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Ethics-related practices in Internet-based applied linguistics research

Abstract: Drawing on an analytic framework developed from ethical research guidelines and the relevant literature, this study analyzes and discusses the ways ethical issues were addressed by authors of 72 relevant journal articles on online self-representation in the field of applied linguistics. The results illustrate how researchers undertook efforts to fulfill ethical responsibilities in Internet-based research. They show how researchers' self-narrated concerns and contextual conditions have mediated ethics-related research practices as reported in these studies. The results indicate the need for researchers to enhance critical awareness and assessment of potential ethical issues when conducting Internet-based research. Such critical awareness is essential for researchers to initiate and sustain an ongoing dialogue concerning ethics-related research practices in Internet-based applied linguistics research.

Keywords: research ethics, Internet-based research, self representation

1 Introduction

The advances in Internet technology have been noticeably transforming the way we live and interact with each other, presenting researchers "a place for and a site of an array of research activities" to explore individuals' existence and social issues (Buchanan and Ess 2009: 43). The virtual world created by the Internet provides researchers with access to geographically dispersed populations, which would be otherwise difficult to reach (Madge 2007). Also, the possibility of preventing their identities from being made public encourages disadvantaged groups to speak up on sensitive topics (e.g. politics, crime and sexuality) in technology-facilitated interviews or online focus group discussions (Graber and Graber 2013). The distance between researchers and the researched also enables ethnographers to be a 'fly on the wall' during non-participatory observation to

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minimize disruption (Kozinets 2010; Boellstorff 2012; Kausel and Hackett 2015). These methodological advantages have motivated an increased number of inquiries to be undertaken online. In the field of applied linguistics, there has been a growing interest in Internet-based research. For example, naturally occurring data produced online are used to identify the linguistic patterns of speech acts (e.g. Vasquez 2011), to examine the public's engagement with social issues (e.g. Baker, Gabrielatos and McEnery 2013) and to explore second/foreign language learning (e.g. Kulavuz-Onal 2015). In addition, recent years have witnessed the rise in number of Internet-based studies that investigated online self-representation texts reflecting and displaying one's voice (Huang 2015), positioning (de Oliveira, Esteve and Camacho 2013) and identity (Luzón 2011).

Following this surge of interest in Internet-based studies, researchers have started an ongoing discussion on how to comply with ethical research principles when conducting research online (Bassettt and O'riordan, 2002; Buchanan 2011; Harriman and Patel 2014). Though some see such studies as text-based due to the open accessibility of online data, others treat such studies as human subjects research by using the word 'participants' particularly when considering social media materials (Page et al. 2014). These researchers felt obliged to take measures to protect the privacy of 'participants' (e.g. Stromer-Galley and Martinson 2009: 214). The blurred boundary between participants of online activities and (passive) participants in Internet-based applied linguistics research seems to be the place where the problem lies. In reality, no matter how researchers perceive their studies, individuals who produce online texts will be involved and could be affected. For instance, after the recent developments in search engines the identity of individuals is no longer safeguarded (Wilkinson and Thelwall 2011). It is now apparent that individual participants' identities can be traced with the increasingly sophisticated search engines if direct quotations of a considerable size are present in articles (Kraut et al. 2004), which complicates the ethics-related challenges in Internet-based applied linguistics research. In addition, researchers may need to reflect on some of the assumptions they have when studying online discourses. For example, they need to be aware that indiscreet use of publicly accessible online data that contain sensitive personal information can destroy the trust among the online users and harm potential participants if they are identified (Herring 1997). However, it is also true that absence of physical contact with potential participants in Internet-based research does create obstacles for researchers to fulfill their ethical obligations such as obtaining informed consent from all participants. In light of the growing interest in ethics among applied linguistics researchers (De Costa 2016), these complexities generate an imperative to identify ethics-related practices in Internet-based applied linguistics research. To this end, we conducted this review of
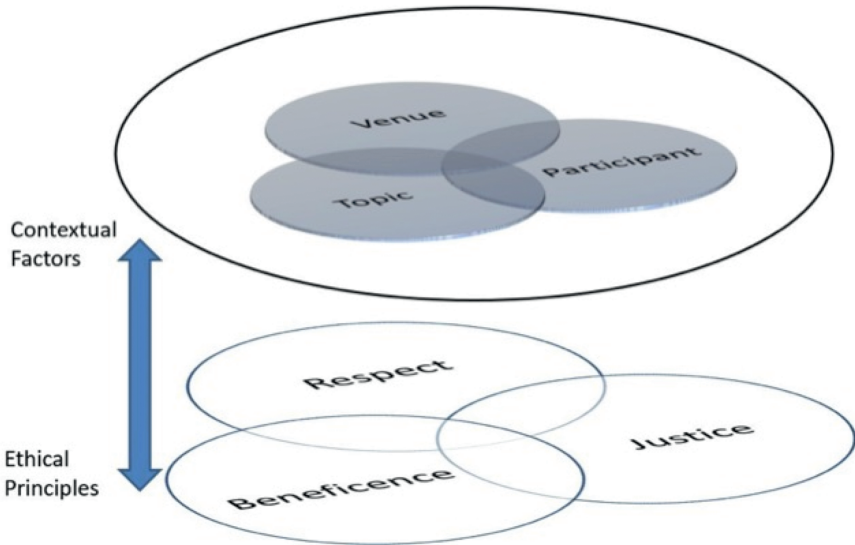
ethics-related practices in Internet-based research that explores and interprets individuals' online self-representation. Studies of this kind deal with netizen-produced texts on private aspects of their lives and often involve direct quotations of varying lengths. For these reasons, such studies are more likely to have ethical issues and thus deserve more attention. Our review answer the following questions:

1) How do researchers address ethics related issues in Internet-based applied linguistics studies?
2) How do research contexts mediate the researchers' observation of ethical research principles?

In the coming sections, this paper first discusses the relevant ethical guidelines on offline and online research to develop an analytic framework. It then describes the selection criteria and the process of relevant Internet-based applied linguistics studies to be examined. Informed by the analytic framework, we analyzed the application of ethical principles in the 72 selected articles to identify how researchers took steps to fulfill ethical responsibilities in Internet-based research. By analyzing what researchers did and what might have undermined their efforts to observe ethical principles, this paper intends to stimulate an ongoing dialogue concerning relevant ethical issues among applied linguists who are interested in conducting Internet-based research.

2 Ethical guidelines and principles for Internet-based research

As Internet-mediated communication blurs the boundaries between "alive/not alive, public/private, published/non-published, writing/speech, interpersonal/mass communication and identified/anonymous" as well as the online/offline (Trent, Gao and Gu 2013: 71), ethical issues need more attention from institutions or agencies responsible for the promotion of ethical research practices and research integrity. An early survey among Institutional Review Board (IRB) respondents indicated that Internet-based research ethics was commonly perceived as *not* an issue of concern and that more than half of the respondents did not have the relevant guidelines to review and evaluate Internet-based research design (Buchanan and Ess 2009). An examination of ethical research guidelines among major professional associations in the field

Figure 1: An analytical framework of ethics-related research conduct.

of applied linguistics has also revealed that only limited attention is being paid to ethical issues in Internet-based research. For instance, British Association of Applied Linguistics (BAAL) addresses the ethics-related challenges associated with Internet research in a brief section that acknowledges the varying nature of Internet environment affecting the effectiveness of informed consent and confidentiality. Applied Linguistics Association of Australia's (ALAA) ethical research guidelines do not have a section on Internet research though the association claims that its guidelines are based on those of BAAL. Although it is not clear why this change happened, the deletion of that section could be seen as an indication that the association does not intend to make extra efforts to regulate ethical practices in online contexts. Likewise, American Association of Applied linguistics (AAAL) does not provide ethical guidelines on Internet-based research while American Psychology Association's (APA) ethical code of conduct contains no remarks on Internet-based research. Due to such lack of references, we developed an analytic framework (see Figure 1)from both ethical guidelines for offline research involving human subjects and Association of Internet Research's (AoIR) interdisciplinary guidelines for ethical online research practices for this review (Bruckman 2002; Ess and AoIR ethics working committee 2002; Kraut et al. 2004; Markham and Buchanan 2012). The two versions of AoIR

