

## Do Honest People Pull the Short Straw?

Kiyoshi Murata, Yohko Orito, Miha Takubo

## ▶ To cite this version:

Kiyoshi Murata, Yohko Orito, Miha Takubo. Do Honest People Pull the Short Straw?. 13th IFIP International Conference on Human Choice and Computers (HCC13), Sep 2018, Poznan, Poland. pp.282-292, 10.1007/978-3-319-99605-9\_21. hal-02001940

# HAL Id: hal-02001940 https://inria.hal.science/hal-02001940

Submitted on 31 Jan 2019

HAL is a multi-disciplinary open access archive for the deposit and dissemination of scientific research documents, whether they are published or not. The documents may come from teaching and research institutions in France or abroad, or from public or private research centers. L'archive ouverte pluridisciplinaire **HAL**, est destinée au dépôt et à la diffusion de documents scientifiques de niveau recherche, publiés ou non, émanant des établissements d'enseignement et de recherche français ou étrangers, des laboratoires publics ou privés.



# Do Honest People Pull the Short Straw? The Paradox of Openness

Kiyoshi Murata<sup>1[0000-0002-5632-8078]</sup>, Yohko Orito<sup>2[0000-0002-4293-1722]</sup> and

Miha Takubo<sup>3[0000-0003-4532-6138]</sup>

Meiji University, 1-1 Kanda Surugadai, Chiyoda, Tokyo 101-8301, Japan kmurata@meiji.ac.jp
<sup>2</sup> Ehime University, 3 Bunkyo-cho, Matsuyama, Ehime 790-8577, Japan orito.yohko.mm@ehime-u.ac.jp
<sup>3</sup> Osaka International University, 6-21-57 Tohda-cho, Moriguchi, Osaka 570-8555, Japan mihachi@oiu.ac.jp

Abstract. Widespread acceptance of the value of the culture of openness and honesty in cyberspace, due to the proliferation of (in many cases, ostensibly free) online services such as social media, paradoxically encourages 'clever' or 'crafty' people to use those services in a closed or controlled fashion to their own advantage. Online services that would motivate such people to exploit 'honest' or 'innocent' users undermining the open and honest culture have been provided. This situation will lead to social issues, such as the spread of online behaviour that treats others as only a means, the distortion of digital as well as real identities of a wide range of individuals, and human alienation. Nobody except social media platform companies seems to get the benefit from people's social media usage in the longer term. In this paper, the nature of these issues is examined with referring to actual cases, and measures to address them, such as the establishment of the right to be translucent and the notion of co-ownership of digital objects, are proposed.

Keywords: Social Media, Openness, Online Honesty, Strategic Use, Identity.

#### 1 Introduction

The development and permeation of social media have spawned a new phase in personal information and privacy protection. Before the advent of social media, online services for individuals like online shopping and search services encouraged users to disclose their own personal information including their interests and concerns, and access to such personal information disclosed online was restricted exclusively to the online service providers and distribution of it was controlled by them; this is still the case for most of online services other than social media. On the other hand, social media are designed so that individual users are encouraged to reveal and disclose their own personal information, and that of others (usually friends and acquaintances),

because the open sharing of personal information on a social media platform is integral to ensuring the profitability of its business. In this respect, social media pose a unique privacy issue. As Lucas [1] points out, "[e]ven if your privacy settings are super-high, it's always possible one of those 'friends' will rat you out'."

The more individual Internet users disclose and share personal information about themselves and others on a social media platform, the more the economic value of the platform is enhanced. Accordingly, social media platform companies desire to build and maintain the open and honest culture online. The 'friends of friends are friends' structure, which is exemplified in Facebook's 'like' and 'share' functions and in Twitter's official and unofficial retweet functions, is embedded in social media platforms to provide the users with opportunities to observe the attributes, status, thought and/or behaviour of friends of their online friends for this reason. In fact, social media platforms such as Facebook, Twitter, Instagram and YouTube have attempted to enhance Internet users' open and honest communication with their friends, friends of friends, and friends of friends of friends, as well as with an unspecified number of other people, by revealing personal information not only pertaining to themselves, but also to these others through various modalities of expression, including text, sound, pictures and moving images. Consequently, personal information revealed by oneself and others is accumulated on the Internet and in the databases of social media companies in a state of being ready to be processed, used and shared, and hardly any ordinary person can control this accumulation, or the access to and use of such information.

