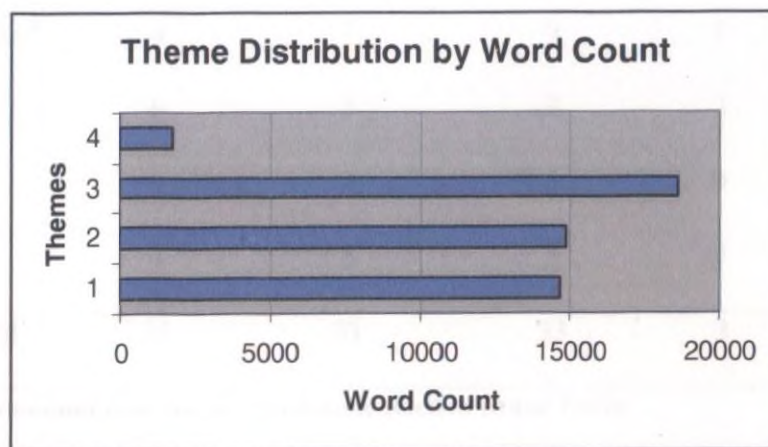

Figure 2. Individual Theme Distribution by Word Count.

Themes: 1) Physical Nature and Presence; 2) Emotional Human Experience; 3) Conflict, Control and Resolution; 4) Information, Data and Prediction

The theme coding data (Table 6 / Appendix F) was also assessed by individual session or focus group (Table 8). Again, it should be noted that due to limited participant numbers in each session any assumptions or comparisons between communities may lack validity. It is total theme occurrence and subsequent word counts within the total region

that are of specific interest to this research. The following information Table 8 provides

numeric information and total theme counts for each session. Figures 3a-f while repeated

information do provide a graphic representation of where certain themes predominated.

This information and the summary that follows is provided as context and support to our

original task.

Table 8. Individual Theme Occurrence by Session.

			Theme		
Focus Group/ Session	1) Physical Presence	2) Emotional Experience	3) Control Resolution	4)Information Prediction	Total
#1 Morris	4	7	6	1	18
#2 Winnipeg	9	4	10	0	23
#3 Grand Forks*	4	7	9	1	21
#4 Selkirk	6	5	2	1	14
#5 Fargo	4	3	3	0	10
#6 Grafton	4	5	3	0	12
Total	31	31	33	3	98

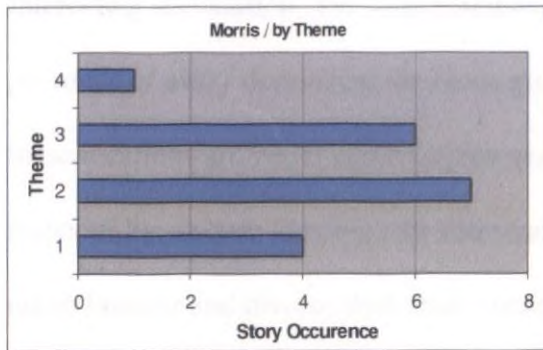* Session #3 combines both focus groups conducted in Grand Forks
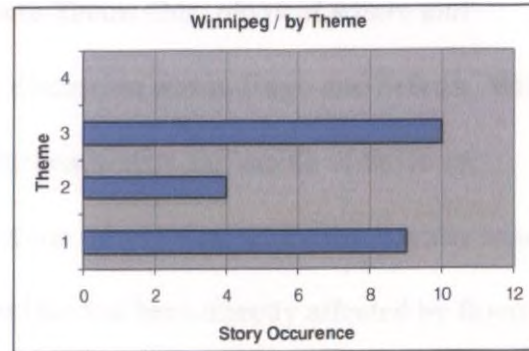
Figure 3a. Theme Occurrence Morris.

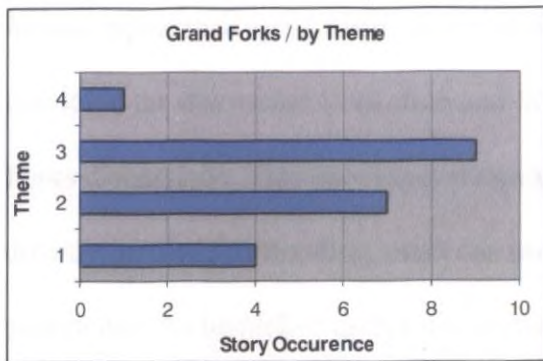Figure 3b. Theme Occurrence Winnipeg.

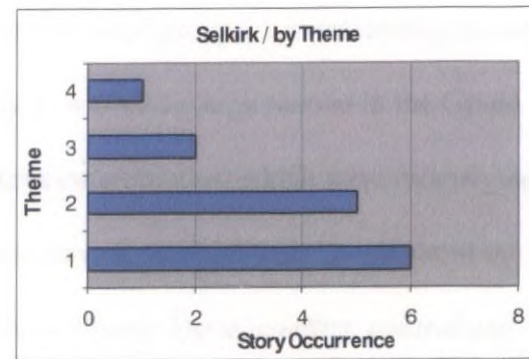Figure 3c. Theme Occurrence Grand Forks.
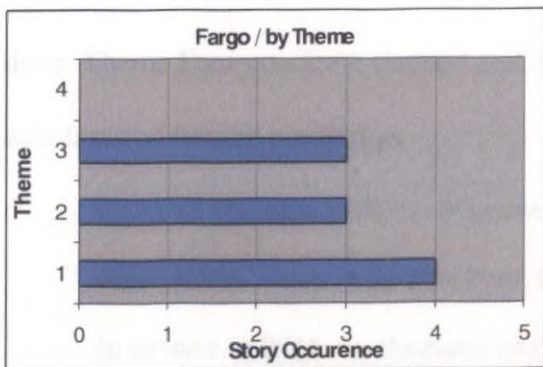

Figure 3d. Theme Occurrence Selkirk.

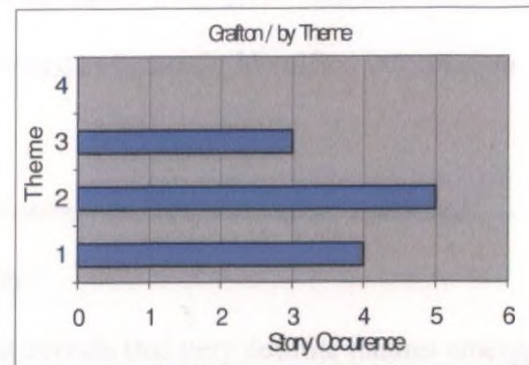Figure 3e. Theme Occurrence Fargo.

Figure 3f. Theme Occurrence Grafton.

Again, it must be emphasized that analysis by session or community may lack validity because of limited individual group participants. It does however provide some interesting speculation. The only sessions where Theme One, *physical nature and presence of water* dominated the focus group discussion was in Fargo and Selkirk. While these locations are larger communities near the headwaters and mouth of the river, respectfully, in both locations the discussion about the physical attributes of water were much broader and diverse than those locations that had been directly affected by floods. In Winnipeg and Grafton where the impact of floods were less of an issue, physical presence and attributes were second most discussed. While Theme Two, *emotional human experience* was a major theme of discussion in all groups, it is interesting to note that it led the discussion in Grafton and Morris. It was also a high second in the Grand Forks discussions. This may suggest that in those communities, which were recently and directly involved in flooding, everyone seems to have a personal story to tell about the experience. As identified earlier discussions about Theme Three: *conflict, control and resolution* dominated in Winnipeg, Grand Forks and Morris (high second), while least discussed in Selkirk and Grafton. Fargo had comparable interest between theme two and three. Theme Four was least chained and discussed as it mainly identified information, data fact and limited prediction.

Research Question 1 (RQ1): What themes emerge in discussions about water and water related issues in the Red River Valley?

In answer to RQ1 our thematic analysis reveals that very definite themes emerge in discussions about water by residents within the Red River Valley. Four repeated and recognizable themes arose from the discussions in the focus groups. Theme One dealt with the physical presence of water that people experience. Theme Two expressed their

emotional responses to water - past, present and future. Theme Three focused on elements of conflict, control and resolution surrounding water issues. Theme Four, largely a by-product of the methodology, expressed information, data and prediction.

Content Analysis: Repetitive Word Use

To further understand how we use certain language, a second level of discourse analysis by word count was performed on the narrative data collected from the seven focus groups. Using ATLAS-ti qualitative data analysis (QDA) linguistic software, a word count of how often certain words occurred within the dialogue was conducted. This QDA program provides similar analysis as Cornell Universities recently released MemeTracker web site, which monitors phrases and language use of media cycles. This provided quantitative data on the number of times each word was used in the total text, and in prompted top of mind responses, within a particular theme or in a specific session similar to protocol suggested by Auerback and Silverstein (2003).

The word count analysis from ATLAS-ti was subsequently transferred to an Excel program to facilitate manipulation and charting of data. For ease in handling the files, which generally included 2,000 - 4,000 words, text management methods also suggested by Auerback and Silverstein, (2003) was used to edit the text by deleting words that appeared less than five times as well as all proper nouns, names, numbers and abbreviations (yeah, oh, etc.) The word water, which was in all cases the most repeated word, was in most cases not included in the data analysis. Some high word count categories were based on groupings of words that were similar, for example, flood, floods, flooding. This edited and final narrative text data was then analyzed to answer the following research question:

Research Question 2 (RQ2): What chained or dramatistic language exists within these themes?

Having identified four basic themes in the narrative text and in order to address RQ2, the analysis continued in search of subsequent dramatistic language through a word count of repetitive word use as suggested and used by Breakwell, Hammond, & Fife-Schaw (1995). Three different assessments were carried out on the narrative:

1. Repetitive Word (noun, verb) Use by Total Text & Prompted Top-of-Mind

2. Repetitive Word (noun, verb) Use by Individual Theme

3. Repetitive Word (noun, verb) Use by Individual Session (for interest only)

1. Repetitive Word Use by Total Text and Prompted Top-of-Mind

The 15 most repeated nouns and verbs were sorted in ascending order from the total narrative text (all sessions / unprompted) (Tables 9a, 10a), for prompted top-of-mind comments at both the start (Tables 9b, 10b) and the conclusion (Tables 9c, 10c) of each session. As mentioned in Chapter 3 the participants were asked at the start of each focus group session to identify the first three *top-of-mind* words that came to mind when thinking about water. At the conclusion of each session, the participants were also asked for the three top-of-mind words that came to mind when thinking about the *future* of water.

Examples of prompted top-of-mind comments at the start of the sessions included:

> Morris: *wet, too much, moving like a river, | flood, quantity, cleanliness, | flood, quality, quantity being too much or too little, | artesian well, wet, waste*

> Winnipeg: *Terrified, precious, deep | Health, scarcity, fear | Added property value, necessity, essence | Clear, deep, polluted | Dangerous, frozen, soothing | Dirty, wet, unpredictable*

> Grand Forks: *sex ,drink, salt water | flood, lead, chlorine | flood, soothing, rhythm |scary, fishing, cleansing | Norway and mountain | wet, fun, peaceful*

> Fargo: *Flood, Snow | Rain | life, recreation, more | clean, scary, wet.*

At the end of each session top-of-mind comments on the future of water included:

Winnipeg: *We were taught that three water issues are too much, too little, too polluted. / Pollution, scarcity and control / I would say scarcity, ownership, control, and pollution. / Political, political, political. / Pollution, necessity, conflict / I thought of violence*

Selkirk: *pollution / good management, future is bright, / globally a major source of conflict, not as optimistic, we're trying late. / concern with shortages, too much flooding, drinking water quality, not that optimistic, I am somewhat fearful of the different waters coming up from the states through the river systems, I'm concerned / I'm optimistic that they are going to clean it up/*

Fargo: *scarce, limiting resource / more demands /more demands / concerns and potential scares of fresh water and the quality*

Grafton: *wells, that chemical thing, diversion / Nature will have it's way, what we want to do all the time and that doesn't always work.*

(In all cases obvious word combinations like flood, flooded and flooding and singular/plural words have been combined.)

Repetitive Nouns

Table 9a. Total Text.   Table 9b. ToM START.   Table 9c. ToM FUTURE.

Total Text All Sessions & Themes (Nouns)			Top of Mind – Start (Nouns)			Top of Mind – Future (Nouns)		
Word	Total #	% of Words	Word	Total #	% of Words	Word	Total #	% of Words
FAMILY	29	0.06%	QUALITY		1.01%	PROFIT		0.55%
TOWN	30	0.06%	SALT		1.01%	EXPLOITATION		0.55%
SNOW	31	0.07%	SCARCITY		1.01%	STATES		0.55%
WELLS	33	0.07%	SNOW		1.01%	VIOLENCE		0.55%
FARM	35	0.07%	VALUE		1.01%	WAR		0.55%
HOME	42	0.09%	WASTE		1.01%	SHORTAGES		0.55%
BOAT	45	0.09%	PROPERTY		1.01%	SOURCE	2	1.09%
SPRING	50	0.11%	RECREATION		1.01%	CONFLICT	2	1.09%
HOUSE	51	0.11%	WELLS		1.01%	CONTROL	2	1.09%
ICE	62	0.13%	FEAR	2	2.02%	QUALITY	2	1.09%
LAKE	91	0.19%	FUN	2	2.02%	WELLS	2	1.09%
FLOOD	121	0.26%	LIFE	2	2.02%	OPTIMISTIC	3	1.64%
TIME	122	0.26%	QUANTITY	2	2.02%	POLITICAL	3	1.64%
PEOPLE	168	0.35%	RAIN	2	2.02%	SCARCE	4	2.19%
RIVER	173	0.37%	FLOOD	7	7.07%	POLLUTION	4	2.19%
Total	1083		Total	26		Total	29	
Total all Words		47371	Total all Words		99	Total all Words		183

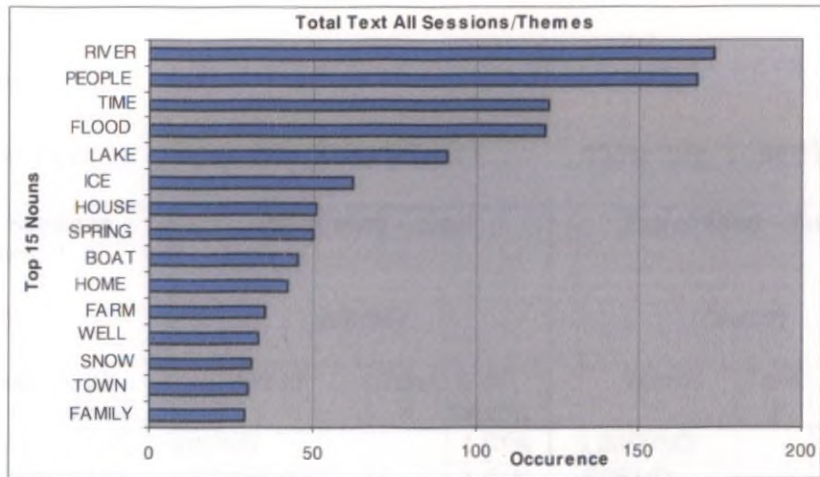Only top of mind words that appeared more than once have been used.

