

Construction of Environmental Citizenship in Hypermedia Space

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Abstract: Based on the theory of communication intermediary, this study analyzed how the communication use of networked individuals affects the construction of environmental citizenship. By fitting the questionnaire data with structural equation model, the study finds that the background variables of communication, the use of communication (media information reception, diffusion, discussion), have a significant direct or indirect positive impact on the recognition of environmental citizenship.

1. Introduction

As a kind of social movement, environmental movement must have its main body of action. Therefore, since the mid-1990s, the research on environmental citizenship or ecological citizenship has emerged under the impetus of environmental movement.

Foreign research on the influencing factors of public environmental protection behavior is earlier than domestic research. Most of the research uses theoretical analysis and empirical testing methods to demonstrate from different aspects.

Maloney & Ward (1973) and Fortner (1978) studies have shown that education and environmental knowledge have a significant impact on public environmental behavior, and there is a significant positive correlation between environmental knowledge and environmental attitude. Borden (1984) found that there was a correlation between environmental behavior participation and attitudes towards environmental pollution, and the correlation was the highest. Oskamp (1991) pointed out the correlation between environmental knowledge and environmental behavior. Guagnano, Stern & Dietz (1995) argues that environmental attitudes and emotional factors interact to promote public environmental behavior. When the attitude is neutral, the relationship between environmental protection behavior and environmental protection attitude is the most significant, while when the emotional factors are favorable or unfavorable, it will promote or inhibit environmental protection behavior. Scholar Stern (2005) divides the factors affecting public environmental behavior into four categories: habits and conventions, situational factors, personal abilities and attitudes. The main factors affecting public environmental protection behavior are: the degree of environmental knowledge possession, as well as emotional factors.

It is concluded that the main factors affecting public environmental protection behavior are citizen's environmental attitude, emotional factors, and related environmental knowledge. Based on this, a valuable research question is how we should influence the environmental citizens' emotions, attitudes and other factors so as to influence their environmental protection behavior.

From the point of view of domestic research, there are many research results on the role and process of mass media in the construction of citizenship. Some scholars have made statistics on the environmental awareness of the Chinese public, and found that the public's environmental awareness is closely related to the degree of environmental pollution in the early stage, and in the later stage, it shows a trend consistent with the environmental concern of newspapers, from which we can find that the public's environmental awareness in the later stage is closely related to the degree of environmental pollution. Awareness, to a large extent, depends on the construction of mass media (Mid-Autumn Shi National Day 2012). Yan Chunkou believes that the construction of

mass media for the public is essentially an identity construction, but due to the invasion of commercial capital, the construction of the citizenship of the audience will be affected by mass media (Yan Chunjun, 2004). Fan Changzhi and child soldiers, starting from Parsons's social system theory and Habermas' communicative action theory, analyzed the relationship between media, government and the public in the social structure, and answered the specific appearance and construction process of journalism professionalism in China (Fan Changzhi-child soldiers, 2009). Zeng Qingxiang takes "Moving China" and the opening ceremony of Beijing Olympic Games as examples to analyze the context, connotation, prototype and values of cultural citizenship (Zeng Qingxiang, 2008). In addition, Wang Jun and others analyzed the process of advertising influence and citizen cultural identity construction from three dimensions of cultural sharing, co-construction and co-existence (Wang Jun, 2013).

However, after entering the network society, simply considering the construction and impact of mass media on the environmental citizenship, obviously can not be applied to modern society. With the rapid development of digital media, great changes have taken place in the channels and ways of public access to information. The public is not satisfied with obtaining information through mass media. More and more people will use mobile phones, the Internet and other means to selectively obtain information that they think is useful. It can be said that the Internet, social media and other forms of new media have a lot of impact on the construction of citizenship.

So there are many scholars in China who have studied it. Zhang Ouyang believes that the virtuality and openness of cyberspace break through the restriction of real society on personal identity, and eliminate the control and influence of social rules and authority on individuals (Zhang Ouyang, 2013). Lei Weizhen and Ding Buting take "Qian Yunhui Incident" as an example to analyze the structural changes brought about by the Internet on the identity construction of the national community, and propose that the citizenship construction mechanism triggered by the Internet has positive significance for the public sphere (Lei Weizhen & Ding Buting, 2012). Xu Yingchun put emphasis on the combination of environmental communication and green public sphere, put forward their influence and interaction mechanism, and discussed and studied the construction and influence of various elements in the operational mechanism of environmental communication on green public sphere in China (Xu Yingchun, 2011). From the perspective of environmental communication, Chai Qiaoxia focuses on the strong interaction between the two constructions and constructions (Chai Qiaoxia, 2014).

Based on this, first of all, the influence of the mass media on the audience only stays at the shallow level of environmental awareness. Whether the mass media can form a positive environmental attitude and take corresponding environmental actions remains to be further confirmed and studied. There are also some achievements in the research of "attitude-behavior gap" in the field of international communication academia. By integrating "social norms" into environmental initiatives and media reports, conveying to the audience that "others are doing the same thing" will greatly affect one's behavior (Griskevicius, Cialdini & Gooldstein, 2008). Secondly, there are few studies on the construction of environmental citizenship by new media. On the other hand, there are mainly studies on environmental issues from the perspective of environmental communication. Few scholars analyze the relationship between networked individualism and the construction of environmental citizenship from the perspective of public communication.

