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EXAMINING VIRTUAL ORGANIZATIONS USING FANTASY THEME ANALYSIS: A STUDY OF ICT POLICY ADVISORS' DISCOURSE ABOUT DEVELOPING COUNTRIES

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ABSTRACT

Virtual organizations (also called virtual communities) are entities that use information technology to adapt to changing project, information, or marketplace demands. In this paper, we use fantasy theme analysis to identify dramas created in a virtual community or organization composed of individuals and organizations involved in giving policy-making advice to developing countries. We extend a particular kind of dramatism (fantasy theme analysis) into the realm of policy makers who create and enact dramas in their virtual communities. Fantasy theme analysis as envisioned by Bormann (1972, 1980, 1982, and 1983) is a departure from other types of dramatism in that it does not rely on the costumes, props, and physical settings to identify dramas. Our analysis found that the heroes were not the benefactors who donated money for the information technology, nor the adopters of the technology, nor even the practitioners who facilitated the implementation of information and communications technology (ICTs). Rather, the hero, surprisingly, turned out to be the ICT policy researchers. These are the people who analyze, compare and debate ICT policies, and how best to measure ICT impacts, in a free exchange within their virtual community. In our analysis of the virtual community's exchanges, the villain emerged as people within developing countries who

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suppressed or warped the use of ICTs. The group does not equate villainy with government, but equates it more closely with ruling authorities who pervert the use of ICTs who want to hinder their introduction. We conclude that the script created by a virtual organization via an Internet forum discussion is usefully examined taking a fantasy theme analysis approach, and that the resulting analysis is useful in helping policy makers identify the heroes, villains, plots and subplots of their policy discussions in their virtual community. We recommend three actions: 1) for ICT researchers we would urge them to recognize the dramas they and their colleagues are creating through their group interactions, 2) for policy advisors we encourage them to reflect on the power they possess to participate in ongoing discussions on a positive, symbolic and creative level, and 3) for researchers we recommend taking up the challenge of examining virtual communities by developing research methods that can capture the full panoply of interactions not readily available through traditional approaches. Fantasy theme analysis is one such method.

INTRODUCTION

Many researchers are exploring the recent phenomenon of virtual organizations, teams, and communities. Some of their work focuses on whether analytical approaches used to understand traditional organizations are still appropriate for deciphering those communities that only exist virtually.

In this paper, we also face that question. Specifically, we recognize that many researchers have demonstrated the effectiveness of the theatre metaphor to help investigate, illustrate, and facilitate improvement in an organization or organizational members' decision making.

Most notably, theatre metaphors are demonstrably useful in analyzing brick and mortar firms that have physical manifestations. One example is a study that uses the activities related to mounting a theatre production to help better prepare an organization for IT disaster recovery (Kendall, Kendall, and Lee 2005). Theatre metaphors, or alternatively film metaphors are useful in observing, studying, and deriving meaning from variables of office layout and design; lighting in office and public areas; clothing of organizational members; and physical props such as desks, computers, software, and other types of information processing equipment (Kendall and Kendall 1981 and 1984).

CONTRIBUTION

This paper contributes by recommending and then using a type of theatre metaphor called fantasy theme analysis to analyze discourse in virtual communities. This novel approach preserves the usefulness of the theatre metaphor for organizational understanding, while relaxing the need for analysis of a physical environment typical of critical and analytical approaches based on the theatre metaphor. In this application, we strengthen our understanding of the adoption of ICTs in underdeveloped countries. In particular, our contribution permits new insights into the ways that policy advisors, ICT researchers, and others create and share reality through their discussions in a virtual community.

Our approach extends IS research in virtual communities and organizations. While our study identifies a hero, a villain, a plot, and a subplot, other studies can further examine the interaction of the parties involved (who is on stage at the same time), or how ICTs are used in virtual communities (whether they are used to advance the plot, deepen it, or to divert the audience from the main problem at hand). Fantasy theme analysis is a viable method for studying blogs, software support user groups, peer-based recommendation systems, and many other virtual communities.

We examine whether dramatism as a methodology is still useful in interpreting the social convergence created by virtual organizations in their online exchanges. Virtual enterprises use networks of computers and communication technology to bring people with specific skills or interests together electronically to work on projects that are not physically located in the same place. Information technology enables coordination of these remote team members. The effectiveness of the dramatistic approach for use in analysis of the discourse of these virtual teams is dependent on the idea that it is free from the constraints of physical spaces. Dramatism that relies on the analysis of costumes, props, and physical settings would not be an appropriate methodology to analyze virtual communities.

In this paper, we develop and apply a methodology based on a subset of dramatism called fantasy theme analysis. Fantasy theme analysis is a methodology used in discourse analysis for theoretical and applied studies of the creation and maintenance of a group's social reality through group dramatizing. For example, it was successfully used in political communication research to grasp the multiple dramas that created US foreign policies during the Cold War (Cragan and Shields 1977); to perform exploratory research that assists in the segmentation of farm management services into understandable segments for marketing purposes (Cragan and Shields 1981); to identify the broad appeal of gurus in the management "effectiveness" movement (Jackson 1999); and to study the formation of online hate groups (Duffy 2003).

This approach moves us away from the concreteness of other dramatistic methods and permits us the freedom necessary to explore the discourse created by virtual organizations. Using fantasy theme analysis, we identify dramas created in a virtual community of policy advisors and donors linked together by Bellanet (found at www.bellanet.org). Bellanet is an international nonprofit initiative governed by a steering committee representing several donor institutions.

For the purposes of this study, the goal of understanding the drama is to demonstrate the usefulness of fantasy theme analysis for

understanding virtual communities and secondarily to feedback that drama to policy makers and others to increase their awareness of how they are dramatizing policies concerning the impact of ICTs on developing countries.

VIRTUAL TEAMS, COMMUNITIES, AND ORGANIZATIONS

Virtual teams are becoming increasingly central to the organizational life of traditional organizations (Grenier and Metes, 1995; Jarvenpaa, Knoll and Leidner 1998; and Mowshowitz 1997 and 2002), and they are taking their place as replacements for physical work teams as well (Vickery, Clark, and Carlson 1999). Definitions of virtual teams also include, "groups of geographically and organizationally dispersed coworkers that are assembled using a combination of telecommunications and information technologies to accomplish an organizational task (Townsend, DeMarie and Hendrickson 1998, p. 18). Virtual teams also possess "cooperative relationships supported by information technology to overcome limitations of time and/or location," (Morris, Marshall, and Rainer, Jr. 2002).

