

Chapter 2

The Web of Identity: A Model of Digital Identity Formation in Networked Learning Environments

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ABSTRACT

This chapter examines how learners develop a sense of self and belonging in networked learning environments. The authors propose that individuals create and negotiate their identities through an iterative process of dialogic and symbolic exchange with other individuals. The process is always in flux as individuals constantly readjust their understanding and actions within a given context. Individuals strive to reach comfortable levels of cognitive resonance in which they integrate experiences and beliefs of the external world into their personal narratives. To explain this process, the authors provide the Web of Identity (WoI) model. Based on the work of Goffman (1959) and Foucault (1988), this model is composed of five dramaturgical strategies: technology, power, social structure, cultural, and personal agency. These strategies both guide and enable the enactment of behaviour. For researchers, exploring identity and affiliation through the WoI lens raises a series of thought-provoking questions worthy of further investigation.

INTRODUCTION

The growing popularity of social networking technologies, such as Moodle, Facebook, MySpace, Twitter, and Ning are prompting researchers to examine the potential of online community and

collaborative space for students and faculty. In this chapter, we examine the reflexive relationship between social interaction and understanding of self in networked learning environments. Networked learning theory focuses “on the connections between learners, learners and tutors and between

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learners and the resources they make use of in their learning” (Jones, Ferreday, & Hodson, 2006, p. 1). Networked learning theory and practice are rooted in the constructionist tradition, where knowledge and identities are perceived as being ‘constructed through discourses’ (Talja, Tuominen, & Savolainen, 2004, p. 82). In keeping with the tenets of constructionism that define networked learning environments, we acknowledge the significance of social interaction in both learning and identity formation. It is through identification with and differentiation from others that individuals are able to establish their sense of self. This sense of self is a reflection of the learner’s experiences and relationships. The emphasis on constructionism and relationship development, suggests that one’s sense of self is inherently connected to one’s sense of belonging within community. Individuals may also develop multiple identities which they enact strategically depending on their goals and the context. The primary aim of this chapter is to introduce a theoretical framework for outlining the processes affecting the development of digital identities: the Web of Identity (WoI) model. This model describes how individuals acquire and express their sense of self within various social contexts and how they use strategies to express their identities. The WoI strategies complement current theories of networking such as Actor Network Theory (ANT) and relational sociology by informing how the dynamics of action and interpretation influence individual identity and network affiliation. The WoI model has interesting implications arising from the use of identity formation strategies in networked learning environments suggesting multiple avenues for further research.

BACKGROUND

Networked learning, technology enhanced learning, and e-learning researchers have all grappled with theories of identity formation, but to-date none have adequately identified the processes

involved at the level of the individual. Both *Identity Theory* and *Social Identity Theory* focus on the relationship between already-established roles or groups on identity (Desrochers, Andreassi, & Thompson, 2002). Similarly, Burke’s *Differentiated Model of Role Identity Acquisition* focuses on the alignment of behaviour to roles within a given reference group, but fails to explain how “standard” reference groups or communities initially form (Collier, 2001). Wenger, McDermott, and Snyder (2002) outline seven elements necessary for cultivating communities of practice (CoPs): (1) allowance for evolution, (2) dialogue of perspectives, (3) varying levels of participation, (4) public and private community spaces, (5) value added, (6) familiarity and excitement, and (7) rhythm of interaction. This and many other studies of online community mention personal identity only in passing, focussing instead on community identity or social presence in general (Handley, Sturdy, & Fincham, 2006; Rovai, 2002; Schwier, 2007; Schwier & Daniel, 2007). But, how do individuals come to identify with and distinguish themselves from their communities? And, how does online technology affect these processes?