recommendations take "a dialogic, case-based, inductive, and process approach to ethics" (Markham and Buchanan 2012: 5), which pays attention to the shifting and unique context of each Internet-based study and the importance of being responsive throughout a research project. Such approach echoes the call for more attention to *microethical* governance in *TESOL Quarterly* Research Guidelines, in which researchers are reminded to make ethics-related research judgements *in situ* (Mahboob et al. 2016). The analytic framework guided our analysis of researchers' observance of ethical principles in Internet-based applied linguistics research.

These guidelines acknowledge the importance of contextual factors in ethics-related considerations when conducting Internet-based research. For example, informed consent, one of the key ethics-related practices, is often used to illustrate how responsible judgments are made *in situ*. First, the nature of online environment plays a role in deciding whether informed consent should be sought. It is foremost to check a website's policy on whether the data are publicly accessible. Moreover, since site policy sometimes conflicts with Internet users' expectations, more and more researchers are recognizing that the concept of public/private should better be conceived of as a continuum (Elm 2009). Ethics-related decisions also depend on the sensitivity of the topic that the data touch upon. It is anonymity in the virtual world that attracted individuals to express their stances towards sensitive issues and to seek help on personal problems. Since these individuals are often at risk, the vulnerability of the studied influences the ethics-related decisions that researchers make. In a nutshell, the three factors – venue, topic and participant – are interrelated and should be taken into account together so as to make "practical, reflective judgment[s]" (Ess 2009: xiv). Therefore, instead of imposing stringent codes of conduct for evaluation, this paper proposes an analytic framework *in situ* that encompasses the three factors and guides researchers' reflexive responses to ethics-related challenges in Internet-based research.

The analytic framework also centers around "ethical pluralism" (Ess 2002: 3). To address the dynamism of the Internet environment and to cope with the advancement of technology, ethical pluralism underlies the advocacy for guidelines instead of a set of prescriptive codes to address ethics-related challenges in Internet-based research. The three ethical principles in *Belmont Report*, the foundation of ethical research practices, have been incorporated into our analytic framework (Buchanan 2011). They include respect for persons, beneficence and justice. Respect for persons is primarily practiced through the process of informed consent; beneficence refers to the obligation to minimize harm; and justice addresses special protection for the

vulnerable population (*ibid.*). Internet-based applied linguistics research on self-representation may have to address these issues through ethics-related decisions made on a critical evaluation of the venue, topic and participants involved in a given research site. For instance, the concept of vulnerability may extend to a wider online population because the technology-enhanced traceability of personal information and identity under certain conditions may put netizens in a less-protected position. Such ethics-related assessment needs to be conducted in an ongoing manner in every stage of the research, and to inform a plurality of ethics-related decisions that differentiate one study from another.

3 The study

This review was stimulated by our recent involvement in an edited volume on research ethics in applied linguistics (Gao and Tao 2016). Our critical reflection on Gao Internet-based applied linguistic research motivated us to undertake a more comprehensive analysis of how ethics-related issues have been addressed by applied linguists at large. Due to budgetary and time constraints, we limited our review to studies published in Social Sciences Citation Index (SSCI)-indexed and language-related journals during 2000–2014. The time frame of the review period is based on the fact that the concept of Web 2.0 was introduced after 1999, which led to astronomical growth of netizen-generated content for researchers to explore (Barton and Lee 2012). We started the literature search with journal selection and consulted the library to which we are all affiliated with. We acquired a recommended list of relevant journals from the library. Then the scope of each journal was carefully read to evaluate if it was likely to have published studies on online self-representation. The first and second author selected 46 such journals. After being cross checked by the third author, 45 journals were included in the search for relevant studies while one journal, *Journal of Business and Communication*, was excluded because of its limited relevance to our focus on online self-representation.