Regardless of whether they are conscious or unconscious of the values embedded in a service, those who enjoy using it accept these values to a certain extent. When a user considers Google search results to be appropriate or acceptable for them, or that they need to register on Facebook under their own names, they substantively affirm the values underlying the technological schemes of such online services. In fact, social networking services (SNSs) have been accepted by the majority of Internet users, with no or little resistance against the default user environment settings of the services, as a tool to expand their communicative ability, deepen their human interactions, and enrich their lives in real space. In Japan, Facebook became the dominant SNS, overtaking 'mixi', the local Japanese SNS, in October 2011. Interestingly, whereas almost all users enjoyed using the mixi SNS under pseudonyms, most of the same people did not hesitate to register on Facebook under their own names because they believed that the platform required them to do so. Contrary to the findings of boyd and Hargittai [2], these users seemed not to care about their privacy settings on the site.

Whereas people use various social media services for different purposes, many of those services are federated with each other. Instagram and LINE, an instant messaging service similar to WhatsApp, are other popular social media platforms, and provide their users with a social sign-in capability; that is, those users who accept this can access the services by using their Facebook login information, and give Instagram and LINE permission to use other types of Facebook information of them, such as their 'friend lists'. The linkage function of Twitter enables its users to automatically upload their tweets on Facebook. Many social media services encourage users to share their smartphone directories with the media platform companies to enhance the

connectivity with their friends in real space. In fact, the social media-driven culture of openness has seemed to be accepted among a wide range of people.

However, any technological service is an object of interpretation. Once a service starts to be used, its users are free to find and create their own ways of engaging with it, possibly departing from the developer's original intentions. The value and culture of openness that many social media platforms support is not necessarily accepted by the users; rather, this is at the users' discretion. While there are many 'honest' or 'innocent' social media users who, consciously or unconsciously, affirm the value and culture of openness by using the default user environment settings of social media platforms and by casually posting personal information pertaining to themselves and others on social media sites, 'clever' or 'crafty' users can engage with social media strategically, as a tool to benefit themselves by exploiting honest users who, to such individuals, have only instrumental value. Given the potentially significant benefit to clever users of using social media in this way, they may be strongly motivated to covertly control the personal information of themselves and others that they and others reveal. In fact, individuals who use social media in this manner have already been observed. The widespread acceptance of the value and culture of openness in cyberspace, which owes to the proliferation of social media, paradoxically encourages 'clever' people to use social media in a closed or controlled fashion, to their own advantage. This is expected to lead to social issues, such as widespread online behaviour that treats others only as a means, the distortion of digital as well as real identities of a wide range of individuals, and human alienation, which would be serious especially for people in young adulthood. Nobody except social media platform companies seems to get the benefit from social media usage in the longer term. This study, as a basically conceptual one, deals with these issues through investigating the nature of them and attempts to propose policies to address the issues, based on the previous work of two of the authors [3]. The work has been extended through investigating actual online services which seem to foment the clever or crafty use of social media.

### 2 The Age of Openness?

#### 2.1 The Open and Honest Culture Advocated by Facebook

As described in its original mission "Give people the power to share, and to render the world more open and connected" [4], Facebook appears to be aiming for an informationally open, transparent society in which everyone actively reveals everything about him/herself. Kirkpatrick [5] described how Mark Zuckerberg, the founder of Facebook, believes that people should have just one identity and that having two or more identities showed a lack of integrity<sup>1</sup>; that in a more open and transparent world people would be held to the consequences of their actions and be more likely to behave responsibly<sup>2</sup>; and that more transparency should make for a more tolerant society in

<sup>2</sup> p. 200

<sup>&</sup>lt;sup>1</sup> p. 199

which people accept that everybody does 'bad' or embarrassing things sometimes<sup>3</sup>. Zuckerberg also said that transparency increases integrity, by essentially saying the same thing to everyone [6]<sup>4</sup>. Zuckerberg's insistence marks a sharp contrast with the account of the value of privacy Rachels [7] provided. According to him, privacy is important if we are to ensure our ability to create and maintain different sorts of social relationships with different people, and the idea that different standards of conduct with different people is a sign of dishonesty is wrong. Zuckerberg seems to disregard the value of privacy, and the characteristics of the services and functions that Facebook provide seemingly reflect Zuckerberg's belief in open and transparent society even after they changed their mission statement in June 2017 – "Give people the power to build community and bring the world closer together". They are also consistent with the principles and logic underpinning a digitised market economy in which money and personal information are circulated as currency. Individual users enjoy a variety of 'charge-free' online services that are paid for with personal information.

