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THE POWER OF NETWORKS AND INFORMATION FLOWS-- A CIRCUITS OF POWER PERSPECTIVE ON ONLINE RELIGION

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Abstract

This paper examines the tension between ICT users and legitimate authority in a network society. To explore this tension, this study reports a case study in the setting of a Taiwanese Christian church, particularly how the church authority was affected by the adoption of new technology. Drawing from a circuits of power perspective, the result of this study reveals that the intertwined relationship among information technology, social structure and users during the process of technology adoption and assimilation. The findings indicate that the implementation of Internet technologies in the church has challenged the traditional role of authority and distorted the power of information flow among stakeholders in the church. Our work shed light on how Internet technologies shape, and are shaped by the membership and belief in the context of religion.

Key words: online religion, power, circuits of power

1   Introduction

Online religion is one of the emergent areas of study attracting research attention in recent years. In the mid-1990s, researchers started to explore the role that religion was playing in a variety of online environments (O' Leary, 1996; Bauwens, 1996; Lochead, 1997; Schoroeder et al., 1998; Dawson &Hennebry, 1999; Hadden & Cowan, 2000). Early work remains at the level of documenting and defining the phenomenon of online religion or describing the experience of online religious practice. These early investigations tended "either to sing the praises of various fascinating possibilities for doing religion in a new ways or to condemn the presumed excesses of virtual life" (Dawson & Cowan, 2004).

After a decade of development, a substantial empirical study and investigation has being accumulated under the umbrella of religion and Internet studies, as a result, the online religion study began to come into its own as a field (Dawson & Cowan, 2004; Campbell, 2004, 2005a; Cowan, 2005; Hojsgaard & Warburg, 2005). The current studies of online religion are generally dominated by the fields of communication, religious studies, sociology of religion, and theology. Dawson and Cowan (2004) suggest that the effort to understand online developments in the context of wider social and cultural conditions is expected for future work. To echo these calls, this paper focuses on the power/authority issue of online religion by integrating the scholarly work from both the field of information systems (IS) and organizational studies. This study attempts to provide theoretical angles different from previous online religion studies, and to enable a detailed description and analysis of how Internet use challenges and adapts to existing authority patterns by observing the tension when a Christian church (a legitimate authority) encounters the power of network and free flow of information in the network society. In particular, the study was guided by two questions: (1) how does peer-to-peer networking logic challenge the traditional vertical structure of legitimizing authority? (2) Will the power of information flow take precedent over the power of legitimate authority?

The organization of this paper is as follows. The next section presents a brief overview of the theoretical traditions of organizational sociology on power, and then reviews power and authority literature in current online religion studies. The theoretical determinants of power and influence are then identified. This is followed by a description of the research methodology, the case study itself and a discussion section on our findings.

2   Literature Review

Information communication technology (ICT) developments have opened up new spaces of religious practice—or 'techno-religious spaces'— which are sociable spaces linking people and information, supporting web-like existence in the world (Berners-Lee, 1999, p. 123), and which also result in a new politics of space, with reconfigured dominations and resistance (Kong, 2001). With these new techno-religious spaces, the "new" politics of space deserve analysis—how authority adapts the ICT to their communities and how technology has affected the community.

Pioneer researchers of online religion studies commonly believe the concept of "authority" is used in various ways. Campbell (2007) reviewed 103 articles published in *Journal of Computer-Mediated Communication*, finding that the most common uses of "authority" were (1) official structures, (2) a specific agent in a position of power, (3) power, (4) moral/higher authority of governance, and (5) online/offline text and information. She therefore suggests online religion studies of power issues require identifying the specific form of authority that is at play.

2.1 Authority/Power in Organization Studies

The study of power in organization has been well defined and discussed in contemporary organization theory. In order to respond to Dawson's and Cowan's (2004) call for interdisciplinary insights, the study therefore discusses authority/power concept drawing from organization literature.

Organization theorists, traditionally, have defined "power" against "authority" around the axis of "legitimacy" (Clegg, 1989a). On the one hand, most social scientists define "authority" as legitimate power, which has traditionally been associated with formal power. While on the other hand, "power" is commonly regarded as a "capacity" grounded outside the authoritative structure of the organization, i.e. politics, and is therefore an illegitimate power (Clegg, 1989a; Silva, 2007). In this view, power in an organization is normally regarded as "propertied."