Networked learning researchers suggest that individuals socially create and negotiate an understanding of who they are with relation to shared knowledge, beliefs, and behaviours (Ferreday, Jones, & Hodgson, 2006). Macfayden (2008) posits “establishment of learner identities allows the development of a learning community” (p. 560). Goodyear and Zenios (2007) highlight the significance of self and community in the learning process:

A strong element of this socio-cultural view of learning is that participation in authentic knowledge-creation activities, coupled with a growing sense of oneself as a legitimate and valued member of a knowledge-building community, is essential to the development of an effective knowledge-worker. Action and identity are key. (p. 355-356)

From this perspective, development of self and community are not sequential, but simultaneous. Identity formation is a complex, iterative, and continual process involving dialogic and symbolic exchange. Personal and community identity co-evolve through social interaction. Ricoeur (1992) saw this relationship between self and social interaction, proposing that personal identity involves both temporal continuity of the self (*idem*) and selfhood (*ipse*) allowing differentiation of an individual from others in a given community (p. 3). Continuity of self refers to the sense of being a single, integrated individual who holds a stable narrative (relatively unchanging viewpoints of situations or environments) over time. But, this continuity is necessarily complemented by a sense of difference from others—that is, the individual can distinguish his/her narrative from that of other individuals. Learning theorists such as Vygotsky (1978) view social feedback as a mechanism through which one can verify the adequacy of constructs and concepts of self (Driscoll, 2005). Clearly, individuals learn to identify self and others through interaction, observation, and reflection. Yet, individual identities remain ephemeral, fluid, and contingent as individuals continually improvise as they negotiate meaning with their audiences (Hutton, 1988; Merchant, 2006). “The responses of the other are necessary to the sustaining of an ‘observable/accountable’ world, and yet there is no point at which they can be absolutely relied upon” (Giddens, 1991, p. 52). In the postmodernist sense, the self may be seen as “a realm of discourse rather than as a real thing or permanent structure of the mind” (Turkle, 1995, p. 178).

Relational Dialogue

Strongly constructionist in their view, Ferreday, et al., (2006) suggest that individuals learn through “relational dialogue” through which they “construct meaning about who [they] are, as well as

creating norms and values that determine what is seen as accepted knowledge within a given social and cultural context. It is through social interaction that individuals learn acceptable behaviours as well as share, acquire, and shape cultural symbols in a continual cycle of reciprocity between self and community (Hutton, 1988; Merchant, 2006).

Relational dialogue is one of the most significant factors in networked learning. Textual interaction, in some online environments, may be the only means of forming impressions of self and others. In this respect, words are action. In social dialogue, according to Mead (1934), the *me* (the self) is an internalization of all others (society), while the *I* is the source of actions and change. The actions or words of the *I* change society, which are then internalized in the *me*. Through social interaction, individuals share and acquire symbols, as well as knowledge, of social behaviour. Akin to Cooley’s conception of the *looking-glass self*, (1922), actions and reactions provide a mirror in which to see one’s temporal identity and through which to gauge identity performance within a given community. Self-reflection guides both consumption and creation of identities as “we incorporate some of what we see and experience into our own identities” (Chayko, 2008, p. 160). The relationship between the individual and community is a dialectical one:

On one level, I am the product of my unique personal biography. Yet who I am (or who I think I am) varies according to the social situation in which I find myself, and the motivations I may have at the time, although I am by no means entirely free to choose how I am defined. (Buckingham, 2008, p. 1)

The self has a sense of personal narrative and each individual chooses to perform certain parts of hers or his identity, depending upon the audience and the circumstance (Conrad, 2007; Goffman,

1959; Walther, 1996). The term identity implies both difference from others and resonance with others. In networked communities, this harmony and/or discord occurs through processes similar to those of offline identity. Online interaction is often equally real and may be strongly reflective of an individual's offline life (Chayko, 2008; Christensen, 2003). Technological mediation merely influences how impressions are accessed (time, place, manner, and meaning) and managed (Goffman, 1959). Observation of social behaviour and direct queries to social participants may help researchers understand the participants' interpretations of identity. But, actions and discourse can only temporarily reify continuously shifting relationships and identities of community members.

