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Author(s)	Thomson, Robert; Ito, Naoya
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The effect of relational mobility on SNS user behavior: A study of Japanese dual-users of Mixi and Facebook

THOMSON Robert and ITO Naoya

abstract

Previous studies have shown clear cultural differences in how Japanese and American social network site (SNS) users interact with differing SNS platforms (see Barker and Ota, 2011; Fogg and Iizawa, 2008; Takahashi, 2010).

In this study of 131 Japanese SNS users who use both Facebook and Mixi, self-disclosure, numbers of contacts, in-group numbers, and levels of perceived commitment on Mixi and Facebook were measured.

The study found that such users showed a lower level of self-disclosure, connected with fewer people and had fewer categories of contacts, and felt a higher degree of commitment on Mixi than on Facebook. It is suggested that these differences stem from differing responses to perceived relational mobility on each platform; Mixi being a socioecological environment which reflects low-relationally mobile Japanese society, and Facebook being a socioecological environment which reflects high relationally mobile North American social environments. (141/150)

1 Introduction

As online social networking becomes increasingly embedded in individuals' everyday lives, any demarcation between the online and offline self is being progressively rendered non-existent. Indeed, despite earlier fears of virtual online social networks replacing one's real-world relationships (Katz, 2002; Kraut et. al, 1998; Putnam, 1995) more recent research suggests that online social networks in fact supplement and reflect users' real-world social networks (Ofcom, 2008; Vergeer & Pelzer, 2009). Furthermore, far from users creating and maintaining disparate real-world and virtual identities, there is strong evidence that in many cases, users not only maintain a measure of identity consistency between online and offline worlds, but also expect the same of others in the online communities they participate in, thus creating a self-moderating environment where authentic culture and identities flow between the so-called offline and online worlds (Valentine, 2003; Williams, 2006; Wilson, 2005).

This paper explores this notion — that offline norms of culture are reflected online — by examining Japanese users of Mixi (a popular domestic social networking site (SNS) in Japan) who also use either Facebook or Twitter, two other popular SNS in Japan; the former increasing in popularity, the latter already overtaking Mixi in user numbers. Specifically, this paper argues that Japanese users' differing usage patterns of Mixi, Facebook and Twitter reflect socioecological traits observed in Japanese and North American offline contexts; Japanese - showing a typically higher degree of context-sensitive behavior - modify levels of self-disclosure to a larger degree, form larger or smaller in-groups, and experience differing levels of commitment depending on the degree of relational mobility extant in the social ecologies of each SNS, which are, in turn, reflections of offline characteristics of the social ecologies from which the SNSs emerged.

2 Background: The Japanese Facebook User Paradox

The current study was motivated largely by what the author refers to as “the Japanese Facebook user paradox”. This refers to a Japanese Mixi user who also uses Facebook, and who displays a real photo of themselves on their Facebook profile, but not on Mixi. Other researchers have also touched on this

existence of paradoxical behavior between a Japanese individual's behavior on Mixi, and their behavior on North American SNS such as Facebook. Many of them point to offline cultural traits influencing behavior online, as outlined below.

Barker and Ota (2011), while not addressing dual users of Mixi and Facebook *per se*, make a comparison of Japanese users of Mixi, and United States users of Facebook using a between-subjects study design. Their study focused on female users of the two SNSs, and the roles of diary keeping on Mixi and photo posting on Facebook. They found that “American young women are much more prone to public expressions of connection with and celebration of peer groups on SNSs as exemplified by posting photographs [of themselves and with others]. Japanese women seem to nurture their Mixi friendships and in part communicate their closeness via diaries” (p. 56). They posit that the differing uses of their respective SNS by the two groups of participants reflect their differing cultural perspectives on communication.

Fogg and Iizawa (2008) also made between-subject comparisons along the Mixi-Facebook theme, but looked in particular at user behavior through the lens of platform design. Specifically, they looked at how each platform utilized persuasive techniques to achieve similar goals, namely of creating profile pages, inviting friends, responding to others' contributions, and returning to the SNS often. They concluded that, characterized by boldness and assertiveness, “Facebook better reflects the persuasion dynamics that are common to US culture while Mixi conveys a stronger Japanese sensibility,” characterized by subtlety (p.45).

Perhaps the closest in form to the current paper's argument however, is the within-subjects study conducted by Toshie Takahashi into Japanese dual users of both Mixi and MySpace. In her paper (Takahashi, 2010) she draws on her ethnographic research into Japanese youth and cultural identity in order to shed light on the dynamics of their engagement with SNS. She found that Mixi and MySpace afford opportunities for Japanese youths to reflexively to-and-fro between distinctly Japanese cultural values (such as interpersonal security and stability) on Mixi and distinctly North American cultural values (such as free self-expression) on MySpace, essentially being able to dabble with different identities.