Originally, the propertied notion of power is derived from the work of Marx (1976) and Weber (1978). Theories stem from this school of thoughts are known as the rational system theories on organizations who emphasize "propertied" power in formal power and legitimate organizations. In contrast to the more recent natural and open system theorists on organizations think the notion of power as "relational." In Emerson's (1962) theory of power-dependence relations, he proposes an "exchange" framework where power is a property of social relations; it is not an attribute of an actor. An accurate portrayal of power relations is two-fold: power imbalance and mutual dependence. Likewise, post-structuralism theorist Foucault also believes the nature of power is relational. For him, power is a relation between forces; or rather every relation between forces is a power relation. Therefore, power does not have an independent object being. Instead, it is in the network, or grid of forces that power emerges. In Foucault's view, every relation is always already a power relation. Power is never one-dimensional because that neglects the network notion of power. Individuals are the vehicles of power. Every time the manager acts, he acts in response to power (resistance) and in accordance with force. Every act, and every communication by every person in the organization is already in power and reconfigures power. Foucault believes power networks are "simultaneously local, unstable and diffuse, and do not emanate from a central point or unique locus of sovereignty" (Introna, 1997, pp.125-127). Power is not something that is "acquired, seized, or shared, nor a commodity, a position, or a plot. Rather, it is the operation of nonegalitarian and mobile relation of force.

In a nutshell, there is a growing trend that the notion of power in organizations has turned from a "propertied" view to a "relational view;" from a centralized, static view toward a more decentralized, liquid view. In the same fashion, Scott and Davis (2007) notes that legitimate power indicates (1) a set of persons or positions linked by power relations and (2) a set of norms or rules governing the distribution and exercise of power and the response to it. He suggests that a set of dyadic power relations between the legitimate authority and each subordinate is transformed by the emergence of legitimacy norms into a multi-person control structure. In this structure, each subordinate participates in the control of his or her own peer group. The emergence of legitimacy norms helps to render power relations more impersonal and reduces the tension associated with the exercise of interpersonal power.

2.2 Authority/Power in Studies of Online Religion

The question of online authority and how the Internet challenges or creates new forms of religious authority has become a favorite topic for analysis in online religion study in recent years. Yet, little theoretical and empirical work has been done. Dawson's early work (2000) highlights religious "control and authority" as areas of special concern. Recent studies of online religion suggest that the Internet has the potential to both affirm and threaten

traditional authority in different online religious communities (Barker, 2005; Barzall-Nahon & Barzall, 2005; Cowan, 2005).

In general, there are two different views presented in current online religion studies of power/authority issues: (1) the Internet as a trigger to social change perspective; (2) the social shaping of technological perspective. The former presents the utopian and dystopian extremes of the early work on the social impact of the Internet. Researchers from this perspective believe that it is technology that predominantly influences human life. Some reported the Internet creates new authority structures and roles, such as Thumma's study (2000) of new leadership roles of church webmasters in American congregational websites and Herring's moderator (2005) as "governing authorities" in an online Christian group, while others were just as quick to sense the dark side of the ICT, calling for the embrace of greater caution. For example, Barker's study (2005) of online norms found online discussion forums may subvert the fixed, tight hierarchical structure of religious organizations. Piff and Warburg (2005) showed the tension arises between religious institutions and members, as online forums create spaces and processes whereby official teachings may be challenged.

On the other hand, many researchers have recently turned to the social shaping of the technology (SST) perspective to investigate religious authority and online religion, trying to eschew technological determinism. Campbell (2005b) argued that religious users often conceptualize and introduce the Internet as suitable for spiritual purposes. The social shaping of technology highlights that technology is embedded in a social process of negotiation between individuals or groups who inevitably shape them towards their own desires and values. Campbell argued that this differs from the negotiation processes of non-religiously defined groups, because religious groups operate within a spiritually rich worldview with meanings and values that might be absent in non-religiously defined groups. Empirical studies such as Barzilai-Nahon and Barzilai (2005), who studied the religious fundamentalism among ultra-Orthodox Jews, and Kuver and Cheong (2007), who interviewed religious leaders of a diverse set of faiths in Singapore, all lent support to the emergent research on the spiritual shaping of ICT. The findings revealed that the Internet can be culturally constructed in ways that adapt to the needs of a religious fundamentalist hierarchy. The Internet may serve as a tool which solidifies rather than challenges religious authority.