We established three criteria for identification and selection of studies for close examination. Firstly, studies to be included should have used netizen-produced texts written naturally rather than for any research purposes. For this reason, we excluded studies in which online language learners were required to write about themselves. In such studies (e.g. Miyazoe and Anderson 2010), researchers usually have more control of the situation, and

participants, usually being students at the same institute of the investigators, have the awareness of being researched and thus ethical procedures similar to off-line studies should apply. Our second criterion is that before the completion of research, investigators do not have off-line relationships with all participants. Lastly, for focusing on online self-representation studies within the field of applied linguistics, only qualitative or mixed-method studies which display extracts from netizen-produced texts were included. Quantitative studies that use online texts on a large scale for generation of statistics for the sake of mass surveillance, commercial processes or law enforcement, etc., can also entail ethical issues but they are beyond the scope of this paper.

When selecting relevant articles, we used a list of keywords including *online, Internet, cyber, virtual, network, media, chat (room), Facebook, YouTube, Twitter, newsgroup, BBS, web(sites), (we)blog, instant messenger* and *MSN*, to search in the titles and abstracts of articles within the 45 journals. The second author scanned through every article in the search results and filtered out studies that did not meet our selection criteria. Finally, 72 articles were selected for further examination after being double checked by the first author (see the appendix). Since published studies are subject to critique, we did not seek consent from authors for including their works in this paper. In the examination stage, we read through all the articles carefully to see if anything related to research ethics was mentioned. Then, we read these ethics-related statements twice and conducted word-by-word coding on them before we identified various types of research ethics-related conduct, consent acquisition and anonymization for instance, and counted the number of each type. The ethics-related considerations mentioned by researchers, such as the difficulties in obtaining informed consent, were also documented and calculated. This was to yield an overall picture of these online researchers' efforts to address ethical issues based on their writings, which will be reported in the next section. Based on the above mentioned overall picture, we adopted the analytic framework to examine all 72 selected studies through multiple readings to find out why and how researchers addressed the three ethical principles in specific ways, in a given context. In addition, we also identified certain ethical risks arising from the contextual condition of these studies, which should have been addressed more sufficiently and warrant further discussion. By doing so, we intend to obtain an in-depth understanding of the complexity of ethics-related challenges when applied linguists conduct research in the virtual world.

4 Ethics-related research practices: an overall picture

We start our findings with statistical results on Internet researchers' ethics-related conducts and concerns to answer the first research question. This section reports on 1) forms of ethics-related conduct; and 2) ethics-related considerations that were verbalized or manifest. The analysis showed that 36 of the 72 articles had directly addressed ethical issues in either Methodology or Note section. It was noted in the analysis that these ethics-related statements primarily draw on traditional off-line ethical procedures, invoke guidelines prescribed by academic and professional institutions and rely on specific challenges and difficulties to justify individual case-based solutions. The other half made no explicit mention of ethics-related considerations in writing though this does not mean that these researchers have not considered relevant ethical issues in practice. Despite the lack of explicit references to ethics-related considerations, it should be acknowledged that 11 of this half did offer certain means of protection to their participants through removal or alteration of names.

4.1 Forms of ethics-related conduct

As seen in Table 1, different forms of ethics-related conduct mentioned in the 36 articles include anonymization, consent acquisition, invocation of ethical research guidelines, personal information disclosure and researcher intervention.

Table 1: Forms of ethics-related conduct.

Ethics-related Conduct	Anonymization	Consent acquisition	Invocation of ethical guidelines	Personal information disclosure	Researcher intervention
Paper number	25	16	6	4	2

4.1.1 Anonymization

The most frequently mentioned form of ethics-related conduct is anonymization, explicitly stated in 25 research articles. The process of anonymization was

referred to by the authors as the conduct to avoid the disclosure of real (screen) names of participants. Our examination suggests that anonymization was often understood as the alteration or removal of names, which can be illustrated by the following ethics-related statement:

Extract 1
Names of participants have been changed to protect their anonymity (Stromer-Galley and Martinson 2009: 214).

