

A Philosophical Hermeneutics Approach for Understanding Community Dialogue on Environmental Problems: A Case Study of Lake Taupo

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Abstract: This paper illustrates the application of philosophical hermeneutics for understanding community views regarding the water quality of Lake Taupo in New Zealand. In recent years the community in the Taupo District has been engaged in dialogue on concerns raised by some stakeholder groups that the water quality of Lake Taupo is being affected by activities in the surrounding catchments of the lake. The principles of Hans-Georg Gadamer's philosophical approach to hermeneutics, including historicism, non-authorial intention, pre-understandings of the interpreter and the fusion of horizons, provide a framework for the interpretive approach adopted in this study. The findings indicate that the issue at hand is not merely an ecological issue. Understanding social, economic, political and cultural issues affecting the Taupo community provides a more holistic interpretation of the communal dialogue.

Keywords: Hermeneutics, communitarian, sustainability, accountability, pre-understanding

1. Introduction

The primary objective of this paper is to illustrate the application of Gadamer's philosophical hermeneutics (Gadamer, 1975) for understanding community dialogue on the pollution of Lake Taupo. Hermeneutics has been used by researchers in a variety of disciplines such as: accounting research (Walters, 2004; Gray, 2002; Shearer, 2002; Francis, 1994), organisational research (Prasad, 2002), childcare, health and development (Wilder & Granlund, 2003), and in various other disciplines (Mkhize, 2005).

The following section briefly traces the evolution of hermeneutics and provides an overview of seminal ideas on hermeneutics. The next section presents a discussion on the application of Gadamer's philosophical approach for understanding the dialogue of the Taupo community. The paper concludes with reflections on how new meanings can emerge from using this philosophical approach.

2. Hermeneutics – definitions, origins, evolution and main ideas

Hermeneutics is the theory of interpretation (Palmer, 1969; Llewellyn, 1993; Weber, 1962; Crotty, 1998; Dilthey, 1976, Schleiermacher, 2002). It is concerned with interpreting and understanding the external objectifications of the human mind including texts and works of art (Palmer, 1969). Contemporary hermeneutic scholars (such as Ricoeur, 1981) have extended the scope of hermeneutics to understanding social actions of individuals, groups, organisations, institutions, and communities.

The origins of the word hermeneutics can be traced to Hermes in ancient Greece, the Greek wing-footed messenger-god whose function is to transmit God's message in a form that humans can understand (Palmer, 1969). Aristotle (1938) refers to hermeneutics as an operation of the mind in articulating a true judgement about something. The most widespread usage of hermeneutics is in relation to biblical interpretation and as such it is commonly referred to as a methodology for interpretation (Ebeling, 1970). Later hermeneutics was also extended to non-biblical text. From a theory of biblical exegesis hermeneutics developed as a philological methodology during the eighteenth century, refining techniques of grammatical analysis.

Since the seventeenth century two schools of thought with radically different conceptions of its scope and purpose have primarily influenced hermeneutics. One follows the tradition of Friedrich Schleiermacher and Wilhelm Dilthey who conceptualise hermeneutics in epistemological terms (Schleiermacher, 2002; Dilthey 1976). The other school is influenced by the ideas of Martin

Heidegger and Hans-Georg Gadamer who see hermeneutics as an ontological process (Heidegger, 1967; Gadamer, 1975, 1976).

For Schleiermacher (2002) understanding/ interpretation is the re-experiencing of the mental process of an author. He describes understanding as a referential operation between a whole and its parts in a hermeneutic circle. In this whole-part relationship the part derives meaning from the whole; reciprocally the meaning of the whole is dependent on the meaning of its individual parts. Dialectical interaction between the whole and the parts brings out the meaning of the whole and the parts. The interpreter aims to understand the meaning intended by the author and the historical context in which the text was written. Language is a crucial aspect of the hermeneutic process because texts are expressed in language and grammar is used to understand the meaning intended by the author. Schleiermacher sees hermeneutics not merely as a sub-discipline of theology; but extends its application to any utterances in language.