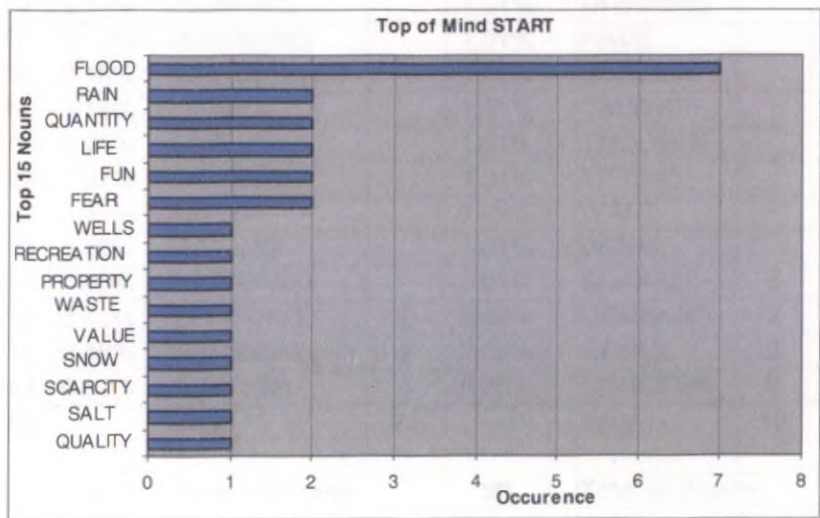Figure 4a. Repetitive Nouns / Total Text All Sessions and Themes.

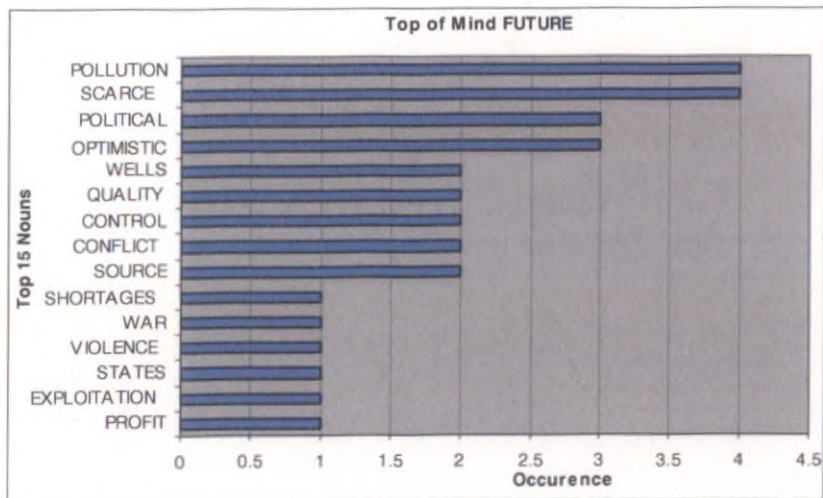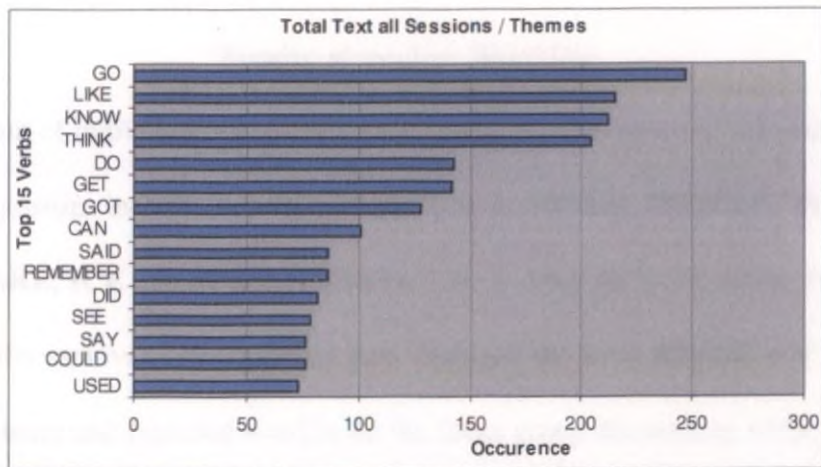Figure 4b. Repetitive Nouns / Top of Mind START.

Figure 4c. Repetitive Nouns / Top of Mind FUTURE.

Table 10a. Total Text.   Table 10b. ToM START.   Table 10c. ToM FUTURE

Total Text All Sessions & Themes (Verbs)			Top of Mind – Start (Verbs)			Top of Mind – Future (Verbs)		
Word	Total #	% all Words	Word	Total #	% all Words	Word	Total #	% all Words
USED	73	0.15%	BEING		1.01%	LIMITING		0.55%
COULD	76	0.16%	CLEANSING		1.01%	SPEND		0.55%
SAY	76	0.16%	DRINK		1.01%	BE		0.55%
SEE	79	0.17%	HUNTING		1.01%	DRINKING		0.55%
DID	82	0.17%	KAYAKING		1.01%	HAVE		0.55%
REMEMBER	86	0.18%	CONCERNED		1.01%	SUSTAIN		0.55%
SAID	86	0.18%	LEAD		1.01%	TAUGHT		0.55%
CAN	101	0.21%	LIKE		1.01%	THOUGHT		0.55%
GOT	128	0.27%	MOVING		1.01%	TRYING		0.55%
GET	142	0.30%	NEED		1.01%	WANT		0.55%
DO	143	0.30%	SAILING		1.01%	WORK		0.55%
THINK	204	0.43%	TERRIFIED		1.01%	SCARES	2	1.09%
KNOW	212	0.45%	DRINKING	2	2.02%	DEMANDS	2	1.09%
LIKE	215	0.45%	SWIMMING	2	2.02%	GOING	2	1.09%
GO	247	0.52%	FISHING	5	5.05%	CONCERN	3	1.64%
Total	1950		Total	21		Total	19	
Total all Words		47371	Total all Words		99	Total all Words		183

Only top of mind words that appeared more than once have been used.

Total Text all Sessions / Themes

Top 15 Verbs (y-axis), Occurence (x-axis: 0, 50, 100, 150, 200, 250, 300)

- GO
- LIKE
- KNOW
- THINK
- DO
- GET
- GOT
- CAN
- SAID
- REMEMBER
- DID
- SEE
- SAY
- COULD
- USED

Figure 5a. Repetitive Verbs / Total Text All Sessions and Themes.

Top of Mind START

Top 15 Verbs (y-axis), Occurence (x-axis: 0, 1, 2, 3, 4, 5, 6)

- FISHING
- SWIMMING
- DRINKING
- TERRIFIED
- SAILING
- NEED
- MOVING
- LIKE
- LEAD
- CONCERN
- KAYAKING
- HUNTING
- DRINK
- CLEANSING
- BEING
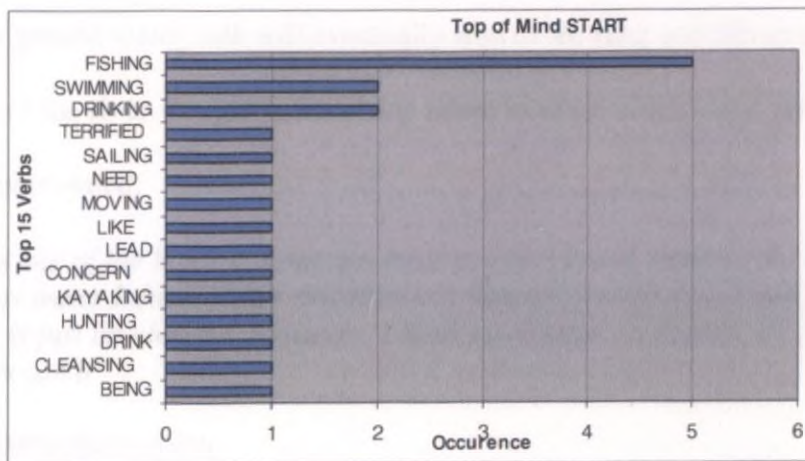
Figure 5b. Repetitive Verbs / Top of Mind START.

Top of Mind FUTURE

Top 15 Verbs (y-axis), Occurence (x-axis: 0, 0.5, 1, 1.5, 2, 2.5, 3, 3.5)

- CONCERN
- GOING
- DEMANDS
- SCARES
- WORK
- WANT
- TRYING
- THOUGHT
- TAUGHT
- SUSTAINABILI
- HAVE
- DRINKING
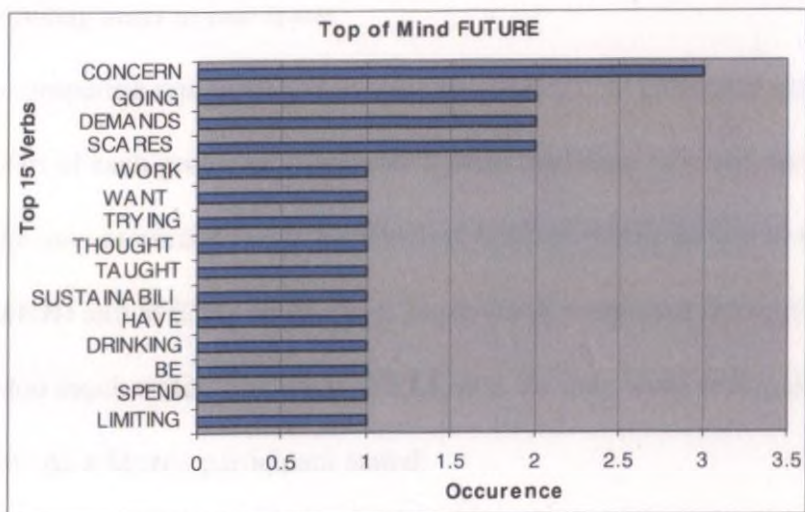- BE
- SPEND
- LIMITING

Figure 5c. Repetitive Verbs / Top of Mind FUTURE.

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Results: Repetitive Word Use

A count of individual nouns repeated throughout the course of the seven focus group sessions include recurring words such as: **RIVER, PEOPLE, TIME, FLOOD, LAKE, ICE** and **SPRING** (Tables 9 a-c.). After the word, water, (which was specifically removed from the final data analysis) the word **RIVER** was the most predominant and repeated word in all the focus group discussions within the valley. No matter the origin of the story about water, whether in the form of ice, snow, well or ground water, talk will eventually lead to the river and life around the ebb and flow of the river. People in the valley relate to water as the river. As one Fargo participant stated:

> *That's one of the biggest memories most people have of water or the river, you say water I think, water and river are kind of synonymous, I don't think water is just an element, whatever, I think more what we can do with it, how we can use it*

A Winnipeg participant states:
> *I feel this responsibility for polluted water, big time. Living in the Red River Valley where you see floods and rainstorms I have no sense of the scarcity of water and it seems to me conserving water in Winnipeg I would almost say it's nonsense. It's an energy issue. The cost of getting water to your house.*

When comparing repetitive words from the total text to prompted top-of-mind words at the start of each group, or when asked about the future of water, the results were interesting. The only recurring words in both total text and prompted top of mind were the words **FLOOD** and **WELL**. In all cases, these words were used in the context of abundance or too much water. The word **WELL** was the only word that ranked inclusion in all three lists. As a Morris participant stated:

> *Gretna had an underground lake, aquifer right under the town. We had a well 14 feet deep. Hard water. You could not pump that well dry. There is plenty of water. That's why those cottonwoods are so tall in Gretna.*

Comparing the repeat rate for the top four nouns in total text with the top four nouns in prompted top of mind words at the start of discussions, we get the following eight words related to the source and influences of water: **RAIN, RIVER, FLOOD, QUANTITY …. PEOPLE, LIFE** and **TIME. POLLUTION, SCARCE, POLITICAL** and **OPTIMISTIC** are the four most repeated nouns from prompted for top of mind when thinking of the future of water. Words like **QUALITY, CONTROL** and **CONFLICT** are also widely used nouns relating to the future of water. While prompted top-of-mind words requested at the start of each session were generally positive and upbeat reflecting water in different forms and fun activities, there was a marked difference from those prompted top-of-mind words asked at the end of each session about the future of water. These words were in most cases very negative and concerning. Concerns of scarcity, quality, pollution, control and conflict dominated. Much of the tension is reflected in comments from two Winnipeg participants:

> *I would agree. I don't think they are in any sense a priority but I would say scarcity, ownership, control, and pollution. Political, political, political. Pollution, necessity and the thing I dread is conflict. I thought of violence then I thought that was too radical to say. We've been talking around it. It's touching on conflict in all the discourse.*

> *Three words for the future. Vulnerable, precarious, disrespect. I see a breakdown in how we access distribute and share water.*

Repetitive verbs from the total text (Table 10 a) do not seem to reflect a definite message or pattern. Verbs like **KNOW, THINK** and **REMEMBER** are more often repeated. Repeat verbs used in prompted top-of-mind at the start of each session (Table 10 b) include: **FISHING, SWIMMING,** and **DRINKING.** Verbs from prompted top-of-mind on the future of water include **CONCERN, GOING, DEMANDS** and **SCARES.** We do find the occasional use of adjectives like **PRECIOUS, CLEAN** and **RENEWABLE** when asked about the future of water.

2. Repetitive Word Use by Individual Theme

Having looked at repetitive word use by total narrative text in comparison to prompted top-of-mind word associations, we now do our second word count assessment of repetitive words by actual themes: 1) physical nature and presence; 2) emotional human experience; 3) conflict, control and resolution; 4) information, data and prediction. Taking the narrative text from each of these chained story themes and subjecting that data to ATLAS-ti resulted in the following information.

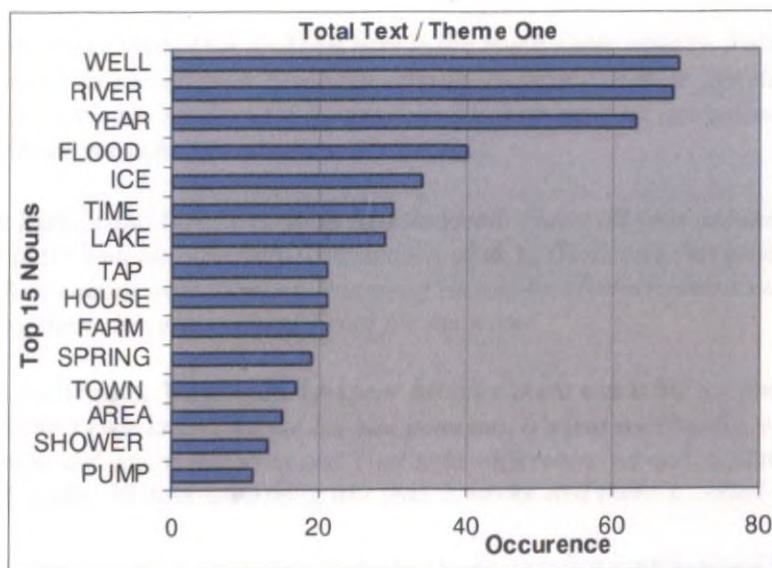**Theme 1: Physical Nature and Presence of Water**

Figure 6. Repetitive Nouns / by Theme 1.