Fragmentation Authenticity and Reciprocity

To what extent does online interaction contribute to the fragmentation of the self? Many postmodernists view electronic media as disembodiment, allowing unlimited creation of multiple, unrelated identities that may or may not be associated with one's physical life. In ethnographic studies of how the Inuit use the Internet, Christensen (2003) challenges the notion of the Internet as an identity-fragmenting medium. Instead, he posits that the Internet is often used in order to assert rather than desert identity as evidenced by the strong references of web content to offline, physical life. As such, he contends that "social and professional identities are continuous across several media" (p. 17). Yet, he recognizes that expression of self through the medium of the Internet does alter one's identity as we come into contact with a variety of others, form new interactions, reactions, and understandings in "a recursive construction and deconstruction of identity" (p. 24). The Inuit sense of identity online, Christensen observes, is strengthened by a growing sense of differentiation

from other cultures on the Internet. *Strengthening* connotes change. Christensen's argument supports the concept of identity as a mutable construct, but not necessarily a fragmented one.

Cranton & Carusetta (2004) define authenticity as "the expression of the genuine self in the community" (p. 7). Even in face-to-face environments, it is difficult to acquire an accurate picture of someone's full identity (Sarup, 1996). Determination of the authentic self can be contradicted by appearance and manner or what Goffman calls the "dilemma of expression versus action" (Goffman, 1959, p. 33).

According to Giddens (1991), trust is the foundation of one's ontological security: the greater the difference between an actor's (an individual's) words and actions, the less one can trust the actor's identity and any relationships based upon it. Ontologically insecure individuals may lack a sense of personal history, may be socially paralyzed by anxiety and constant self-scrutiny (McConnell, 2006). In non-mediated face-to-face environments, individuals can refer to facial and bodily expressions to ascertain authenticity; in many technologically-mediated environments, words are action. In either case, ongoing interaction over time—the history of relationships between words and action—can inform impressions of reliability of identity performance (Merchant, 2006). Over months of interaction unconscious habits tend to surface, providing traces typical of specific interactional styles (Ferreday, Hodgson & Jones, 2006; Chayko, 2008). Gender, in particular, can be difficult to mask over time (Ferreday, et. al., 2006).

Computer-mediated communications have been critiqued as "de-individualizing," stripping away non-verbal and non-visible cues. Fewer avenues to access the private (internal feelings, values, and beliefs) and public (a sense of others' views) leaves fewer routes toward self-awareness (Matheson & Zanna, 1988, p. 222). Giddens (1991) felt that this de-contextualization of identity could

reduce ontological security and result in a sense of incoherence and fragmentation of one's own identity and those of others. However, many researchers now believe that the lack of physical and temporal situated-ness in networked learning environments merely changes how individuals establish identity authenticity online. Walther (1996) proposes that participants in technology mediated environments form impressions of each another as clearly as they would in a face-to-face environment, but acknowledges that impressions take longer to generate because collecting observations involves more diligent and consistent participation. Walther (1996) argues that online interaction can even become hyperpersonal—leading to greater intimacy as individuals employ additional techniques to plan, contemplate, edit, and project identities of self and others (Chayko, 2008; Merchant, 2006; Walther, 1996). Furthermore, in some of his longitudinal studies, Walther (1996) found that anticipation of future interaction prompts “communicators to seek more information about one another, to act more friendly, and to cooperate in negotiations” (p. 12).

In any social exchange feelings of authenticity and fragmentation may be complicated by the degree of reciprocity of the actors. For example, when engaged in learning in a networked learning environment, some individuals may only observe the activities of others, yet may still view themselves as members of the community because they are partaking in its communications (Chayko, 2008, p. 73). Others, who may be overtly participating, may not recognize these individuals as members at all. *Lurkers*, as they are labeled in networked learning environments, leave few, if any, traces of identity and, therefore, receive little or no feedback in response to their performances. Yet, their quiet observations of actions can influence their behavior as they internalize the information and move into other contexts (Jones, Ferreday & Hodgson et. al., 2008). Further, it is possible for

peripheral members to become more active within the group as they gain confidence (Lave & Wenger, 1991, p. 37). Yet, it is not clear to when peripheral members become members of the community nor to what extent equilateral reciprocity is necessary to be considered a member.

