Book Review

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The Psychology of Pro-Environmental Communication:
Beyond Standard Information Strategies
Christian A. Klöckner
(2015, Palgrave Macmillan)

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Although the condition of the environment has been steadily worsening during the Anthropocene, perhaps in response, the use of the word 'environmental' in the name of academic and other fields seems to be increasing. Environmental history, environmental engineering, environmental physics, and environmental philosophy are but a few examples. In the book reviewed here, Klöckner uses his background as a professor, frequent author on environmental topics, and an environmental psychologist with a quantitative bent to bring what he believes might be a fresh perspective to communication strategies which seek to increase people's participation in pro-environment actions.

The book is clearly organised. Its ten chapters follow a common textbook model, beginning with a chapter summary and ending with review questions and suggestions for further reading, as well as containing strengths, weaknesses, and applications of the ideas discussed. This book will appeal to those who want a broad, academic, well-referenced foundation to environmental communication which is understandable to educated laypeople. The chapters fall into three parts. Part I, chapters 1 and 2, provides background on environmental communication, including key terms and connections with other disciplines. Part II, chapters 3-7, presents relevant theories and research, while Part III, chapters 8-10, analyses cases of environmental communication.

Klöckner defines communication as an exchange of meaning which can be carried out via verbal and nonverbal signs and symbols, including behaviours, and he defines environmental communication as "that part of human communication that is related to environmentally relevant human behaviour" (p. 17). The author's goal is to help readers gain insights into "which communications can make people ultimately change their environmentally damaging behaviour" (p. 19).

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Part I

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Chapter 1, while acknowledging the importance of intrapersonal communication, looks at three different types of interpersonal communication: face-to-face, mediated, and

communication via media. To Klöckner, direct face-to-face communication has the advantages of being more satisfying, persuasive, trust-building, and more difficult to ignore. On the other hand, such communication has the limitations of being potentially more annoying to those with whom we seek to communicate and more costly in terms of time and effort per person reached.

Mediated person-to-person communication takes place electronically via phone calls, e-mails, Skype, etc. While such communication may be less rich than direct face-to-face communication in terms of the range of communication, Klöckner believes it has the advantages of promoting a more egalitarian discourse and more reflection, at the same time that it reduces time and effort costs. The third type of communication, communication via media, utilises such means as newspapers, TV, songs, murals, social media, and websites. Obviously, such media can reach more people, but are easier to ignore, less targeted, less interactive, and more one-way.

Chapter 2 has many points of advice for those seeking to promote environmentally friendly behaviours. These include:

a. Communication can focus on values and norms (p. 24).
b. To be effective, communication should involve behaviours that are perceived to be convenient and inexpensive (p. 24).
c. People's decisions are most often shaped by the broader context, rather than being individual decisions. Contextual constraints can involve culture, people's skills, and finances (p. 25).
d. Technology only benefits the environment when that technology is used and used properly (p. 26).
e. Language is vital to how people construct their world, and at every step in the processes in which they engage (p. 26).
f. "Environmental communicators should prioritise behaviours that (a) have a large environmental impact, (b) many people are able to change, and (c) many people perform" (p. 30).
g. Different domains, such as food and mobility, present different opportunities for environmental communication (p. 52).

Part II

Chapter 3 is the first chapter of Part II, which focuses on relevant theories and research. This chapter introduces the following theories used in communication research: rhetorical, semiotic, phenomenological, critical, cybernetic, sociopsychological, and sociocultural, focusing on the latter two theories. Under sociopsychological theory, notions of attention, memory, attribution, persuasion, and automaticity are addressed. Under sociocultural theory the notions of social constructivism, social construction of meaning, self, and identity are discussed, as always highlighting their relevance to environmental communication.

Of particular interest in this chapter are the idea of taking the central route (p. 60) and

the theory of inoculation (p. 61). Taking the central route involves engaging people on issues that are relevant to their lives and on which they are likely to act. The theory of inoculation takes its name from medicine, where a weak form of a disease is used to immunise people from a more severe form of that disease. With environmental communication, this theory is applied by introducing weak versions of anti-environment arguments and then involving people in rebutting them.

Chapter 4 presents environmental psychological decision models: theory of planned behaviour, norm-activation theory, the value-belief-norm theory, and goal-framing theory. Frankly speaking, I had difficulty grasping these theories. Fortunately, some of the applications were very common sense, including using strategies to increase positive beliefs and decrease negative beliefs about environmentally friendly behaviours and to decrease positive beliefs and increase negative beliefs about environmentally harmful behaviours. Indeed, for each of the decision models, concrete examples were provided.