One fruitful branch of research is examining the development of trust in teams that cannot see each other face-to-face (Sarker, Valacich, and Sarker 2003). Other researchers have explored the use of text, audio, and video and the impact on decision-making (Baker 2002) in virtual teams. They found that adding video to audio-only communication could result in a significant improvement in the quality of a virtual team's strategic decisions. These results help underscore the importance of the concrete, physical manifestation not typically available for virtual teams, as well as the difficulty for researchers in trying to analyze what is occurring in virtual teams that do not have physical environments.

Other authors (Warkentin, Sayeed, and Hightower 1999) have done exploratory studies of real versus virtual teams and concluded that collaboration technologies are capable of creating a communication environment for virtual partners they can also serve as hindrances to the group development of cohesion and satisfaction with their own

interaction process. The importance of the strength of relational links became apparent when the authors found that they are positively associated with the effectiveness of information exchange. However, researchers later found difficulty in predicting team behavior in using a collaborative tool, and in reusing a shared knowledge repository (Majchrzak, Rice, King, Malhotra, and Ba 2000).

A wide-ranging state of the art discussion of virtual organization literature is presented by Belanger, Watson-Manheim, and Jordan (2002). They note that many of the current methodologies for approaching virtual work do not adequately address the complexity or the diversity of the phenomenon. While some researchers are studying the differences among virtual communities, our interest here is in the similarities of virtual communities. Virtual communities can be defined as “social aggregations that emerge from the Internet when enough people carry on public discussions long enough and with sufficient human feeling to form webs of personal relationships in cyberspace,” (Rheingold, 1998). Specifically, the use of information and communications technologies to create a sense of community, an open and shared exchange of information; signed, rather than anonymous interactions; shared goals of information exchange; an awareness of community topics of general interest and an adherence to certain modes of address and standards of online behavior are all features that virtual communities share.

It is important to study virtual communities for a number of reasons. The first is that they are a recent manifestation of organizational processes, and it is *prima facie* worthwhile to study emergent forms of organizations. The second is that the openness that characterizes the policy discussions studied here provides unparalleled access to multiple exchanges.

Virtual communities can take many forms and they are ubiquitous. Virtual communities began as bulletin board postings on the Internet (some still are) and they have spread widely with the advent of the Web and improved access to the Internet. Some virtual communities are content or profession based

and organizations host them for their employees; others exist based on the largesse of commercial sponsors; still others are free but center discussion on leisure, political, medical or other specific interests. Many readers may have experience with the virtual communities sponsored by Yahoo! or GeoCities organized around special interest topics.

Our interest is in studying policies for ICTs in developing countries. In order to observe a virtual community we went to a credible, virtual community called Bellanet. Bellanet broadly defines its own organizational objectives - as to better information and communications technologies programming strategies that include improving ICT policy advice and program development. Specifically, we are examining the virtual community called the inet-Impact list forum, a forum under the Bellanet umbrella. The inet-Impact is a public, unmoderated forum for discussion of how best to measure the development impact of the Internet and other information and communications technologies on developing countries. It is a virtual community of practice that is open to people or enterprises who share an interest in the evaluation of information. A more detailed description of the inet-Impact list forum is provided in the upcoming methodology section.

CHOOSING A DRAMATISTIC APPROACH

Dramatism is a way to understand, interpret, predict and even change modern social interactions. There is ample research extending over the past six decades or so, that points to the meaningfulness of adopting a dramatisitic perspective or theatre metaphor as a powerful research approach when examining an amazingly broad array of traditional organizations and organizational problems.

Many researchers have successfully used the theatre metaphor to understand organizations and organizational members. While it is not the purpose of the research undertaken here to complete an exhaustive review of their plentiful contributions we have included some highlights to demonstrate the

pervasiveness of the use of the theatre metaphor in modern organizational studies.

Gardner and Avolio (1998) have used the theatre metaphor to understand charismatic leadership. Crossan, White, Lane, and Klus (1996) have used the dramaturgical approach to develop a newly emergent organizational skill called “organizational improvisation.” Kanter (2002) has also contributed in the improvisational arena.

Clark and Mangham (2001) analyzed a play written by bank managers and reveal that the theatre is a technology rather than a metaphor in this case since management is using it as a tool for change. Roach (1986) used the theatre metaphor to suggest creation of a decision theatre - a physical space where participants can develop skills in interpersonal relationships, and solve problems in areas such as decision-making, team building and conflict resolution. Bryant (1993) extends the theatrical metaphor to the study of operations research and concludes that the quality of discourse brought about through the activity of building a model is often of greater consequence than a specific application or solution resulting from the exercise.

Czarniawaska-Joerges & Wolff (1991), Mangham and Overington (1987), and Czarniawaska and Jacobsson (1995), all use Burke’s pentadic approach to analyze organizations as stages for action in which the roles of organizational actors are put together theatrically for role-playing and for the constructing of a carefully manicured and stage-managed image.

Boje, Luhman, and Cunliffe (2003) convincingly argue that there is dialectic approach to dramaturgical analysis, which suggests that theatre is both life and metaphor wherein they assert that it is possible to use the theatre metaphor to reach critical consciousness as well as a “transforming formal spectacle through experiments in emancipatory carnival-like theatre.”

In his dramaturgical study of gendered differences in managerial repertoires between male and female managers based on interviews with members of the National Health Service in England, Greener (2004) found that female managers are able to draw on different

behavioral strategies than their male counterparts.

Kendall and Kendall (1981 and 1984) developed a dramaturgical methodology to analyze the action of executives and employees in organizations. Their methodology also relied on *mise en scène* analysis based in film theory. They created a method, called STROBE, for analyzing the physical environment consisting of the costumes, setting, lighting, and props used in corporate dramas, and concluded that organizational members (actors) often contradict what they say in the organizational narrative (interviews) in the way they interact with their props and surroundings.