Sub Themes: Stories of abundance, scarcity, quality (taste), physical events and activities, geographic proximity or source identification and conservation.

Word Count Identifiers: well (69), river (68), year (63), flood (40), ice (34), time (30), lake (29), tap (21), house (21), farm (21), spring (19), town (17), area (15), shower (13), pump (11) (Total Words: 14,828)

Quotes:

Fargo Participant: *There's probably, anyone that's lived in Fargo 10 years, if you talk about the **river** they're going to think of **flooding**, right, that's going to be one of the first things that comes to their mind because everyone's been affected by it in some way or another.*

Morris participant: *I remember going to my grandparent's farm in Souris where they had nothing but **well** water and my mother praising the water and we had to go out to the hand pump. We thought that as such an experience. Pumping a pail of water, carrying it in, sitting it on the counter with the ladle and we couldn't drink it because it tasted so much different than our chlorinated Red River water.*

Winnipeg Participant: *Our problem here is too much water usually. Perhaps as citizens of the world we should think about conserving. Everyone do their fair share even though we have too much water in my mind. I feel strongly we are polluting the **lakes** and we have got to be more responsible for that.*

Selkirk Participant: *Oak Hammock, Artesian **well**. Flows all year around. So it's all part of that Gimli because they have artisan **wells** in Gimli and that area up there as well. That's about west 10 miles. Winnipeg Beach, or, Matlock, there's artesian **wells** all along there. Seagrams chose Gimli for the water*

Selkirk Participant: *We flooded last year because there was a big ice jam, and this year you wouldn't even know that the ice had gone out, it's just was hardly, you just didn't even know, did you, it just went out. That's the difference, we had, it jammed for just about 2 weeks, 10 days something like that, 2 weeks, and there's...cried everyday.*

Morris Participant: *Something I've always known but emphasized by the flood just how insignificant we really are in the big scheme of things. The magnitude of this thing and...Where we live we are right in the middle of the biggest expanse and my **house** is an island retreat is right in the middle.*

In Theme One / Physical Nature and Presence of water, the most repeated nouns in descending order were **WELL, RIVER, YEAR, FLOOD, ICE, TIME** and **LAKE**. These words could all be anticipated in a discussion about water and its presence and attributes. Major repeated nouns either referred to source, availability or time. The interest is in the repeated and high use of words like **YEAR** and **TIME**. We identify,

measure and relate to water through common stories based on history and events or natural activities. Whether measured by season or by generation we create common meaning and understanding through positioning in time. The Flood of '97 was a recurring reference.
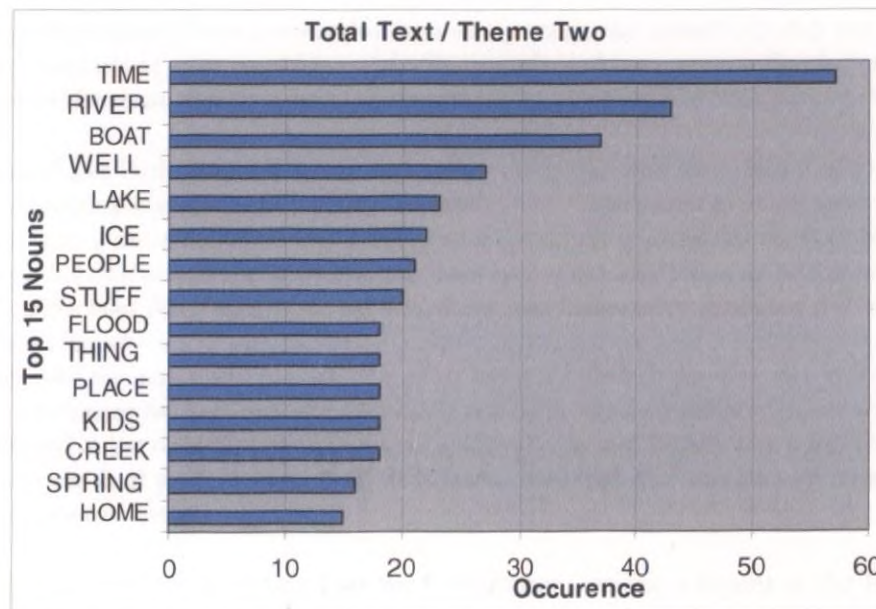
Theme 2: Emotional Human Experience

Figure 7. Repetitive Nouns / by Theme 2.

Sub Themes: high anxiety, concern/fear, anger, enjoyment, happiness, good times, fun

Word Count Identifiers: time (57), river (43), boat (37), well (27), lake (23), ice (22), people (21), stuff (20), flood (18). (Total Words: 14,738)

Quotes:
> Morris Participant: *It was great **time** like a holiday. It was a wonderful **time**. It made me realize what was important because we had one vehicle, we packed it in. We put things in the attic and said to hell with it, if it goes, it goes. We left the doors unlocked. We drove away. We never missed it. We were gone over a month and we never missed anything. We had a great **time** there.*

> Selkirk Participant: *I haven't swamped yet, close a few times, small **boat**, small kicker on the back, big guy in the front there, I was cruising along and I couldn't see because he's like.... So I says get down a little bit and he decided he just lay back of the bow of the **boat** so he laid back like this and as the **boat**s guttle started filling up, Eric sit up. So he sat up and the bow came up and we were fine but it was dicey there for a minute*

Morris Participant: *I was a six-year-old kid. I bid my Dad goodbye as he went into the lake in the **flood**. He had a team of horses and wagon and cows at the back, a cap on the wagon and he went north. We didn't know if we'd ever see him again.*

Morris Participant*: One of my fondest memories of **ice** hockey one winter in particular where the creek froze absolutely smoothly, where us guys had a game of hockey on a Saturday afternoon. We played till it got dark, the moon was up when we got home. The game kept shifting down the creek. It was exhilarating to feel there was no end to the game. It was something to play on. Both my childhood memories of water are water you play with.*

Fargo Participant: *I don't remember it as being scary, just something that you are concerned about your neighbors and other **people** that were getting flooded out, not scary in the sense that I've ever felt threatened or anything like that, personally*

Grand Forks Participant: *We were in my little John **boat** and there was 3 of us and we were arguing about who was going to paddle next. I proceeded to stand up in the **boat** as we're going down this river and I took one step and all of a sudden the boat titer tottered over a log and across the river and the front end of the **boat** filled up and then the back end of the **boat** filled up and we all bailed out and I remember grabbing this tree for dear life and like the water was sucking me down because there was a branch going straight down into the water and him and the other kid were already floating like half way down just screaming for help and like no body's out there within 6 miles of where we were. I managed to get onto the tree and we all walked down and luckily saw a farmer who said he saw the **boat** go by with no body in it so that was, yah that was an experience that was quite an experience*

In Theme Two / Emotional Human Experience, we see a repeat of the following nouns in descending order of their occurrence: **TIME, RIVER, BOAT, WELL, LAKE, ICE, PEOPLE, STUFF** and **FLOOD.** The inclusion of repeat words such as **TIME** and **PEOPLE** suggest a remembered experience or situation from the past and the inclusion or impact of others in that experience. Much of the discussion in the groups about emotional human experience involved past memories of youth and adolescence. Use of words like river, boat, lake and ice in the sessions was generally in a positive and fun context. While there was also some trauma related to those words it is interesting to note that our emotional human experience related to water is not solely related to the word **FLOOD**. Indeed as one Grand Forks participant stated:

Really though as far as a disaster goes it's a flood like that is a pretty peaceful placid disaster because you think about it and you were fighting away and sandbagging and then we hear on the radio that its broken through the dike and none of us were treading water or drowning, it was a fairly peaceful disaster

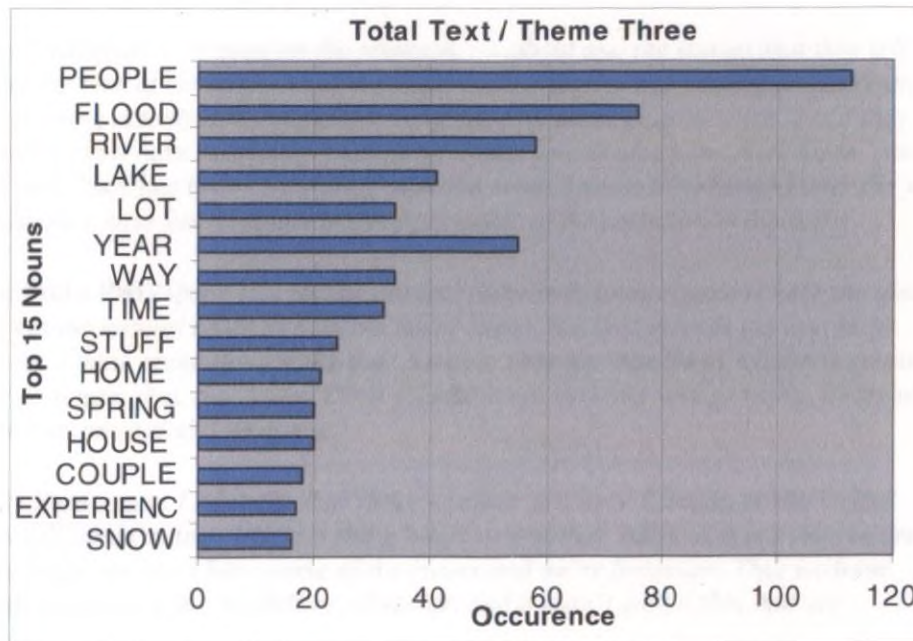**Theme 3**: **Conflict, Control and Resolution**

Figure 8. Repetitive Nouns / by Theme 3.

Sub Themes: man versus nature, possession and conflict, commerce and commodities

Word Count Identifiers: people (113), flood (76), river (56), lake (41), lot (34), year (55) way (34), time (32), stuff (24), home (21), spring (20). (Total Words: 18,625)

Quotes:

Morris participant: *One of the biggest jobs in addressing the public is how do you cut it between fear mongering and complacency. That's very hard to do. You can fear monger and get **people** to go wild like the 4-foot wall that never came. That thing created all kinds of havoc because it wasn't reality.*

Morris Participant: *In all of this, **people** inside the floodway forget they are also on a flood plain (Thank-You) and if the water had gone over, and there were a number of factors it was close, there would have been water on the second floor offices at Portage and Main and 80% of the city would have been effected. Yet the mindset of most **people** in Winnipeg is Alfred E Newman "What me worry?"*

Fargo Participant: *That leads into another thing, once the dams and there, which are really for flood control and to regulate the barge traffic. So they have a dependable level*

*of water, throughout the **year** but then recreation starts and now when the damns get too low, then the recreation people start complaining.*

Selkirk Participant: *Again, this was about 15, 20 years ago the RM of Rockwood had an Engineering study going out there what can they do with this water because all these Artesian wells are coming in and filling up their ditches and they had that 12 months of the **year**, literally, so they had to do some kind of an engineering solution to do with all of this water.*

Fargo Participant: *I've been on the pontoon, ...about and the stories that they tell around the turn of century where, they had, there's pictures of activity on the river, I mean boating activity and people throwing **stuff** in, garbage, you name it and they've told stories that have overhangs from some of the houses along the river there, years and years ago. They just throw their **stuff** over the river. I guess it's changed over the years I suppose they have had ordinances put in because of the pollution in the river*

Grand Forks Participant: *It's got the natural (**lake** bed) **Lake** Agassi is here the glacier so its got the natural basin to hold the **lot** of water. But that extends out in a large capacity. I think about that all the time because they say that Devil's **Lake** is actually trying to regain that, that's why Devil's **Lake** keeps growing and growing, its trying to regain that natural glacier space.*

Selkirk Participant: *I think the Red River whether you're in Canada or the United States still binds us together, this thing binds us together, because it is a unique area, you're right, we don't have some of the issues and we're fortunate. That we have enough water from the rainfall or whatever, and it hasn't gotten that bad yet.*

In the narrative related to Theme Three / Conflict, Control and Resolution we find repeat words such as **PEOPLE, FLOOD, RIVER, LAKE, LOT** and **YEAR**. While the dialogue related to theme three did talk about conflict between man and nature, most of the dialogue was about conflict and control between people. Conflict over property, commercialization and political action appeared to pre-dominate. There appeared to be resignation or resolution in all the stories. Much of the sentiment related to this theme was conveyed in comments from a Morris Participant:

For me I have way more concern now than I did then. The reason I have more concern is because I believe there are things that have been done that have increased the magnitude of flooding on all of us many times from what used to be normal winter situations. Now every time we have a late spring and there is excess amount of moisture outside the valley around us the probability of it flooding us is extremely high and that gives me great concern because I know it is man made and not a natural occurring event.

Theme 4: Information, Data and Prediction

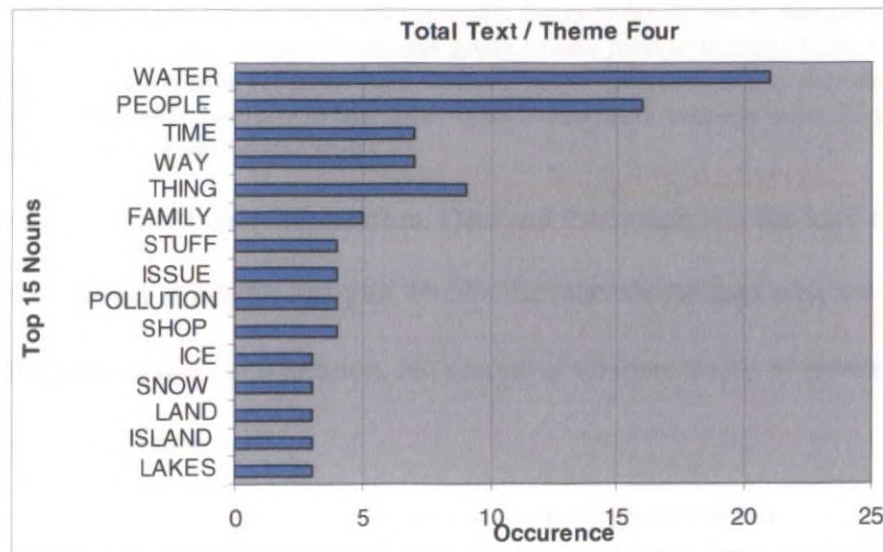This was the only case where the word WATER was left in the data analysis.

Total Text / Theme Four

Figure 9. Repetitive Nouns / by Theme 4.

Sub Themes: Information, facts, data or predictions

Word Count Identifiers: water (21), people (16), thing (9), time (7), way (7), family (5), pollution (4), ice (3), snow (3) (Total Words: 1,878).