The Internet as a trigger to social change perspective	The Internet as an ideological weapon for religious teaching	Backover, 2003; Adamu, 2002, Piff and Warburg, 2005
	The Internet as a threat to traditional religious authority	Cowan, 2004; Barker, 2005
	The Internet empowers new leadership roles	Anderson, 1999; Thumma, 2000; Herring, 2005; Cowan, 2005
The social shape of the technology perspective	Internet provides tools for affirming traditional structures	Larsen, 2001; Campbell, 2005b; Barzilai-Nahon and Barzilai, 2005; Kuver and Cheong, 2007

Table 1.   Current online religion studies of power/authority topics

Although the current online religion studies of authority/power issues have made considerable progress in the last decade, some significant gaps still exist. First, both perspectives alone are insufficient to explain the complicated intertwining powers of relationships in legitimate authority, structure and informal power. The Internet as a trigger of social change perspective assumes technology to be an objective, external force. It plays a deterministic role, while the social shaping of the technology perspective, emphasizing the possibility for different social groups of users to shape technologies toward their own ends. It relies too heavily on the capability of human agents. It is insufficient to ask questions about how ICT interacts with human agents, and whether the SST is guided fundamentally by the factors such as demography, personal attributes, resources distribution, or the positions in the network, etc.

Similarly, Kuver and Cheong (2007) admitted that the current approaches are unable to fully answer the above issues.

Second, the different expressions of "authority" and "power" need to be distinguished (Campbell, 2007). Though some researchers have made efforts to approach the concept of authority as multi-layered or of various dimensions, most of the current definitions of authority are static and propertied, with little attention to the liquid, relational notion of power, which provides a more comprehensive explanation for dynamics of authority, structure, and power in a networking society.

Third, little work provides a sound theoretical framework to explain how and why ICT is used for religious purposes. Dawson and Cowan (2004) suggest there is a need for more longitudinal, long term studies to see how patterns in online religious life may change over the course of time. In addition, they also call for work on significant Asian traditions.

In accordance with the above arguments, we propose the adoption of a natural open system approach on organization to investigate the relation of power networks in religious authority and the use of ICT. Unlike the traditional rational system approach, a natural open system approach assumes that there is a close connection between the condition of the environment and the characteristics of the systems within it. (Scott & Davis, 2007) We believe the relational power is better understood in light of the interdependence of organizations and environments. Given the limitations of current online religion studies on power, especially relational power, this study proposes the frame work of circuits of power as the theoretical lens to investigate the power issue of the religious use of ICT.

3 Theoretical Framework

In this paper, we adopt circuits of power in add an empirical case in organization studies. The circuits of power constitute a rich analytical tool for the study of power and IS (Silva, 2007; Clegg, 1989a). In line with Foucault's relational power concept, Clegg's framework of circuits of power explains power relationships of the particular circumstances of organizations or their structure, considering relational power and its embedded environment. As power is something that cannot be owned and the exercise of power depends on the relationship between agents, such relationships that sustain, maintain, or transform power relations can be analyzed by applying this framework.

The framework considers power as circulating in three different circuits: (1) the episodic circuit, (2) the social integration circuit, and (3) the system integration circuit. First, the episodic circuit of power consists of agencies, resources and outcomes. It is in this circuit that agents struggle to control resources. Those agents successfully controlling resources will be those with a stronger power base. This aspect of power provides a lens to understand the religious authority's response to the power of the free flow of information, and also how power is transferred among the religious authorities who take different actions. Second, the social interaction circuit concerns the relationship between the rules of meaning and of membership. The analysis of the circuit of social interaction will identify the legitimate and illegitimate dimensions of power within an organization. Tension arises owing to the lack of a balance between the institutional order and its material conditions, that is, technology, techniques and methods of production. This aspect of this circuit allows us to examine how legitimate authority copes with the challenges of the power of flow and makes it fit in with the norms, rules and meanings of religious institutions.