One can argue that theatre metaphors, including STROBE, which stands for STructured OBservation of the Environment, are suitable, perhaps even superior to other methods of analysis. As Figure 1 illustrates, these methods tend to concentrate more on concrete elements such as the location, scenery, lighting and color, props, and costumes. Upon analysis, one can see that scripts often contradict observations of concrete elements. Overall, the theatre metaphor is a useful tool of analysis for organizations.

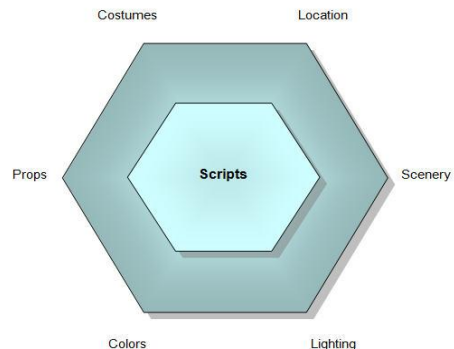


Figure 1. Theatre Metaphors usually concentrate on concrete elements.

The lack of a physical setting for virtual organizations has important consequences for the choice of dramaturgical approach for this particular study. Although the Mangham and Overington (1983 and 1987), and Kendall and Kendall (1981 and 1984) approaches are useful in traditional

organizational settings with physical environments such as an office, they are less applicable to the virtual organization.

Virtual organizations may not have physical space, and the costumes of the participants may go unnoticed in a virtual setting, so we need to explore the script to reveal clues about the virtual organization. Dependence on the script or narrative alone might lead to some difficulty, as Kendall and Kendall (1984) point out. Often the visual elements contradict the narrative and the researcher needs to examine the scene further to resolve these conflicts. Accepting this caveat, we still believe that a script can be powerful, and suggest that further analysis of the script, as theatre, deserves exploration.

FANTASY THEME ANALYSIS

Approaches for analyzing scripts as theatre are not new. Bormann (1972, 1980, 1982, and 1983) developed a particular use of dramatism, which he also calls “fantasy theme analysis,” rooted in the study of messages, created through social interaction of small groups, which then “chain out” into larger society. Bormann noticed that small group members dramatized events, casting heroes and villains, placing blame and praise, finding a sanctioning agent for their actions.

Bormann theorized that dramatizing helped group members create a rhetorical vision, built of “fantasy themes.” Bormann believed that the dramas were present in a group’s written words, and that the dramas’ indisputable presence made them a worthy object of study in their own right.

We are concerned with the virtual community and the world created online. The virtual organization has none of the trappings of *mise en scène*, which traditionally refers to the arrangement of actors and scenery on a stage for a theatrical show, a stage setting or the physical setting of a stage action. The virtual world does not feature the props, the costumes, or the face-to-face dialogue.

Given the less developed state of physical signs and symbols in the virtual world, we must rely heavily on the text material to reveal the drama taking place in these communiqués. Fantasy theme dramatism

was successfully applied to a variety of organizations. Cragan and Shields (1981) used this form of dramatism to study firefighters and help a pharmaceutical company determine what dramatic visions were guiding their management groups. Kendall (1993) adapted Bormann’s dramatisitic approach to demonstrate the use of dramatism for discovering and interpreting corporate dramas inherent in the language of the boilerplates of the annual reports of the Dow Jones Industrials.

Earlier we made the argument that fantasy theme analysis is more suitable than other forms of dramatism for this study because we are looking at virtual organizations. Fantasy theme analysis also has other advantages. The primary emphasis is on the script, as it creates a drama. Envisioning an ongoing drama invokes the theatre and all it does to communicate with an audience. By analyzing the drama, fantasy theme analysis identifies the heroes, the villains, and the agents that sanction the drama. In addition, it reveals human characteristics such as emotion, motive, and meaning as intertwined with the hero, villain, and agents. Once these are revealed, the analyst or participant is about to experience an “Aha!” moment that is a crystallization of insight that propels them into a gestalt-like coalescing of the pieces of a puzzle. As illustrated in Figure 2, fantasy theme analysis is robust.

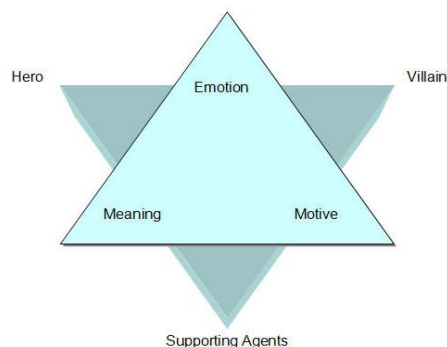


Figure 2. Fantasy Theme Analysis allows emotion, motive, and meaning to be intertwined with the hero, villain, and other supporting agents.

Fantasy theme analysis is more useful for this study of virtual organizations because

it allows the researcher to analyze the script, while it does not require additional physical or interactionist elements of the dramaturgical metaphor as suggested by other studies (Mangham and Overington, 1983; Kendall and Kendall, 1981 and 1984). While both sets of authors suggest the utility of seeing the whole of the organization as a metaphor, including the space, props, costumes of key actors, and their scripts, Bormann suggests that dramas (which manifest meaning, emotion, and motive; heroes, villains, sanctioning agents and so on) are discourse itself, or what we refer to as the theatrical script. Therefore, we choose and adhere to the fantasy theme framework for this study. For a more detailed comparison of fantasy theme analysis versus other types of discourse analysis commonly used in information systems research, please see Kendall, Kendall & Kah, 2003.

METHODOLOGY

The host of the ICT policy list forum (the virtual organization under study) is Bellanet, an international nonprofit initiative governed by a steering committee representing a number of funding partners including:

- Canadian International Development Agency (CIDA)
- Danish International Development Assistance (Danida)
- International Development Research Centre (IDRC)
- Swedish International Development Cooperation Agency (Sida)
- United Nations Development Programme (UNDP)

The broad objectives of Bellanet include a commitment to learning, listening, and collaboration in developing nations. In order to achieve these objectives Bellanet actively pursues ways to encourage the development, adoption, acceptance, and use of ICTs more effectively as well as pursuing ways to better connect with the global development community.