Although strong criticism of Facebook's adherence to openness has been expressed by many people who consider that the company's attitude poses a significant threat to the right to privacy, Jarvis [6] supports the culture of informational openness or 'publicness', represented by the widespread use of various kinds of social media, and highlights the benefits of disclosing personal information, including sensitive information. Showing empathy for Facebook's exploitation of people's desire to connect with each other<sup>5</sup>, and for Zuckerberg's perspective that Facebook enhances humanity<sup>6</sup>, Jarvis points out the various benefits of publicness and states that publicness represents an ethic of sharing<sup>7</sup> and should be balanced with privacy as an ethic of knowing - the importance of which, according to Jervis, has been overstressed. However, to gain an appreciation of the benefits of informational transparency for individual social media users, we need to recognise the asymmetry in this transparency between individuals and organisations, which may have a harmful effect on a wide range of people: whereas the transparency of social media users is becoming very pronounced, the transparency of social media platform companies, with respect to the ways in which they handle personal information, remains low.

In the context of surveillance studies, Lyon [8] insists that organisations that engage in personal information processing should accept accountability for ensuring transparency, to safeguard the dignity of users, considering the disparity in power between individuals and organisations<sup>8</sup>. However, most social media platform companies do not satisfy this requirement for accountability with respect to their handling of personal information, and many people blindly accept pseudo-personalised services that they can enjoy in exchange for revealing their personal information online.

<sup>&</sup>lt;sup>3</sup> pp. 210-211

<sup>&</sup>lt;sup>4</sup> p. 175

p. 2

<sup>&</sup>lt;sup>6</sup> p. 22

<sup>&</sup>lt;sup>7</sup> p. 110

<sup>&</sup>lt;sup>8</sup> p. 187

As an advocate of an open and honest culture, Facebook requires its users to register under their own names, provide their real information and not to provide any false personal information on the site [9] – and the majority of them do so – although it is also true that a significant number of users are pseudonymous or effectively anonymous.

#### 2.2 Online Services That Undermine the Open and Honest Culture

Despite Facebook's and other social media platform companies' persistent effort to build an open and honest culture, online services which could undermine this effort, or which would abet clever users in embellishing themselves online, have been launched. For example, Klout – a website and mobile application launched in 2008 – measures its users' online social influence via 'Klout Score' through analysing their postings on social media sites including Facebook, Twitter and Instagram [10], [11]. This controversial service [12] may encourage its user to embellish him/herself online to get a higher Klout Score, if he/she expects the score relates to his/her interests or reputation. Reppify – a San Francisco based company – provides recruiters and human resource departments with a job applicant's 'job fit score' calculated based on his/her personal information put on social media sites [13]. If this service becomes widely used, those who want to find good jobs would substantively be forced to reveal their personal information online – or, they are almost non-existence as job seekers - and to control what they publish online so that they can receive high job fit scores. They are compelled to internalise expectations of their potential employers. Actually, it has become usual that employers or potential employers investigate a job seeker's social media postings to judge whether he/she is eligible to be employed or not [1].

VALU is a Japanese online service released in May 2017, which would undermine the open and honest online culture. On the VALU site, an individual user accredited by VALU Inc. can issue virtual stock called VALU for a commission of JPY 500. The upper limit of the initial offering price of a user's share is calculated in bitcoin based on his/her social media presence including the numbers of Facebook friends and Twitter followers. The total number of authorised shares of a user is decided also based on his/her social media presence, and the issuance of additional VALU is not permitted. Stockholders, or VALUERs, of a user's VALU can receive benefits such as exclusive information or novelty goods from him/her, and can freely transfer their stock to other users. This service would provide an incentive for potential VALU issuers to strategically embellish themselves online to enhance the economic value of their VALU as well as for VALUERs of VALU a user issues to support him/her not because they are fans of him/her but because they desire to get a gain in share dealings, although VALUERs are described as fans of issuers of their stocks in the term of use of VALU [14]. From the viewpoint of VALUERs, VALU issuers could be just devices whereby to make money and VALU issuer governance becomes a matter.