Chapter 5, unlike chapters 3 and 4, looks more at change on the societal level, rather than at the individual level. The chapter discussed one theory – diffusion of innovation theory – and one tool, agent-based modelling. Diffusion of innovation theory examines how new technology, and new social beliefs and practices are adopted. The author notes that many attempted pro-environment changes fail because the advocates of these changes disregard tenets of diffusion of innovation theory, e.g., that the change must have an easily evident advantage and must be easy to understand and practice. Agent-based modelling uses Information Technology to simulate the interplay of various actors in a particular situation. This modelling allows environmental activists to plan more carefully and thoroughly.

In chapter 6, Klöckner provides insights into the characteristics and use of various types of media, including art and music. For example, he points out that while the internet has democratised communication, those who lack internet access and skills can remain marginalised. Also discussed are theories of risk perception and risk communication. When examining risk, people assess both the probability of a threat actually occurring, as well as the effect if the threat does become reality. Unfortunately, research suggests that, due to a variety of factors, public assessment of risks is often inaccurate. Therefore, communication must seek to address this deficiency. One point from this chapter that may be especially worthwhile for environmental communicators to bear in mind is that unless communication is entertaining, it may well be ignored.

Chapter 7 focuses on market segmentation, beginning with why one-size-fits-all communication is not likely to succeed. Next, well-known forms of segmentation are discussed: by geography and by demography, such as age and gender, and behavioural, such as types of shoppers, e.g., economisers and support seekers. The chapter goes deepest into psychometric segmentation, which divides people according to attitudes, values, and personality. For example, people may be found at different points along the values continuum of, at one end, self-enhancement, i.e., looking out for #1, and, at the other end of the continuum, self-transcendence, i.e., being concerned for others, including nature.

Part III

Chapter 8 opens Part III, which examines various cases of environmental communication. The chapter's focus is on environmental psychology intervention techniques involving communication. Among the many techniques discussed are commitment, goal setting, prompts, and block leaders. Commitment involves people pledging to perform a certain behaviour, e.g., eating plant-based at least once a week. Goal setting is similar, except that people pledge to meet a target, e.g., saving a certain number of farmed animals' lives in a year, rather than carry out specific actions. Prompts are often short messages placed near the points at which people need to make decisions about whether to behave in environmentally friendly ways; e.g., some activists have placed stickers about the disadvantages of meat consumption in the meat departments of supermarkets. Finally, the block leaders technique recruits people to act as leaders among their peers; e.g., in Singapore, people can become Green and Healthy Monday ambassadors.

Chapter 9 focuses on intervention techniques that work at the level of groups. Understanding the dynamics of groups involves understanding terms such as group polarisation, diffusion of responsibility, majority and minority influences, and group competition. Group polarisation involves the tendency for groups to take positions more extreme than those that would have been taken by individual members of the group. Diffusion of responsibility occurs when no one takes responsibility for carrying out the group's decisions. Research on majority and minority influences suggests that a minority can have a powerful impact on what a group does. Investigations of group competition have found that people may strive harder for their group to succeed than they would for their own individual success.

Chapter 10 looks at the role of games as communication tools. Indeed, gamification, also known as 'serious games', is a growing trend in education and elsewhere. Games include board and card games, computer games, and simulations and role plays. Klöckner stresses that games must first of all be entertaining. Three other characteristics of effective educational games are that they motivate players with rewards, allow players to fail but in a safe setting, and provide multiple ways for players to succeed. Two games, Fate of the World and the Energy Saving Game, are discussed. Another increasingly common characteristic of games, including computer games, is that they incorporate collaboration among players. Finally, one type of role play game described in the book deserves special mention: social dilemma games. In such games, the dilemma arises because individuals do best when they act in their own self-interest, but when everyone does that, the collective suffers, much as is often the case with our real life behaviours regarding the environment.

Conclusion

In conclusion, this book contains a wealth of actionable concepts and techniques. But at the same time, what we read in a textbook like this, or any other resource, no matter how well researched or how progressively motivated the authors, must be treated critically,

because (a) any study, or even groups of studies, is necessarily incomplete and (b) each situation represents a unique and shifting panoply of factors. That said, *The Psychology of Pro-Environmental Communication: Beyond Standard Information Strategies* provides a valuable resource which environmental communicators may benefit from drawing on for insights and the stimulation of brainstorms.