2. Theoretical framework

2.1 Environmental Citizenship

Bart Van Steenbergen, an early researcher, proposed three models for understanding ecological citizenship (Steinbergen, 2007). Andrew Dobson believes that there is inconsistency between environmental protection behavior and environmental awareness among citizens as individuals. In order to overcome this problem and create a truly sustainable society, the concept of environmental citizenship must be proposed (Dobson, 2003). John Barry then proposed that "green citizenship" is

a continuum from "negative" to "positive", and implies the meaning of "critical citizenship" (Barry, 2007). In addition, Mark J. Smith and Piya Pangsapa discussed three theoretical themes in the study of ecological citizenship responsibility (Mark Smith & Pia Ponsapa, 2012). Young raised the issue of social connectivity (Young, 2006).

Domestic scholars mainly do the following related research: From the perspectives of ecological sustainability and deliberative democracy, Pi Qingzhi systematically combed and commented on the development of western environmental citizenship theory, and tried to explore the environmental political movement in the green dimension in western society (Pi Qingzhi, 2007). Yang Tongjin, Qinpeng and others discussed the formation logic, theoretical implication, ecological citizenship characteristics and legal value of the theory of environmental citizenship (Qinpeng, 2012; Yang Tongjin & YANGTong-jin, 2008). In addition, Liu Tao discussed the collective identification and confirmation of ecological citizenship in the era of globalization from the perspective of national image dissemination (Liu Tao, 2009), while Yang Li, Sun Weidong and others discussed the construction of global corporate citizenship from the perspective of climate change (Yang Li & Sun Weidong, 2013).

Based on the above research, the author believes that the so-called environmental citizen refers to the citizen who has good environmental literacy, positive environmental protection consciousness, and dares to practice healthy environmental protection behavior, and plays the role of main participants and active promoters in environmental protection activities.

2.2 OSROR Model

OSROR model is based on the theory of communication intermediation. This model modeled the audience information receiving-spreading-using-cognitive-behavioral trajectory in hypermedia space. Based on this theory, the variables involved in this study are as follows:

O(object background):

How the background variables of communication affect politics has always been a core issue of communication studies. Perfect media infrastructure is the prerequisite for individuals to obtain the social capital needed for community participation (Mabweazara, 2009). On the one hand, background variables will affect individuals' communication behavior. Individual media use and corresponding communication practice are influenced by background factors (Yao & Haggard); on the other hand, a good communication background structure helps to promote individual politics. Governance knowledge and behavior, for example, the core idea represented by Columbia School is that community structure plays an important role in individual community participation and integration (Lynd & Lynd, 1937); therefore, media is an important part of community structure (Ball-Rokeach, Kim, & Matei, 2001). This study holds that, like community structure, family, work and learning occasions may also be important background variables of communication, which may also have an impact on individual communication practice and political awareness.

2.3 S (source): Information acquisition.

People tend to use different types of media to obtain external information (Leung, 2009). Hypermedia integrates old and new media into individual daily life. Individuals receive external public opinion information through the mass and network media. Therefore, the frequency of mass media, social media and Internet media has a positive impact on the frequency of news contact.

And this information will influence our discussion of the topic. On the one hand, information in both mass media and social media provides resources for further discussion. On the other hand, these discourse resources become the premise for us to imagine and discuss society. In fact, news in both mass and social media provides a cultural basis for national participation in the community of nations.

The core idea represented by the Chicago School is that the media is an important factor affecting urban ecology. The reason why the mainstream media is important is that in a heterogeneous and mobile society (Park, 1923), the "imaginary community" constructed by the media can condense people's social consensus (Hopkins, 2009), so that residents in different parts of the country can share the imagination of a country (Hopkins, 2009). Yao & Haggard.

Therefore, the news information obtained by mass media, social media and online media may be positively correlated with people's perception of environmental citizenship.

r (response)

Individuals will discuss and disseminate information based on social networks established in hypermedia space (Mo et al., 2014; Zhang & Leung, 2015). This kind of discussion can occur in the space with the Internet as the carrier, or in the space with the social media as the carrier, and will eventually affect the topic discussion in our daily life.

Therefore, the discussion in the network and social media may have a positive impact on the overall discussion.

O—R(object recognition and reaction)

Internet media provides virtual space for citizens to participate in the world community. The Internet has made Kant's concept of "world citizenship" a reality (Manuel Caster, 2006). Information input in hypermedia space will affect individuals' willingness to participate in the community of human destiny (Lee, So, & Leung, 2015) and behavior (Kim & Chen, 2016) by changing their cognitive level (Mabweazara, 2009), whether it is information acquisition or discussion. These will further influence the participation of individuals around the world in international environmental affairs (Chan, Chen, Lee, 2016).

Therefore, information acquisition and discussion have a positive impact on improving individual's environmental citizenship awareness.

3. Conclusion

In a word, this study has the following two contributions: (1) Based on OSROR model, this paper reveals that the communication and use of networked individuals have a significant impact on the cognition of environmental citizenship. (2) This topic provides a theoretical basis for the construction of security mechanism and expands the empirical and explanatory fields of similar studies.

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