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Just as in the real world, individuals actively manage online impressions using “dramaturgical” techniques learned from socialization within communities. Socialization within communities results in its members acquiring a sense of shared history, purpose, norms, hierarchy, ritual, belonging, and continuity (Lapadat, 2007; Schwier, 2007; Rovai, 2002). These elements of community are the source of the technical, political, structural, cultural, and personal techniques that constitute the Web of Identity (WoI) model presented in this chapter. This model complements current theories such as Actor Network Theory (ANT) and relational sociology, both of which support the ideas that production of meaning occurs through interaction (Mützel, 2009). Both theories focus on how individual activities affect social relationships and the “collaborative emergence of actors” (Mützel, 2009, p. 878). ANT helps us understand how social media allow actors to compare their conceptions of themselves and others and how asymmetries “in the distribution of symbolic resources” arise (Chouldry, 2004, p. 5). However, in ANT, the end result is a judgment on a level of development in a network. Relational sociology, on the other hand, explores what happens after networks form, acknowledging ongoing processes in meaning creation and control. Whether through ANT's process of *translation* (connections established through activity) or relational sociology's *discursive interaction* (relational dialogue), neither theory offers information about strategies-enactment enabling active meaning-making and

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relationship-building (Mützel, 2009, p. 875). This is where the WoI model can make a significant contribution to networked learning theory.

Goffman (1959) viewed instances of social interaction as a performance: “all the activity of a given participant on a given occasion which serves to influence in any way any of the other participants” (p. 15). He suggested that performances are held within regions delineated by boundaries or “barriers to perception” (p. 10). These closed social settings, he proposed, could be analyzed through four perspectives:

1. **Technical:** The ability to which individuals can create, express, extend, and share him/herself (Chayko, 2008).
2. **Political:** The degree to which individuals or groups can demand, control, sanction, and enforce behaviour of others.
3. **Structural:** The horizontal and vertical social structures that restrict social contact and social distance.
4. **Cultural:** The morals, values, customs, tastes, decorum, and norms of a given group of people.

Because closed social settings are interpretive perspectives, we cannot see them; rather, we can see through them. To identify them tangibly, we must witness their enactment. For this reason, Goffman (1959) added a fifth element: the dramaturgical, which he defined as “the techniques of impressions management in the establishment and the identity and interrelationships of the several performance teams which operate in the establishment” (p. 240). The dramaturgical perspective overlies the other four perspectives represented in Figure 1.

However, Goffman’s perspectives were originally developed to examine social establishments, not identities of individual actors. To inform the analysis of personal identity, one must consider another factor—personal agency. Foucault (1988) referred to the processes of establishing

personal identities as “technologies of the self” and outlined four technologies that individuals use to understand identity (p. 18):

1. **Production:** Enables production, transformation, and manipulation of things.
2. **Power:** Enforces rules of behaviour.
3. **Sign systems:** Allow communication through language and other cultural symbols.
4. **Self:** Permits expression of personal preferences and proclivities.

Table 1 shows a correspondence between Goffman’s perspectives and Foucault’s technologies.

In Figure 2, Goffman’s perspectives and Foucault’s technologies have been combined. The dramaturgical perspective overlies the other categories because it provides the visible actions of impression management. Although social structures may result from expression of power strategies, Goffman’s structural perspective is retained as a main strategy because it focuses on the maintenance of social structures once they have come into being. Foucault’s technologies of the self have been added and named Personal Agency-Dramaturgical (PaD).

PaD acknowledges individual idiosyncrasies, needs, or personal motivations, which may help account for the variability in how individuals perform their identities: “individuals . . . effect by their own means a number of operations on their own bodies and words, thoughts, conduct, and way of being so as to transform themselves in order to attain a certain state of happiness, purity, wisdom, perfection, or immortality” (Sarup, 1996, p. 84).

In all performances, any of the techniques may influence all others (represented by the non-solid lines in Figure 2). For example, impressions of status (SD) might be influenced by ethical or religious values (CD) (through an overt display of adherence to culturally-defined ethical practices). When the techniques are used together over time, they shape the coordination of activity,

