Anonymity in Computer-Mediated Communication in Japanese and Western Contexts
─ Comparisons and Critiques ─

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Abstract

Computer-mediated communication (CMC) is characterized by a degree of anonymity that is rarely seen in face-to-face (FtF) communication. Data gathered for this paper supports recent research that found higher levels of anonymity in Japanese CMC when compared to English language "Western" CMC. In the cases examined, anonymity in the Japanese context appeared to be one level higher in a hierarchical model (i.e. more anonymous) than in Western contexts. These authors argue, however, that the individualism vs. collectivism (IND-COL) / autonomy vs. affiliation dichotomy is just one of many variables that could affect the use and construal of anonymity in CMC. In particular, it has been discovered that socio-economic characteristics of interactants on specific social networking sites (SNS) and Internet forums have helped foster the creation of distinct online micro-cultures within the context of broader Western culture. Such intra-cultural variations within Japan and their effects on CMC deserve further investigation.

Keywords: Computer mediated communication (CMC), Intercultural communication, Online anonymity, Individualism, Collectivism, Social identity

Since the 1990s, the Internet has played an extraordinary role in breaking down socioeconomic barriers. With a credit card and a click of the mouse, any ordinary citizen of a developed nation can now provide a microloan to an aspiring entrepreneur in a remote African village. Tech-savvy Chinese citizens can easily access government-blocked websites such as that of Amnesty International.[1] The world has even witnessed a presidential candidate, Barack Obama, run a successful election campaign that relied heavily on Internet-based grassroots efforts. As much as the Internet has helped people around the world transcend the limitations of physical location, cultural-linguistic differences remain a formidable obstacle which limits communication between individuals. For example, the microloans organized by Kiva

(www.kiva.org) are mediated by on-site *field partners,* who are often required to play the role of translator in addition to their other responsibilities.

Is language really such a barrier? It is widely believed that English has become the lingua-franca of the Internet; a once widely-quoted figure for English language content is 80%. However, as of July 2008, according to Internet World Stats (Miniwatts Marketing Group, 2008), the figure is closer to 29.4%, with Chinese trailing close behind at 19% (See Appendix A). The Internet metrics company comScore (www.comscore.com) has reported that the number of Internet users topped one billion for the first time in December 2008.[2] The majority of these new users are in Asia, which suggests that most Internet traffic will soon be conducted in a non-English language.

In face-to-face (FtF) communication, norms of social interaction and discourse are heavily influenced by individuals' socio-cultural backgrounds and there is no reason to believe that such differences should become irrelevant in an online context. Thus, as the cultural-linguistic diversity of online traffic increases, so too does the importance of understanding these differences—not the least for those in the business of designing new communication technologies.

Although rare in FtF communication, anonymity is one of the most pervasive and defining characteristics of online social interaction. This paper examines some of the contrasting ways in which anonymity is interpreted and used in computer-mediated communication (CMC) on Japanese and Western social networking sites (SNS) and Internet forums, and why a commonly held assumption about East-West individualism (IND) and collectivism (COL) may not provide satisfactory explanations for the observed differences in anonymity conditions. It is hoped that this examination will not only raise awareness of these differences, but will also serve as the first step toward a more rigorous interpretation of the many variables that influence CMC. Ultimately, this is important for the fostering of mutual understanding in an interdependent world that is increasingly reliant on CMC.

1. Levels of anonymity in CMC

Anonymity is one of the most distinguishing features of CMC. Unlike FtF communication, which usually necessitates a strong connection to an individual's true identity, CMC has been characterized by three hierarchical conditions of anonymity (Fig. 1).

Visual anonymity represents the lowest degree of anonymity. Individuals communicating under visual anonymity (e. g. e-mail) usually retain some connection to
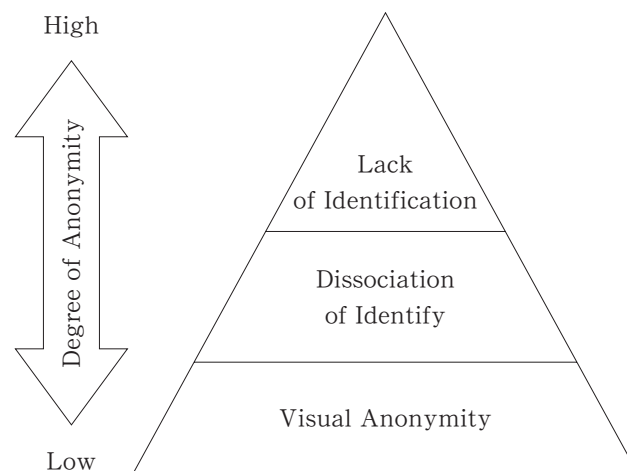
Fig. 1　Hierarchical conditions of anonymity（Adapted from Morio and Buchholz[5] p. 229 ）

their real self.