In September 2017, Metaps Inc., a Japanese data analytics company, launched their online time trading pit service called Timebank, which enable an individual to benefit from an expert consultation online [15]. The certification as an expert and his/her

consultancy fees are determined based on his/her online influence measured by, for example, the number of Twitter followers. This service could motivate people to pretend online influencer. In fact, that number can easily be increased by buying fake followers [16].

Instagram faces a similar situation. This photo sharing application and service is popular, and Instagram influencers are now regarded as effective advertising tools — photos, for example, of their wearing dresses uploaded on Instagram are expected to promote the sale of those dresses. However, a US marketing company Mediakix [17] demonstrated that an Instagram influencer can be created through purchasing fake followers and engagement at small cost. This means that anyone can impersonate an Instagram influencer. In Japan, on the other hand, many Instagram users compete to post "Instagrammable" or "Insta-genic" photos on the photo sharing site to show their fulfilling real or offline life. Family Romance Inc. based in Tokyo launched its business to support these people. The company dispatches professional staff who play customers' parents, siblings, friends or acquaintances and are taken photos with customers for fabricating their fulfilling real life [18].

Such strategic online behaviour, i.e. of being dishonest on social media platforms, illustrates the existence of another form of online informational transparency asymmetry: the asymmetry between those who, consciously or unconsciously, commit to informational openness and those who consciously attempt to control their identity (or at least, their digital identity) in cyberspace. To enhance the strategic value of their digital identity, the latter group or clever people have an incentive to exploit the former group or innocents. Whereas clever people are motivated to consciously control what information about them is opened up online by them or others, they have an incentive to reveal innocents' information for their own benefit, and hope innocents to keep to behave honestly online in order to maintain their edge against innocents. At the same time, however, those who proactively engage in online self-commodification may be subject to the distortion of their digital identity or diremption between their identity and self-awareness.

Some questions that raise, therefore, are: "Is online openness and honesty a virtue in the current Internet environment?"; and "Is the pretence of openness and honesty online a wise act?"

#### 3 Risks Entailed in an Open and Honest Culture

#### 3.1 Diremption between Self and Identity

Kierkegaard [19] describes the nature of one's self as "a relation that relates to itself" or "the relation's relating itself to itself in the relation". In the current ecoenvironment (or human habitat), which is composed not only of nature but also of "technological conjunction" [20], this can be interpreted in terms of one's self-image that is determined by relationships with others including creatures, organisations,

-

<sup>&</sup>lt;sup>9</sup> p. 13

communities and artefacts, and is actively and/or passively constructed – and/or deconstructed – in a repeating fashion according to these relations. Based on his studies of phenomenological psychopathology, Kimura [21], [22] points out that one's self-image is repeatedly generated, or emerges, through one's own mental processes, not those of others, that differentiate the self from non-self in an individualised, personal context. In this regard, Kimura states that the self is subjective, dynamic and relational, as Kierkegaard suggested, and temporal, as Heidegger [23] noted, and, from the viewpoint of time, one's current self or relation is developed according to on one's past self or relation, through differentiation processes.

An individual's identity is also developed relationally and dynamically. According to Goffman [24], both the social and personal identity of an individual are part of other people's concerns and definitions of that individual<sup>10</sup>. The personal identity of an individual is composed of positive marks, or 'identity pegs', and

"the unique combination of life history items that come to be attached to the individual with the help of these pegs form his identity. Personal identity, then, has to do with the assumption that the individual can be differentiated from all others, and that through this means of differentiation a single continuous record of social facts can be attached, entangled, [...] becoming then the sticky substance to which still other biographical facts can be attached. [...] personal identity can and does play a structured, routine, standardised role in social organisation just because of its one-of-a-kind quality" 11.