Third, the circuit of system integration indicates the material conditions, the technological means of control over the physical and social environment, and the skills associated with these means. System integration circuit is the major source of change in the circuits of power framework, which allows us to realize the nature of ICT as a potent source of transformation

and tension (Introna, 1997; Clegg, 1989a).With this theoretical lens, this study may offer a natural open system angle on organization for the online religion studies, bringing new insights. In addition, this study may more effectively explain the relational network power than other current work.

4   Methodology

This research has adopted the interpretative approach. Myers (2009) argues that interpretive case studies attempt to understand phenomena through the meanings that people assign to them. As power is not only associated with a set of persons or positions but also with a set of norms or rules governing the distribution and exercise of power as well as the response to it (Scott & Davis, 2007). Interpretivism, which emphasizes language and the meaning of actions, is the most appropriate research approach for making sense of the power issues of ICT use in religious settings.

The empirical setting of this research is a Taiwanese church called the Light of Life church (LLC, a pseudonym). The IT division of this church appropriated ICT since 1999. In early 2002, the IT division had implemented its intranet systems and started a plan for integrating its database and website, adopting the concept of customer relations management. This empirical research covers the ICT initiated and deployed period. The data was collected in two stages. For the first stage, one of the author spent three weeks at the LLC from the first week of January to the first week of February in 2002. During this period, the author conducted 5 individual face-to-face, semi-structure interviews with pastor, IT team members and users. The interview protocol included questions such as the benefits and obstacles of the adoption of church websites and the Information systems, comments on the statement: "The information put on the web sites should be controlled because the doctrine of church is not somebody's the opinion of individuals," and comments if the free flows of information are beneficial to the church and its community, etc.

The interviews consisted of two interviews with pastors of the church, one with IT team leader, two with webmasters and three with users. The users were recruited through personal referrals and online forums, considering the diversity of their jobs, social roles and Internet usage habits. On average, each interview lasted about one and half hour to two hours. All the interviews were recorded and transcribed. Other examined materials included collected and reproduced relevant documents, observation notes, informal conversations with church staff and members, internal ICT implementation plans, minutes of the IT team's meetings, and press releases. Besides personal Interviews, during the research period, we regularly visited the website and online forum to observe.

As the Intranet structure has clearly indicated the change in power after the third phase of LLC's deployment of the ministerial support systems, we decided to conduct second phase of the interview to look at the effectiveness of the system implementation. The second stage was in the second week of July, 2009. Three formal follow-up interviews with the IT team and one phone interview with a user were conducted to validate the early interpretations of the results and identify any inconsistencies. In addition, we rely on the value on informal interviews during the interaction at the church services.

It is also worth noting that the use of multiple sources of information helps demonstrate the credibility and dependability of interpretive case study research (Yin, 2009). As one of the authors has been a member of this church for years, she maintained close contact with the informants via e-mail and telephone throughout the second stage of the fieldwork.

To analyze the data, the concept of circuits of power was used to structure the narrative of the case, thereby constructing a dialogical process between the data and the theory (Klein and Myers, 1999). The interpretations were validated by following the approach suggested by

Clegg (1989b), Backhouse et al. (2006) and Silva (2007). Specifically, the theoretical framework considered power as circulating in three different circuits. Through reading the field notes and interview materials several times, we refined the three circuits of power and ensured that these flows of power were dominant across the ICT implementation process in LLC. If conflicting or incomplete interpretations of a certain event or statement were identified, the participants were contacted for clarification. In the last stage, the three follow-up interviews played an important role in validating the three circuits of power.

Data Sets	Research Methods	Stage I Jan-Feb 2002	Stage II July 2009	Length of each interview
Church leaders	In-depth-interview	2	1	1 hour ~2 hours
Webmasters	In-depth-interview	1	1	1 hour ~2 hours
Users	In-depth-interview/ Online or offline interactions/ email	2	1	1 hour ~2 hours

Table 2.   Interview Information

4.1   Case Narrative

LLC, established in 1954, is a nondenominational church and one of the fastest growing churches in Taiwan. The attendance of Sunday worship of LLC totals more than 7,800 every week, and the church is now the second largest church in Taiwan in terms of membership. LLC has 36 island-wide affiliated churches and 39 world-wide affiliations. Unlike most churches which are hesitant to appropriate information technology, LLC has defined two IT strategies as: "to ensure the effectiveness of ministry through both the teamwork of full-time co-workers and the appropriation of information technology," and "to preach to unreached people with the gospel by the use of new technology." ICT has become an important tool of its ministries and for the communication with its congregation and affiliated churches.