　　Dissociation of identity occurs when an individual adopts a new online identity. A handle name or a graphical avatar may represent this identity, which can have a different name, background, race, and gender. An avatar can even be non-human, as seen in the 3D online game, World of Warcraft.

　　At the highest level of anonymity, lack of identification, CMC interactants lack an online identity altogether. In addition to visual anonymity, interactants at this level also lack an avatar or any label that would mark them as an individual. Interactants using an SNS typically share a single handle name（such as *anonymous*）at this level of anonymity.

　　According to the Social Identity Model of Deindividuation Effects（SIDE model）, visual anonymity encourages individuals to perceive the self and others less as individuals and more as representatives of a social group. This, in turn, sensitizes interactants to the social norms embodied by the group, and fosters *group-normative* behaviors that are consistent with these social norms.[4] Morio and Buchholz[5] make the claim that CMC on Japanese Internet forums exhibit higher degrees of anonymity than on western forums. They argue that the difference in anonymity reflects a stark contrast in East-West social orientation: the affiliation motivation of the East vs. the autonomy motivation of the West. Morio and Buchholz state:

　　　　In Western culture, where independence and uniqueness is highly regarded, an online community without identification should be less preferable than one that allows such individual identification. On the other hand, in Eastern culture, such an online community perfectly matches people's need to be a part of something larger than themselves and should enhance a sense of unity with the

group (Morio and Buchholz[5] p. 304).

Indeed, even a cursory glance at any popular Japanese SNS would suggest that its interactants adopt a higher degree of anonymity than their Western counterparts. But is this difference widespread enough to be considered universal across the respective cultures, and does it really arise from contrasting social orientations? Before considering these questions, let us first take a closer look at anonymity conditions on Japanese and Western Internet forums and SNSs.

2. Anonymity on Internet forums

Making comparisons between anonymity conditions on equivalent Japanese and Western Internet forums is difficult to achieve due to the scarcity of forums in the West that allow interactants to adopt the highest level of anonymity (lack of identification). Morio and Buchholz[5] compared anonymity on Slashdot, one of the few forums to have both an English and Japanese version. Their findings are summarized in Table 1, which shows the percentage of interactants who chose to participate in forum discussions at the highest level of anonymity.

Table 1   Percentage of completely anonymous Slashdot interactants (Summarized from data in Morio and Buchholz[5])

	US site	Japan site
Most active topics	25%	69%
Most viewed topics	21%	57%

These figures appear to support the researchers' claims about cultural differences in perceptions of anonymity. The very fact that the *capability* for total anonymity is much more rare on Western forums also seems to support their claims (most Western sites require some form of registration and e-mail verification of identity). The largest Internet forum in the world, after all, is the Japanese *2 Channel*. With over 800 active boards, it is famous for being a thriving anarchy of completely anonymous interactants－a phenomenon for which there is no equivalent in the West.[6]

On 2ch, a name field is available but seldom used. Entering your name in the field, unless you do so with an obvious lack of purpose, would identify you as a newbie who doesn't understand the forum, an administrator, or someone

attempting to be a Web celebrity (Wikipedia entry : *2 Channel*).

The activity on 2 Channel exemplifies anonymity at the highest tier (lack of identification), while activity on Western Internet forums, which typically require the use of avatars or handle names, is based on second tier anonymity (dissociation of identity). Thus, the Japanese version is one level higher in the anonymity hierarchy (Fig. 1).

3. Anonymity on SNSs

SNSs popular with the general public also reflect a degree of anonymity, but at the lower two tiers of the hierarchy. The two most popular SNSs in the West are MySpace and Facebook. On both of these sites, most users post real photographs of themselves on their profile page.

The authors of this paper conducted a search on MySpace for men and women between the ages of 18 and 35 in both the U. S. and Japan. Table 2 shows the percentage of individuals comprising the first 100 results who chose an avatar to represent themselves online (i.e. second tier anonymity).