Quotes:

Selkirk Participant: *That new machine, or that machine that fellow invented, the **ice** auger, or whatever Reuters. We wouldn't have broken it, there was 35, 40 inches of **ice** there, we wouldn't have broken it. That doesn't break that much **ice**, it's only 25 tonnes, so that got us down to 20-24 inches of **ice** that we could, that's what you got left to break they have already cut this......*

Winnipeg Participant: *If we ever did start selling **water** to the states, my understanding of NAFTA is that it would be like the oil. You could not reduce the amount of oil you are selling to the States right now. Once you're started you can never reduce, never go back. So we start. But how can you tell someone they can't have fresh **water***

Selkirk Participant: *They can't have ice in it, if there is ice in there they can't open it, they'll smash up the bridge. They can actually flood them out before they can open that gate, back the water up so they can get ahead and open that gate, way I understand It seems to, when we have ice jamming there it almost break prematurely or its trying to break up prematurely but its not ready to go, like this **year** it was ready to go just fine.*

Winnipeg Participant: *There is probably a 10-year education process making people aware of global warming and water shortage and then the government will feel comfortable about actually working. You have to have politician who believe there is an issue as well.*

Selkirk Participant: *I think the aquifer actually dropped 60-80 feet in that period of time. It was huge, that means it's always going to take forever to come back. One that started getting wet again it came back within a year I think it is, it was that much of a drop. A lot of wells went dry in that time. What's that cycle suppose to be, 15 years. Yah, The wet, dry. We're due then.*

The final Theme Four / Information, Data and Prediction was the least discussed theme with the fewest words for analysis. Unlike the other theme data sets, the word water was included in this configuration. No unique or obvious trends or messages can be attributed to this final theme.

Results: Repetitive Word Use by Individual Theme

Research Question 2 (RQ2): What chained or dramatistic language exists within these themes?

It is the search for repetitive language as used in dramatistic themes that is the objective of this study. The word count analysis by individual themes confirmed the presence of certain words repeated in certain themes. In Theme One / Physical Nature and Presence of water the most repeated nouns in descending order were **WELL, RIVER, YEAR, FLOOD, ICE, TIME** and **LAKE**. Major repeated nouns either referred to source, availability or time. With the repeated use of words like **YEAR** and **TIME** it may suggest that we identify, measure and relate to water through common stories based on history and natural activities and events. The Flood of '97 was a recurring term.

In Theme Two / Emotional Human Experience, we see a repeat of the following nouns in descending order of their occurrence: **TIME, RIVER, BOAT, WELL, LAKE, ICE, PEOPLE, STUFF** and **FLOOD.** The inclusion of repeat words such as **TIME** and

PEOPLE suggest a remembered experience or situation from the past and the inclusion of others. Much of the discussion in the groups about emotional human experience involved past memories of youth and adolescence. Use of words like river, boat, lake and ice in the sessions was generally in a positive and fun context.

In the narrative related to Theme Three / Conflict, Control and Resolution we find repeat words such as **PEOPLE, FLOOD, RIVER, LAKE, LOT** and **YEAR**. Most of the dialogue was about conflict and control between people. Conflict over property, commercialization and political action appeared to pre-dominate. There appeared to be resignation or resolution in all the stories. The final Theme Four / Information, Data and Prediction was the least discussed theme with the fewest words for analysis. No unique or obvious trends or messages can be attributed to this final theme.

3) Repetitive Word Use by Individual Session

The third and final repetitive word use assessment was conducted on individual focus group sessions. Repetitive word counts of noun use were conducted on each focus group session. It must again be emphasized that due to limited number of participants in each session, valid assumptions about or between sessions or communities may not exist. This section is included as interest and to benefit our understanding of the participants and the need for further research between communities. For the purpose of this analysis, the predominant word **WATER** was included in the data analysis. Results were analyzed by focus group session, theme and individual word use.
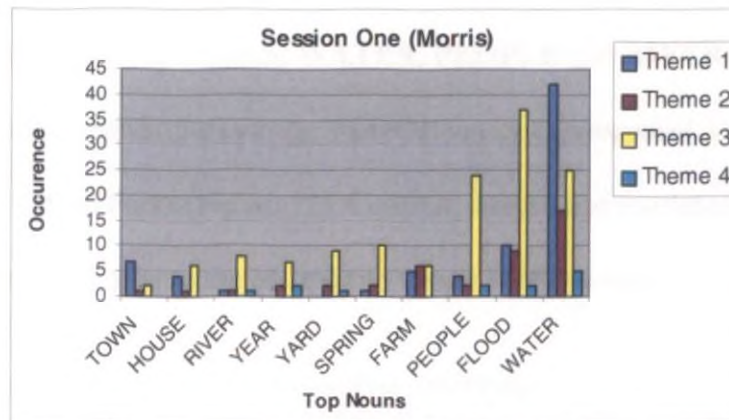
Figure 10. Repetitive Nouns by Individual Session (Morris).
(Themes: 1.Physical Nature and Presence; 2.Emotional Human Experience; 3.Conflict, Control and Resolution; 4.Information, Data and Prediction)

In the Morris, Manitoba focus group the most repeated words were **WATER**,

FLOOD, and **PEOPLE**. It was expected that the word **WATER** would be most used and

repeated when discussing the physical presence and attributes of water (theme one). What

is of interest is that the majority of repeat word use was in discussion about conflict,

control and resolution (theme three). Having experienced numerous floods over the past

years, the participants in this community very much equated water with flooding and

people/possibly community. As one of the Morris participants stated:

> *It builds community. I said we're having problems getting equipment in. He said*
> *leave it to me. A couple of hours later I had a cat and a high hoe in my yard I*
> *saved my farm. That is when you help somebody and take care of somebody,*
> *somebody comes back and helps you. Neighbours helping neighbours. It's*
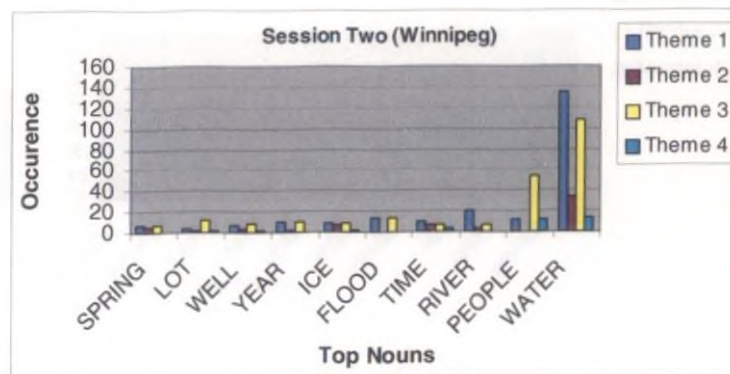> *extremely humbling to ask someone for help but when we are all in the pickle.*

Figure 11. Repetitive Nouns by Individual Session (Winnipeg)

The Winnipeg group repeated **WATER, PEOPLE** and **RIVER** as predominant nouns and in similar theme discussions. **FLOOD** was not as repeated a word as in Morris (Figure 10) and Grand Forks (Figure 12). Conflict, control and resolution was also the predominant theme, similar to the Morris and Grand Forks groups.
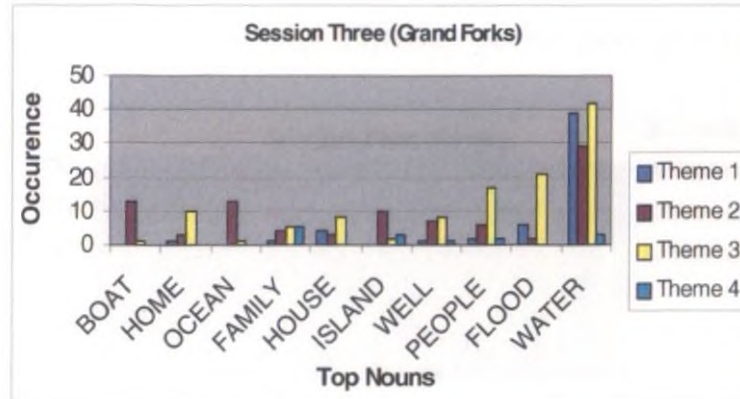

Figure 12. Repetitive Nouns by Individual Session (Grand Forks)
Session #3 combines both focus groups conducted in Grand Forks

The Grand Forks group, similar to Morris, shared recent flood experience and identified **WATER, FLOOD** and **PEOPLE** as the most repeated nouns. Emotional human experience was more predominant as a theme in Grand Forks because of the complete devastation and impact on every individual within the community.
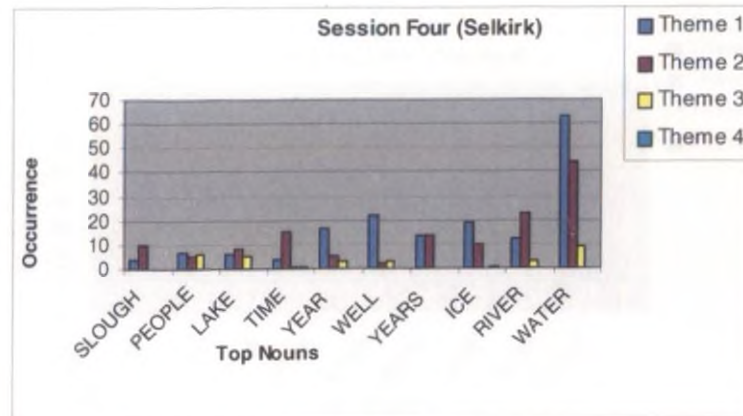

Figure 13. Repetitive Nouns by Individual Session (Selkirk)

In Selkirk, while the words **WATER** and **RIVER** were most repeated, the third

in ascending order was **ICE**. Located near the outlet of the Red River as it drains into

Lake Winnipeg, the jamming of river ice was repeated frequently. Conflict and control

were not dominant themes in the Selkirk focus group. Emotional human experiences

were more predominant and of a happy fun time. Selkirk participants talked about

enjoying sport and recreation on the river. **FLOOD** does not show up in the discussion.
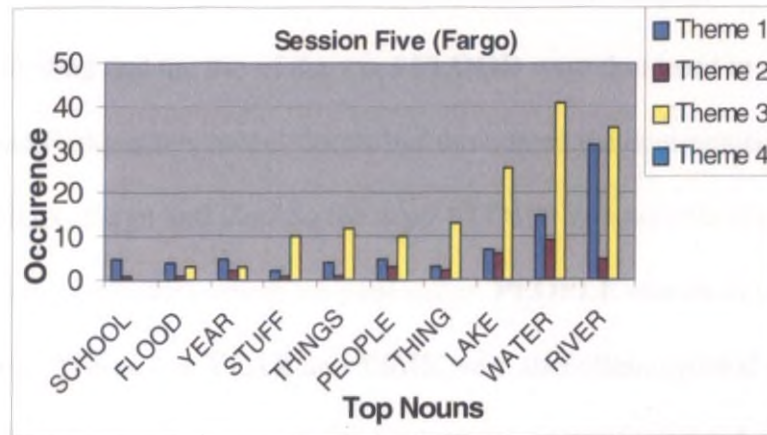

Figure 14. Repetitive Nouns by Individual Session (Fargo).

The Fargo group identified **RIVER, WATER, LAKE** and **PEOPLE** as repeat

words, all within the context of a theme three, conflict, control and resolution. Similar to

Selkirk, Grafton, and to some degree Winnipeg, the word **FLOOD** was not identified as a
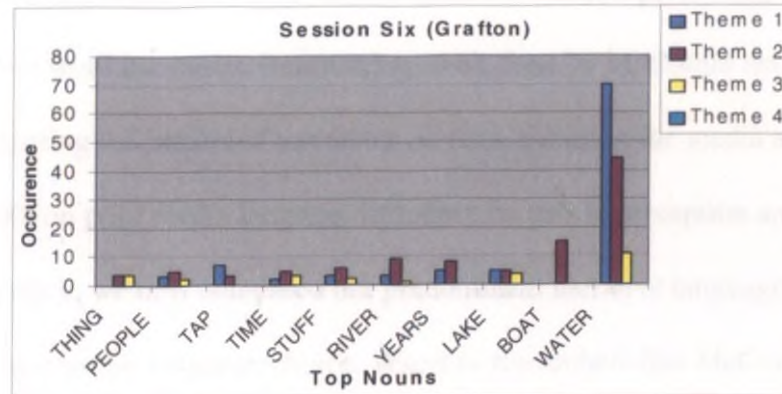
significant word.

Figure 15. Repetitive Nouns by Individual Session (Grafton).

The final focus group session was held in Grafton, North Dakota. This was the only community located a distance of approximately 12 miles (19.3 km.) from the Red River. While the word **WATER** again is expected to dominate in all discussions, it is word like **BOAT, LAKE, YEARS** and **RIVER** that are most repeated. There appears to be little interest in conflict and control with most theme discussion being of physical presence and emotional human experiences.

Results: Repetitive Word Use by Individual Session

While flooding and the use of the word **FLOOD** were dominant in sessions in Morris and Grand Forks where recent floods had devastated the communities, in other sessions like Selkirk, Fargo and Grafton the word **FLOOD** was not often repeated. **ICE** was a repeated word in Selkirk where ice jams occur. **PEOPLE** was most repeated in the Winnipeg session. Words like **YEAR** and **TIME** were also often repeated giving a chronological placement to common stories while the river itself provided a physical placement or positioning for the participants. Numerous references were made to the Flood of '97. The word **SCARCITY** did not resonate or repeat often in any session.

Keyword / Select Word Analysis

The third and final element of the triangulation analysis performed on the text was a keyword/select word use count. Referencing work done by McComas and Shanahan (1999) on measuring the impact of narratives on issue cycles in the media and by Cockerill (2000) on print media language influence on public perception and water management policy, we now compared our predominant narrative language against media and interest group language choice. Whereas researchers like McComas and Shanahan were able to run Lexus-Nexus keyword searches to collect articles, in this

instance the primary researcher, research assistant and coding assistant were all given the same selection of 15-20 articles, news releases and web pages from local government, media and NGO/NFP river/water interest organizations. Each coder was asked to select a list of 25 directional keywords that they found as recurring and with dramatic emphasis within the copy. (Cockerill, 2000). Those lists were later coordinated to produce the following 20, as agreed by the three coders, keywords.

Table 11. Keywords.

abundant	essential	precious	renewable
clean	filter	preserve	resource
control	force	protect	shared
dangerous	fresh	pure	threatened
divert	non-renewable	quality	valuable

These 20 identified keywords from media and NGO sources were then checked against the total narrative text and prompted top-of-mind words for use and repetition. As Cockerill (2000) had done a reverse comparison of scientific language in media narrative and eventual impact on public policy, our approach, while simplified, was intended to reveal similar associations. Our study wished to test these keywords with our database of public discourse. Quoted examples of the use of certain words in the narrative text are also provided for context.

Table 12. Keyword appearance in Total Text, Prompted ToM START and Prompted ToM FUTURE.