More specifically, among the 25 articles that mentioned anonymization, twenty-four of them converted real (screen) names of participants into numbers or pseudonyms. In one study, however, original screen names were used as data to be analysed. The following statement indicates that researchers sometimes think of screen names as not linked to real-life identities and disclosure of screen names is therefore not problematic:

Extract 2
… there is no way of knowing whether these are the commenters' "real" names. However, such names do serve as potential rhetorical resources for commenters, hence they are treated as data … (Hastie and Rimmington 2014: 191)

4.1.2 Consent acquisition

Apart from anonymization, authors in 16 studies addressed issues concerning consent acquisition, which is the second most frequently used form of ethics-related conduct mentioned in the 36 articles. However, among them only 10 studies acquired informed consent. Table 2 shows how researchers of the 16 studies treated consent in different ways.

As shown in Table 2, eight of the 16 studies explicitly stated that informed consent from participants was acquired while two obtained it from

Table 2: Treatments of consent.

Treatment of consent	Informed consent from all participants	Informed consent from administrator	Consent from part of participants	From whom not clear	Not acquired
Paper number	8	2	2	1	3

Note: We believe it is important to differentiate informed consent from consent only.

administrators of the sites (i.e. online community service purveyors). Among the rest, two studies sent invitations to potential participants and collected data only from those who agreed to participate. However, there is often a lack of transparency in relevant ethics-related statements. For instance, one study claims in one sentence that consent was acquired. There is no mention of how/from whom consent was gained:

Extract 3

Permission was gained to use the archives for research purposes. (Simpson 2005: 339)

Statements in three articles suggest that the authors considered the ethical issue of consent. Meanwhile, they argued that in their research context it was impossible or impracticable to acquire informed consent. For example, one author argued that

Extract 4

... it is usually impossible or impracticable to obtain consent from all the individuals involved. (North 2007: 554)

Conversely, despite the inconvenience and difficulties in practice, authors who obtained informed consent from participants adopted different ways of online communication with the participants, such as email or internal mailing system. The following examples illustrate how they made efforts to obtain consent from participants:

Extract 5

... we used Facebook itself (the "wall") to inform participants about the research. None of them manifested any disagreement. (Maíz-Arévalo and García-Gómez 2013: 743)

Extract 6

Members of the closed discussion group have been asked for permission to study their messages and only e-mails from writers who gave their consent were included in the analysis. (Tanskanen and Karhukorpi 2008: 1589)

4.1.3 Invocation of ethical research guidelines

In statements regarding ethics-related research conduct, invocation of ethical research guidelines was also used as a strategy to address ethical issues. Table 1 suggests that authors of 6 studies relied either on ethical research guidelines prescribed by academic organizations such as the British Association for Applied Linguistics (BAAL) or on the ethics-related conduct of other researchers in previous publications, in order to justify their own ethics-related decisions. In one of the studies quoted earlier (North 2007), the author who thought of informed consent as impossible and impracticable drew on suggestions by another researcher and guidelines by an academic organization:

Extract 7

I followed the guidelines suggested by Bruckman (2002): the site is open access, the data is archived and accessible to the public and the research did not contravene site policy nor involve sensitive issues. These features, together with the use of pseudonyms to protect online identities, also bring the research in line with draft recommendations of the British Association for Applied Linguistics ... (North 2007: 554)

4.1.4 Personal information disclosure

As anonymization was applied only to names, other forms of personal details may compromise people's identities. These personal details, such as IP address, avatar, photograph, home address, age and nationality, were considered by authors of four studies, who made explicit statements about personal information disclosure. Two of them did not include any information of the participants while the other two studies modified the details as in the following quotes.