Bellanet evolved from international meetings on donors and foundations held in 1994 in Bellagio, Italy (hence the name "Bellanet"). Those who attended the meeting realized that it was imperative to discover

ways to combine their knowledge and their efforts to help developing countries. Bellanet focused on exploring applications of ICTs by "collaborative initiatives" that brought their constituents together in new ways, one of which was an online discussion forum. Early on, major accomplishments included providing technical and strategic assistance to the African Information Society Initiative and the Association for the Development of Information in Africa.

During the period that we analyzed, the contributors grew from 30 to 117 members. The inet-Impact is a public, unmoderated forum, which provides a virtual community for discussion of how best to measure the development impact of the Internet and other information and communications technologies. This discussion started on July 24, 1998 as a follow-up to a session called "Measuring the Development Impact of the Internet and Evaluating and Implementing ICT Strategies for the Information Age," which took place during the first Global Knowledge Conference in Toronto, Canada. This discussion forum, LEAP IMPACT (inet-Impact-L) aims to improve the institutional performance of monitoring and evaluation practice related to information services, information products and information projects. It is a virtual community of practice open to all individuals/organizations interested in the evaluation of information.

We looked at all text messages from the online discussion, called the inet-Impact list forum, dating from July 24, 1998 to January 17, 2002. Hundreds of messages ranged in size from eight words to about a 1,000 words. Although there was no seasonal pattern, they tended to come in bursts from time to time as participants responded to a key message. We do not consider that any of these quantitative measures help to identify, understand, or define the characters, plots, or subplots. Other forms of analysis, including content analysis (Krippendorff, 1980) (which is a traditional approach to tackling large bodies of unfamiliar texts) would have yielded different results that concentrated on words and phrases such as ICTs, the Internet, networks, the Web, email, and telecommunications.

While these words describe enabling technologies, they are *sans* emotion. The danger is that funding organizations, Bellanet, and the virtual community of ICT policy advisors as a whole would focus solely on these technologies. However, using the theatre perspective afforded by fantasy theme analysis, we see that these words describe mere props. The technologies in and of themselves do not achieve any of the Bellanet or list forum goals. Rather, it is the identification, development, adoption, acceptance, and use of these technologies that help developing countries. It is essential to note that the underlying value framework is important, not the particular word such as “Internet,” but the meaning that is created for it by the virtual community.

The importance, therefore, lies in the communication and actions of the actors in this drama and the values underlying their communications and actions. Our analysis focuses on these by applying the principles of fantasy theme analysis. Although there are many actors on stage, analysis of the drama will reveal which are the protagonists and the antagonists. We do not understand the plot or any subplots (if they exist). For, in order to understand the dramas, one needs to know all of these things. As we identify dramas, we can account for how the group creates, raises and maintains its own consciousness concerning the measurement of ICT impacts in developing countries. Understanding the group consciousness of the virtual community responsible for ICT policy and for measuring the impacts of ICTs in developing countries is an important step in grasping their social reality and how it might influence outcomes as well as be influenced in future exchanges. Therefore, we applied the fantasy theme dramatic perspective to examine the dramas present in the virtual community of the ICT policy list forum.

The process involves reading each message thoroughly to look for the dramas revealed there. Dramas are stories with a plot in the form of a beginning, middle, and end, that have a hero, villain, and subplots, along with supporting agents. When we find recurring themes and dramas, then the next step in the process is to construct configurations that recur throughout. In this

particular study, we are concerned with understanding the dramas enacted about the success or failure of particular information technology policies.

There are many logical ways to approach the data set of communications present in the text of the list forum messages. Kendall, Kendall, and Kah (2003) discuss three approaches to discourse analysis that would be valid for analyzing this data. In this study we used a form of functional discourse analysis. Our first step was to examine the data for emotionally loaded terms (the list serve participants in this virtual community do *not* use emoticons to convey emotional content as is done in some other virtual cultures). Therefore, we initially sought out key words appearing frequently in online messages that represented good and evil.

As is traditional in fantasy theme analysis, we, a group of three researchers, labeled these words as either God or Devil terms. The reader should note that we did not sanitize the quotations for publication by correcting repetitions or misspellings. It is interesting to observe that misspellings do *not* occur in all online discussions or organizational emails; however, the culture of the ICT policy list forum participants sanctioned rapid communication over the desire to “perfect” a document before sending it. After careful reading of the discussion messages, we chose the God and Devil terms. We then searched the online discussion messages for them. At that point, we highlighted and color-coded the terms so that they would be readily identifiable on a page. Table 1 shows the terms used to analyze the virtual community’s online discussions.

The next step in our analysis was to re-read the discussions, paying particular attention to problems and ICTs that cluster around the God and Devil terms in the text. As we grasped the presence of patterns, we were able to witness the heroes and villains of the drama emerge.

CONTRASTING GOD AND DEVIL TERMS

The God and Devil terms that emerged from our analysis provided interesting

contrasts. While they are not necessarily opposites, some clear contrasts emerge. For example the terms “access and connectivity,” versus the term “land locked” point out judgments about the availability and unavailability of the Internet. Another interesting contrast is apparent in the God term of “democracy” versus the Devil term of “bureaucracy.” Further, we see the God term “free” in contrast to the Devil terms of “controlled” and “constraints.” Taken together the God and Devil terms point to a rich tapestry of the shared values and beliefs emerging from our fantasy theme analysis. In the upcoming section, we include relevant quotations from listserv participants that are indicative of the rhetoric we analyzed. To provide a glimpse of how the rudimentary terms began informing our analysis, we highlighted God terms in the quotations as blue and Devil terms as yellow.

FINDING THE HERO WITHIN

Whom would the ICT policy experts and advisors see as a hero? Who would emerge as a villain? How would the plot unfold? As we analyzed the God and Devil terms from the virtual community dedicated to ICT policy, the hero took form, and their features became recognizable.