The present study is similar to Takahashi's in the sense that it utilizes a within-subjects design, focusing on Japanese dual users of Mixi and Facebook. Where the present study departs from Takahashi's argument, however, is in the fact that on the whole, both Mixi and Facebook have been, since their inception, specifically focused on the ‘social graph’. That is, unlike MySpace where the typical user connects predominantly with others met online (Thelwall, 2008) — and indeed this was the case for Takahashi's informants — Facebook is an environment where the typical user brings their offline connections online (Ellison, Steinfield, & Lampe, 2006). If indeed Facebook were a place where Japanese users can simply form alternate identities, away from the eyes of known

others, then the Japanese Facebook user paradox is not as perplexing as it might be if Facebook is a place where Japanese are, like the majority of Facebook users, interacting with known others. That is to say, the Japanese Facebook user paradox is all the more a paradox when behavioral discrepancies are visible to known others.

3 | Social Networking Sites in Japan

Before moving on, an overview of SNS in Japan is warranted. Within recent technology news sectors within Japan and abroad, a story that is keeping blog writers, journalists, and consumers alike in suspense is the interplay of three large social networking sites in Japan, all successful in their own right: the entrenched made-in-Japan Mixi (overwhelming majority of users are Japanese (Toto, 2008)); the slick powerhouse Twitter (Japanese users make up 1.22% of global audience (Evans, 2010) and Japanese is the second-most represented language on the site (Semiocast, 2010)); and the sleeping giant Facebook (Japanese users make up 0.5% of global audience (Gonzalez, 2011)). With domestic SNS around the world quickly being surpassed by Facebook in terms of user numbers (Saito, 2010a), the Japanese tech world is understandably interested in Facebook's possible dominance or lack thereof in Japan. Some point to increasing ad prices on Facebook as indicators of an imminent 'tipping point' in Facebook's growth in Japan (Saito, 2010a; 2010b), and Facebook Japan's Country Growth Manager Kodama Taro is optimistic, recently announcing their goal of capturing fifty percent of the Japanese internet user market by the year 2013 (TV Tokyo, 2010). Others are more critical, adamant that an ingrained phobia of identifiable personal information on the net will preclude Japanese from flocking to the real-name centric Facebook (Tabuchi, 2011).

In terms of user engagement, however, measured by page views and average access duration per month, Mixi is still far ahead of both Twitter and Facebook, suggesting a well-entrenched, well familiarized user base. On the other hand, Twitter is enjoying surges in user registrations, with access numbers overtaking those of Mixi, even before the 2011 Japan Earthquake (Saito, 2010b).

It warrants mention that the choice not to include the social gaming service Mobagee and mobile-based Gree (both Mixi's main domestic rivals (Fujishiro, 2010)) in this discussion is intentional. Mixi itself, as a company, sets itself apart from GREE and Mobagee, describing itself and its products as inherently marketed towards the representation and interaction of real-life relationships online, whereas Mobagee and GREE are described more in terms of

online gaming and subsequent connections between mutual strangers (Table 1). This claimed tendency for Mixi users to connect primarily with existing known others is reflected not only in news media (Fujishiro, 2010) but also in research (Hjorth, 2008; Takahashi, 2010). This arguably brings Mixi much closer to a mainstream definition of social network sites (boyd & Ellison, 2007), and accordingly, affords a more useful comparison between uses of Mixi, Facebook and Twitter.

■ Table 1 - Mixi compared with Mobagee and GREE

	<i>Mixi</i>	Mobagee and GREE
Typical peer user	Pre-existing acquaintances (social graph model)	Mutually anonymous acquaintances (virtual social graph)
Motivations for use	Connecting with real-life friends	Gaming
Source of stimulation	Social emotions — connections with known others	Competitive emotions - achievement through game domination

Adapted from Okada, 2010

The inclusion of Twitter as relevant in this study could be construed as tenuous, due to its inherent multi-use characteristics. It is at once an SNS, a micro-blogging platform, a marketplace, and more. The apparent absence of any obvious paradox in behavior between Mixi and Twitter, however, was seen as giving insights into why the Japanese Facebook user paradox might exist.