Dilthey (1976) regards hermeneutics as an epistemology for the Geisteswissenschaften (human science). Like Schleiermacher, Dilthey believes that the primary purpose of hermeneutics is to obtain objectively valid interpretations of man's inner life as it happened in a particular time in history.

Heidegger (1967) rejects the conception of hermeneutics as involving rules for textual interpretation and methodology for Geisteswissenschaften but regards hermeneutics as the phenomenology of Dasein ("being there"). Heidegger (1967) offers an ontological conception of hermeneutics emphasising on existential understanding and historicism. According to this conception human beings are formed through their history and understanding is a process in which and through which one exists as a human being.

Under the influence of Hans-Georg Gadamer, hermeneutics developed in broader philosophical terms. Gadamer (1975) associates understanding with inner historical, dialectical and intrinsically linguistic experience. In rejecting the existence of subject-object dichotomy, Gadamer looks beyond the purpose of recovering the meaning intended by the author. Understanding means to understand the author's experience in reference to our own horizon of experience i.e. meaning of a past work is defined in terms of the questions put to it from the present. Application of the meaning of the text to the present situation always takes place during the process of understanding. Central to Gadamer's thesis is the concept of pre-understandings of the interpreter, which originate from the tradition or historical-social background of the interpreter and form the horizon within which the interpreter understands the object (text). Gadamer suggests that unproductive presuppositions be eliminated. In the process of understanding there is a fusion of the horizon of the interpreter and that of the text. In Gadamer's philosophy, language assumes a supreme role as a medium for dialectical and historical experience of understanding, fusion of horizons, assessing prejudices and disclosing hidden meanings embedded in the historical nature of man.

3. Application of Gadamer's philosophical approach

This study employs Gadamer's interpretive approach for understanding community dialogue regarding the impact of human activities on the water quality of Lake Taupo. Lake Taupo is a national icon and the largest freshwater lake in New Zealand. The unique natural environment of the lake is conducive for recreational activities and supports the primary tourism industry of the Taupo District (APR Consultants, 2002). The lake is a home to many native plant species, aquatic birds and a variety of fish and the main source of water supply for the greater Waikato Region (Environment Waikato, n.d.). In recent years the Taupo Community, comprising of multiple stakeholder groups, was engaged in numerous discussions regarding the water quality of Lake Taupo (Environment Waikato, 2004a, 2004b). Application of Gadamer's approach to hermeneutics would mean to understand the views of the stakeholders (the text) beyond the meaning intended by the stakeholders (author's intention) and to uncover hidden meanings through fusion of horizons (the researcher's preconceptions with that of the stakeholders). The views were identified through the research process of attending community meetings and forums and interviewing stakeholder groups. The hermeneutical approach of this study is shown in figure 1.