The mission of appropriation of ICT is to optimize the performance of the church operations and to deliver current events and messages from the entire church to its congregation and the public. LLC started its website around 1996. Being a large-size church, the IT Division in this church plays a major role in coordinating the information and current events of the administrative departments and ministry departments on a weekly base.

The development of LLC's website has three different phases. In the first phase, 1996-1998, the church set up an experimental website. It was done by some volunteer church members and was minimally maintained and updated. The second phase started from the forming of IT division of LLC in 1999. The site was transformed by integrating the website with database management. As LLC has a flat organizational structure, each division developed its own ministries and seldom talked to each other. Consolidation of cross-division information in the church was difficult. In order to minimize the communication difficulties and the workload of coordination among divisions, the goal for phase II was to decentralize the flows of communication in the church office.

The IT team implemented an intranet system in the administrative divisions of the church to coordinate data entry. Each division was authorized access to input or correct information in the database related to their own services. The work process can be regarded as a semi-decentralized network. There was no longer a central office to update or consolidate all the data from a variety of divisions since, with the adoption of the database. The IT team could always get the most updated data as long as each division had input their data correctly. However, most of the pastors in the church have not yet adopted this system in 2002. The IT team pushed the use of the intranet in the ministerial support divisions in phase III (2003-2007), especially for all the district pastors and cell group leaders. That is, to allow 426 cell

group leaders to enter the information of their cell members remotely to replace the past hierarchical reporting process, minimize the errors of centralized data entry and make the workflows more decentralized. Another major task in phase III was to push all pastors in this church to appropriate this system. Though most pastors were in consensus on the appropriation of new technology in the church, they had not really been involved in the computerization. Moreover, most pastors had limited computer literacy. Whether top management could quickly learn was the key to the computerization of the entire church. As the IT team leader, said in 2002,

> "Appropriating ICT has been an inner revolution in the LLC. It challenges the work process and habits in the church offices. The diffusion of technology in the LLC has been a bottom-up process, rather than a top-down one. We are currently right in the middle."

Also, the IT team in LLC attempted to draw the attention of a larger portion of nonbelievers rather than its own congregation by establishing a new version of the church's website in phase III. Instead of posting existing material on the website, the IT team adopted the concept of customer relation management and enter the existing church publications into a database by different topics based on user needs, for example, testimonies or essays about marriage or child behavior.

To investigate the tension between the power of authority and the power of free flow of information during the implementation of the Internet, in the interviews, the informants were asked whether or not they agreed that the information put on the websites should be controlled because the church doctrine is not the opinion of individuals, and whether they believed there exists a conflict between church authority and unfettered information. Their answers, unexpectedly, showed mostly an openness to embrace the free flow of information. Some of them said, "Nowadays, the church no longer puts too much stress on the authority of man, but rather puts more emphasis on the authority of God. The authority of God has been challenged throughout history. Truth is illuminated when people debate it." Others believe the free flows of information, in the long run, help the church be more aware of and reflect on their own ministries. As one of the webmasters talked about his own experience, "I felt pretty shocked myself when I started to join the religious forum. There are so many denominations that present different ideas and perspectives that I have never known. I became more open-minded after joining the forum." Still others mentioned that technology is neutral. It will never replace the role of the church. Therefore, the church does not have to worry about it too much.

During the course of our investigation, the controversy surrounding "Harry Potter" provides a good example to observe the tension online and how this Chinese Christian church dealt with the conflict. The webmaster in LLC told the story:

> "…Two days before the Harry Potter movie opened, a reporter visited LLC's website and found a message that had been posted on the website for nearly two months. That was a message written by the wife of one of the pastors in LLC, pointing out that Harry Potter promoted witchcraft. She reminded the church congregation of the pernicious influences of such work on children. This message was originally published in the Sunday worship program for our own congregation and later was put on the website. The reporter dug it up and wrote a news story about it on the Light of Life's website. All of a sudden, the traffic at LLC expanded six-fold. We were severely criticized in the posted messages. Hundreds of people sent feedback on this issue and there were lots of obscene words posted on the website. LLC had to hold a press conference to state its position."