4 | SNS and relational mobility

As mentioned in the introduction, this paper argues that users' behavioral adaptations to socioecological environments existing on each SNS account for much of the cause behind the Japanese Facebook user paradox. Oishi and Graham (2010) recently brought into recognition once again the role of social ecologies in researching human behavior and culture. They conceptualized culture (symbols, meanings, rituals, etc.) and behavior to be influenced by physical, social, and inter-personal relationship attributes of specific socio-ecological environments. Particularly relevant to the present study, is the effect of a social ecology's interpersonal relationship environment on humans' behavior. Schug et. al. (2010) explored such a relationship in their study of a social ecology's degree of relational mobility on people's level of self-disclosure to others within that social ecology. They define relational mobility as “the degree to which individuals have

opportunities to voluntarily form new relationships and terminate old ones within a given context” (p. 1), and that as opposed to the traditional view of cultural differences arising from value and belief discrepancies, cultural differences from a socio-ecological perspective “are characterized as different adaptive strategies (both conscious and not) tailored toward producing desirable outcomes in a particular social environment” (p. 14). As Schug et. al. found in their study, and as others have in other studies, Japanese society tends to display low relational mobility, whereas many Western cultures, such as the US, tend to be construed as high relational mobile societies (see Yuki et. al. (2007) for findings on US-Japan relational mobility).

If indeed, as suggested previously, social-graph oriented SNS reflect users' offline human networks and offline identities, it might be suggested that socio-ecological attributes which typify those networks are also translated online. Accordingly, in this study it is theorized that the socio-ecological environment of Mixi reflects that of the majority users' offline networks; that is, reflecting Japanese society, Mixi is characterized by low relational mobility. Likewise, considering Facebook's early stage of uptake in Japan, it is theorized that Japanese users' networks on Facebook will reflect that of the wider Facebook network, which in turn reflects socio-ecological characteristics of Facebook's main user base; US, or generally Western users, for whom their daily offline socio-ecological environments are characterized by high levels of relational mobility. Furthermore, considering Twitter's relatively large Japanese user base, it is assumed that for Japanese Twitter users, Twitter reflects offline Japanese socioecological traits: that is, it is characterized by low relational mobility. Furthermore, if relational mobility differs across the socioecological environments present in each SNS, one would expect behavior typical of the degrees of relational mobility present.

5 | Relational mobility and self-disclosure

Schug and her colleagues took this socio-ecological framework and applied it via two studies to explain the observed phenomenon of East Asians disclosing less personal information than do North Americans in every-day life. By self-disclosure they mean “the revelation of sensitive personal information to another person,” specifically with the function of indicating commitment between interaction partners. In the first study, they explored between-culture differences in self-disclosure, and in one further study they tested for within-culture differences. For the between-cultures study, data gleaned from participants from the US (high relational mobility) and Japan (low relational mobility) was compared, whereas

for the within-culture study, data relating to participants' behavior and perception of levels of relational mobility in family relationships (low relational mobility) versus close friendships (high relational mobility) was compared. The researchers discovered that in both the between- and within-culture studies, the more relationally mobile the context, the more participants self-disclosed to others around them. Within low relational mobility contexts, participants were less likely to self-disclose.

With these findings in mind, and widening the definition of self-disclosure to include the degree to which an individual posts a photo of their face on their SNS profile, it was hypothesized in the present study that:

H1 Mixi users who also use Facebook will display lower levels of self-disclosure on Mixi than they do on Facebook, and Mixi users who also use Twitter will display lower levels of self-disclosure on Twitter than Facebook users do on Facebook.

6 | Relational mobility and commitment

In his seminal text on trust, Toshio Yamagishi (1998) explores the dynamics of interpersonal relationships in the US and Japan, from a perspective of evolution and adaption. He theorized that in the US — a highly relationally mobile society where individuals have a relatively large amount of opportunity to form and sever relationships — individuals tend to form less committed relationships, citing the logic of relational costs and benefits. In Japan, Yamagishi argued, forming committed relationships characterized by high levels of mutual reciprocity is of greater value than moving outside the bounds one's in-group, since opportunities to form new beneficial relationships outside of that in-group are relatively scarce. That is, the cost of severing one's established relationships is higher than the benefits gained from taking the risk and doing so. The US, he argued, is a different picture. There, to a greater extent than in Japan, along with more opportunity to form new relationships, there are benefits to moving beyond any one specific in-group. In other words, there is greater cost involved in giving up outside opportunity for the sake of one's present in-group; the benefits of staying with a committed in-group can be smaller than those when one steps out and forges new relationships.

This dynamic, Yamagishi argues in one of his papers (Yamagishi, Jin, & Miller, 1998), drives what is interpreted as in-group bias in collectivistic cultures. Low levels of relational mobility lead to more interpersonal commitment, which

leads in turn to higher levels of mutual reciprocity as a means to ensure mutual benefits for those members of close-knit groups. Yamagishi (Yamagishi et. al., 1998) suggests that in collectivistic cultures, such as Japan, *group heuristics* — “an expectation of generalized reciprocity among...members of the same group” (p. 321) — is a defining characteristic, and furthermore, that “a person...who does not follow the practice [of reciprocity between in-group members] would face cold responses from the other members of his/her group at best, and could face even ostracism” (p.322). Therefore, if one is to construe Mixi as a low relationally mobile social environment, and Facebook as a high relationally mobile social environment, one would expect the following.