Keywords Total Text All Themes				Keywords ToM START				Keywords ToM FUTURE		
Keyword				Keyword				Keyword		
ABUNDANCE	3	0.01%		CLEAN	3	3.03%		CLEAN	6	3.28%
CLEAN	34	0.07%		DANGEROUS	1	1.01%		CONTROL	2	1.09%
CONTROL	16	0.03%		ESSENTIAL	1	1.01%		DIVERSION	1	0.55%
DANGEROUS	5	0.01%		PRECIOUS	1	1.01%		FRESH	1	0.55%
ESSENTIAL	1	0.00%		QUALITY	1	1.01%		QUALITY	2	1.09%
FILTER	13	0.03%		VALUE	1	1.01%		RENEWABLE	3	1.64%
FORCE	9	0.02%						RESOURCE	1	0.55%
FRESH	8	0.02%								
NON-RENEWABLE	2	0.00%		Total Words		99		Total Words		183
PRECIOUS	4	0.01%								
PROTECT	6	0.01%								
PURE	2	0.00%								
QUALITY	12	0.03%								
RENEWABLE	11	0.02%								
RESOURCE	27	0.06%								
SHARED	2	0.00%								
THREATENED	1	0.00%								
Total Words		47371								

Winnipeg Participant: *So much of our natural world depends on water and the balance of water forces so I think it's such a **precious resource** I don't think people realize how important it is and it's a responsibility to all these natural resources if we…*

Fargo Participant: *The concerns and potential scares of **fresh** water and the **quality** of it, that's a concern. On the other side we know there are people working on these things we don't know what they will find as far as making things better, you know what I'm saying*

Winnipeg Participant: *One thing I fail to understand is water is **renewable**, hydro carbons and oil isn't. We are pumping out oil and gas as fast as we can to the US but we are afraid to export water. Water is **renewable** as far as we know. We're pumping the oil and gas like there is no tomorrow but water is too scarce. We won't all die of thirst if we give them our oil but it all winds up in the hands of industry.*

Grafton Participant: *My father farmed and twenty-five years later still farms, as did my grandfather, great grandfather and so on. Water was important. It meant that it was either going to be a good year or a bad one. The fields would either flourish or wither. Whether at the ocean or lake, or pool, water is extremely powerful. It is the foundation for all living things. It is mysterious and **dangerous**, and as much as it gives life, it can take it away.*

Table 13. Keyword appearance by Theme
(Themes: 1.Physical Nature and Presence; 2.Emotional Human Experience; 3.Conflict, Control and Resolution; 4.Information, Data and Prediction)

Keyword by Theme 1			Keyword by Theme 2			Keyword by Theme 3			Keyword by Theme 4		
Keyword			Keyword			Keyword			Keyword		
ABUNDANCE	2	.01%	CLEAN	2	.01%	ABUNDANCE	1	.01%	CONTROL	2	.05%
CLEAN	13	.09%	CONTROL	3	.01%	CLEAN	14	.08%	QUALITY	2	.11%
CONTROL	2	.01%	DANGEROUS	3	.01%	CONTROL	10	.05%	SHARE	1	.11%
DANGEROUS	1	.01%	FILTER	1	.01%	DANGEROUS	1	.01%			
FILTER	8	.05%	FRESH	1	.01%	FILTER	3	.02%	Total Words		1878
FORCE	5	.03%	PURE	1	.01%	FORCE	4	.02%			
FRESH	4	.03%	QUALITY	1	.01%	FRESH	3	.02%			
NON-RENEWABLE	2	.01%	RESOURCE	1	.02%	PRECIOUS	2	.01%			
PROTECT	2	.01%	SHARED	1	.02%	PROTECT	4	.02%			
PURE	1	.01%				QUALITY	6	.03%			
QUALITY	4	.03%	Total Words	14	738	RENEWABLE	5	.03%			
RENEW	1	.01%				RESOURCE	22	.12%			
RESOURCE	2	.01%				SHARE	2	.01%			
SHARED	1	.01%									
						Total Words	18	625			
Total Words	14	828									

Research Question 3 (RQ3): Does that language chain between public narrative, private dialogue in small group discussion and our personal thoughts and impressions?
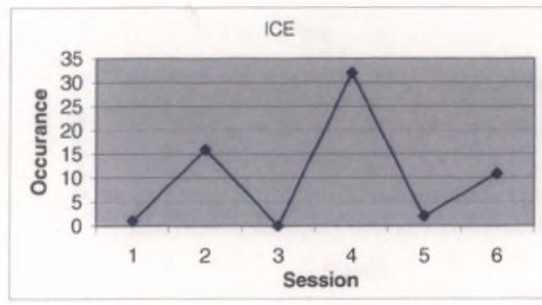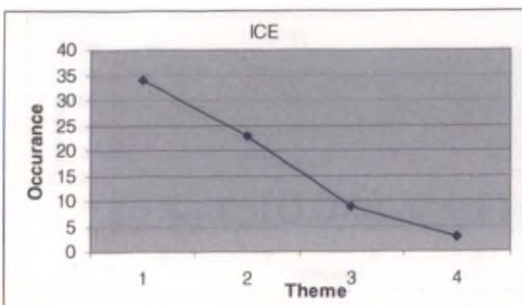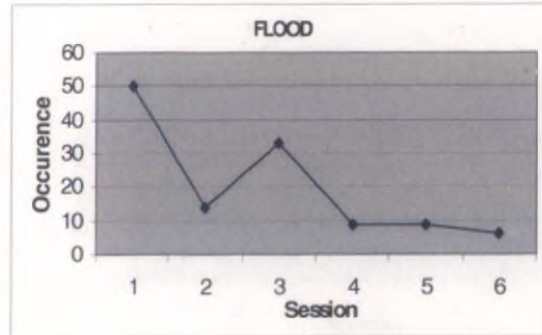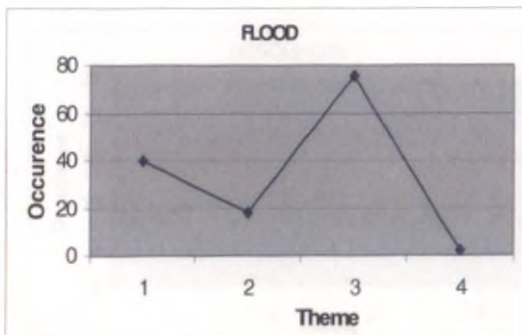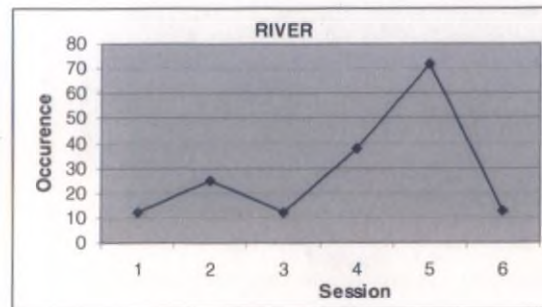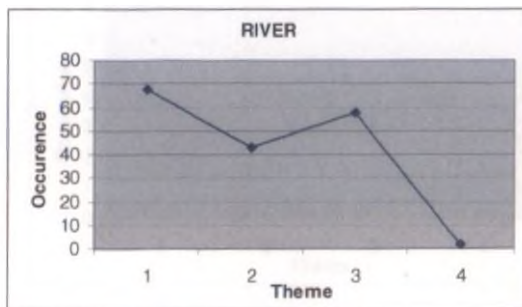
In comparing pre-selected media and NGO keywords against the total text and both prompted top of mind (ToM) responses we note the following repeat associations: **CLEAN, QUALITY** identified in all 3 data cells, words **FRESH, CONTROL, RENEWABLE, RESOURCE** only in total text and ToM FUTURE, and **DANGEROUS, ESSENTIAL** and **PRECIOUS** in total text and ToM START. When compared against each of the four identified themes **CONTROL, SHARE** and **QUALITY** were the only keywords to appear in all four themes. Words like: **CLEAN, DANGEROUS, FRESH, FILTER, RESOURCE** and **QUALITY** appear in total text and theme two. **ABUNDANCE, PROTECT** and **RENEWABLE** in total text theme 3.

Select Word Use: Most predominant words from previous counts

The final content analysis applied to the words from the focus group narrative was

a theme and session analysis by certain select words chosen from both the repetitive word

count analysis and the keyword comparison. The following words were identified in both

themes and in individual sessions: **RIVER, FLOOD, ICE, LAKE, WELL, QUALITY,**

RESOURCE, CONTROL, SCARCITY, CLEAN, YEAR, TIME and **PEOPLE.**

Again, caution must be exercised in generalizing about individual session or communities

because of limited participants in each session.

(Themes: 1.Physical Nature and Presence; 2.Emotional Human Experience; 3.Conflict, Control
and Resolution; 4.Information, Data and Prediction)
(Sessions: 1.Morris; 2.Winnipeg; 3.Grand Forks; 4.Selkirk; 5.Fargo; 6.Grafton)

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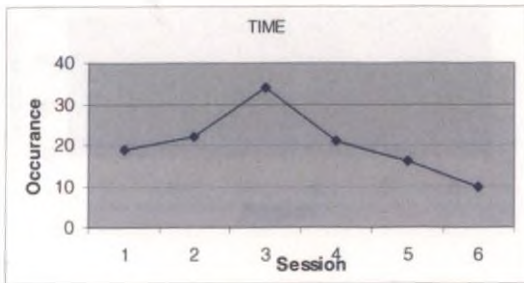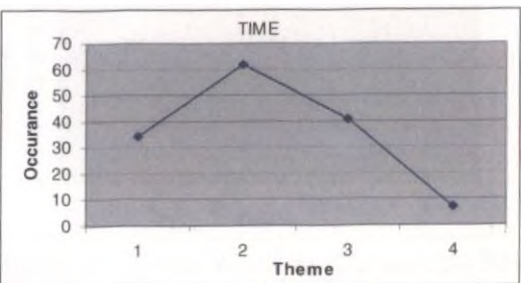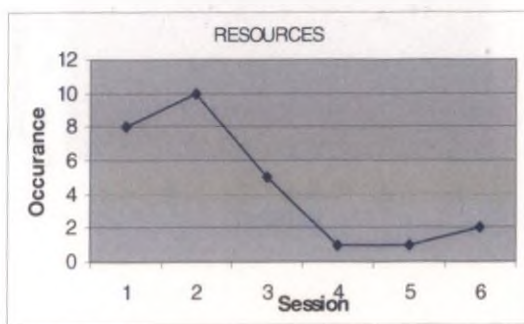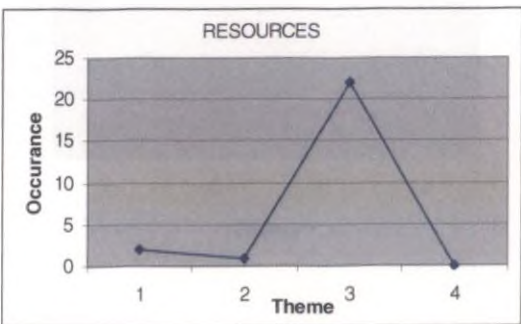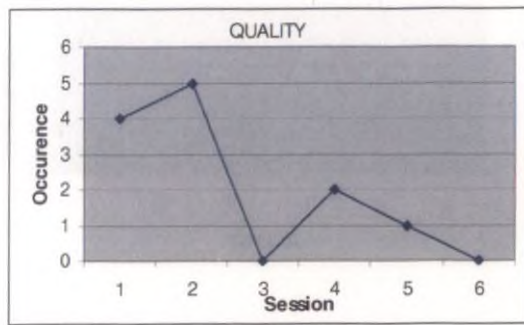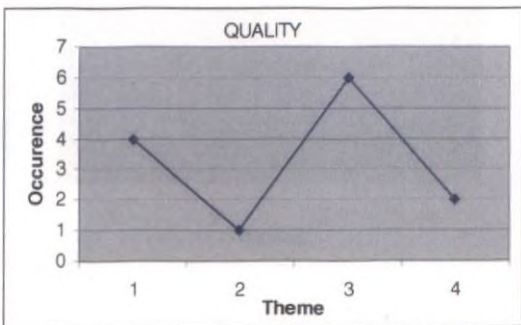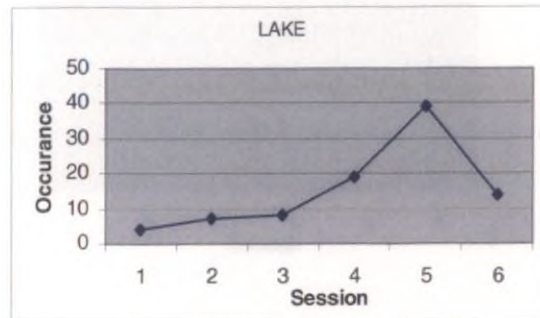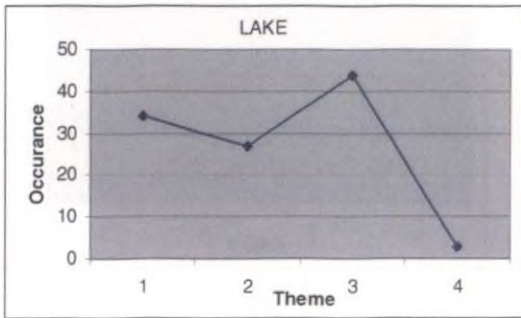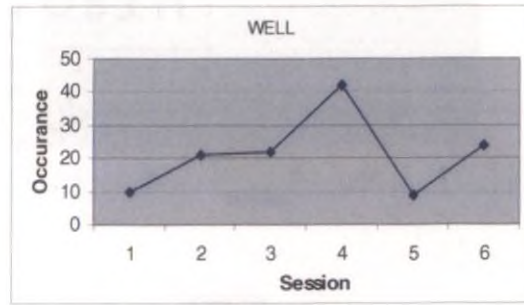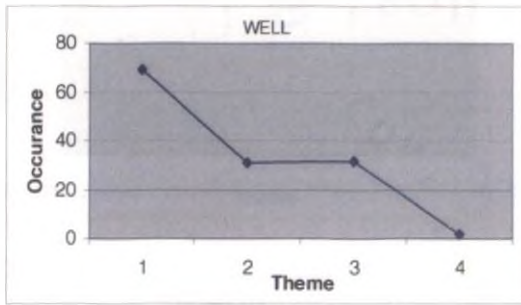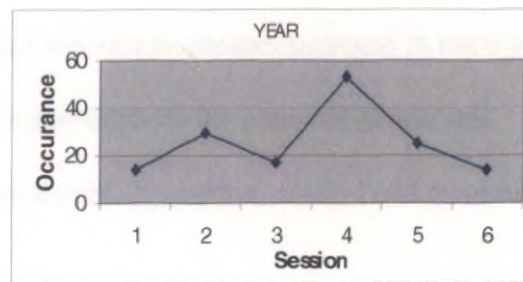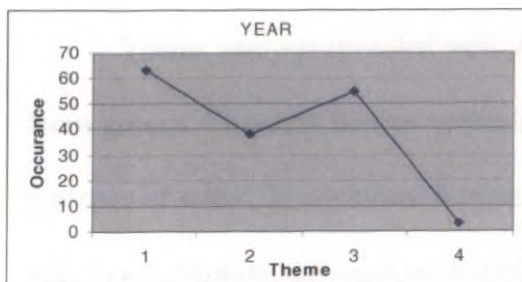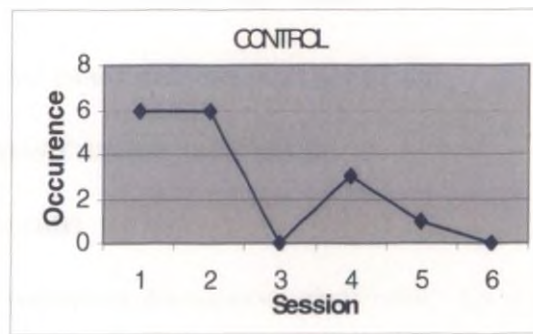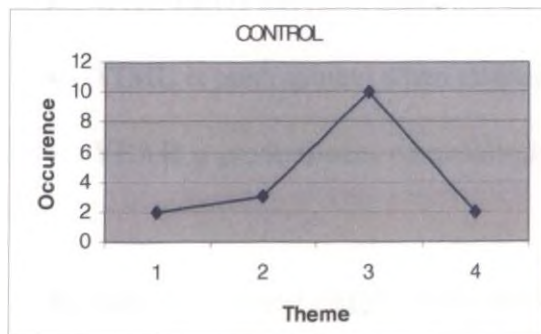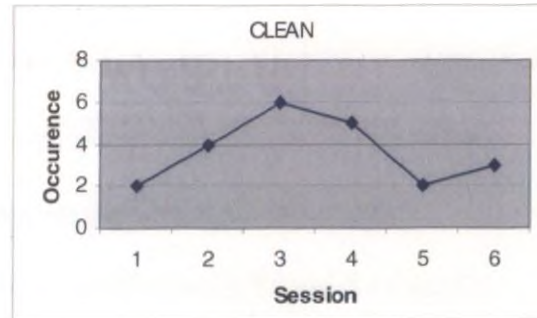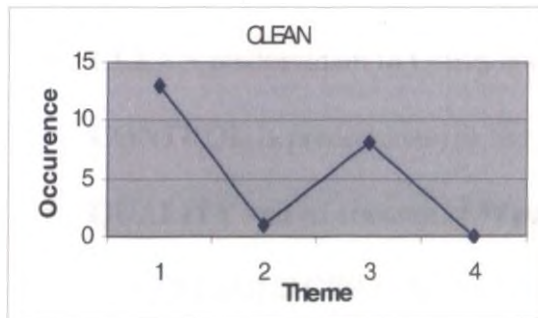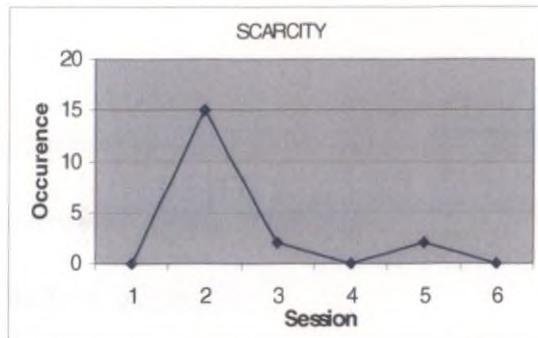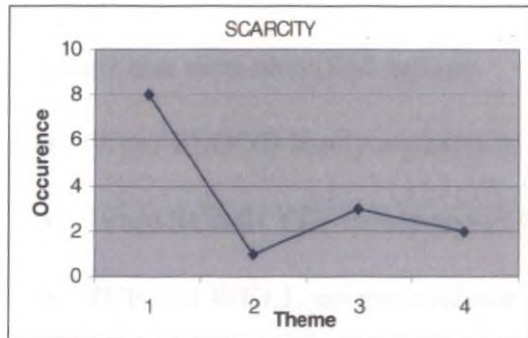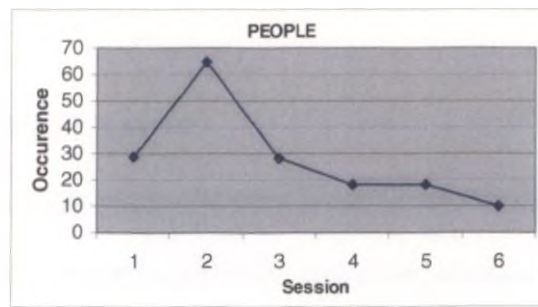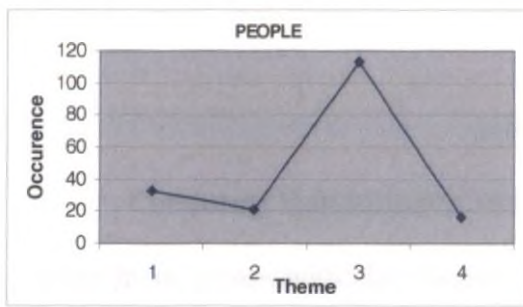
Figure 16. Select Word by Theme and Session.