Examining the clustering of God terms around an entity in the rhetoric of the online ICT policy community, we found that the group consistently introduced rhetoric describing a strongly idealized version of one of the types of list forum participants as their hero, the ICT policy researcher. This hero is capable of creating, improving, and otherwise shaping ICT policy. The means they employ are progressive and insightful assessments of impacts of the Internet and information and

Table 1: Some of the God and Devil terms in the ICT policy drama. God terms are words or phrases used in a drama which characterize highly revered values and attitudes towards actors and objects. Devil terms are words or phrases that have very negative connotations.

God Terms	Devil Terms
Access (ibility)	Bias (ed)
Collabor (ation, tive etc.)	Bureaucra (cy, cies, cratic)
Community	Constraints
Connectivity	Controlled
Demo (cratic, cracy etc.)	Costs
Diffusion	Crime, Criminal
Dissemination	Destabilization
Efficien (t, cy, c ies, etc.)	Diminish
Empower (ment)	Disadvantage (d)
Encourage (ment)	Evil
Facilitate	Failure
Free	Hatred
Global	Hype
Goals	Inefficient
Growth	Land locked
Independen (ce, t etc.)	Loss
Infrastructure	Problem
Initiate (Initiative)	Repercussion
Innovat (e, ion)	Risk
Open (ness)	
Plan	
Prior (ities, or y)	
Productiv (e, ity)	
Progress	
Support	

Note: List serve participants used both British and American spellings as well as including misspellings that are not shown here. Adapted from Kendall, Kendall & Kah (2003).

communications technologies in the developing countries under advisement. This hero often champions democracy in the face of opposing models of governance. One list forum participant wrote:

On democratization for example, I recently discovered an unusual indicator of Internet impact in Africa ... My conclusion was that the openness of the Internet allows the "good guys" to win out in the long run. But it takes work.

The hero as idealized ICT policy researcher is equally well versed in both quantitative and qualitative approaches to impact assessment and measurement issues surrounding economic, political and social aspects of policy. The hero is an expert who seeks out the advice of other IT policy experts in order to deepen their own powers of discernment in those matters. Another list forum participant wrote:

On the other hand it was suggested in the countries we visited that local radio stations were now using the Internet to get stories which they were rebroadcasting in local languages, and that this improved access to information was likely to improve public understanding of issues before legislative bodies and otherwise contribute to democratization. On the one hand, such anecdotes do suggest an impact, and indeed an important impact. But I am uncomfortable with accepting such anecdotal evidence as establishing the necessary causal relationship between the Internet and democratization. ...I have suggested that a potential way of getting better understanding of the impacts of the Internet would be to ask a panel of experts to review the data collected from quantitative and other indicators, and to provide a qualitative evaluation of the likely impact (in prose). There are a lot of problems with such an approach--getting "experts", developing a process which leads to better rather than worse judgments, finding ways to make prose palatable to policy makers, etc. Therefore as we discuss the indicators of the impacts of the introduction of the Internet in Africa, I think we might be justified in having a

section specifically on such qualitative indicators.

The hero thoroughly grasps the culture and political dynamics of the developing country almost as if by a gestalt. The virtual community's hero is also responsive to the wishes of the country being served (and studied through impact assessments), realizing with refreshing and humble candor that one's knowledge is always less than perfect. A list forum participant commented:

... what is the purpose of the assessment and who is supposed to take advantage of it. For me, impact assessment is a community process for the benefit of the community. It is perhaps more important as a consciousness awakening process than as an input to policy making. This is one more reason why all stakeholders, and not only experts should be involved.

Interestingly, the ICT policy researcher hero as created on the list forum is not restricted to existence in a purely physical form. The online discussion created a hero who is aware of the virtual world created and sustained by the Internet on a variety of levels including the individual, group, and community level. Another list forum participant commented:

...Pipelines and infrastructure are features of that space and important in terms of how they contribute to a built virtual landscape. Access, connectivity, telecom regimes, prices, ext. determine the scope, scale and accessibility of this electronic space. Measuring those and changes in those is useful because it tells us something about scope, range, and accessibility to this new "space". That is useful but there is a lot more to be measured. In my work I define this space as a collaborative work venue AND a social process venue. I also tend to stress equally individual, group, and community use and presence. I use the notion of an electronic persona to characterize presence in the space and ask what things do these (individual/group/community) persona do in this space, what do they bring to it, and what do they take from it.

The hero also seeks the best indicators of Internet supply; Internet penetration; its environment support; institutional use of the Internet; its impact on democracy and civil society; and the Internet's impact on private sector development. The hero possesses a keenly developed sense of how to go about the complex tasks of assessment of technology impacts in developing countries.

As we move to consider the emergence of a villain, it is worthwhile to note that although the hero exists *within* the virtual community, the villain is located as external to it. This is not surprising, since identifying a villain outside of the group is a common way for groups to forge a shared identity.

PLACING THE VILLAIN OUTSIDE

Using rhetorical fantasy theme analysis, we began with the clustering of Devil terms as we analyzed the text of the listserv virtual organization for the emergence of a villain. Exploitation, abuse, twisting or distortions of the Internet are all activities of the villain. In the list forum drama, the villain often takes anti-democratic actions; or seeks to ensure that the rich get richer while the poor get poorer. One list forum participant wrote:

Moreover, there are probably anti-democratic impacts of the introduction of the Internet (use of the Internet by anti-democratic factions, possible deterioration of the standards of validation of statements made in public discourse), which counteract the positive impact identified in the anecdote.

Whoever would repress a native population, whoever would spread hatred of others, promote factionalism over unity or seize on the Internet or other ICT as tools of propaganda and isolationism, embodies the villain. Another list forum participant wrote:

But I would finish by saying that Internet can also help on improving the those preconditions even though it could deteriorate the situation when used for such destructive ends as destabilisation or propagating hatred.

Frequently the villain identified in the list forum corresponds to a corrupt ruling autocracy or an out of control regime. Many

times this villain and the ruling authorities are one and the same in the developing country. A participant in the list forum discussion frets for the safety of the citizens of a developing country when a villain bends the Internet to suspect purposes:

I worry too about the negative impacts of the Internet. I suspect African countries will continue to fall behind in mastery of the technology, and as a result will lose competitive advantage to other countries that do master the Internet. I can imagine some countries in which factions will appropriate the Internet for purposes antithetical to the welfare of most citizens.