H2 Mixi users who also use Facebook will feel more committed to their relationships on Mixi than their relationships on Facebook, and will connect with a smaller number of individuals on Mixi than Facebook.

7 | Method

From the 26th of January until the 13th of February 2011, an online survey was conducted for Mixi users who also use either Facebook or Twitter. Respondents were recruited on a self-selection basis, whereby initial invitations to take part in a “Mixi/Facebook/Twitter comparative survey” were posted on the author's Twitter feed, blog, Facebook status updates, and various Facebook- or Twitter-related communities on Mixi, with the following format (in Japanese).

Take part in a Mixi/Facebook/Twitter comparative survey run by Nagoya University > (shortened link to online survey) < win a 1,000yen Amazon voucher!

Numerous similar invitations were also directed to Japanese Twitter users who tweeted in Japanese using the hash-tags #twitterjrp, #facebookjrp, and #Mixi (found via the Twitter public timeline search). The invitations included a shortened bit.ly URL pointing to the online survey. The URL received a total of 770 clicks during the survey period, resulting in 192 surveys started, 131 of which were completed by the end of the 19 day survey period.

Respondents were asked a series of questions in the survey, initially covering their use of Mixi, after which they were asked a second set of the same questions in relation to “the SNS other than Mixi on which you spend the most time” (the choices were either Facebook or Twitter). After completing the second set of SNS-related questions, they were then asked about their feelings towards a

series of statements related to trust, followed by a series of statements in regards to international awareness.

8 | Participants

As indicated above, 131 respondents participated in the survey, 78 of which were dual users of Mixi and Facebook (66.7% female), and 53 of which were dual users of Mixi and Twitter (39.6% female) (Table 2). The majority of participants were aged between 20 to 40 years old, and a majority indicated being from the Kanto region. For Mixi, participants had been registered on the site for an average of 5.25 years ($SD = 1.92$), Facebook users had been registered on Facebook for 3.53 years ($SD = 1.84$), and Twitter users had been registered on Twitter for an average of 2.89 years ($SD = 1.07$).

■ Table 2 - Survey participants' (all Mixi users) secondary SNS

	<i>N</i>	(%)
Facebook	78	(59.5)
Twitter	53	(40.5)
Total	131	(100.0)

9 | Results

The Japanese Facebook user paradox: self-disclosure on Mixi and Facebook

Hypothesis one predicted that Mixi users who also use Facebook will display lower levels of self-disclosure on Mixi than they do on Facebook, and Mixi users who also use Twitter will display lower levels of self-disclosure on Twitter than Facebook users do on Facebook. To test this hypothesis, self-disclosure was defined narrowly, simply as the degree to which a user displayed their real name and/or real photo on their public profiles. Accordingly, a four-point scale was provided where participants were asked to indicate to what extent they displayed basic information about themselves on their public profiles on each SNS, as follows: 1 = *I do not show either my real name or a picture of my real*

face; 2 = I show a picture of my real face; 3 = I show my real name; 4 = I show both my real face and real name. During analysis, reflecting the arbitrary nature of values 2 and 3, these values were converted into one value, leaving a scale of 1 = I do not show either my real name or a picture of my real face, 2 = I show a picture of my real face only or I show my real name, 3 = I show both my real face and real name.

On Mixi, there was no significant difference in disclosure of this basic information between the two groups (Facebook users = 1.59 (SD = 0.75), Twitter users = 1.45 (SD = 0.61), $t(129) = 1.11, p > .05$), with 58.0% of all respondents choosing not to display either a real photo of themselves or their real name on Mixi. Only 11.5% of all respondents indicated that they show both a real name and real photo on Mixi.

When it came to basic self-disclosure on Facebook, however, 59.0% of Facebook users indicated that they display both their real name and real face on Facebook. On the three-point scale described above, Facebook users on Facebook scored an average of 2.59 (SD = 0.50), while Facebook users on Mixi averaged 1.59 (SD = 0.75) on the scale, this being a significant difference, $t(77) = 17.84, p < .001$. Facebook users also disclosed to a higher degree than Twitter users ($M = 1.62, SD = 0.77$), $t(129) = 8.79, p < .001$. These results support hypothesis one (Table 2).

Taken at face value, these results do not suggest any relationship to the level of relational mobility within the social contexts of the three SNS. Equally plausible would be, for example, the influence of Facebook's design features, not the least of all being the name Facebook. One might argue that it is the mere existence of such a name which is drawing out the behavior of posting one's face on one's public profile page. In Oishi and Graham's model, this would equate to the physical attributes of a socio-ecological environment influencing behavior.