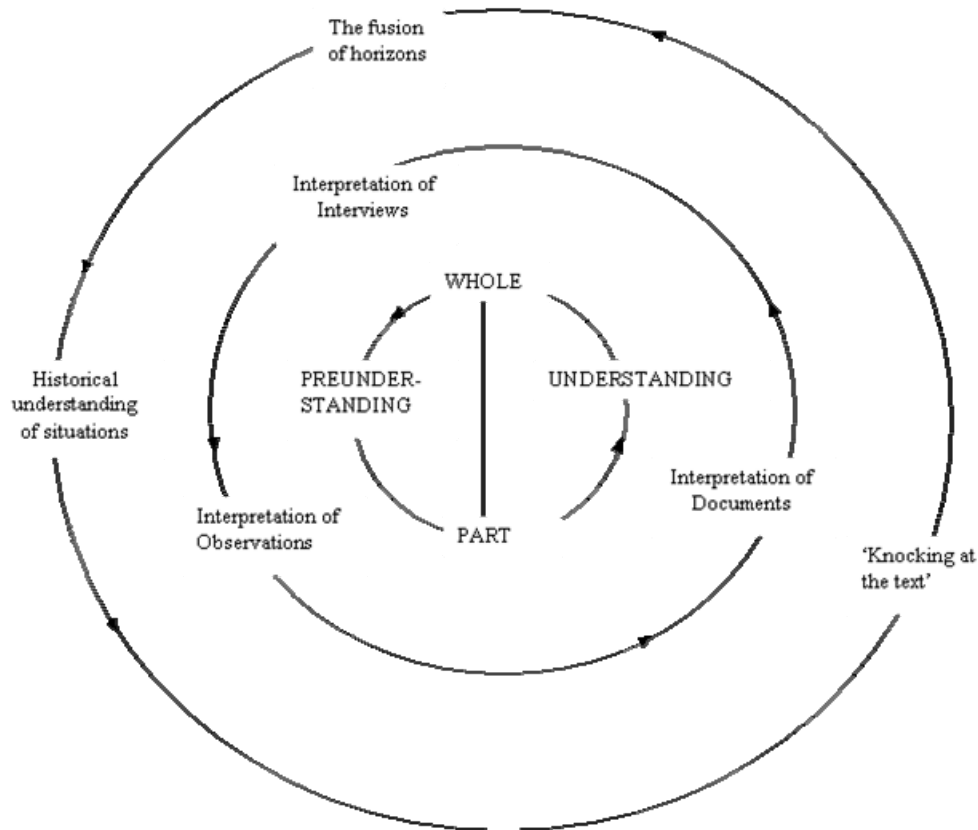


Figure 1: Application of Gadamer's approach to Hermeneutics

3.1 Definition of text

In this study text refers to the views of stakeholder groups on the water quality of Lake Taupo. It is not possible to discuss the views of the stakeholders in great detail within the word limitations of this conference paper. Therefore, this study only focuses on issues raised by stakeholder groups, which have been central to community discussions. The issues are discussed below.

- Environment Waikato (Regional Council) is concerned about nitrogen flows entering Lake Taupo and has identified intensive animal farming in surrounding catchments of the lake as the main source of the nitrogen flows. The Regional Council has linked the growth of toxic blue-green algae and several types of weeds in the lake to increasing loads of nitrogen flowing into the lake (Environment Waikato, 2001a; 2001b). To maintain clear clean water in the lake, Environment Waikato has proposed policy changes to cap nitrogen loads on surrounding lands of the lake so that there will be no increments of nitrogen flows in the future (Environment Waikato, 2005)
- The Farming community of the Taupo District is concerned about implications of proposed policy changes. Farmers have invested on existing rules and faced significant cost and revenue implications if the rules changed. Any policy change to restrict land use will drastically affect small farms while larger farms will continue to operate with reduced profitability (Environment Waikato, 2001c). The farming community felt Environment Waikato should present data of nitrogen loading from all activities including urban developments in the district. At several public meetings it was pointed out that any measures to maintain clean lake should consider farming needs and practical considerations (Environment Waikato, 2000a)
- Ecologists want urgent action to be taken to tackle the water quality issues instead of waiting for more research results (Environment Waikato, 2000a). The community in general has strong environmental ethics (Environment Waikato, 2001d; Stewart, Johnston, Rosen & Boyce, 2000) and want stronger measures to save the lake (Environment Waikato, 2000b)

- There was an increasing emphasis on sustainable development and common values of the Taupo community including environmental, commercial and cultural values reflecting the three crucial elements of sustainability (2004b).

3.2 Alternating between whole and parts

In this study the social, economic, cultural, historical and legal environment of the Taupo community and the documents (public documents (Environment Waikato, 2004a & 2004b), interview transcripts, field notes, minutes of meeting and website material) which articulate stakeholders' views on the water quality of Lake Taupo are collectively referred to as the whole. Parts refer to the views of the stakeholder groups and especially to issues identified in section 3.1. Alternating between the whole and the parts provides new insights on the issues raised by stakeholders.