In the current socio-economic and technological climate, the fact that people use social media in their own ways to consciously or unconsciously construct relationships with others – through mutually revealing personal information about themselves and/or others at various levels of accuracy and detail - will inevitably affect the development of their identity. If an individual uses social media as a tool for writing his/her online biography according to his/her own preferences; if it is possible for him/her to select a specific audience for a specific post online at will; and if he/she can completely control what personal information is revealed to others, he/she does not need to worry about the negative impact of social media on the development of his/her identity. Of course, none of these conditions are fulfilled suggesting that, today, an individual's digital identity can take on a life of its own such that they may be compelled to play a part in creating their own distorted digital identity, as defined in certain contexts. Those who realise that they are compelled in this direction would suffer serious diremption between their identity, defined in a heteronomous fashion, and self; as a result, they would also suffer dysfunction with respect to the mental processes involved in generation of the self.

<sup>11</sup> p. 57

<sup>&</sup>lt;sup>10</sup> p. 105

#### 3.2 Strategic Creation of a Digital Identity: Is It Really Advantageous?

For clever Internet users, social media may seem to be an expedient tool for subtle self-promotion. Such users understand the nature of social media, for example that profile information uploaded to social media websites is propagated much more widely than might be expected, and that they have a wider audience on social media platforms than could ever be imagined before; therefore, these individuals carefully evaluate the target audience that their online postings reach. They craft articles and regularly post them on social media sites at the right moment to convince their target audience that they are admirable and acceptable people. To do this, these users need cognisance of the decoding capacity of their audience [24]<sup>12</sup>. Also, they never forget to check their online friends' and acquaintances' postings, to ascertain which of these postings could aid their own self-promotion, as well as those that are obstacles to it, on a regular basis. If they identify any of the latter type of postings, they endeavour to erase them as quickly as possible. Those who desire to strategically control their digital identity should give their full attention to the management of potentially stigmatising information pertaining to themselves that others can disclose, or pass around online [24]<sup>13</sup>, although such management is extremely difficult in the current Internet environment. In addition, they should attempt to encourage others to post positive things about them online and discourage the posting of negative things.

Do these activities really enrich their lives? Are these clever people truly wise and prudent? In a certain sense, they are controlled by the architecture of social media. Although, for example, they can successfully embellish their digital identity and, as a result, obtain good jobs, this does not mean their lives are successful; on the contrary, they would be forced to continue to wear the mask created by their clever online activities. When the gap between the virtual identity created by their strategic social media use and actual identity is recognised by others in real space, they would suffer stigma, as Goffman [24] suggests<sup>14</sup>.

However, those users whose activities on social media sites are manipulated openly and covertly by the clever people are exploited by them and alienated, in many cases unconsciously. It is easy to call such exploited users unwise. However, considering that the majority of Internet users are non-technical users, and that the technological architecture of social media is reviewed and upgraded on a regular basis, effective measures to make them more prudent should be adopted urgently.

#### 4 Towards a Richer and More Tolerant Information Society

Under the current circumstances, where the boundary between real space and cyberspace is being dissolved, many people have experienced the phenomenon of 'disappearing bodies' [25], and identity is composed of digital and real space components. The two types of informational transparency asymmetry, between individuals and

<sup>&</sup>lt;sup>12</sup> p. 51

<sup>&</sup>lt;sup>13</sup> p. 42 <sup>14</sup> p. 2

organisations and between honest people and clever people, suggest that we may now live in a world where open and honest people can only make fools of themselves. The Internet economy and digital network society have seemingly rendered honesty as no longer a virtue. In an informationally transparent society, where it is very hard for anyone to prevent another from revealing and accessing his/her personal information, are the wise people those who are adept in crafting or counterfeiting their digital identity to their own advantage without anyone knowing? As discussed above, the answer is no

A paradoxical situation now exists in which various kinds of online services for individual users, which encourage openness with respect to their own and others' personal information, provide clever users with an incentive to strategically hold back and/or counterfeit their personal information, which has in turn made it difficult for many people to control their identity in a favourable manner. Froomkin [26] suggested that "the most effective way of controlling information about oneself is not to share it" and "the easiest way to control databases is [...] to keep information to oneself" 15. However, those who practice such behaviour would suffer from social exclusion [27] and would be at an economic disadvantage. Additionally, the counterfeiting of personal information revealed online can distort the digital identity of the subject of the information, and this distortion may in turn cause serious distortion of his/her identity in real space, affecting quality of life for a lengthy period, because any information posted on the Internet may remain accessible indefinitely and stigmatising information tends to spread rapidly and widely due to rampant online vigilantism.