A separate survey item was prepared to test for participants' international interest and awareness, and while not directly associated with the present hypothesis, results do go some way to suggest effects of perceived relational mobility. Participants were asked whether they agreed or did not agree on a 4-point scale (1 = I don't agree; 2 = I slightly disagree; 3 = I slightly agree; 4 = I agree) to a number of cultural awareness items (selected from Rew, 2003 and

Table 2 - Self disclosure on Mixi, Facebook, and Twitter

	On Mixi			On Facebook			On Twitter		
	M	(SD)		M	(SD)		M	(SD)	
Facebook Users	1.59	(0.75)	-	2.59	(0.50)	△	↑		
Twitter Users	1.45	(0.61)	-					1.62	(0.77) ▽

NB. Facebook users $n = 78$, Twitter users $n = 53$

1. △ / ▽ = significantly more/less compared with partner in the FB/TW dichotomy, (χ^2), $p < .05$.

2. ▲ / ▼ = significantly more/less when compared with partner in the MX (FB) / MX (TW) dichotomy, (χ^2), $p < .05$.

3. ↑ / ↓ = significantly more/less when compared with MX (own category), binomial, $p < .05$.

Kou, 2010). The aim of this survey item was not directly associated with the aims of the current paper; it was there simply to test the proposition put forward by Facebook founder Mark Zuckerberg that early non-American adopters of Facebook tend to start using Facebook simply because they are more likely to be connected with foreign friends or have a pre-existing international awareness (Sweeney, 2010). The results from this item are discussed towards the end of this paper, however the results also suggest that expectations regarding interpersonal relationship environments — in this paper's context high and low relational mobility environments — are factors in self-disclosure on Mixi, Facebook, and Twitter.

Echoing Zuckerberg's argument, the results from the present study show that Mixi users who use both Mixi and Facebook do appear to have a higher level of intercultural awareness and international interest when compared with participants who identified themselves as being dual users of Mixi and Twitter (Table 3).

■ Table 3 - International Awareness/Interest

	FB		TW	
	<i>M</i>	<i>(SD)</i>	<i>M</i>	<i>(SD)</i>
I am an international person (SQ002)	2.64	(1.60)	2.36	(1.06)
I have lots of foreign friends	2.81	(1.02)	> 1.79	(0.97)
I think I have good English skills	2.63	(0.97)	> 1.68	(0.92)
I enjoy mingling with foreigners	3.50	(0.60)	> 2.98	(0.91)
I often take part in international events	2.33	(1.00)	> 1.72	(1.01)
My understanding of other cultures is low	1.77	(0.84)	< 2.26	(0.86)
If I have the opportunity to help someone, I prefer to help Japanese people, not foreigners	2.14	(0.80)	< 2.58	(0.82)

1. '</>' indicates a significant difference on an independent-samples *t*-test, $p < .05$.

2. FB = Facebook users ($N = 78$), TW = Twitter users ($N = 53$).

Interestingly, however, a linear regression analysis showed a mild but significant effect of one's agreement to the phrase 'I am an international person' with an individual's level of self-disclosure on Twitter ($b = 0.47$, $t(51) = 3.74$, $p < .001$), with the degree to which one agreed with the statement explaining a significant portion of variation ($R^2 = 0.205$, $F(1, 51) = 14.22$, $p < .001$). Many other items in this international awareness section also displayed effects on self-disclosure (Table 4).

In other words, it could be inferred that the more internationally aware an individual is — i.e. the more aware they are about rules governing interpersonal relationships in social ecologies with different levels of relational mobility than their own Japanese social ecology — the more likely they are to self-disclose.