Table 2 Percentage of MySpace members adopting second tier anonymity (ages 18-35)

	Within the U. S.	Within Japan
Men	12%	53%
Women	12%	51%

Another search was then conducted with an older demographic : ages 50-68. The results are presented in Table 3.

Table 3 Percentage of MySpace members adopting second tier anonymity (ages 50-68)

	Within the U. S.	Within Japan
Men	22%	60%
Women	24%	47%

There exists a clear disparity between the preference of Western and Japanese interactants making use of second-tier anonymity, and the phenomenon does not appear to be based on age demographics. Anecdotal evidence from Facebook members suggests a similar phenomenon occurring there.

Searches were also conducted on Mixi, Japan's most popular SNS. The Mixi

interface is only available in Japanese, and members are required to own a mobile phone number registered in Japan. Therefore, it can be assumed that the results do not include a significant number of individuals living abroad. The results, again based on the top 100 hits, are as follows:

Table 4　Percentage of Japanese Mixi members
adopting second-tier anonymity

	Ages 18–35	Ages 50–68
Men	91%	90%
Women	83%	95%

As with the Internet forum Slashdot, Japanese interactants in SNSs overwhelmingly chose a level of anonymity one level higher than that chosen by their Western counterparts; whereas most Western interactants used a real photograph of themselves on MySpace, the majority of Japanese interactants, both on MySpace and on the exclusively Japanese Mixi, used avatars to represent themselves online. From these figures, it can be said that a clear gap exists in the ways anonymity is used in Western and Asian contexts, at least in one Internet forum (Slashdot) and two SNSs (MySpace and Mixi).

4.　The flawed dichotomy of East-West collectivism vs. individualism

Research has shown that visual anonymity in CMC (by inference, all three levels of Fig. 1) fosters deindividuation and a more impersonal, task-oriented focus.[7] Though this is the most intuitive explanation for the effects of anonymity, other research has observed interactants in similar conditions expressing greater self-awareness and stronger social attraction to the group.[8, 9] The SIDE model, makes similar claims about the effects of visual anonymity. Others have even found that anonymity has no effect on attraction to the group.[10]

A drawback to these studies and many others is their failure to account for different levels in the anonymity hierarchy (Fig. 1) as well as cultural preferences in CMC. Morio and Buchholz[5] attempt to take these issues into account and essentially base their argument on the dichotomy of individualism vs. collectivism.[11, 12] This dichotomy is analogous to many others, including but not limited to: independent vs. interdependent; West vs. East; and autonomy vs. affiliation. These widely held stereotypes about Western vs. Eastern culture are so entrenched in people's minds that they often go unchecked.

Morio and Buchholz make bold claims about the highest tier of anonymity.

They say that Japanese people prefer this type of anonymity because it fosters greater attraction to the group, thus providing for the affiliation motivation that characterizes Japanese culture. People in the West, driven by autonomy motivation, prefer second tier anonymity or lower, as they feel a need to have an identifying label of some kind. While this makes intuitive sense, some research has suggested this core assumption about Japanese and Western culture to be incorrect. In a meta-analysis of 83 studies that assessed IND and/or COL,[13] researchers were startled to find that, although Americans were higher in IND than most of the 50 countries included in the study, they were higher in COL than the Japanese. Furthermore, Americans were higher in COL when the analysis used studies that used high-reliability scales, while COL was nearly equivalent when the analysis was based on low-reliability scales. Yet, most cross-cultural studies in cultural psychology have used low-reliability scales, and these are the very studies that have led researchers to assert higher American individualism and lower collectivism when compared to the Japanese. This discrepancy may signify a validity problem, and the accuracy of the construct being measured should be seriously considered before making monolithic generalizations about a culture. The researchers state: "…self-concept research often relies on Japanese comparisons, assuming marked differences in IND and COL without testing them." (Oyserman *et al.*[13] p. 18) Therefore, the conclusions borne by any study that starts from this basic, possibly flawed, assumption should be taken with a liberal amount of skepticism.

It should also be noted that the very idea of East vs. West could be flawed, since the same study showed that Koreans were equivalent in COL to Americans, and that Chinese were far higher in COL than Americans. In light of such data, the generalizations about Western and Eastern societies found in many studies are clearly misdirected.