Thus, as Rachels [7] pointed out, it is still important for us to safeguard our ability to autonomously construct relationships with different people through selectively providing them with personal information, which contradicts Mark Zuckerberg's belief. To do so, while maintaining quality of life at a satisfactory level in the present, we need to use the various services available on the Internet, including social media, very prudently. To ensure prudence, in addition to the full accountability of service providers regarding the transparency of their personal information handling, it is necessary for us to establish the 'right to be translucent', which relates to our capacity to control the selective disclosure of our personal information and therefore can be executed on others' activities regarding the revealing of our personal information. Both complete informational transparency and informational opaqueness would be harmful to individuals as well as to society; the 'right to be translucent' guarantees people the ability to autonomously set the level of informational translucence in different contexts. It is noteworthy that this right never justifies clever people's embellishing themselves and exploiting others online to make themselves look good. This right encourages people to prudently maintain their honesty online.

We also need to develop the notion of the 'co-ownership of digital objects' so that we can, to a certain extent, claim ownership of digital objects stored in organisational databases or owned by other individuals that contain our personal information (e.g. digital photos of us taken by others using their own cameras). The right to be translucent and to take co-ownership of digital objects should be implemented within the

\_

<sup>&</sup>lt;sup>15</sup> p. 1464

architecture of Internet services, including social media. Considering that most Internet users do not read the privacy policies that online businesses almost always post on their websites [28], [29], [30], such implementation is extremely important.

Establishing a system of a 'privacy premium' would be one of the most useful ways of striking a balance between people favourably controlling their identity and maintaining the prosperity of the digital economy. The majority of existing Internet businesses that provide charge-free services force their customers to 'purchase' the services by providing personal information, or to otherwise decide against using them. Under that system, people are required to choose whether to partake of a commercial service by paying with personal information or with money.

Moreover, as suggested in the previous section, an effective education system to cultivate prudent Internet use should be established as a matter of urgency. Instead of instilling existing rules and norms for Internet usage, a wide range of non-technical users have to be encouraged to understand important human values such as individual dignity, freedom and autonomy as well as the core values underpinning ICT professionalism, including an ethical code of conduct for ICT professionals, to cultivate their prudence, because the online environment is always changing.

### 5 Conclusions

In the current paradoxical Internet environment, in which various kinds of online services encourage individual users to share the personal information of themselves and others honestly, and which provides clever users with an incentive to strategically hold back and/or counterfeit their personal information, many people experience difficulties maintaining favourable control of their identities. Consequently, social issues, such as the spread of online behaviour that treats others as only a means, the distortion of the digital identities of a wide range of people, and human alienation, will occur. To address such issues, it is essential to establish (a) the right to be translucent, (b) the notion of co-ownership of digital objects, (c) a system for a privacy premium, (d) an effective education system to cultivate prudent non-technical Internet users, and (e) the implementation of important human values into the system architecture of Internet services.

#### References

- Lucas, S.: Job hunting? Take a close look at your Facebook page. MoneyWatch, https://www.cbsnews.com/news/job-hunting-take-a-close-look-at-your-facebook-page/, last accessed 2018/1/6 (2014).
- boyd, d., Hargittai, E.: Facebook privacy settings: Who cares?. First Monday 15(8), http://firstmonday.org/ojs/index.php/fm/article/view/3086/2589, last accessed 2018/1/6 (2010).
- Murata, K., Orito, Y.: The paradox of openness: Is an honest person rewarded?. Proceedings of CEPE 2013, 221-231 (2013).