Table 4 - International awareness and self-disclosure

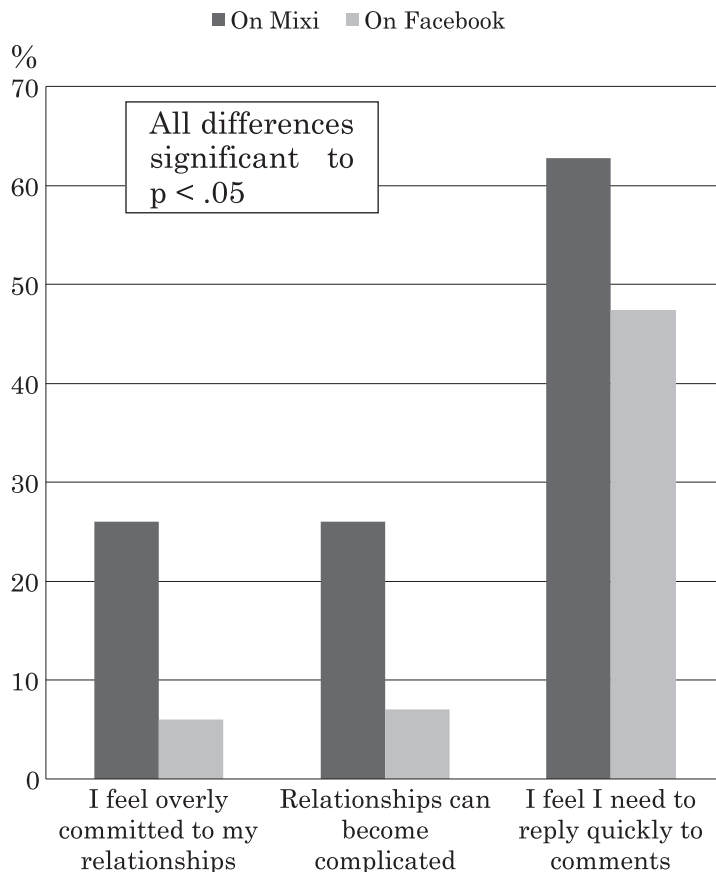
	<i>r</i>	<i>B</i>	<i>SE B</i>	β
I am an international person	.205	.386	.102	.470***
I think I have good English skills	.192	.381	.104	.455***
I have lots of foreign friends	.061	.223	.106	.282*
My understanding of foreign cultures is low	.122	-.332	.116	-.372**
I enjoy mingling with foreigners	.068	.247	.113	.294*
If I have the opportunity to help someone, I prefer to help Japanese people not foreigners	.103	-.324	.123	-.347*

*** $p < .001$, ** $p < .01$, * $p < .05$, Dependent variable: self-disclosure

Relationship commitment on Mixi and Facebook

Hypothesis two stated that Mixi users who also use Facebook will feel more committed to their relationships on Mixi than their relationships on Facebook, and will connect with a smaller number of individuals on Mixi than Facebook. To this end, participants were given a list of statements relating to their experience of relationships on each SNS, to which they were asked to indicate whether or not they experience the content of those statements. The three

Chart 1 - Regarding your use of Mixi and Facebook, do you experience any of the following? (N = 78)



statements which are of importance to the current hypothesis were “I feel overly committed to my relationships,” “relationships can become complicated,” and “when I receive a comment, I feel as though I should reply to that comment as soon as possible.” Results are outlined in Chart 1. On all three items, when compared with their experience on Facebook, a greater percentage of participants felt overly committed to their relationships on Mixi, felt that relationships on Mixi become complicated, and felt a need to reply to comments quickly.

One might presume, however, that the longer one has been registered on an SNS, the more committed one might feel towards the relationships on that platform, and the more complicated relationships might become simply due to the natural progression of relationships. That is, since participants had been registered longer in general on Mixi, that naturally they would feel more committed to their relationships on Mixi rather than their comparatively new relationships on Facebook or Twitter. A linear regression analysis did not, however, find any reliably strong nor significant relationship between the length of time registered on an SNS and feeling that relationships were overly committed, complicated, or increasing in required reciprocity (Table 5).

In this way, hypothesis two was supported, suggesting a reflection of offline norms online. That is, just as in Japanese society people experience comparatively high levels of commitment and strong group heuristics, so do users of Mixi feel the same regarding their relationships on Mixi. Likewise, at the present stage in Facebook's entrance into the Japanese online social networking market, Japanese users indicate less strong group heuristics in regards to their relationships on Facebook — arguably a reflection of the generally higher level of relational mobility within their networks on Facebook. Indeed, as answers from another part of the survey indicated, Japanese users of Facebook do appear to have vastly more foreign contacts in their Facebook friend list than their contact lists on Mixi; 50% of Mixi/Facebook dual users have *very close foreign friends or family living close by* and 68.3% of the same users have *foreign friends living far away* in their friend list on Facebook. This is compared with only 11.7% of the same users having *very close foreign friends or family living close by*, and 15% having *foreign friends living far away* on Mixi.

■ Table 5 - SNS registration years and relationship commitment (N = 78)

		<i>r</i>	<i>B</i>	<i>SE B</i>	β
Mixi	I feel overly committed to my relationships	.013	-.035	.025	-.161
	Relationships become complicated	.010	-.031	.024	-.151
	I feel I have to reply to comments quickly	.042	.061	.029	.233*
Facebook	I feel overly committed to my relationships	.036	.027	.014	.220
	Relationships become complicated	-.008	.009	.015	.068
	I feel I have to reply to comments quickly	-.011	.014	.031	.050

*** $p < .001$, ** $p < .01$, * $p < .05$

Discussion

There are two important points which need to be addressed regarding these results. One is in regards to how North Americans may interpret the existence of the Japanese Facebook user paradox. One further point is related to changes within Japanese Facebook users' networks on Facebook which is sure to affect the ability to generalize the results to later populations of Japanese Facebook users.