3.3 Alternating between observations, documents and interviews

The middle circle in Figure 1 shows the hermeneutic interpretive process as alternating between interpretations of observations of community meetings (minutes of meetings and field notes), public documents (reports and website material disseminated by local authorities) and interviews (interview transcripts). Interpretation of the public documents helps me understand the observations and this in turn helps me understand the viewpoints of the persons interviewed. The interviews in turn provide more information when I revisit the documents, minutes of meeting and field notes. Meanings and interpretations that develop from understanding observations in turn enhance my understanding of the insights of the interviewees. Each stage of interpretation generates sub-interpretations, which together contribute to the totality of the interpretation. The spiral interaction helps identify unproductive prejudices, poses new questions and exposes new insights beyond those intended by the stakeholders.

3.4 Identifying pre-understandings: Unproductive prejudices

Gadamer (1975) cautions the researcher to be mindful of "one's own fore-meanings and prejudices" (p.238) because unproductive prejudice hinder understanding (Prasad, 2002). This study has identified two unproductive prejudices. The first one refers to the tendency to look at an environmental problem from a purely ecological perspective. On the basis of such a prejudice-strong form of sustainability - ecological considerations are placed in the forefront while the economy and human society are totally constrained by the natural systems of our planet (Pearce, Anil, Barbier, 1990; Pearce & Turner, 1990). Such prejudice provides a narrow interpretation of the environmental issue because it undermines the importance of economic, cultural, social, political and legal contexts. Adopting a narrow ecological perspective can lead to more unproductive prejudices such as "farmers are to be blamed for the pollution", "farmers are the culprits", "farmers are being victimised", "local authorities are pro-development" and "no emphasis given to other causes of pollution such as urban run-offs", "lack of democracy in communal processes" etc. which are often raised during community meetings in the Taupo District.

Another unproductive prejudice considers economic growth as a priority above environmental and social considerations - a weak form of sustainability (Solow, 1993; Solow, 1974). This is based on the assumption that environmental and social problems can always be solved if the economy is sound (Wildavsky, 1994). Such a paradigm places the economy at a higher level of context from which environmental issues can be understood. It demeans environmental, social and other values as subsets of the economic values. Prioritising economic values has produced community responses such as "the market can resolve the pollution of Lake Taupo", "protecting Lake Taupo will stifle economic growth of the Taupo District", and "protecting water quality in Lake Taupo means halting animal farming".

Such prejudices influence our perception of an environmental problem and our decisions to counter the problem that we see. Gadamer (1975) suggests the elimination of the unproductive prejudices during the hermeneutical process. The interpreter can then understand the text better than the author of the text.

3.5 Knocking at the text

Knocking at the text means having a dialogue with the text, listening and posing questions to the text until new meanings and knowledge emerge. The degradation of water quality in the lake accelerated with the introduction of intensive animal farming during the 1950's. Although the pollution was detected over the past 30 years (Rae, Hawes, Chague-Geoff & Gibbs, 2000) it is only in recent years that it has become to be "seen" as an environmental issue requiring policy changes on land use. These poses a question - Why is it only in recent years the pollution of Lake Taupo is "seen" as an environmental problem whereas the problem has been known for many years?

3.6 The fusion of horizons

The fusion of horizons is the synthesis of my pre-understandings with stakeholders' views, information contained in the documents and historical understandings of situations. In this study I have used two levels of context to understand issues on the water quality of Lake taupo. The immediate level context takes into consideration the historical, political, cultural, economic and environmental aspects of the Taupo District and the Taupo Community. The higher-level context is defined as a conceptual framework embedding the concepts sustainability, communitarianism and accountability.