- Johnson, K.: Facebook gives up on making the world more open and connected, now wants to bring the world closer together. VentureBeat, https://venturebeat.com/2017/06/22/facebook-gives-up-on-making-the-world-more-openand-connected-now-wants-to-bring-the-world-closer-together/, last accessed 2018/1/6 (2017).
- 5. Kirkpatrick, D.: The Facebook effect: The real inside story of Mark Zuckerberg and the world's fastest-growing company. Virgin Books, London (2011).
- 6. Jarvis, J.: Public parts: How sharing in the digital age improves the way we work and live. Simon & Schuster, New York (2011).
- 7. Rachels, J.: Why privacy is important. Philosophy & Public Affairs 4(4), 323-333 (1975).
- 8. Lyon, D.: Surveillance studies: An overview. Polity Press, Malden, MA (2007).
- Facebook statement of rights and responsibilities, https://www.facebook.com/legal/terms, last accessed 2018/1/6.
- Parr, B.: Klout now measures your influence on Facebook. MashableAsia, http://mashable.com/2010/10/14/facebook-klout/#OXKYBVbB0GqW, last accessed 2018/1/6 (2010).
- Ha, A.: Klout users can now add Bing to their account and include Instagram in their score. TechCrunch, https://techcrunch.com/2013/03/28/klout-instagram-bing/, last accessed 2018/1/6 (2013).
- Miller, R. J.: Delete your Klout profile now!. SocialMediaToday, http://www.socialmediatoday.com/content/delete-your-klout-profile-now, last accessed 2018/1/6 (2011).
- 13. Garling, C.: Didn't get that new job? You need a better Facebook score. Wired, https://www.wired.com/2011/11/reppify-identified-facebook-linkedin, last accessed 2018/1/6 (2011).
- 14. VALU terms of use, https://valu.is/terms, last accessed 2018/1/6.
- 15. Timebank website, https://timebank.jp/, last accessed 2018/4/16 (in Japanese).
- 16. Nihon Keizai Shimbun: Widespread trade of "Like!". Nihon Keizai Shimbun, https://www.nikkei.com/article/DGXMZO29361450T10C18A4CC1000/, last accessed 2018/4/16 (2018) (in Japanese).
- 17. Meidakix: Are fake Instagram influencers deceiving brands?. Mediakix, http://mediakix.com/2017/08/fake-instagram-influencers-followers-bots-study/, last accessed 2018/1/6 (2017).
- 18. Family Romance, http://family-romance.com/service/realappeal.html, last accessed 2018/1/6 (in Japanese).
- Kierkegaard, S.: The sickness unto death: A Christian psychological exposition for upbuilding and awakening. Princeton University Press, Princeton, NJ (1980) (edited and translated by Hong, H. V. and Hong, E. H.).
- 20. Imamichi, T.: Eco-ethica, Kodansha, Tokyo (1990) (in Japanese).
- 21. Kimura, B.: Time and the self. Chuokoron-Shinsha, Tokyo (1982) (in Japanese).
- 22. Kimura, B.: The self as relations. Misuzu Shobo, Tokyo (2005) (in Japanese).
- 23. Heidegger, M.: Being and time. Harper & Row, New York (1962) (translated by Macquarrie, J. and Robinson, E.).
- 24. Goffman, E.: Stigma: Notes on the management of spoiled identity. Simon & Schuster, New York (1963).
- Lyon, D.: Surveillance society: Monitoring everyday life. Open University Press, Buckingham (2001).
- 26. Froomkin, A. M.: The death of privacy?. Stanford Law Review 52(5), 1461-1543 (2000).

- 27. Allmer, T.: A critical contribution to theoretical foundations of privacy studies. Journal of Information, Communication and Ethics in Society 9(2), 83-101 (2011).
- Acquisti, A., Gross, R.: Imagined communities: Awareness, information sharing, and privacy on the Facebook. In: Golle, P., Danezis, G. (eds.), Privacy enhancing technologies: 6th International Workshop, PET 2006, Cambridge, UK, June 28-30, 2006, Revised Selected Papers, pp. 36-58, Springer, Berlin Heidelberg (2006).
- 29. Murata, K., Orito, Y., Fukuta, Y.: Social attitudes of young people in Japan towards online privacy. Journal of Law, Information and Science 23(1), 137-157 (2014).
- 30. Orito, Y., Fukuta, Y., Murata, K.: I will continue to use this nonetheless: social media survive users' privacy concerns. International Journal of Virtual Worlds and Human Computer Interaction 2, 92-107 (2014).