10 | Identity and integrity in Japan

“You have one identity...the days of you having a different image for your work friends or coworkers and for the other people you know are probably coming to an end...Having two identities for yourself is an example of a lack of integrity”
— Mark Zuckerberg on self-disclosure on Facebook (Kirkpatrick, 2010, p 199).

One might say that Zuckerberg's understanding of identity is representative of a North American view of identity. The proposition that a person would consciously choose to present a differing version of themselves to different people in different contexts is seen as “inconsistency in self-concept” in Western cultures, as Kashima et. al. put it (Kashima, 2004). Kashima and his colleagues conducted research into cultural differences in the contextual self, comparing between the US, Germany, Korea and Japan the amount of context-sensitivity present in each society and the meaning of altering one's self depending on the situation. They found that whereas context sensitivity in the Western cultures was low, the Japanese and Korean sample was high in context sensitivity. Furthermore, greater cross-contextual variability in the phenomenal self was, as mentioned above, seen as inconsistency in self-concept in the Western cultures, whereas in Japan, “being true to what is appropriate in a context may mean possessing a true self in Japan” (Kashima, 2004, p 138). That is to say, to a Japanese person, the act of presenting a different self in different contexts is not an issue as it is in Western cultures.

Kashima et. al.'s research is, however, but a recent addition to a long history of theorizing about the Japanese contextual self. In Ruth Benedict's classic 1947 text on Japanese culture, *The Chrysanthemum and the Sword*, when addressing the concept of virtue in Japanese society, Benedict alludes to the Japanese as being able to swing between different behaviors, according to the current societal ‘circle’ one might find oneself in. Furthermore, this was done,

Benedict asserted, with little psychic cost. Those contradictions, “as they seem to [Westerners]...are as deeply based in their view of life as our uniformities are in ours” (Benedict, 1946, p 197). Much later, in 1990, Walter Edwards observed the same thing in his treatise on Japanese culture as seen through its wedding rituals. He described Benedict's insights as a demonstration within Japanese society of ‘compartmentalized spheres of activity’. He observed that “for the Japanese order in existence is external, lying within the gestalt that is the property of each particular context” (Edwards, 1989, p 138).

In a similar vein, Rosenberger (Rosenberger, 1989) suggests that a ‘synthesis’ of these ‘contradictions’ is the goal of managing the various selves in Japan. In particular, Rosenberger posits that there are four distinct ‘modes of expression’ of the self within Japanese culture: group productivity (where authority and subordination are emphasized), personal accomplishment (inner-oriented task focused self), harmony or affection (outer-oriented and culturally-patterned spontaneity), and pure impulse or gratification (spontaneous and oriented towards the inner self) (Rosenberger, 1989, p 89, 98). Echoing somewhat Benedict's observations, Rosenberger suggests that “the Japanese self is posited on movement between categories” (Rosenberger, 1989, p 94). She goes so far as to say that “rather than the Western ideal of integration of self in all contexts, manipulation of self between categories is a feature of mental health and morality in Japan” (Rosenberger, 1989, p 97). She writes that “the key to the mature self in Japan is ordered movement among opposing categories — a constant manipulation of *ki* energy that requires strong self-awareness” (Rosenberger, 1989, p 110). Morality itself, proffers Rosenberger, “lies in proper contextualization of self's actions and emotions rather than in a rigid adherence to only one side of life” (Rosenberger, 1989, p 97).

This dynamic was displayed to an extent in the present study. Not only were different behaviors displayed by the same users on different SNS, very few respondents considered there to be any contradiction between the selves they display on each SNS and their selves offline. In one section of the survey participants were asked whether the following statement applied to them on either Mixi or Facebook: “I am a different person on [Mixi/Facebook] compared with offline.” For Mixi users who also use Facebook (N = 78), only 6.4% (N = 5) of respondents considered themselves as being different offline compared with on Mixi. Only one user (1.3%) indicated that they are a different person offline compared with on Facebook. Reflecting previous research outlined above, this result suggests that even though discrepancies in behavior exist for Japanese users of Mixi and Facebook, this does *not* mean that for those users they consider there to be discrepancy in self-construal on the differing sites.

Facebook's tipping point and relational mobility

As mentioned previously, data from the present study suggests that the more culturally aware one is, the more one tends to self-disclose on Twitter, and that in general, Facebook users have a higher level of interest in international matters and a higher level of cultural awareness.