Extract 8

We ... modified person-related information in the excerpts such as geographical location and age, to ensure the privacy of participants. We also modified the dates of the postings for greater anonymity. (Stommel and Koole 2010: 362)

Extract 9

... the present study only quotes textual data as examples to illustrate the aspects under analysis. All the names or references to participants as well as photographs or any other identifying devices have been eliminated. (Maíz-Arévalo 2013: 51)

4.1.5 Researcher intervention

Lastly, the least frequently mentioned form of ethics-related research conduct has to do with researcher intervention, which not only brings up the question about the quality of research in terms of objectivity, but also potentially affects or even endangers online participants' life in situations when the relevant research topics are relatively sensitive. The two cases identified in our study indicate that researchers tried to clarify their non-participatory role during the production of the texts used as data. For instance, del-Teso-Craviotto (2008)'s research explored chatroom interactions on LGBT issues. The author clearly stated that she did not intervene in the process of online communication between participants. If the researcher, however, had pretended to be a member of the LGBT community to elicit some responses (e.g. dating invitation), serious ethical issues would have emerged.

Extract 10

I did not participate in the interactions that were actually recorded so as not to interfere with the data. Instead, I participated in the chat rooms when the conversations were not being recorded to familiarize myself with the environment. (del-Teso-Craviotto 2008: 254)

In Knapton (2013), it was explicated in the statement that data from pro-anorexia websites was collected without researcher intervention or elicitation.

Extract 11

... at no point did the researcher register on any websites or interact with any of the members in order to gain information (Knapton 2013: 466)

The above examples illustrate the various types of ethics-related conduct in the selected Internet-based research works. In what follows, we focus on ethics-related considerations behind the ethics-related conduct.

4.2 Considerations when faced with research ethics

Behind the above cited instances of ethics-related conduct, our coding of the 36 articles that mentioned ethical issues also revealed authors' consideration of some contextual conditions relevant to research ethics. Table 3 presents these considerations followed by detailed explanations.

Table 3: Considerations of research ethics.

Consideration	Accessibility	Registration	Site policy	Sensitivity	Vulnerability	Difficulty
Paper number	7	2	2	2	3	3

Seven articles mentioned accessibility of data and all claimed that their data source(s) (e.g. websites or discussion forums) were open to public and that anybody could gain access to the data gathered. This seemed to imply that conducting research on the data does not violate the privacy of those who contributed the data and for this reason, informed consent was unnecessary (also see North 2007). This was the consideration of site registration as two studies mentioned that the research sites did not require registration. This means that the data could be accessed without the requirement that researchers must become one of the internal members.

Two articles mentioned site policy. One claimed that if the name of website was mentioned, all data on the website could be used for free. The other (North 2007) claimed that the site policy was not contravened but did not mention what the policy was. In addition, two authors relied on the sensitivity of topics to justify their research conduct. North (2007) declared that the topic was not sensitive (creative humorous interactions online) and therefore, informed consent was considered unnecessary by the author. The other is Stommel and Koole (2010) who admitted that the sensitivity of its topic (eating disorder) would require informed consent. Three mentioned vulnerability of participants with one (Maíz-Arévalo and García-Gómez 2013) deeming its participants as not vulnerable and the other two (Stommel and Koole 2010; Smithson et al. 2011) admitting their participants might need special protection (that is, people with eating disorders and young people who may inflict harm on themselves). Lastly, authors of three articles (North 2007; del-Teso-Craviotto 2008; Stommel and Koole 2010) talked about the difficulties of online self-representation to justify the use of traditional procedures to address research ethics. Because of the difficulties in the context of del-Teso-Craviotto (2008) to get informed consent from every single participant, the author acquired informed consent from the site administrator.

In conclusion, half of the authors of the 72 articles included explicit statements concerning research ethics. The forms of ethics-related research conduct involve anonymization, consent acquisition, invocation of ethical research guidelines, personal information disclosure and data elicitation by the researcher. When making these decisions, researchers apparently also

considered accessibility of data source, requirement of registration, site policy, sensitivity of topic, vulnerability of participants and difficulties of following offline ethical research procedures. To gain a more in-depth understanding of Internet research ethics, the next section illustrates why online researchers observed the three ethical principles in specific ways and why some of them still need to undertake more efforts to address potential ethical issues in light of the analytic framework.