3.7 Historical understanding of situations

Knowledge of the history of New Zealand and the nature of New Zealanders is crucial for understanding any environmental issue in New Zealand. According to Parliamentary Commissioner for the Environment (2002) New Zealanders have high environmental values but maintaining such values becomes difficult when economic and social pressures increase. During the 1970's the performance of the New Zealand economy was affected adversely by two events. The first was Britain's entry into the European Economic Community (European Union) on 1 January 1973 signalling the end of New Zealand's special trading partnership with the United Kingdom. Under the Ottawa Agreement of 1932 and wartime commandeer programmes, New Zealand had enjoyed about 40 years of specially negotiated trading concessions which allowed it to export large quantities of agricultural products at favourable prices to Britain. During that time Britain was New Zealand's main export market and New Zealand was able to protect its expanding manufacturing sector from international competition by using a system of import licensing and high tariffs. However, Britain's entry into the European Union adversely affected New Zealand's export market. The second event was the oil price shock in 1973 arising from the decision of OPEC to raise the price of crude petroleum. This caused a threefold increase in the price of oil.

These two events adversely affected international trade and balance of payments causing rising unemployment and inflation, which continued into the early 1980's. The emphasis of governments in New Zealand during the 1970's, 1980's and 1990's was mainly to maintain economic growth and low unemployment. During the period 1984 -1999 economic reforms in the form of trade liberalisation, monetary policy, fiscal policy, industry policy and labour policy were introduced to promote economic growth and a market based economy. However, the New Zealand economy continued to slide into deeper recession during the 1990's. The economy was badly affected by serious droughts in several parts of the country and by the Asian economic crisis. It was only in late 1999 that the economy began to recover from the recession.

The economic conditions prevailing before 2000 explain why there was a lack of attention to issues affecting the natural environment. However, since late 1999, as the economy began to recover emphasis on environmental issues within the context of sustainability became an important policy issue. One of the elements of policy changes implemented by the labour government after 1999 was an emphasis on sustainable development. This partly explains why it is only since 2000 that the pollution of Lake Taupo has started to be "seen" as an environmental problem even though the pollution started some three decades ago.

In 2001 the Central Government, through its Ministry for the Environment, contributed \$550,000 for the development of an integrated sustainable development strategy (Environment Waikato, 2004a) to protect Lake Taupo. The project was unique in that it was the first time a sustainable

development strategy was developed through a communitarian process. Over a period of three years (from July 2001 – July 2004) a sustainable development strategy was developed by local and central government agencies jointly with the Taupo community – comprising of resident associations, actions groups, Maori Tribal Community groups, farmers associations, Chamber of Commerce, local authorities, some central government departments etc. The community was engaged in cooperative enquiry processes to debate on the water quality of Lake Taupo. The processes, mainly the initiative of local authorities with backing of central government, aim to create community awareness of the environmental issue and to seek community views in developing a sustainable strategy. The local authorities with public funds and vast research expertise at their disposal were able to influence the communitarian process and direct the attention of the community to issues that concerned them. The farming community is generally not content with the processes.

4. Gaining new understanding – The emergence of new meanings

The following meanings emerged from applying Gadamer's approach.

4.1 Economic priority

Several economic activities in the Taupo District depend on clean and clear water in Lake Taupo. Tourism is a major industry in the district (APR Consultants, 2002) and the lake is the primary attraction for the development of hotels, motels, restaurants, shops which cater for tourists and local residents of the Taupo District. Every year about 730,000 overnight visitors come to the District for recreational activities such as boating and fishing. The tourist industry is important for continuous economic development that provides long-term employment and business opportunities. In recent years there has been a growing trend towards residential and commercial development in the district resulting in conversion of lifestyle blocks and farmlands to cater for such developments. These types of land development and tourist activities which depend on a clean lake are considered a lesser threat to the water quality in the Lake as compared to livestock farming. Commercial development is seen as less polluting and good for the economy of the Taupo District. This raises an important question as to whether there is a real concern for the lake or whether the pollution is an excuse for stakeholders who want more farmland released for commercial development.