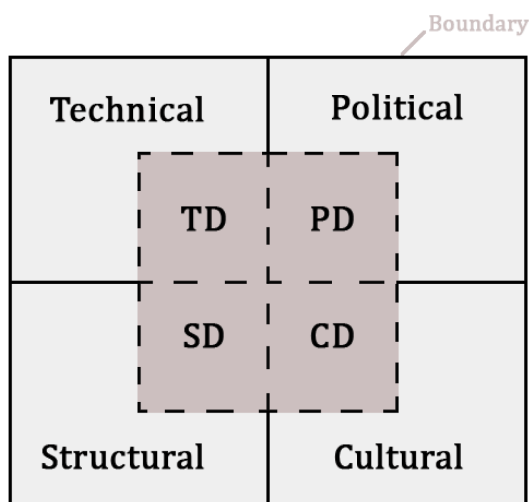
Table 1. Correspondence between Goffmanian and Foucauldian concepts

Goffman	Foucault	Strategies of impressions management
Technical-Dramaturgical (TD) Perspective	Technologies of Production	Display of quality, competency, and standards. (May be based on ability to produce, transform, or manipulate objects or situations.)
Political-Dramaturgical (PD) Perspective	Technologies of power	Display of persuasion, manipulation, authority, threat, punishment, coercion, and control.
Structural-Dramaturgical (SD) Perspective	N/A	Display of status, level of formality, maintenance of social distance, restriction of contact, gossip, ostracism. (May be based upon the type of relationship with the audience as per game rules, social hierarchy, and/or received practices such as caste.)
Cultural-Dramaturgical (CD) Perspective	Technologies of sign systems	Maintenance of moral standards and cultural values through rituals, norms, lifestyle congruent with an audience, and signs and symbols (abstract systems, language, money, decoration, and social practices).
N/A	Technologies of the Self	Display of individual needs, motivations, and idiosyncratic abilities and tendencies. (May be based upon race, physical attributes, sexual preference, gender, creativity, geographical location, and personal history).

(Koole, 2010. Adapted from the work of Foucault, 1988 and Goffman, 1959.)

inter-subjectivity, emotional states, and views of personal and group history. Figure 2 acknowledges all WoI factors through cognitive resonance (CR), where members of a community share an understanding of their collective and individual identities (Chayko, 2008).

Figure 1. A graphic representation of Goffman's perspectives (TD - technical-dramaturgical, PD - political-dramaturgical, SD - structural-dramaturgical, and CD - cultural-dramaturgical.) (Koole, 2010)



The Web of Identity in Online Learning Networks

The Web of Identity (WoI) model can be used as a lens through which to examine the formation of networked learning identity and affiliation. The WoI takes place within a region or setting (physical or virtual) and is often delineated by a barrier (boundary) to entry whether physical, psychological, or virtual. The types of messages and the importance of the messages exchanged within an interaction may influence the variations on impressions management strategies chosen by the participants (Chayko, 2008). For purposes of analysis here, we will assume that the WoI strategies are enacted within boundaries of a given field of study or learning purpose. Therefore, the strategies enacted by learners will also be influenced by the needs of learners within (and possibly across) domains of study.

Technical-Dramaturgical (TD) Strategy

While use and access to digital learning environments is dependent upon a variety of factors, such as wealth, class, and gender, it is important to acknowledge that these environments provide

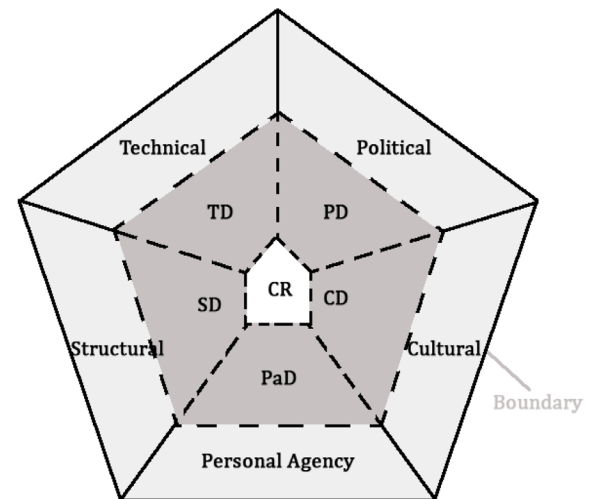
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“symbolic resources” for both conformity and resistance to socializing forces (Buckingham, 2008, p. 5). Through web pages, blogs, pictures, video, audio, and other tools, individuals can choose, create, display, and sustain various aspects of their personal narratives (Chayko, 2008). Networked learning technologies provide both synchronous and asynchronous access to narratives of individuals who are geographically dispersed (Giddens, 1991), fostering a sense of social presence (social and emotional connectedness), or even ambient co-presence (awareness of continuous availability) as in the case of mobile communications (Swan, Richardson, Ice, Garrison, Cleveland-Innes, & Arbaugh, 2008). Ambient co-presence may increase ontological security (trust in one’s constructs, identity, and identity of others) because members of their social network are reliably available, thereby increasing a sense of trust through consistent interaction (Chayko, 2008; Giddens, 1991). As optimistic as this may seem, technology can also constrain expression and access, creating a digital divide wherein only those with the knowledge and economic means can engage in interaction (Stald, 2008).