The webmaster explained the reason to hold a press conference was the result of the criticism posted on the website and many phone calls on this discussion. He further reflected how the use of media has altered the form of congregation,

> "We gave some examples supporting our positions, such as the fact that Harry Potter is one of the 10 most challenging books according to the list of the American Library Association. So our position is to remind our congregation to restrict their children's access to related material, not to restrict the access of adults. We need to learn what we can say or what we need to avoid saying before the media. Ultimately, the media is different from our congregation."

After this incident, the church decides to set rules for the discussion on the online open forum. As the webmaster concluded that,

> "It is just for Internet users to post their ideas. If we think the speech is against our rules, we just delete it. Normally we warm them by an email before we delete."

5 Analysis

In this section, we will carry out the analysis of the case by examining how each circuit of power became fixed and stable, that is how the information system's associated meanings, regulations and techniques of production were integrated into the church organization. Given that each circuit represents a different perspective of power, we will analyze each separately.

5.1 The Circuit of Episodic power

The episodic power consists of agencies, resources and outcomes. Power is manifested here by agents capable of controlling resources and establishing alliances to produce their intended outcomes (Introna, 1997). It leads directly to tangible outcomes (A gets B to do something). In this case, the As are the IT team of the LLC, while Bs include the administrators and ministers, pastors, and cell group leaders (both the Intranet and website users), as well as the church congregation (website users).

In analyzing the power relations concerned in this circuit, although the IT team in the LLC has been fully empowered with the authority to develop the online ministry, the resistance they experienced includes the issues of lack of technical expertise, lack of resources (manpower and budget constraints) and the issue of limited computer literacy. The IT team leader mentioned that they could not afford to hire programmers with strong technical backgrounds. Instead, they sent team members to take courses or on-the-job-training to pick up the necessary technical skills and knowledge. Lacking sufficient budget and manpower lengthens the process of diffusion of technology. The IT team members of the LLC said, "we just get everything done little by little," and "I wish we could add one hundred more people to do more. Yet, so far we can only work within the constraints of our resources and try our best."

Although church authorities may support the use of information technology in LLC, their limited computer literacy may become an obstacle retarding the diffusion of technology. One Christian Internet user claimed that the failure to receive any response from church staff or pastor to his questions posted on the Church website disappointed him a lot. Another Internet user who is also a pastor mentioned that most pastors in traditional Taiwanese churches are too busy and have too limited knowledge to foster the use of information technology in their churches. Some IT team staff said many pastors have not yet experienced the benefit of the appropriation of information technology. They are afraid of technology and feel it is difficult to learn.

The episodic circuit is one of the major factors of the success of an organization's change. In this circuit, the IT team (agencies) represents the legitimate authority, but lacks the capability to control resources and use top management. Therefore, their intended outcomes are retarded though still ongoing. In the year 2009, the interviewee, a webmaster stated that the existing obstacles such as the lack of resources and computer literacy have been greatly improved

along with the diffusion of ICT. However, the bottom-up process of the diffusion of technology in this church did not work well. IT team leader said, "We need administrative support in many ways. The IT team alone cannot bear the whole process of diffusion of IS. The promotion of IS should be a top-down model. The coercing from above is crucial, but it is not the way we are." The implementation of the ministering system, follow-up system and CRM system for the purpose of pasturing turned out to be unsuccessful. The IT team member said, "Ministering is not easy to computerize. There are too many variables when a pastor deals with a congregation." Therefore, the IT team gave up their original idea of being a change agent to computerize the church ministry and provide managerial tools; instead, they adjusted their role as a facilitator providing solutions in response to the request of ministries' development.