4.2 Construction of identity

The efforts of local authorities and the central government to create public awareness of the pollution of Lake Taupo can be aligned to their efforts to construct "green" identity (environmentally friendly identity) for themselves. According to Porter (2005), identity and identity dynamics are masked "beneath layers of economic, management and scientific talk" (p.1) and identities are threatened by sustainability discourse, in particular by environmental sustainability. Porter articulates that organisations identify themselves with the natural environment in order to establish a positive identity and that fear of identity loss, rather than concern for environmental degradation underlies sustainability debate. The local authorities of the Taupo District and the Central government can be seen to be constructing a "green" image for themselves in their efforts to create public perception of the pollution of Lake Taupo. Their identities will then be in harmony with the clean green image of New Zealand.

4.3 Communitarian approach to accountability

The pollution issue can be interpreted from the perspective of a communitarian approach to accountability. A broad conception of accountability to community has been suggested in social and environmental accounting literature (Cooper, 1992; Gray, 1992; 1995; Lehman, 1999; Maunders & Burritt, 1991, Harte & Owen 1987). Advocates of communitarianism generally believe that accountability involves processes of negotiation, explanation and articulation in civil society to provide a sense of belonging and understanding in the community (Macintyre, 1984; Francis, 1991; Wilson 1993). The purpose of this form of accountability is to empower members of society to engage in a critical enquiry on issues of common concern thus creating a fairer and more just

society. Using this preconception regarding accountability I argue that the perception regarding the pollution of Lake Taupo has been created out of a sense of accountability in the Taupo Community.

The multiple stakeholder groups of the Taupo community, though with different interests, are willing to come together to share common values and engage in cooperative enquiry on issues that threaten their common values. The issue of the pollution of Lake Taupo has stimulated a sense of accountability in the community involving the dissemination of information and process of cooperative enquiry where there is explanation and enquiries about the water quality issues. Accountability has made members of the community to see the issues as an environmental problem. The sense of accountability creates an internal conflict for some stakeholder groups such as the farming community. The conflict is between accountability to self and accountability to the other (Shearer, 2002). During processes of cooperative enquiry or public meeting the farming community may find it difficult to defend self-interest as against the interest of the Taupo community.

Accountability is a political practice that mediates relations between people in society and the rationality of accountability - which is what we account for, how we account, to whom we account, about whom we account, when we account - is affected by the values choices of members of a community (MacIntyre, 1984). According to Pallot (1991) these value choices depend on the values and assumptions held by those able to influence the accountability process. In the Taupo District local authorities are able to influence communitarian processes of cooperative enquiry because most of these processes are initiated and funded by the authorities with the support of the central government. The authorities have vast amounts of financial and management resources to carry out research prepare and disseminate information in order to create public perception of the pollution of Lake Taupo.

4.4 Sustainability discourse

A higher level of context for understanding the pollution of Lake Taupo can be defined in terms of the impacts of sustainability discourse in the international arena. New Zealand's commitment to the Kyoto Protocol, and Agenda 21 of the 1992 Earth Summit in Rio de Janeiro and the principles adopted in the 2002 World Summit on Sustainable Development in Johannesburg have put pressure on local authorities and the central government to pursue more serious policies towards environmental sustainability. Part of this approach is to create public awareness and public perception of issues affecting the natural environment.

5. Conclusion

Stakeholder groups in the Taupo community have expressed several preconceived notions regarding the water quality of Lake Taupo. Application of Gadamer's hermeneutic approach, however, helps us develop a more holistic understanding of the issues by using a framework of historical, political, economic, social and cultural contexts and theorizing by drawing from communitarian ideology, sustainability paradigms and broader conceptions accountability. This study indicates that 'reality' about the water quality of Lake Taupo depends on the communitarian process and the groups, which are able to influence the communitarian process. The influential groups create awareness and perceptions in the community regarding the pollution of Lake Taupo. Economic well being of some stakeholder groups in the community depends on a clean lake. This includes private entities operating tourism related activities; land developers wanting more farmland released for residential and commercial property development and local authorities wanting to promote economic growth in the district. The environmental issues arise from interplay of political, cultural, economic and social factors rather than the actual scientific evidence pointing to the problem. Gadamer's philosophical approach to hermeneutics helps us see the underlying meanings of the issues.

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