5 Observation of ethical research principles and contextual conditions

This part presents observations of the three ethical research principles in the reviewed studies, and in the discussion of each principle, researchers' self-narrated concerns and contextual conditions are used to illustrate how they mediated or should have mediated ethics-related research conduct (Research Question 2).

5.1 Respect for persons

The principle of respect for persons was exercised typically in elicitation of informed consent from the involved participants (Buchanan 2011). Compared to offline research, our examination revealed significant variations in online researchers' decisions with regard to whether, when, how and from whom they elicited informed consent. The analysis also identified that their ethics-related decisions might have been mediated by different contextual factors including data accessibility, vulnerability of participants and sensitivity of the data.

Researchers tend to exempt their online studies from informed consent in cases when they perceive certain Internet venues to be publicly accessible. Thus the perceived accessibility of online research sites constitutes an important determinant of whether informed consent is required. Extract 12 illustrates how ethics-related concerns can be addressed when using public and private online data including mail lists and closed discussion groups.

Extract 12

As our material includes e-mail messages from a closed discussion group, a few words are in order as to the ethical implications of using such material. Mailing

lists with public archives ... are generally regarded as unproblematic in this respect, whereas closed discussion groups are considered private and consequently the same guidelines apply as with face-to-face material: informed consent from all the subjects is a requirement. The members of the closed discussion group have been asked for permission to study their messages and only e-mails from writers who gave their consent were included in the analysis. (Tanskanen and Karhukiorpi 2008: 1589)

As can be seen in the extract above, the authors address the two types of data separately in terms of the necessity of seeking permission from participants. According to their understanding, the mail lists are publicly archived and thus "regarded as unproblematic" if they did not obtain informed consent from the participants. In contrast, since closed discussion groups are private, they found it necessary to follow the offline ethical research guidelines by obtaining consent from each participant. The different reactions towards public and private data reveal that researchers' ethics-related decisions with regard to informed consent are largely mediated by their perceptions of research sites' accessibility.

While the above example also reveals the public/private divide of the virtual world, more and more researchers have displayed an increased awareness of the uniqueness of online social networks in their ethics-related decision-making. For instance, Facebook was perceived as a "semi-private" arena, which has unique ethics-related challenges for researchers to address in Extract 13.

Extract 13

As argued by Paccagnella (1997) ... messages posted on semi-private arenas like Facebook ... In the current study, however, we have adopted an intermediate solution; that is, the data were gathered without informing participants a priori so as not to prejudice their behaviour. Once all the data were collected, we used Facebook itself (the "wall") to inform participants about the research. (Maiz-Arevalo and Garcia-Gomez 2013: 743)

Although the researchers found references to argue for the public nature of Facebook, they decided to elicit informed consent from participants but postponed it till the completion of data collection. This was considered "an intermediate solution" that can reconcile the fulfillment of ethical responsibility and the need to maintain a site for naturalistic research. It is also interesting to note that the researchers made use of the online research site itself – the Facebook wall – as a means of informing the participants about the research. Using research sites to inform potential participants echoes Mahboob et al.'s (2016)

proposal that consent forms should be made more accessible and acceptable to the target participants in a medium that they are mostly familiar with. After all, not all online users are used to reading and writing emails as researchers do and for this reason, they should be respected in their own way of information gathering. Likewise, Barton and Lee (2012: 287) researched an online photo-sharing community Flickr and "made extensive use of Flickr's private email system, FlickrMail" to send invitation letters to individual users. These studies show that researchers can contact online participants to obtain informed consent by using the research site itself.