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Select Word Analysis

Comparing high frequency use of select words from the narrative text from our seven focus groups with high frequency use of media and NGO keywords words is not viable because of the limited use of media and NGO keywords. However, interesting points that were identified include:

- Word **FLOOD** barely registers in last three sessions…Selkirk, Fargo and Grafton.

- Word **SCARCITY** barely shows in any session except Winnipeg.

- **ICE** and **WELL** are predominant in Selkirk / Session 4.

- **RIVER** and **LAKE** were both repeated most often in Selkirk and Fargo sessions.

- **CLEAN** predominant in Grand Forks and Selkirk, downstream from larger cities.

- **CONTROL** is predominant in Session 1 / Morris and Session 3 / Winnipeg.

- **QUALITY** was of concern in Winnipeg session and theme of control.

- Word **RESOURCES** highest repetition when discussing Theme 3 / Control.

- Word **PEOPLE** most repetitive in Session 2 /Winnipeg and Theme 3 / Control

- **TIME** is predominant when talking about emotional human experiences.

- **YEAR** is predominant when talking about Presence and Control.

Results

Research Question 1 (RQ1): What themes emerge in discussions about water and water related issues in the Red River Valley?

Theme analysis revealed well defined and similar themes emerged in each of the focus groups. Common themes across all groups were: 1) the physical nature and presence of water, 2) emotional human experiences, 3) conflict, control and resolution and, 4) information, data and prediction.

The narrative data revealed a definite and obvious consistency between the theme coding done by the three separate and independent coders. The coders had no difficulty in identifying the presence of a chained story and of the dramatistic theme under discussion.

Participants primarily talked about the attributes of water in terms of quantity and abundance. Quality was raised but generally limited to those discussions about the taste of drinking water and the use of bottled water. Quality as pollution was not emphasized. Personal experiences about water were of either personal trauma or enjoyment and family relaxation. Control of nature and political control were also discussed.

Word, line and page counts indicate that in all but the Selkirk and Grafton sessions the majority of discussion measured by word count was about conflict, control and resolution. Second being emotional human experience themes with a similar word count for physical presence and attributes. The least discussed theme as identified by coded stories and word count was about data, facts and projections.

The only session locations where Theme One - physical nature and presence of water - dominated the focus group discussion was in Fargo and Selkirk. The two larger urban areas near the headwaters and mouth of the river, in both locations the discussion about the physical attributes of water were much broader and diverse than those locations that had been directly affected by floods. There was a more recreational relationship with the river.

In Winnipeg and Grafton, where the impact of floods was less of an issue, physical presence and attributes were second most discussed. While Theme Two - emotional human experience - was a major theme of discussion in all groups it is interesting to note that it led the discussion in Grafton and Morris. It was also a high

second in the Grand Forks discussions. This may suggest that in those communities, which were recently and directly involved in flooding, everyone seemed to have a personal story to tell about the experience.

Theme Three, conflict, control and resolution, dominated in Winnipeg, Grand Forks and Morris (high second), while least discussed in Selkirk and Grafton. Fargo had comparable interest between theme two and three.

Theme Four, information, data and prediction, was least chained and discussed as it mainly identified information, data fact and limited prediction. Again, it must be emphasized that analysis by community or session may lack validity because of limited individual group participants.

One can conclude that, for people living in the Red River Valley, there are four recurring themes when discussion turns to water issues. The main underlying theme is of conflict, control and resolution related to water linked to very strong and intense physical and emotional experiences people have regarding water. It might be assumed that this is related to our proximity to the Red River and its seasonal flooding.

Research Question 2 (RQ2): What chained or dramatistic language expresses these themes?

Content analysis reveals a core group of words are used in the Red River Valley to express the four themes. Location along the river, proximity to the river, specific experiences and the theme under discussion all influenced to varying degrees the language employed. Words of source, quantity and quality are what we associate with water.

Analysis of repetitive word use identified individual nouns repeated throughout the course of the seven focus group sessions. These included recurring words such as: **RIVER, PEOPLE, TIME, FLOOD, LAKE, ICE** and **SPRING.** After the word, water, which was specifically removed from the final data analysis, the word **RIVER** was the most predominant and repeated word in all the focus group discussions within the valley. People in the valley relate to water as the river.

The only recurring words in both total text and prompted top of mind were the words **FLOOD** and **WELL**. In all cases, these words were used in the context of abundance or too much water. The word **WELL** was the only word that ranked inclusion in all three lists.

Comparing the repeat rate for the top four nouns in total text with the top four nouns in prompted top of mind words at the start of discussions, we get the following eight words related to the source and influences of water: **RAIN, RIVER, FLOOD, QUANTITY …. PEOPLE, LIFE** and **TIME. POLLUTION, SCARCE, POLITICAL** and **OPTIMISTIC** are the four most repeated nouns from prompted for top of mind when thinking of the future of water. Words like **QUALITY, CONTROL** and **CONFLICT** are also widely used nouns relating to the future of water.

While prompted top-of-mind words requested at the start of each session were generally positive and upbeat reflecting water in different formations and with various fun related activities, there was a marked difference from those prompted top-of-mind words asked at the end of each session about the future of water. These words were in most cases very negative and concerning. Concerns of scarcity, quality, pollution, control and conflict dominated. This is one of the crux findings of this study.

Repetitive verbs from the total text do not seem to reflect a definite message or pattern. Verbs like **KNOW, THINK** and **REMEMBER** are more often repeated. Repeat verbs used in prompted top-of-mind at the start of each session include: **FISHING, SWIMMING,** and **DRINKING**. Verbs from prompted top-of-mind on the future of water include **CONCERN, GOING, DEMANDS** and **SCARES**.

Repetitive adjectives and adverb comparisons do not reflect any noticeable trends or follow any consistent pattern of meaning. We do find the first occasional use of adjectives like **PRECIOUS, CLEAN** and **RENEWABLE** when asked about the future of water.

Refining the content analysis by inspecting repetitive word use by individual theme confirmed the presence and nature of certain words repeated in certain themes.

Theme One - Physical Nature and Presence of Water. The most repeated nouns in descending order were **WELL, RIVER, YEAR, FLOOD, ICE, TIME** and **LAKE**. All these words could be anticipated in a discussion about water and its presence and attributes. Our interest is in the repeated and high use of words like **YEAR** and **TIME**. We measure and relate to water through common stories based on history and time. Whether measured by season or by generation we create common meaning and understanding through positioning in time.

Theme Two - Emotional Human Experience. We see a repeat of the following nouns in descending order of their occurrence: **TIME, RIVER, BOAT, WELL, LAKE, ICE, PEOPLE, STUFF** and **FLOOD.** The inclusion of repeat words such as **TIME** and **PEOPLE** suggest a remembered experience or situation from the past and the inclusion or impact of others in that experience. Much of the discussion in the groups about

emotional human experience involved past memories of youth and adolescence. Use of words like **RIVER, BOAT, LAKE** and **ICE** in the sessions was generally in a positive and fun context. While there was also some trauma related to those words, it is interesting to note that our emotional human experience related to water is not solely related to the word **FLOOD**.

Theme Three - Conflict, Control and Resolution. We find repeat words such as **PEOPLE, FLOOD, RIVER, LAKE, LOT**, and **YEAR.** While the dialogue related to theme three did talk about conflict between man and nature, most of the dialogue was about conflict and control between people.

Theme Four - Information, Data and Prediction. This was the least discussed theme with the fewest words for analysis. Unlike the other theme data sets, the word **WATER** was included in this configuration. No unique or obvious trends or messages can be attributed to this final theme.

Since the sample number from the focus group sessions is so small, I offer an analysis of repetitive word use by individual session for interest only.

Morris focus group the most repeated words were **WATER, FLOOD,** and **PEOPLE**. It was expected that the word **WATER** would be most used and repeated when discussing the physical presence and attributes of water (Theme One). What is of interest is that the majority of repeat word use was in discussion about conflict, control and resolution (Theme Three). Having experienced numerous floods over the past years, the participants in this community very much equated water with flooding and people and possibly community.

The Winnipeg group repeated **WATER, PEOPLE** and **RIVER** as predominant nouns and in similar theme discussions. **FLOOD** was not repeated as often as it was in Morris and Grand Forks. Conflict, control and resolution was also the predominant theme, similar to the Morris and Grand Forks groups.

The Grand Forks group, similar to Morris, shared recent flood experience and also identified **WATER, FLOOD** and **PEOPLE** as the most repeated nouns. Emotional human experience was more predominant as a theme in Grand Forks because of the complete devastation and impact on every individual within the community.

In Selkirk, while the words **WATER** and **RIVER** were most repeated, the third in ascending order was **ICE**. Located on the outlet of the Red River as it drains into Lake Winnipeg the jamming of lake ice was repeated frequently. Conflict and control were not dominant themes in the Selkirk focus group. Emotional human experiences were more predominant and generally of a happy fun time. Selkirk participants talked more about enjoying the river with sport and recreation. FLOOD does not show up in the discussion.

The Fargo group identified **RIVER, WATER, LAKE** and **PEOPLE** as repeat words, all within the context of a Theme Three (conflict, control and resolution). Similar to Selkirk, Grafton, and to some degree Winnipeg, the word **FLOOD** was not identified as a significant word.

The final focus group session was in Grafton, North Dakota. This was the only community located a distance of approximately 12 miles (19.3 km.) from the Red River. While the word **WATER** again is expected to dominate in all discussions, it is word like **BOAT, LAKE, YEARS** and **RIVER** that are most repeated. There appears to little interest in conflict and control with most theme discussion being of physical presence and

emotional human experiences.

To conclude this answer, we have specifically identified keywords that occur during water discussions. We have identified which words express each of the four themes. Now we further analysis the data from the focus groups and compare it to similar analysis of media, government and NGO discourse.

Research Question 3 (RQ3): Does that language chain between public narrative, private dialogue in small group discussion and our personal thoughts and impressions?

Using keyword analysis in comparing pre-selected media and NGO keywords against the total text and both prompted top of mind responses we note very few associations. The following associations were repeated: **CLEAN, QUALITY** identified in all three data cells, **FRESH, CONTROL, RENEWABLE, RESOURCE** between total and FUTURE and **DANGEROUS, ESSENTIAL** and **PRECIOUS** between total and START.