5.2 The Circuit of Social Integration

The analysis of the circuit of social integration will identify the legitimate and illegitimate dimensions of power within the organization. The Harry Potter incident provides a perfect case for investigating the tension between the legitimate power and illegitimate power. That is, the recognition of the illegitimate dimension of power, or its "dark side". (Introna, 1997) The main task in this part of the analysis is to identify the rules of meaning and membership that are related to the information system. For the church leaders, the rules for interpretation are based on the doctrines of biblical truth, while the congregation believes partly according to the religious teaching, partly according to the voices of the commercial world. Introna (1997) indicates, in any organization, tension will arise owing to the lack of a balance between the institution order and its material condition. Where there is lack of balance, the material conditions will engender social relationships and practices that can threaten the organization's continued existence.

The Harry Potter incident demonstrates how a Taiwanese Christian church can learn from the power of information flows when its authority has been challenged. The church authority, the legitimate power, regarded Harry Potter as related to witchcraft. However the different points of view from the press and the Internet users inside and outside the church represent here the illegitimate power of flows. As the LLC received critical messages, it did not decide to retard or stop the information flows. Rather, it adjusted itself to differentiate between discourse among insiders (members of the church) and with outsiders (the public). They learned how to manage the flows by setting rules to restrict the unfettered flows to a tolerable extent. When the conflict happened, their core values of religious doctrines became clearer, and they learned how to layer their technical architecture. Two years after the incident, they started to set a window email box on the church website for receiving different ideas and doctrines, starting to dialogue with the "outsiders."

Inrona (1997) states, in the circuit of social integration, the consolidation of the social relationships and practices will depend on the extent to which managers are able to cope with the tendencies towards disintegration within the organization. Likewise, the illegitimate power of flows stopped this Taiwanese Church from taking a central control approach to the unfettered flows. Rather, the church learned not only to regulate its architecture by using passwords, but also to form a set of invisible inner "editorial" rules, norms and values to segregate by issues or types of users. Although some editorial rules were formed by doing, the leaders in the church acknowledged that sometimes it is hard to draw a line between heretical and real Christian beliefs. The church authorities were still in control of its institutional order, the religious core, within their congregation by their power of interpretation and legitimate regulation. In the meantime, they were also open to the public, receiving the challenging rules, norms and beliefs from the outsiders. They, therefore, bridged the gap between the institutional order and its material condition in terms of a common language.

Circuits of power	● The interpretation of framework	● The circuits of power in the LLC
Episodic power (causal power)	● The As are the IT team of LLC, and Bs include the administrators and ministers, pastors, and cell group leaders as well as the church congregation.	● Lacking of resources and computer literacy of top management retarded the implementation process. ● The bottom-up model for the diffusion of the technology turned out to be unsuccessful.
Social Integration (depositional power)	● The church authority is the legitimate power, regarding Harry Potter as related to witchcraft. The press and the different views of the Internet users inside and outside the church represent here the illegitimate power.	● The church adjusted its discourses and differentiated among insiders (members of their congregation) and with outsiders (the public). ● It layered and regulated its architecture by using passwords. ● It formed invisible inner "editorial" rules, norms and values to segregate by issues or types of users. ● It established an email box on the website to accept any questions and different views.
System Integration (facilitative power)	● The IT team realized its role as a facilitator rather than as a managerial role. They started to listen to the needs and requests of the ministries. ● Priorities were set based on the solutions related to the common needs and the easy-to-implement applications. ● The match with user habits and the characteristics of the technologies were considered.	● After the failure to develop a ministering system, follow-up system and CRM system, the IT team started to implement communication systems to facilitate the communication needs to the congregation in pastoral care. ● They also implemented systems by the request of each ministry, such as the Sunday school.

Table 3.   The circuits of power flow in LLC

5.3   The circuit of system integration

The circuit of system integration considers power as facilitative. Although the managerial system, follow-up system and CRM system that the IT team designed in 2002 were not successfully implemented, the Sunday school system, membership system and communication systems, such as the central email system and the enterprise information portal (EPI) for short message sending were all pervasively adopted by both the administrators and ministers of the LLC in 2009. One interviewee reported that the earlier system design and user habits were difficult to match. For example, the CRM system has many restrictions requiring the users to change their ministering habits to fit in with the process. Therefore, the outcome of the implementation was unsuccessful.