Interestingly, the villain and hero lock horns in a relationship wherein the villain is required to interact with the hero in order to reach their stated goals of policy influence. Heroes must demonstrate their diplomatic talents tested since they must tread a very fine line in relating to the "ruling" villain to first gain entry into the developing country and then secure permission to assess the impact of the Internet on that country. Another list forum participant wrote:

Moreover, there are probably anti-democratic impacts of the introduction of the Internet (use of the Internet by anti-democratic factions, possible deterioration of the standards of validation of statements made in public discourse) which counteract the positive impact identified in the anecdote.

The villain can benefit from the proffered relationship with the hero. Outward signs may even be that an expert from the outside is sanctioning the actions of a repressive regime. However, for the hero, the appearance of siding with the villain is just one more barrier to overcome. A list forum participant comments:

Just extending the riff on interviewing, the word "authority" is interesting. On the one hand, an authority is someone from whom one can obtain "authoritative" information. On the other hand, the authorities are those with "legitimate" power. At least in English we confound the ideas of control of knowledge and exercise of power in this term. But the result is that if you seek

authoritative informants, you often wind up with political influentials. Similarly, as you change knowledge flows, it seems likely that you will change patterns of authority. Now if you ask the people who have exercised power due to their control over information about the impacts of changes which give new people such control, what are they going to say? What will the newly empowered people say? How are you to interpret the meaning of their responses without a clear understanding of the authority relationships and how they are changing?

The villain poses many hindrances to the work of the hero, the idealized ICT policy researcher. One disturbing barrier is the potential for harassing citizens who participate in a study.

In the end, the ultimate meaning of “working for a villain” remains for the hero to contemplate. What indeed are the possible risks of strengthening the villain’s power with technology? One list forum ponders this in the following comment:

I wonder what similar stories the anthropologists will tell in the future about the impact of networking on communities? It seems clear to me that a lot of institutions are based on authority relationships which in turn are based on command of knowledge and understanding. I doubt that many community networking initiatives are neutral with respect to these authority relationships, and I doubt that many networking projects are very thoughtful about which "authorities" are strengthened and which are weakened by the differential access to the network that develops.

The villain, then, is dramatized by the virtual group as external to it, and inside a developing country.

OBSERVING THE MAIN PLOT UNFOLD

The key plot revealed through the online discussion of the ICT policy experts is an epic struggle to come to define and measure impacts of ICTs in developing countries, and whether qualitative or quantitative measures are best. One list forum participant comments:

...We may need to specify in first place our working definition(s) of impact. Mine is _The changes in people's or organizations' ability to cope with their problems as a result of the use of information._ Rather than trying a quite tricky sampling of Web sites, one may just count those which are offering contents bearing on our 3 _impact areas_ (economy, education and democracy); multiple allocations being allowed. The higher dividends the number, the richer the information environment. Possibly add a quality rating, though this is too sensitive to individual biases. That gives us the input. Remains the outcome...

When the entire volume of messages is read as a whole, a strong dialectic emerges through the online discussion. The tensions between ICT policy researchers (who are trying to measure the impacts of ICT policies and implementations) and policy advisors are clear. (Policy advisors in this case are members of the listserv who advise foreign governments in developing nations about ICT implementation policies. They hail from diverse backgrounds and specialties in telecommunications, development, and foreign policy. They include paid and volunteer consultants to the policy process.) The debate lurches back and forth, over what are the best ways to measure ICTs. Is it using qualitative methods, or quantitative ones? Or a combination of the two? (Recall, as mentioned earlier in this article, that the initial motivation for the creation of the listserv was a conference devoted to the topic of the impacts of ICT policies.) Another list forum participant wrote:

...I certainly agree that we want to add qualitative observations, and be careful of too great a reliance on quantitative analysis. On the other hand, I don't want to through out quantitative analysis entirely. We might for example seek intermediate indicators of the impact of the Internet where causality is credible even if the causal linkages are less clear than "substituting email for fax saves money," but for which strong theoretical causal arguments suggest positive indirect impact at the national level.

Complexity comes to the debate when members of the virtual community share their frustrations concerning the relationship between ICTs and development. No one seems happy with the current approaches to explain these relationships. One list forum participant observes:

What we do need is a notion of what the relationship is between ICTs and development. We have some early models, all device-centered and build on mechanical process models. They include the information pipeline (information highway) and the information infrastructure (production capacity). They underly the various measures of 'penetration', use, connectivity, access, bandwidth, megaflop measures, etc. I would classify your approach as being in this area. ...My critique is that such approaches are: (A) too device focused (counting things) and when they include process they focus on mechanical processes (who uses what); and (B) they measure intermediate stages without looking at the ultimate deliverables.

The relationship between ICTs and the development warrants further clarification, as elaborated by this list forum participant:

The purpose of the measurment - and I should have said this earlier - is to "unconfound" the relationship between the the inputs - of which ICTs are just one set - and development deliverables. It is to tease out the identifiable roles played by ICTs and evaluate good and bad uses of ICTs in the development process. Much of what we read is about good and bad process in the introduction of ICTs to this or that. Interesting but only a small piece of the question.

There is often dramatic tension between those who are working within a developing country, and those who are working from outside. Many community members are concerned with the ultimate use of impact study results. The following section provides more detail about this subplot and others.

Another embellishment of the central drama involves members questioning whether

the hero can maintain their integrity once forced to deal with the villain in obtaining approval to conduct an impact assessment. After all, the villain holds the political power in the country, and has the right to give life to the impacts assessment, deciding whether the study will go forward, who will be involved, and on what terms.

THE SUBPLOTS: WATCHING THE ACTIONS OF SUPPORTING DONORS

Analysis of the transcripts from the virtual community revealed several key subplots created by the participants in their exchanges. They pivot around interactions among ICT policies, impact studies, and the donors or funding agencies for ICT projects in developing countries. Specifically the subplots include: 1) donor organizations or funding agencies disagree with user community perspectives on the impacts of ICTs; 2) the importance of examining what donors desire from their support of ICTs in developing countries and, 3) questioning whether resources allocated for studying the impacts of ICTs would be more effectively placed in other types of development studies.