However, data suggests that the overall international awareness of Facebook users is decreasing. Early registrants on Facebook are, as Zuckerberg would predict, more internationally aware than more recent registrants (Table 6). This result could, of course, be interpreted in two mutually inclusive ways. Firstly, it is conceivable that through contact with Facebook's main user base — North Americans — Japanese users are afforded the chance to increase their international understanding and awareness. However, since Japanese Mixi and Facebook dual users in the sample predominantly connect with known others on Facebook (see Appendix 1), it is unlikely that they use Facebook with the express intent of making foreigner friends online. It is more likely, therefore, that indeed Zuckerberg's tipping point theory is playing out. In 2010, Zuckerberg was quoted as saying that “we know that a country has tipped when local-to-local connections outnumber local to foreign...it is a long-term thing [and with regard to the four countries left to tip— including Japan] we are probably not going to win in six months, not in a year [but] things look promising in three to five years out” (Sweney, 2010). It is most probable that while earlier Japanese registrants on Facebook connected with foreign acquaintances, more and more new registrants are registering to connect with other Japanese acquaintances.

■ Table 6 - Japanese Facebook Users' International Involvement and Length of Time on Facebook

Question		<i>r</i>	<i>B</i>	<i>SE B</i>	β
What sorts of people make up your friend list on Facebook? (yes, no, multiple answer)	Close foreign friends living close by	.181	-.119	.028	-.438***
	Foreign friends living far away	.186	-.106	.025	-.443***
How do you feel about the following statements? (1 = I don't agree, 4 = I agree)	I have lots of foreign friends	.338	-.327	.052	-.589***
	I enjoy mingling with foreigners	.123	-.121	.035	-.373**
	I often take part in international events	.036	-.121	.061	-.221 †
	I am good at English	.224	1.255	.053	-.484***
	My intercultural understanding is low	.187	.203	.047	.445***

† p<.10, **p<.01, ***p<.001

If this is so, then it is probable that over time, the Japanese Facebook user paradox will decrease in prominence, as Japanese Facebook users' networks on Facebook become less relationally mobile as they become more saturated with fellow Japanese users.

12 | Conclusion

This study's aim was to explore the underlying socioecological factors involved in the Japanese Facebook user paradox. That is, it sought to provide hints as to why Japanese users of both Mixi and Facebook display clearly disparate behavior between the two SNS, in particular in regards to self-disclosure (in the form of profile photos), and levels of commitment to relationships on the SNSs. Results from this study of Japanese users of Mixi, Facebook, and Twitter suggest there is a high likelihood that differing levels of relational mobility within the socioecological environment present in each SNS plays a large role in affecting users' behaviors on the differing SNS. Furthermore, comparisons with offline socioecological environments from which the majority user base of each SNS come from suggest that the socioecological environments on the SNSs surveyed reflect those offline environments.

It was suggested that Mixi is a low relational mobility environment, characterized by low levels of self-disclosure, high commitment to contacts, and high levels of group heuristics; these characteristics reflecting behavioral characteristics of offline Japanese society. Facebook, however, is a high relational mobility environment, hence Japanese users in general showing higher degrees of self-disclosure, less commitment to others, and lower levels of group heuristics; reflections of offline behavioral characteristics of high relational mobility social ecologies as seen in Western cultures such as the US.

13 | Limitations

Yuki et. al. (2007) have developed a scale to measure perceived levels of relational mobility within a given socioecological environment. Follow-up studies would do well to employ this scale, in order to gauge perceived relational mobility levels amongst new and old Japanese registrants on Facebook, and to further map

the function of relational mobility in online spaces on user behavior.

In regards to self-disclosure, the present study takes a very narrow definition of this concept, i.e., the disclosure of obvious identifying information, in the form of a user's real name and photograph. Future studies may benefit from testing whether relative anonymity on Mixi, mediated by relational mobility, in fact elicits broader self-disclosure on that platform in the form of diary entries (a characteristic pointed out by Baker and Ota (2011)).

Respondents for the current sample were, as referred to above, recruited on a self-selection basis. One may, therefore, argue that the results are biased towards representing a particular type of user (internet savvy, early adopter, interested in international matters (due to the surveyor being of Western descent)). Future studies may do well to seek a more thoroughly representative sample.

Appendix 1

Respondents were asked to rate the types of contacts that make up their contact lists, on a four point scale, where: 1 = All (or almost all) of them are people I have met in real life; 2 = Most of them are people I have met in real life; 3 = Most of them are people I met online; 4 = All (or almost all) of them are people I met online.

Types of contacts

	On Mixi			On Facebook			On Twitter			
	M	(SD)		M	(SD)		M	(SD)		
Facebook Users	1.69	(0.86)	-	1.82	(0.91)	▽	-			
Twitter Users	1.92	(1.00)	-					3.09	(0.79)	△ ↑

1. △ / ▽ = significantly more/less compared with partner in the FB/TW dichotomy, (χ^2), $p < .05$.
2. ▲ / ▼ = significantly more/less when compared with partner in the MX (FB) / MX (TW) dichotomy, (χ^2), $p < .05$.
3. ↑ / ↓ = significantly more/less when compared with MX (own category), binomial, $p < .05$.

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