> Autonomy is often valued in Western societies, whereas Eastern societies tend to emphasize affiliation, suggesting that individuals in Western societies will gravitate toward online communities that allow lower levels of anonymity, while individuals in Eastern societies will be more likely to seek out online communities that promote higher levels of anonymity.[5]

Such essentialist notions and studies based on them must be reexamined in order to develop a more holistic picture of the underlying processes guiding social behavior. Therefore, while it seems a sharp contrast in anonymity conditions does characterize Western and Japanese CMC, claiming these are rooted in the IND-COL/

autonomy-affiliation dichotomy may be taking the idea too far. Apart from the fact that this core assumption about East vs. West may very well be incorrect, other factors may just as well account for the differences. Mirco-cultures of specific SNSs or forums, privacy concerns and distrust of the Internet, historical trends, CMC interface characteristics, effects of cell phone culture, online community ties with *real-world* communities (Japanese: *off kai*), socio-economic demographics of interactants －any of these factors may affect the use and perception of anonymity, in addition to or in place of the effects of IND-COL. More comprehensive studies are required that take into account a wider range of variables (both within a culture and across cultures) and a more complex definition of anonymity.

5. Anonymity and CMC content on English and Japanese forums

Yahoo Answers is a free, community-driven knowledge market website that allows users to post questions to which any Internet user can reply. The Japanese equivalent is called *Chiebukuro* (pearls of wisdom). Both feature similar formats, where a handle name together with an avatar (a cartoon or a headshot photograph), or just a handle name, represents the users (second tier anonymity, Fig. 1). Complete anonymity (top tier) is not permitted.

A quick survey of the top three questions with the greatest number of replies shows that almost all English participants use a cartoon avatar, while almost none of the Japanese participants use an avatar (Most only use a handle name). All of the responses examined on both the English and Japanese websites (over 400) were on topic and non-confrontational. This supports research that has found visual anonymity and deindividuation not to be a factor in promoting flaming and other hostile behavior.[14]

In contrast, 2 Channel is notorious for severe flame wars and bullying that have even resulted in participants committing suicide.[15] Many English language forums are also plagued by similar problems with hostile CMC, even with avatar and handle name requirements (i.e. second tier anonymity). Since classic deindividuation theory[16] claims that visual anonymity increases hostility and aggressive behavior, the difference between sites like Yahoo Answers and 2 Channel deserves closer investigation.

The authors of this paper surmise that the most successful models of CMC are based on reward-punishment systems, where useful and constructive comments are *up-voted* by other community members while hostile and unconstructive comments are *down-voted*. Participants in such communities acquire points for voting and for

making posts that receive a high number of up-votes. Websites that have adopted this type of system, like Yahoo Answers, Reddit, Digg, and many others, contain few negative posts, while older-style systems like 2 Channel and the now defunct Usenet, which treat all comments equally, are full of inflammatory posts－despite the latter's requirement for users to have a handle name. Thus, it would seem that rewards and punishments are a far better indicator of CMC behavior than anonymity.

6. Socio-economic variables

Of all the variables that may affect CMC besides anonymity, socio-economic variables deserve a special mention because of a demographic shift occurring now in America. For many years, MySpace was the leading SNS in the world. Now, with the rise of Facebook, a socio-economic rift has arisen between the users of each SNS. Boyd[17] calls the two groups *hegemonic teens,* who are switching in droves to Facebook, and *subaltern teens,* who are staying with MySpace. In stereotyped terms, she writes the following about hegemonic teens:

The goodie two shoes, jocks, athletes, or other "good" kids are now going to Facebook. These kids tend to come from families who emphasize education and going to college. They are part of what we'd call hegemonic society. They are primarily white, but not exclusively. They are in honors classes, looking forward to the prom, and live in a world dictated by after school activities.

Subaltern teens are described in the following way:

MySpace is still home for Latino/Hispanic teens, immigrant teens, "burnouts," "alternative kids," "art fags," punks, emos, goths, gangstas, queer kids, and other kids who didn't play into the dominant high school popularity paradigm. These are kids whose parents didn't go to college, who are expected to get a job when they finish high school. These are the teens who plan to go into the military immediately after schools. Teens who are really into music or in a band are also on MySpace. MySpace has most of the kids who are socially ostracized at school because they are geeks, freaks, or queers.