A subplot of the central drama gives depth to the resonance of the small group's drama as it plays out across the international stage. The hero as the idealized IT policy researcher and the villain as a political power in the ruling country are not alone on the stage. Our analysis of the listserv exchanges reveals that the discourse recognizes the existence of a producer who underwrites ICT impact assessment studies. This is either the donor organization or funding agency. The subplot develops the theme that donor and the community's perspectives on impacts do not always agree. One list forum participant comments:

You raise an important issue. There is, of course, another legitimate constituency -- the funding institution for a program -- where the questions are bottom-line what-should-we-fund. In a more perfect world, that funding institution would be primarily interested in the community's own view of impact. In the real world, the perspectives may well only partly coincide.

In an amplification of this subplot, the drama asserts that those who are involved in the bringing of the Internet to Africa are obligated to examine what the impact of their subsidies has been. Another participant comments:

...as people of other countries are subsidizing some aspects of the process of introduction of the Internet into Africa, those people have a right and obligation to assess the impact of their efforts.

In another prominent subplot, some members openly question whether resources currently allocated for studying the impacts of ICTs would more effectively be placed in other types of development studies. Alternatives for funding range from impact studies of education or feeding the population of a developing country.

In summary, in this section, we pointed out that the idealized ICT policy researcher is created as the hero of the listserv drama in this virtual community. The autocratic ruler is the villain, placed outside the community, usually in the developing country. The struggle to define meaningfully the impacts of ICT in developing countries is the main drama played out in the fantasy themes of the list forum participants in their virtual organization. Subplots also emerge. Members amplified the ideas that donors and funding agencies needed to participate in assessments of impacts; members came to the collective realization that their views of development may be only partially shared, and they also questioned the validity of allocating scarce resources to impact studies of ICTs, when so many other areas of development (many of them central to basic human needs of food, shelter, clothing, and education) continue to lack adequate funding,

DISCUSSION

We used dramatic methods to help reveal dramas of ICT policymakers in a virtual community. Eventually the emergent dramas can help to shape ICT policy in developing countries through the identification and reflecting back of the dramas to policy advisors and makers. It is often the case that participants in the creation and sharing of dramas are unaware of their casting of villains

and heroes until they are mirrored back to them. We believe that fantasy theme analysis is exceptionally well suited to the revelation and exposition of dramas created in virtual organizations and communities that cannot use physical presence or environments to enhance their communication.

The results of our fantasy theme analysis of the dramas created on the inet-Impact list forum from 1998-2002 are summarized in Figure 3. This figure specifically illustrates for the reader how the fantasy theme analysis elements (introduced in our earlier discussion of the methodology) have been specifically revealed through our critical analysis of the written discourse available through the listserv exchanges. A specific hero, the idealized ICT policy researcher, emerged from the discussion. In addition, this virtual community casts as a villain the autocratic power in the developing country.

These choices were not evident to us when we began this study. We would probably have predicted that donors and funding agencies would be depicted as heroes, since in our reality they seem to offer a solution to some problems and a way to accomplish ICT implementations. As for villains, a more obvious guess would be managing directors who would be oblivious to the value of ICTs in the developing country.

After completing our analysis, the dramas the group created and shared through their exchanges became clear, and they were different than one would have supposed. Most often the group under study is unaware of their use of God and devil terms, and thus the meanings and values it has created and is sharing. Likewise, groups are often unaware that they have interacted intensely enough to create a shared hero, villain, plots and subplots unless these ideas are mirrored back to them via a consultant's report or through a formal organizational intervention designed to re-shape the emergent culture.

The main dramatic tension or plot materializes as one reads the voluminous transcript wherein participants vigorously exchange thoughts about what is the best way to measure the impacts of ICTs in developing countries. Should one use qualitative or

quantitative measures? Which more accurately captures and portrays what is happening with the deployment of ICTs?

Three subplots emerged from the participants: 1) donor organizations or funding agencies disagree with user community perspectives on the impacts of ICTs; 2) the importance of examining what donors desire from their support of ICTs in developing countries and, 3) questioning whether resources allocated for studying the impacts of ICTs would be more effectively placed in other types of development studies. They are pictured in Figure 3.

Bormann envisioned a dramatic approach that would rely on the written or spoken word, the script or narrative, in reaching its conclusions. He steadfastly asserted that dramas are detectable in the message (the script) alone, and that the product of the resulting dramatic methodology (a critique) is amenable to replication because the drama is intelligible to any insightful researcher who approaches the script in this manner. The sets, props, and costumes, according to this methodology, can be virtual

themselves, left to the imagination of the audience.

Thus the very characterization of a virtual community existing only in the ether, with its absence of a physical space, props, settings, scenes, or costumes, and lack of face-to-face interaction in conjunction with the text-laden creation of their dramas online seems particularly well suited to fantasy theme analysis.

In this article, we have identified the exchange of messages on an Internet public forum to examine how participants create and share dramas in a virtual community. We have identified a hero, a villain, a main plot and subplots that the listserv created and sustained over a period of years. We have investigated the use of the dramas and their potential future use to help shape policy regarding information and communications technology in developing countries. We also examined how the dramas will help or hinder policy formulation regarding information and communications technologies, as well as its acceptance, distribution, benefactor support and investment in developing countries.