When compared against each of the four identified themes **CONTROL, SHARE** and **QUALITY** were the only keywords to appear in all four themes. Words like **CLEAN, DANGEROUS, FRESH, FILTER, RESOURCE** and **QUALITY** recurred in Themes One, Two and Three.

Keyword analysis suggests there is a very discernable gap between the dramatistic language used by media, government and NGOs and the dramatistic language used by the public when discussing water. However, analysis points toward several measurable and identifiable relationships between the dramatistic language used by individuals and various organizations. This leads us to the question of possible interaction between themes, language and public policy communication and engagement.

Theme Three (Conflict, Control and Resolution) was the overall dominant theme, which, when combined with people's physical experiences with water, resulted in very intense emotional expressions.

Participants' memories of water were happier and more positive then their thoughts and feelings about the future of water. Negative top-of-mind responses along with specific unprompted negative responses suggest uncertainty and fear about water's future. This fear went beyond fear of flooding or other physical dangers of water to include a general sense of uneasiness and uncertainty about the topic.

While many see water as an abundant resource, the issue seems to be more of maintaining quality and effectively draining and redistributing that water. In most cases, the issue is defined as conflict between people and not between people and nature, though the prospect of flood causes some anxiety. This suggests that the need to find agreement among people on water issues is a significant and challenging aspect of current and future discussion and policy management. Since the theme of conflict, control and resolution dominated discussions, it appears finding consensus on water issues may be perceived as very difficult but is an area of embedded concern to the public.

Both the researcher and research assistant confirmed that there is a noticeable disparity between what we are told to think about water and what we actually feel and believe about water. Analysis of the research bears this out in all the identified themes. In most cases, keywords used and repeated by media or NGOs in their communication did not reflect in the public dialogue. While we may officially refer to water as a *precious resource* to be saved and maintained, in truth, water is something the region sees as overabundant that should be immediately released and distributed.

Conclusions

Observation of the participants in the focus groups revealed that everyone had a story to tell about water. There was no lack of discussion and participants were generally comfortable in taking part in the discussion. When left unaided, discussion was spontaneous with no one individual dominating the dialogue or leading the direction. Many participants expressed appreciation at the conclusion of each group for the opportunity to participate. Consistent themes about water across the Red River bioregion became evident. In all cases, the focus groups remained generally consistent with the recurring themes of physical presence and attributes, emotional human experience and conflict, control and resolution.

Participants related to water through physical attributes. Whether talking about the river and its flooding, the level and height of snow and ice or the freezing of pipes and depth and hardness of well water, there was a definite physical dimension and theme to how participants referred to water. The river was dominant. Whether the discussion originated with a memory or experience it inevitably turned to the river and the rise and fall of its level. There is no doubt that in the Red River Valley we think of the river when we think of water and generally we think of quantity and abundance.

Secondary theme or sub-theme words did vary with the specific location. While flooding and the use of the word **FLOOD** were dominant in session in Morris and Grand Forks where recent floods had devastated the communities, in other sessions like Selkirk, Fargo and Grafton the word **FLOOD** was not often repeated. **ICE** was a repeated word in Selkirk where ice jams occur while **PEOPLE** was most repeated in the Winnipeg session. Words like **YEAR** and **TIME** were also often repeated giving a chronological

placement to common stories while the river itself provided a physical placement or positioning for the participants. The word **SCARCITY** did not resonate or repeat often in any session.

One can also conclude that for people living in the Red River Valley there is an underlying and definite theme of conflict, control and resolution related to water. While the over-all dominant theme in the research, it was of least interest in Fargo and Selkirk where the river originates and ends. In most cases, it is a conflict and control between people and not with nature. While many see water as an abundant resource, the issue seems to be more of maintaining quality and effectively draining and re-distributing that water.

People have very strong and intense emotional experiences and concerns related to water. There is a definite fear about future conflict around water. The fact that participants generally felt pessimistic about the future of water resources was consistent in all groups.

Definite dramatism exists in the themes and language used when talking about water in the Red River Valley. Through repetition, we find the following words predominant in our thinking and dialogue about water, indeed, they form the symbolic action in response to the dramatic scenes we create and hold around water. The combination of the language and themes help to form our rhetorical vision about water in the Red River Valley: **FLOOD, RIVER, WELL, ICE, LAKE, PEOPLE, YEAR, TIME, CONTROL, CLEAN, QUALITY, RESOURCE, RENEWABLE** and **SCARCITY**. Each word carries a connotation and specific meaning for people living in

the Valley. Words of source, quantity, quality and distribution are what we associate with water.

There is a noticeable disparity between what we are told to think about water and what we actually feel and believe about water. In most cases keywords that were used and repeated by media or NGOs in their communication did not reflect in the public dialogue. The only theme where media keywords like **RESOURCES** and **RENEWABLE** were repeated was when discussing control, conflict and resolution. This gap between what we hear and how we talk is of interest and will be discussed in the context of public policy communication.

Chapter Five will provide a summary of the importance of the findings and concluding discussion.

CHAPTER FIVE

DISCUSSION

The purpose of this study was to investigate the presence of dramatistic themes and language in general discussions about water in the Red River Valley of the Upper Midwest. With the use of a communication theory of symbolic convergence, the presence of consistent themes helps to identify a rhetorical form or vision about a predominant resource like water within the region. The repetitiveness of the language used in each dramatic theme indicates that a motivated response to a specific situation does exist throughout the region. This also assists in the process of confirming the identification of definite themes (scenarios) and also the presence of a rhetorical vision.

Through a review of the relevant literature, three research questions were developed:

Research Question 1 (RQ1): What themes emerge in discussions about water and water related issues in the Red River Valley?

Research Question 2 (RQ2): What chained or dramatistic language exists within these themes?

Research Question 3 (RQ3): Does that language chain between public narrative, private dialogue in small group discussion and our personal thoughts and impressions?

To answer the three research questions, applied research using theme and content analysis of narrative generated in seven community focus group discussions was

undertaken. The focus groups were held in six separate locations throughout the Red River Valley and resulted in approximately 11 hours of audio taped dialogue and 130 pages of transcribed narrative text from the 31 participants. Each focus group involved 3 to 6 participants and ran 1 to 2 hours.

The focus group narrative was printed and analyzed. Three forms of data analysis were conducted in a triangulation process. The first level of analysis was a hand coded analysis for dramatistic stories that had recurring, redundant and forceful themes within the total narrative text. Three independent coders reviewed each group narrative and identified the presence or absence of a set of pre-determined themes.

The second form of analysis was a content analysis word count used to confirm the existence of specific repetitive language within each theme. From the analysis, four themes about water emerged: physical nature and presence, emotional human experiences, conflict, control and resolution and information, data and prediction. The third and final level of analysis looks at the relationship of media and NGO/NFP keyword narrative to actual group discourse and content.

Importance of Findings

The results of this project identify definite common themes and consistent dramatistic and repetitive language used when discussing water in the Red River Valley. It is clear that a rhetorical vision or possible causal story does exist when water issues are discussed in the Valley. Participants related to water through physical attributes. Whether talking about the river and its flooding, the level and height of snow and ice or the freezing of pipes and well water hardness, there was a definite physical dimension and theme to how participants referred to water. The river was dominant. There is no doubt

that in the Red River Valley we think of the river when we think of water and generally we think of quantity and abundance.

One can also conclude that for people living in the Red River Valley there is a definite underlying theme of conflict, control and resolution related to water. People also have very strong and intense emotional experiences and concerns related to water. There is a definite fear about future conflict around water. The fact that participants generally felt pessimistic about the future of water resources was consistent in all groups.

The following words repeat consistently in the dialogue about water, indeed, they form the symbolic action in response to the dramatic scenes we create and hold around water. The combination of the language and themes help to form our rhetorical vision about water in the Red River Valley: **FLOOD, RIVER, WELL, ICE, LAKE, PEOPLE, YEAR, TIME, CONTROL, CLEAN, QUALITY, RESOURCE, RENEWABLE** and **SCARCITY**.

Based on word count analysis we see repetitive and dramatistic language of source, quantity, quality and distribution associated with water. The distribution and drainage of water are as important as the source and quality. Participants saw water as abundant and manageable that is either alive and in motion (flowing, melting, drawing, flooding)… Live Water or Dead Water (polluted, nonrenewable, scarce). The summary code in the Red River Valley for water would be to **DRAIN, FLOW** and **CLEANSE**.

The findings will be of benefit to future public communication strategies in understanding and selecting messaging language for use in framing public resource policy issues and encouraging public awareness and engagement in issues related to water. Public communication and advertising messages may reflect the eventual and

hoped-for outcome of a situation or proposal, but can be inconsistent with how people

may geographically, historically and culturally experience and relate to the issues under

discussion. The old advertising adage to *scratch others where we may itch* reflects a

warning to every public communication campaign. A recent local water conservation

campaign featuring a headline of *Slow the Flow* reflects a message off code with a public

that wants to see water move. While the intention and sentiment is admirable, the

message is inconsistent with how people in the valley see water. As George Lakoff

(2006) states, "so we ply the public with facts and figures; we appeal to policy wonks

without appealing to emotions, values, principals" (p. 32).

Another finding relevant to current and future water issues is identification of the

gap between the language used by the public in discourse about water and that used by

the media, interest groups and government. All evidence suggests that media,

governments and NGOs continue to use the language of technical experts and policy

wonks that is not always consistent with the public dialogue. With numerous media

preferences and availability (see Tables 4 and 5) this may be an example of where

rhetorical vision is not always chained by the media and special interests.

The study does suggest that a viable and inexpensive research methodology can

exist to assist government agencies, environmental organizations and interest groups

better define how they should frame issues of public resource policy. Using the focus

group methodology and applying a theme coding and content analysis to the narrative

data provides excellent and reliable qualitative information. Having members of the

communicating agency or organization actually attend the focus groups as observers

provides a healthy break from the hegemonic effect of organizational thinking. The use of

a post focus group public survey would help to solidify strategies and perspectives on possible messaging language.

Research Limitations

Focus Group Limitations

One common focus group limitation concerns the skill and ability of the moderator. Focus group results are only as accurate as the skill of the moderator in inspiring discussion and interpreting the results.

Second, in this research the moderator had to lead some of the discussion between participants to chain or generate sufficient story narrative.

Third, focus groups are reactive to personalities, moods and interpersonal dynamics between the participants. In some instances, all the participants in the groups were familiar with each other and in some groups, all were strangers to each other. While questions were designed to breakdown inhibitions and create a comfortable and relaxed environment, familiarity contains hidden dynamics and unspoken language.

Fourth, due to the intensive nature of public focus groups, they are difficult, time intensive and costly to arrange. This form of data collection, when handled properly, presents an immense amount of excellent qualitative data, but a very limited quantitative database for social analysis or regional comparisons.

Limitations of This Study

Limitations for this study included the number of participants and focus groups. Seven focus group in six regional locations with thirty one participants provided sufficient data for qualitative analysis but was insufficient for use in drawing valid social assumptions or community comparisons.

A further limitation was the researcher's knowledge and application of the ATLAS-ti linguistic analysis program. While a word count was all that was originally proposed within the parameters of this research dissertation, the immense capability of the ATLAS-ti software to undertake word combination analysis and concept-linking capability leaves this researcher in awe. Which leads to the next section, areas of further study which should include ATLAS-ti, if even for control data.

Areas for Further Study

As a viable methodology for further study of the topic, applying theme and content analysis to the data provided excellent qualitative results. A larger sample, more representative of the general population, would supply findings that are more specific. Future research should include differences between gender, local communities, rural/urban splits and U.S./ Canadian citizenship. It would be useful to understand these segments and the possible differences in themes and language use.

One area that future quantitative research could explore is whether there is a consensus about the existence and priority of the four themes identified in the study. Each of these themes suggests areas for more in-depth study and comparison that would add to our understanding of the role of language and resource management policy.

It would be interesting and worthwhile to conduct similar focus group discussions in communities in the next level of distance from the Red River. Communities like Steinbach, Stonewall, Altona, Thief River Falls, Hallock and Mayville could provide some interesting comparisons in themes and language.

Conclusions

Ernest Bormann's communication theory of symbolic convergence maintains that people form a degree of group consciousness and solidarity through the sharing of

fantasy themes and imaginative language. His general approach and use of fantasy theme analysis in small group settings does not focus on the speaker, the audience, the channel or the situation, but only on the *message*. The purpose of this study was to investigate that *message* through the presence of dramatistic themes and repetitive language in general discussions about water in the Red River Valley of the Upper Midwest. Applied research included theme and content analysis of narrative from seven focus groups held in the region. The three guiding questions that emerged from the literature review asked if definite fantasy themes exist, whether repetitive language is embedded in those themes, and what language comparisons exist with regional media narrative.

Four specific themes about water did emerge and were repeated in all sessions. The physical nature and presence of water in many forms, a strong and shared emotional human experience related to water, a consistent sense of conflict, control and resolution and finally general information, data and prediction were constant and repeated themes. Dramatistic language was defined as a mode of symbolic action, subsequently the repetitiveness of the words used in each dramatic story provide validation that a motivated and strategic response to a specific situation does exist throughout the region. The qualitative narrative and quantitative word count analysis support the existence of definite themes (scenarios) and also the presence of a rhetorical vision that views water as synonymous with the Red River. Based on word count analysis participants see water as abundant and manageable. The distribution and drainage of water are as important as the source and quality. We define the life of water through motion (flowing, melting, drawing, flooding)…Live Water or Dead Water (polluted, quality, scarce).

The study has made a further significant step in the growing area of environmental communication. Dramatistic language has never been studied before along the Red River of the Upper Midwest. Our study sets a precedent and, hopefully, inspires a process of further study and research on the issue. The study also provides a functional and inexpensive research method to assist government agencies, environmental organizations and interest groups better define how they should frame issues of public resource policy. Using the focus group approach and applying a theme coding and content analysis to the narrative data provides excellent and reliable information on the language we use and realities we share. It is hoped this study will benefit how future public communication campaigns identify and select language used to frame regional issues of public resource policy and to encourage public awareness and engagement in an increasing complex media environment of sound bites and flash images.