TD strategy suggests three implications for networked learning communities:

1. Learning communities require trust in the experts and information. Can an awareness of the WoI strategies help learners determine the authenticity and reliability of online resources?
2. To what extent will those without the technical skills, network access, and technology will be excluded from these learning networks?
3. Will learners identify with members of networks if ontological security cannot be established? To what extent will learners share their ideas in such an environment?

Figure 2. Web of identity (TD - technical-dramaturgical, PD - political-dramaturgical, SD - structural-dramaturgical, CD - cultural-dramaturgical, PaD - personal agency-dramaturgical, and CR - cognitive resonance) (Koole, 2010)



Political-Dramaturgical (PD) Strategy

While some view technology mediated learning environments as enhancing opportunities and freedom of discourse, Foucault might argue that discourse, itself, is a vehicle of social control (Turkle, 1994). Foucault sees discourse as a “set of rules,” the interpretation of which is defined by a dominant class (Sarup, 1996, p. 69). Individuals who threaten or contravene normative practices and rules may be punished (Handley, Sturdy, & Fincham, 2006). Individuals who adhere to rules may not only avoid negative consequences, but may be rewarded. PD strategies may involve exercise of power, coercion, and reward to ensure accountability and predictability of behaviour. “When one is not accountable for one’s own words, there is a lack of social and privacy control; a lack of reciprocity between writer and subject” (Chayko, 2008, p. 138).

PD strategy suggests an implication for networked learning communities:

1. In traditional learning communities, the tutor or the ordained expert is perceived as dominant. This expert condones some ideas and questions or rejects others. The potential loss of this central, mediating role in knowledge construction may be a source of discomfort for traditional teachers in online networks, as in online networks transactional distances (Moore, 1991) may alter the increase or decrease the effectiveness of communication and affect power relations between teachers and learners. Traditional teachers' abilities to enact gatekeeper identities through managing information and learner's behaviours may be eroded.

Structural-Dramaturgical (SD) Strategy

SD strategy is very closely related to the PD strategy. Rather than tracking overt displays of control, SD tracking involves maintenance of a social hierarchy. A social hierarchy can provide stability for an individual to maintain a "coherent, unified, fixed identity" (Sarup, 1996, p. 14). Caste is an example of a stable social hierarchy. In networked learning theory, an individual may belong to multiple communities and fit within multiple and overlapping hierarchies, which may or may not reflect the physical world. Within multiple communities, a member can form mental maps of the social settings and where he/she fits within them. Status may change as individuals engage in various kinds of dialogue. To be connected may suggest "symbolic importance" (Chayko, 2008, p. 126). Gossip, for example, can provide evidence that an individual possesses knowledge that is inaccessible to others, and allow for flirting, humour, and secret-sharing that can connote varying levels of intimacy with and/or among community members (Chayko, 2008). Furthermore, receiving volumes of email or mobile calls in public can convey social importance. Controlling or displaying access to communities can influence social position.

SD strategy suggests three implications for networked learning communities:

1. Traditional education has been conducted through rituals in which students show a degree of deference towards the ordained expert(s). Referencing these experts, acknowledging source and identity through the use of specified citation and reference styles is but one example of academic deference. What is the extent to which traditional structures are transgressed in online networks?
2. As learners and experts enter into dialogue with multiple online contacts in a variety of networks, how might their status(es) change within particular networked learning communities? What kinds of mental maps can individuals envision of their varied levels of status across networked learning environments?
3. Quality and quantity of network connections (friends) may contribute to an individual's sense of importance both within one networked learning community and across other online networks. How an individual performs his or her sense of self-importance, based on awareness of either internal or external community connections, may either positively or negatively affect within-community perceptions of an individual's self-representation of importance.