However, when the IT team of the LLC, started to realize their role as the facilitators of the church organization, the power of system integration happened. They started to develop system by the request of the internal needs. Those systems that can maximize the common interests of the LLC ministers and staff were put into first priority to develop. For example, traditionally, the ministers only meet people face-to-face or on the phone, therefore, the development of communication systems enabled the ministers to contact the congregation in terms of alternative methods, e.g. short message, email etc. at a lower cost. Besides, the

internal requests that were easier to computerize were also put into prior practice, such as the database of Sunday school courses, membership and the baptized list.

System integration is constituted by techniques of production and disciplines. Clegg (1989a) stressed that system integration is the major source of change in the circuit of power framework. Success in implementation depends greatly on the managerial ability to translate the new rules and norms that are implied by the system into pieces of discourse that other members of the organization can understand and accept as ready-to-hand. The data shows this circuit of power in their implementation of some "specific" systems. They no longer design on their own--rather, they positioned the IT team as the facilitator of the church ministries-- and try to find solutions for each ministry request. The IT team learned to choose the less complicated techniques that are easier to adopt by most of the people in the Light of Life Church. They learned that the characteristics of the technology should not be counter to the user habits. They also learned that every system design should be started at the internal users' request so as to facilitate their ministries. Just as Introna (1997) states, the realization of this circuit allows analysts and developers to incorporate those required characteristics in the system to make it fit with the organization.

6   Discussion

Although the appropriation of networking logic in Chinese Christian churches brought about the challenge of unfettered information, the technology designers, influenced by the institutional properties of their organizations, fashioned and reconstructed the technology to meet the managerial goals of the churches. The church authorities were not passively challenged by the new pattern of technology and later marginalized; on the contrary, they tried to reformulate the new technology and learn to make the best use of it. LLC has been struggling to learn to be more flexible in response to networking logic. The findings do not suggest the type of significant tension between the power of authorities and the power of information flows that Castells (1998, 2000) or Miller and Slater (2000) predict. Clegg's circuit of power framework provides aspects to explain how the power flows in LLC.

In addition, our findings suggest that a structurational model of technology (Orlikowski, 1992, 2000) or the Adaptive Structuration Theory (Poole and DeSancitis, 2004) that can better explain the conflict between church authority and the appropriation of the peer-to-peer information communication technology. Orlikowski (1992) asserts that technology is the product of human actions, and that it also assumes structural properties. Technology is physically constructed by actors working in a given social context, and technology is socially constructed by actors through the different meanings they attach to it and the various features they emphasize and use. As technologies become more amenable to design and development by users, traditional forms of organization may be modified; as organizations struggle and learn to be more flexible in turbulent times, different assumptions about diverse interactions with technology may both shape and be shaped by new forms of organization. In this study, our findings extend this viewpoint to the context of religion. Here, similar to the argument put forward by Orlikowski (1992), the adoption of the Internet has challenged the legitimacy of the church and the tradition of information flow between ministers, pastors and cell group leaders. The relationship between technology and human agents is neither one-sided nor derterministic. Our findings provide empirical evidence for Orlikowski's premise that both technology and human agents are structural and socially constructed. The ongoing interaction of technology and its organizations should be understood dialectically in a specific institutional context involving reciprocal causation.

7   Conclusion

In this paper, the objective is to reveal the rich and intertwined process between technology and authority in the context of religion. Drawing from the work in information systems and organizational studies, in particular through the lens of circuits of power, this study reveals how the adoption and assimilation of the Internet modified, and was modified by, the structural properties embedded in church. Three major contributions could be identified in this research. First, integrate both IS and OS research angles into online religion studies of power. Provide larger interdisciplinary lines than are provided in current research. Second, the framework of circuits of power was first adopted to investigate the power issues of religious uses of ICT. Foster a natural open system approach to organization, a relational view of power, and bring new insight to existing static and propertied views of power in online religion studies. Third, according to Foucault, the analysis of power needs to be context specific and relate to local actors. This study also provide empirical piece that describes in detail the intertwining of church leader's actions, discourses and material conditions that contribution to the adoption and management of IS in the context of a Chinese Christian church, and the encouragement of church leaders to better adopt and manage IS with less hesitation. This research endeavour is also in response to Dawson's and Cowan's call (2004) for more work on Asia traditions in online religion studies.

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