As this socio-economic division affects the style and content of each SNS, it is likely that analogous socio-economic divisions might affect content on competing SNSs within Japan. This is just one example of how researchers might incorporate

a more comprehensive cultural description when conducting cross-cultural studies on online anonymity.

7. Conclusion

A clear difference exists in the use of anonymity on English and Japanese SNSs/ Internet forums. Put simply, the Japanese seem to prefer greater anonymity online. The reasons for this, however, are unclear. While researchers have explained this preference in terms of affiliation vs. autonomy motivation, or collectivism vs. individualism, such conclusions appear to be based on a tenuous assumption about East-West cultural differences. Further research on this topic should take into account a more complex view of anonymity, such as Azechi's three-tiered model. Research should also do away with popular assumptions of East-West cultural dichotomies and instead incorporate other inter-cultural and intra-cultural variables that affect anonymity conditions.

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Appendix A

Top Ten Languages Used in the Web (Number of Internet Users by Language)					
TOP TEN LANGUAGES IN THE INTERNET	% of all Internet Users	Internet Users by Language	Internet Penetration by Language	Language Growth in Internet (2000 - 2008)	2008 Estimated World Population for the Language
English	29.4 %	430,802,172	21.1 %	203.5 %	2,039,114,892
Chinese	18.9 %	276,216,713	20.2 %	755.1 %	1,365,053,177
Spanish	8.5 %	124,714,378	27.6 %	405.3 %	451,910,690
Japanese	6.4 %	94,000,000	73.8 %	99.7 %	127,288,419
French	4.7 %	68,152,447	16.6 %	458.7 %	410,498,144
German	4.2 %	61,213,160	63.5 %	121.0 %	96,402,649
Arabic	4.1 %	59,853,630	16.8 %	2,063.7 %	357,271,398
Portuguese	4.0 %	58,180,960	24.3 %	668.0 %	239,646,701
Korean	2.4 %	34,820,000	47.9 %	82.9 %	72,711,933
Italian	2.4 %	34,708,144	59.7 %	162.9 %	58,175,843
TOP 10 LANGUAGES	84.9 %	1,242,661,604	23.8 %	278.3 %	5,218,073,846
Rest of the Languages	15.1 %	220,970,757	15.2 %	580.4 %	1,458,046,442
WORLD TOTAL	100.0 %	1,463,632,361	21.9 %	305.5 %	6,676,120,288

(*) NOTES: (1) Internet Top Ten Languages Usage Stats were updated for June 30, 2008. (2) Internet Penetration is the ratio between the sum of Internet users speaking a language and the total population estimate that speaks that specific language. (3) The most recent Internet usage information comes from data published by Nielsen//NetRatings, International Telecommunications Union, Computer Industry Almanac, and other reliable sources. (4) World population information comes from the U.S. Census Bureau . (5) For definitions and navigation help in several languages, see the Site Surfing Guide. (6) Stats may be cited, stating the source and establishing an active link back to Internet World Stats. Copyright © 2008, Miniwatts Marketing Group. All rights reserved worldwide.

(Retrieved from http://www.internetworldstats.com/stats7.htm)

日本と西洋のコンテキストにおけるコンピューターを利用したコミュニケーションの匿名性：比較と批判

ニコラス・ボビー，ロバート・ツビトコビチ

コンピューターを利用したコミュニケーション（以下，CMC）には，対面コミュニケーション（FtF）には通常存在しない，匿名性という特徴を備えている。今回の論文のために収集したデータでは，日本語での CMC は英語での ‘欧米式’ CMC に比べ匿名性が高い，という最新の研究を立証する結果が得られた。日本語 CMC の匿名性は欧米の場合に比べ，階層モデルにおける匿名性の水準がワンランク高いという事が判明した。その一方，著者らは，個人主義と集団主義（IND-COL）/自律と帰属の二分法は，CMC での匿名の活用と解釈を左右する可変要素の一例に過ぎないと主張する。なかでも欧米文化全般においては，社会経済における特定のソーシャルネットワーク（SNS）やインターネット掲示板利用者の性質が，特異なオンライン・ミクロ・カルチャーの結成を助長している事が分かった。日本国内でのこういったイントラ・カルチャー・バリエーションや，その CMC への影響については，別途詳しい研究が必要となる。

キーワード：コンピュータを介したコミュニケーション（CMC），異文化コミュニケーション，オンライン匿名性，個人主義，集団主義，社会的アイデンティティ