Cultural-Dramaturgical (CD) Strategy

Rituals and norms are mechanisms for sustaining relationships (Stald, 2008). Rituals are culturally sanctioned performances (Nilsson & Svensson, 2007). Norms apply within community boundaries and are developed through practice over a period of time (Sarup, 1996). Community boundaries themselves may be delineated by nothing more than behaviour itself (Erickson in Sarup, 1996). Through interaction with others, individuals learn the norms and values of a given community. Fail-

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ure to do so may result in rejection, humiliation, anxiety, chastisement, or other negative outcomes. Online, “anxiety is . . . produced as we attempt to master the ‘rules’ and norms of modern technological use” (Chayko, 2008, p. 127). Members of a physically dispersed community rely on culturally determined symbols and rituals (such as text messaging codes and etiquette) to cultivate a sense of personal and group identity (Chayko, 2008).

CD strategy suggests an implication for networked learning communities:

1. Within a community interaction requires a set of skills and knowledge of rituals and norms. Non-observance of such rituals may result in exclusion. Spelling conventions, grammar, text messaging codes, and ambient availability may provide new ways for learners to differentiate each other and identify themselves with one another.

Personal-Agency-Dramaturgical Strategy (PaD)

Each human being has a different history of experiences that influences his or her needs, motives, creativity, autonomy, and emotions. These unique internal narratives increase the complexity of social interaction. While the above strategies may influence an individual’s beliefs, values, habits, routines, and unconscious behaviours (Ferreday et. al., 2006), choice is not completely eliminated (Giddens, 1991). Though situated within highly constraining rules of power, cultures, castes, or technologies, individuals may still choose how to express their unique abilities or preferences, accounting for some otherwise unexplainable observed performances.

PaD strategy suggests an implication for networked learning communities:

1. Networked learning communities have been heralded as a great equalizer nearly negating the effects of visible traits such as gender,

race, and physical characteristics which are no longer directly observable. However, studies indicate that characteristics (such as gender) cannot be hidden in sustained or frequent interaction (Ferreday et. al., 2006; Chayko, 2008). What forms of bias and judgment are arising in networked learning environments? What characteristics cannot be hidden from other members of these networks?

Cognitive Resonance (CR)

Cognitive resonance refers to an individual’s identity as reflected or refracted through the above strategies. It is the individual’s current conception of self, within a social context, in which he or she has integrated experiences and beliefs of the external world into his or her personal narrative. As relational sociologists suggest, individuals attempt to establish control in their interactions with others. In the case of CR, control is an attempt to establish a sense of personal resonance with community interpretations of meaning, identity, and belonging (Mützel, 2009). Individuals constantly evaluate their “personal epistemology” against the apparent epistemology of others (Goodyear & Zenios, 2007, p. 363). Reaching resonance implies the internalization of the “generalized other” into the “me” (Mead, 1934, p. xxiv). One’s identity may be defined through “similarity, complementary differentiation, or some blend of the two” (Mead, 1934, p. 26). When we perceive our cognitive resonance as being in harmony with our community, we may assume that “others think about things more or less as we do unless we are presented with specific evidence to the contrary” (Chayko, 2008, p. 25). However, “resonance” connotes echoing, movement, or reflection. As such, acquiring resonance is an ongoing process in which one’s self-conception and the conception of others is constantly echoed, reflected, and changed through social interaction. The constant adjustment of one’s epistemology is indicative of

an individual's epistemic fluency within a given social context at a given point in time; it shows the agility with which individuals can adjust to new conditions within a given social context.

CR strategy suggests an implication for networked learning communities:

1. In the process of achieving resonance within networked learning communities, a learner must constantly evaluate personal interactions to assess the authenticity and reliability of hers or his perceptions of these networks. Learners must constantly adjust their strategies in an effort to manage their appearance, and hence, their membership status in these communities. Learners may constantly seek access to and exit from communities that may or may not resound with their sense of self. To what extent does the quest for harmony with self and perceptions of community traits contribute to or distract from the learning process? Further, could cognitive disharmony increase motivation and learning?