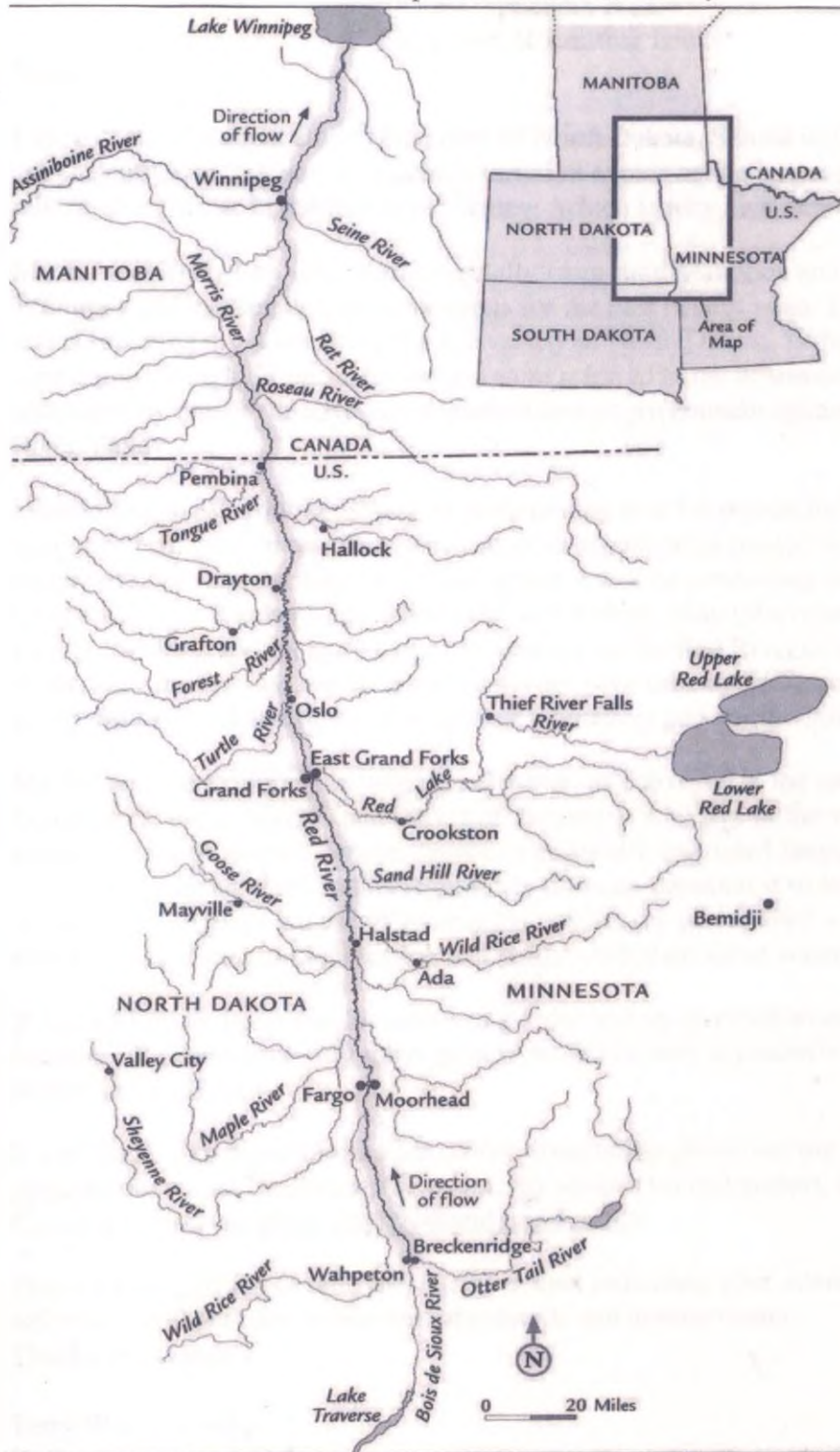> *Disciple:* Confucius said: "Water! Ah Water!"
>   What can we learn from that?
> *Mencius:* Consider a pond. The sun beats down. Where is the water?
>   Consider a spring. The water wells out. Never does it cease flowing.
>
> Taken from *Beyond* by I.A. Richards

APPENDICES

Appendix A
Map of the Red River Valley

The Red River of the North and its Tributaries

Salutation,

I am a doctoral student at the University of North Dakota, School of Communication. I am presently working on a research dissertation exploring the language we use when talking about water in the Red River Valley...which is why I am contacting you.

My name is Terry Lewycky. I am originally from rural Manitoba and have lived in Winnipeg and worked in communications for the past twenty years. I am now teaching and completing my doctorate at the University of North Dakota. Either I have accessed your name through a web search or you were referred to me as someone of possible assistance by one of the advocacy organizations or government agencies within the Red River Valley.

I would like to ask your assistance in participating in a 5-6 person focus group in your area or referring me to people whom you think would be interested in contributing a couple of hours one evening for a focus group. I will be conducting six community focus groups between Breckenridge, Minnesota and Selkirk, Manitoba over the next 4 months. I am not seeking special knowledge or expertise on the Red River or specifically about water, only interest and a willingness to donate your time by participating in a small group discussion. I assure you it will be an interesting and worthwhile experience.

My dissertation explores the language of water, as conveyed in the memories, experiences, jokes, sayings and stories of the people who live in the valley. Using focus groups, I hope to identify certain themes or culturally imprinted language that we use when talking about water in this region. My ultimate intention is to look for relationships between the language we use in general discussion, the perceptions we have and the effectiveness of our communication and public education about water related issues.

If I could impose upon you for names of people and recommendations on a possible location for your community focus group I would be very appreciative. I will arrange all details and logistics.

If you would like more information on my dissertation please see my Dissertation Abstract or contact Dr. Stephen Rendahl, my advisor on this project, at the School of Communication <stephen_rendahl@und.nodak.edu>.

Please CLICK HERE to send me a quick e-mail indicating your interest (and location) or referrals. I will get back to you with the details and arrangements.
Thanks in advance.

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(Dramatistic and Imaginative Language)

You are invited to participate in a focus group research project being done by Mr. Terry William Lewycky, under the supervision of his adviser, Dr. Stephen Rendahl, of the University of North Dakota (School of Communication). The project is a dissertation requirement of Mr. Lewycky's doctoral program. This project will involve six separate taped focus group sessions held in various community locations within the Red River Valley. These sessions will attempt to identify dramatistic, imaginative or culturally imprinted language used in public discourse about issues related to water management.

This project will provide an archive of stories, jokes and memories of the history of the Red River. The audio-tapes of these 1-2 hour focus groups will be transcribed and a content analysis of individual words and expressions will be conducted.

There are no foreseeable risks from this project. Nothing of an intimate or personal nature will be asked, or desired by the participants. The participants can refuse to answer any questions and has the right to suggest topics that are not to be discussed during the focus group. The benefits that may result from this study will include leaving an oral history of stories related to the Red River and fulfilling a dissertation requirement. We cannot guarantee your right to edit or revise or promise that you will receive any benefits from this study.

As a focus group, the project will create a historical record that will be preserved. The tapes will be transcribed and destroyed after a three-year period. This consent forms, which acknowledges your agreement to do the project and be recorded with your words stored for future enlightenment, will not be destroyed but will accompany the transcripts to the repository. The participant will not have the opportunity to review and approve the selected repository. At the repository, the consent forms will not be kept with the transcripts. The forms are administrative in nature, and will be kept in an office with restricted access.

There is no compensation for participation. Participation is voluntary, and your decision whether or not to participate will not change your future relations with the University of North Dakota. If you decide to participate, you are free to leave the study at any time without penalty.

If you have questions about the research, you may call Mr. Terry Lewycky at (204) 269-0797 or Dr. Stephen Rendahl at (701) 777-2567. If you have any other questions or concerns, please call the Research Development and Compliance office at (701) 777-4279. You will be given a copy of this consent form for future reference.

All of my questions have been answered and I am encouraged to ask any questions that I may have concerning this study in the future.

_____   _____
Participant's Signature   Date

River Talk Participant Survey

Please check ( ) or print the answers you are comfortable providing. I do not ask your identity. Thank you for participating.

Date: _____

Town, City or Region: _____

Gender: _____

In what year were you born? _____
(optional)

How long have you lived in this area/ region?

_____

How long has your family lived in this region?

_____

What is your family ethnic origin?

_____

Do you consider yourself religious or spiritual? _____ yes _____ no

Do you consider yourself environmentally aware? _____ yes _____ no

Is your livelihood directly dependent on water in any way? (agriculture, public utility, commercial activity)
_____ yes _____ no

Are you involved or active in public policy issues? _____ yes _____ no

Are you involved in local community or interest groups?
_____ yes _____ no

Have you ever been directly affected by water issues? (drought, flooding, lack of, etc.)

_____ yes _____ no

Where do you get most of your information about local water management issues?
____ Local Newspaper
____ Local TV/ Radio
____ Library/ School
____ Internet/ Web sites
____ Public meetings
____ Government representatives(elected, un-elected/administrative brochures)
____ Friends, neighbors/neighbours and family
____ Other (commercial retailers, interest groups, advocacy groups)

Do you drink bottled or delivered water in your home? _____ yes _____ no

Do you believe water is:
____ a renewable resource
____ a non-renewable resource

Name a song you may think of when you think of water

_____

Where do you get most of your information about the water YOU USE DAILY ?
____ Local Newspaper
____ Local TV / Radio
____ Library/ School
____ National Media
____ Internet/ Web sites
____ Public meetings
____ Government representatives(elected, un-elected/ administrative brochures)
____ Friends, neighbors/neighbours, family
____ Other (commercial retailers, interest groups, advocacy groups)

Comments about the focus-group session:

_____

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Dramatistic and Imaginative Language
General Focus Group Topic Themes and Agenda:

A.) Introduction
- **Appreciate your attendance**
- **Who I am and where from**

- **Here to do research for a doctoral dissertation on the language of Water**
- **How we (general public) talk about water**
- **Findings will be published as a dissertation and also for articles.**

- **Unlike other research where you have an assumption or hypothesis…this type of focus group research leaves it to the participants to identify the themes and content**
- **Non-specific participant input that we tape, transcribe and then code and analyze.**
- **Reid's job is to get you talking and telling us stories and my job is to make the odd note and code our timing for reference when we transcribe the notes.**

- **Last item is to confirm you have signed the CONSENT FORM and will fill out a quick PARTICIPANT SURVEY before you leave.**

B.) Personal Reflections:

1.) What are the first three words you think of when you think about water?

2.) Tell us your first memorable childhood experiences with or about water.

3.) Can you tell us about any story, legends or biblical/religious references that comes to mind when you think about water?

4.) Do you remember any stories that your family (parents or grand-parents) ever talked about related to water? On the titanic?? The big floods ???

5.) How does your water taste

6.) How do your children think about water…

7.) From the Heart Experiences Question related to water (good, bad, impact, fear, adventure)

8.) What are the first three words you think of when you think about the FUTURE of water?

- What are some of the main issues in this area regarding water management?
- What water issues are you concerned about?
- Have you ever heard another name for the Red River?

MORRIS #1   THEME   CODING   MATRIX

Dramatistic Theme/ Story #	Physical Attributes	Emotional Human	Control Resolution	Info/ Prediction
#1	✓	✓anxiety		
#2		✓enjoyment		
#3		✓ enjoyment		
#4		✓anxiety	✓conflict	
#5		✓ enjoyment		
#6	✓abundance	✓		
#7			✓	✓
#8			✓ community	
#9		✓anxiety	✓ conflict	
#10		✓enjoyment		
#11		✓anxiety		
#12	✓abundance	✓		
#13			✓	✓
#14			✓conflict	
#15	✓quality			
#16	✓abundance			
#17			✓control	✓
#18			✓3	

Dramatistic Theme / Story #	Physical Attributes	Emotional Human	Control Resolution	Info/ Prediction
#1	✓ taste	✓ ✓		
#2	✓ ✓	✓		
#3		✓ ✓	✓	
#4		✓ ✓ enjoyment ✓		
#5	✓ ✓ ✓			
#6	✓		✓man ✓nature	
#7	✓abundance ✓ ✓		✓	
#8	✓abundance ✓			
#9		✓fear	✓nature ✓man ✓	
#10		✓ fun ✓		
#11			✓ ✓conflict ✓	
#12	✓ ✓ ✓			
#13			✓ ✓commerce ✓	
#14	✓ ✓taste ✓			
#15			✓ ✓ need ✓	
#16	✓ ✓abundance ✓			cont'd

WINNIPEG #2 (cont'd #2) Dramatistic Theme / Story #	THEME Physical Attributes	CODING Emotional Human	MATRIX Control Resolution	Info/ Prediction
#17	✓ ✓scarcity		✓	
#18			✓ownership ✓corporate ✓	
#19			✓ ✓	✓
#20			✓global ✓warm	✓
#21	✓ ✓abundance ✓			
#22			✓ ✓ownership ✓	
#23			✓ ✓ ✓	✓

| GRAND FORKS #3 | THEME | CODING | MATRIX | |
Dramatistic Theme / Story #	Physical Attributes	Emotional Human	Control Resolution	Info/ Prediction
#1		✓pleasure ✓ family ✓		
# 2			✓scarcity ✓ /conflict ✓	
#3		✓ ✓fear ✓		
#4	✓		✓community ✓	
#5	✓abundance ✓	✓		
#6			✓ ✓community ✓	
# 7		✓ ✓memory ✓		
#8		✓	✓ ✓	
#9	✓		✓govn't ✓	
#10			✓community ✓	✓
#11	✓flood ✓		✓	
#12				✓ ✓info ✓
#13		✓ ✓memories ✓		
#14		✓ ✓	✓	
#15			✓ ✓peace ✓	

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(Cont'd #3)

Dramatistic Theme / Story #	Physical Attributes	Emotional Human	Control Resolution	Info/ Prediction
# 16	✓ ✓ quality ✓			
#17			✓ ✓ ✓	
#18	✓ ✓ quality	✓		
#19		✓ ✓ peace ✓		
#20			✓ ✓ war ✓	
#21		✓ ✓ ✓		

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SELKIRK # 4   THEME   CODING   MATRIX

Dramatistic Theme / Story #	Physical Attributes	Emotional Human	Control Resolution	Info/ Prediction
#1		✓ ✓fear ✓		
#2	✓ ✓flood ✓			
#3			✓ ✓control ✓	
#4	✓ ✓ quality ✓			
#5		✓ ✓ danger ✓		
#6	✓quality ✓	✓		
#7		✓ ✓	✓	
#8	✓ ✓ flow ✓			
#9	✓	✓ ✓		
#10			✓	✓ ✓
#11	✓ ✓ flow ✓			
#12			✓ ✓commerce ✓	
#13	✓ ✓flow ✓			
# 14	✓	✓ ✓		

FARGO #5   THEME   CODING   MATRIX

Dramatistic Theme / Story #	Physical Attributes	Emotional Human	Control Resolution	Info/ Prediction
#1	✓ ✓ abundance ✓			
#2		✓ ✓ fun ✓		
#3	✓ ✓ ✓			
#4		✓ ✓ fun ✓		
#5	✓ ✓ dry	✓		
#6		✓ ✓ recreation ✓	✓ property ✓	
#7		✓	✓ man ✓ made ✓	
#8				
#9	✓ ✓ abundance ✓		✓ ✓ commerce ✓	
#10				

GRAFTON # 6   THEME   CODING   MATRIX

Dramatistic Theme / Story #	Physical Attributes	Emotional Human	Control Resolution	Info/ Prediction
# 1		✓ fun ✓ fear ✓		
# 2	✓ ✓quality ✓			
# 3	✓ ✓ ✓			
# 4			✓ ✓restrict ✓	
# 5		✓ ✓danger		
#6		✓ ✓	✓	
#7			✓ ✓ ✓	
# 8		✓ ✓ fear ✓		
# 9	✓quality ✓ ✓	✓		
# 10	✓quality		✓	
# 11			✓ ✓nature ✓	
# 12		✓ ✓ ✓		

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