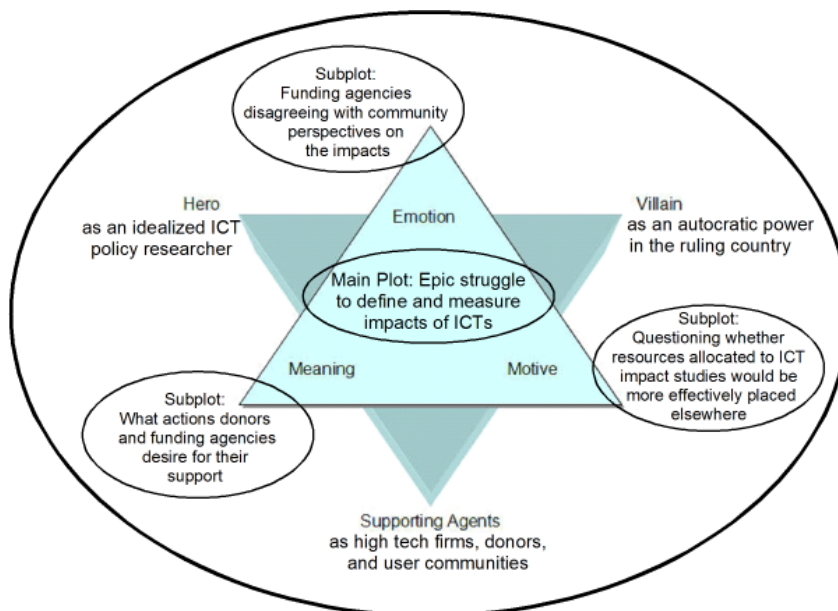


Figure 3. Fantasy Theme Analysis identifying the hero, villain, main plot, and subplots created by the Listserv participants in the ICT impacts virtual community.

ICT experts with a wide range of experience in mounting ICT policy in

developing countries participated in this unmoderated, public list forum. They were

from several different countries. Some were government ministers from developing countries; others were interested advisors and experts who were trying to come to grips with shaping ICT policy.

The reasons for performing a dramatical fantasy theme analysis on the information exchanges from the ICT policy list forum are myriad. One is to illuminate what is occurring in the list forum exchanges, to bring it to the conscious level in a systematic way for the critic, student or researcher of social policy. With this, the critic has a goal of understanding the dramas being created by the virtual exchanges.

A second reason is to hold up the drama we identified to its enactors and creators hoping in this way to mirror back to them what has been evolving on the Web list forum in an organized and “framed” way for their further consideration and eventual action to improve policymaking. Typically, participants in dramas are not fully cognizant of the drama in which they are acting. Revealing a coherent plot, replete with a hero, and a villain, to a participant typically enmeshed in the minutiae of a list forum exchange, is a powerful technique. It is an additional perspective and often the act of supplying a completed mosaic or picture, rather than just another small piece of it, is a cause for greater reflection and eventually action by the receiver.

Indeed, in the fantasy theme approach, dramas chain out into larger groups and eventually the mass media, where individuals pick them up and recycle them into smaller groups who modify them and spin out the dramas once again. Since the list forum participants are those who are active in shaping ICT policy in developing countries, they will have many opportunities to respond and reshape the dramas reflected to them. This is clearly a fruitful avenue for future research into policy-making.

Many surveys (see for example *The Economist*, November 10, 2001) have used quantitative measures to examine the relationships among information technology, economic development and developing countries. Our approach has been a qualitative

one that seeks to arrive at insights in a critical, analytical manner.

ICT policy makers dramatize that autocratic leaders are villains in their discussions. Typically, there is a consensus in the development community that the government should play a key role in establishing a competitive, private sector led communications market, and by promoting supportive measures to enhance the capabilities for accessing ICTs (Kah 1999). Complementary measures, such as reducing taxes, tariffs and trade barriers on imported ICT goods and services would also help improve access and reduce telecommunication costs. It is also suggested that the government could play a part in promoting ICTs through investments in ‘intangibles’ such as local training, consulting services, software adaptation, content providers and building the capacity of local importers and suppliers of IT goods and services. These measures are particularly important if micro and small enterprises are to benefit from ICTs (Kah 2000 and 2001).

Our analysis, however, did not confirm the above statements. In the discussion group, the government did not emerge as the hero. The fantasy theme analysis revealed that the ICT policy researchers of developing countries played the part of hero instead. Whether they have the ability to identify, develop, facilitate adoption, or simply evaluate the information and communications technologies remains an open question.

RECOMMENDATIONS

Based on the foregoing analysis there are a number of recommendations we can offer ICT researchers, policy advisors and organizational researchers as well. For ICT researchers we would urge them to recognize the dramas they and their colleagues are creating through their group interactions. Recognition of these dramas moves the participant closer to understanding of motives, emotions, goals and opportunities for change. Certainly if ICT researchers are interested in assisting and improving the quality of life in developing countries with ICTs, their first step must be recognition of the power of shared dramas to shape reality. For instance, is it the

goal of ICT researchers to spread democracy or other political systems through deployment of ICTs, or do they view ICTs as content-free channels? Our analysis points out that ideas such as democracy and freedom are highly valued by ICT researchers.

Our recommendation for policy advisors is to reflect on the power they possess to participate in ongoing discussions on a positive, symbolic and creative level. We recommend that policy advisors give full recognition to their potential role in creating credible and engaging policy dramas and not just echo current thinking or assume that the role of “advisor” is the role of a spectator rather than a full participant in the drama.

Our recommendation for organizational researchers underscores the problem and opportunity represented by the growth of virtual organizations. Their ubiquity is astonishing. We recommend that researchers take up the challenge of examining virtual communities by developing research methods that can capture the full panoply of interactions not readily available through traditional approaches. Fantasy theme analysis is one such method.

CONCLUSION

In this paper, we took up the challenge of studying a virtual organization using a theatre metaphor. After examining a variety of drama-based methodologies, we highlighted

the difficulties inherent in applying the standard theatre metaphor to dramas taking place in a virtual organization. This ultimately proved problematical because there is a lack of corresponding physical features such as settings, costumes, props, and face-to-face interactions replete with gestures that are traditional pillars of dramatic analysis.

Faced with these barriers, we chose fantasy theme analysis, which focuses solely on the narrative text messages of a small group to reveal their drama and thereby gain insight into the creating, raising, and maintenance of their group consciousness. Using fantasy theme analysis we were able to identify the hero, villain, key plot, subplot and supporting actors of the dramas of an online, virtual community of ICT policy experts.

We believe that our contributions reside in pointing out the fundamental difficulties inherent in using a theatre metaphor (also called dramatism) to understand a virtual organization. We also believe that we demonstrate the viability of using a subset of dramatism called fantasy theme analysis to examine the dramas present in messages of participants in virtual work. In addition, we identify dramas of an online list forum devoted to examining ICT policy for developing countries useful in raising awareness of those forces that help or hinder policy formation for ICT use.

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