Web of Identity Strategies

The WoI strategies, outlined above, continually modulate or filter an individual's social enactments, resulting in a gradient of harmony or discord with other community members. Evidence of harmony and discord are filtered back through an individual's perspectives and are expressed through the strategies in an attempt to re-establish a comfortable level of resonance, harmony. Alignment with shared concept threshold points (Land, Cousin & Meyer, 2005) may result in rejection and/or ontological adjustment of self or to a networked learning community. An individual may, at times, choose to behave in discord with his/her self identity or with expected social practices, ultimately leading towards the explicit challenging of societal practices or even marginalization of self.

FUTURE TRENDS AND RESEARCH

The WoI model provides numerous avenues for future research. First and foremost, the model should be validated within environments in networked learning communities of various disciplinary and geo-cultural contexts. Do individuals display status, coerce others, punish others, share symbols, display idiosyncrasies, and demonstrate competency? To what extent are participants aware of these strategies? The model should be evaluated for completeness. Are there other processes through which individuals establish relationships and meaning?

Researchers could examine the necessity of providing networked learning environments that offer affordances for explicitly expressing WoI strategies. Do networked learning communities form more easily when WoI mechanisms are provided? If not provided, will communities create their own mechanisms to express the WoI strategies? Do networked learning communities break down when a critical mass of individuals find their cognitive resonance is in disharmony? Or does disharmony increase members' motivation to re-establish resonance and strengthen networks? Answers to these questions may allow educators to design networked learning environments in ways that encourage relationship formation and, ultimately, complement learning. Regardless, practitioners can benefit from being cognizant of implications of interactions in networked learning environments on the formation of self and selfhood on learning experiences.

CONCLUSION

Why do some networked learning environments flourish while others perish? Why are some learners more comfortable than others? The complexity of technologically mediated human relationships within and among networks renders

these questions difficult to answer. The process of socialization both binds individuals into networks and, at the same time, equips them with tools to agentially shape social interactions. Unlike many identity theories and community development models, the WoI model focuses on the viewpoint of the individual as he/she takes on and relinquishes membership within and among groups. The WoI strategies are tools that can be enacted at the individual level, yet are also irrevocably influenced by the social context. The enactment of these strategies shapes not only perceptions of social situations, but also of the various identities of self and of others.

The strategies of technology, power, social structure, cultural norms and symbols, and personal agency function as both guidelines for interaction and tools for affecting personal actions. In the absence of physical cues, words are action. Relational dialogue guides the enactment of strategies and the development of epistemic fluency. Theoretically, by becoming adept at strategy use and translation, learners can lessen their sense of fragmentation, better gauge authenticity, and achieve a comfortable level of cognitive resonance. By considering how individual learners gain a sense of self, selfhood, and belonging to networked learning communities, practitioners in higher education can learn how to foster more effective networked learning environments.

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KEY TERMS AND DEFINITIONS

Cognitive Resonance: A state of understanding in which an individual finds that the actions of others are in accord with her current understanding of the world. In a state of high cognitive resonance, an individual feels that her understanding is similar to the understanding of those with whom she is interacting (Chayko, 2008).

Community: A group of individuals who share the same sense of history, culture, values, norms, and rituals.

Constructionism: The philosophical viewpoint that individuals socially create and negotiate an understanding of who they are with relation to shared knowledge, beliefs, and behaviours (Ferreday, Jones, & Hodgson, 2006).

Dramaturgical Strategy: A technique that may be enacted in the presence of others in order to achieve a particular goal (Goffman, 1959).

Epistemic Fluency: The agility with which an individual can adapt behaviours and, possibly beliefs, to new conditions within a given social context (Goodyear & Zenios, 2007).

Relational Dialogue: Communication that results in the construction of meaning, identity, and norms for interaction (Ferreday et. al., 2006).

Web of Identity Model: A model, based on the work of Goffman (1959) and Foucault (1988), that outlines five dramaturgical strategies in the enactment of identity: technology, power, social structure, cultural norms and symbols, and personal agency.