As demonstrated in Extract 13, informing participants of the research afterwards was adopted by online researchers to remain unobtrusive among the researched. However, we had no clue as to whether there were objections from group members and, if so, how would that affect the ethics-related decisions of data usage. In terms of consent, we find it worth quoting Baron (2004) who similarly informed the participants after data collection but made concerted efforts to offer more freedom to participants in terms of what to consent for. The research focused on instant messenger interactions. The conversations between the interlocutors, unlike postings on forums, were private rather than open to the public. In this case, instead of consenting to the data as a whole, the participants were provided options to edit and delete any words/turns in the data – their instant message conversations:

Extract 14

Formal consent forms were distributed electronically to all parties (student experimenters and their conversational partners) at the end of the IM conversation. Both members of each conversation were given the opportunity to edit out any words or turns they wished to delete (an option rarely taken) ... (Baron 2004: 407).

By doing so, the researcher was able to show respect to the participants in a way that they could have more voice. This study also reminds us that researchers may need to not only inform potential participants about their research but also seek their approval as to what can be included in their studies. We believe that such a measure is necessary when the sensitivity of topics and vulnerability of participants complicate the setting, as shown in Extract 15.

Extract 15

The sensitivity of the topic and the vulnerability of the participants require a critical consideration of the ethics for an analysis of such a forum. Informed consent would be ethically most secure (Ess 2002), but difficult. Contacting the

participants may cause harm, since the community could experience the interest of the researcher as obtrusive. Moreover, in many cases it is impossible to reach participants, because participant information is concealed. Therefore, we have first gained informed consent from the administrators of HO for the use of the (public) HO archive from 2005. Initially, they inhibited contacting participants directly to protect the community. However, we got permission to seek consent for the publication of literal quotations from the HO authors if participants' contact details were available on the personal HO profile. None of the respondents objected to their words being published. (Stommel and Koole 2010: 361–362)

The sensitivity of the topic and vulnerability of participants are sometimes independent and sometimes intertwined as factors that profoundly mediate researchers' ethics-related decisions. Stommel and Koole (2010) demonstrates how researchers can address both challenges simultaneously. As can be seen in the extract, the study examined forum threads to reveal how newcomers seek legitimacy for membership of an online support group where participants talked about health-related issues. Even though the textual data derived from forum threads are publicly accessible and might be exempted from informed consent, the author took note of the sensitivity of the topic and vulnerability of the participants and concluded that the context "requires a more critical considera-tion" of these ethical issues (Stommel and Koole 2010: 361). In the meantime, there were also dilemmas concerning the effect and difficulty of consent elicita-tion in the online world. They had misgivings that their presence in the middle of the discussion and communication with the participants would be obtrusive to the community. They were also concerned that the availability of contact information and the fluidity of contributors in online forums often prevent researchers from getting permission from all the participants. To make a balanced decision, the researchers sought consent from the website adminis-trators to use the archived data in the beginning and from the contributors to publish the data at the end. It is revealing that the researchers distinguished data access from inclusion of data extracts in publication in terms of from whom and when to elicit informed consent, which reflects a critical assessment of the contextual conditions in ethics-related decision-making.

The above five examples demonstrate the variations in how informed con-sent was practiced in different online settings. In terms of exemption from informed consent, it seems rather straightforward to tackle data in public and private domain but our database revealed more of complexity. First, we see efforts to break down the public/private dichotomy in this networked world. Although the cyberspace provides an enormous storage of publicly accessible

data, the majority of online interaction is "governed by both personal and communal norms ... and networked" (D'Arcy and Young 2012: 532). Instead of having a clear-cut divide, it may be more desirable to see them located on the continuum between the private and public ends, which makes ethics-related decisions more complex. Moreover, to define privacy requires "a consideration of expectations and consensus" in the AoIR guidelines (Markham and Buchanan 2012: 7). The 2012 AoIR guidelines further argue that researchers can hardly reach consensus in the constantly shifting online terrains. For this reason, research participants' expectations of privacy are often ignored in Internet-based research. It is important to notice that participants in publicly accessible online sites responded with hostility in some research when informed that they were being studied, (Hudson and Bruckman 2004). More attention needs to be paid to the participants' perceptions of privacy, for instance, by taking into account sensitivity of topics and vulnerability of participants. These two contextual factors, as shown in Extract 15, could shape the perceived nature of an online research site and complicate the decision and practice of informed consent. Therefore, we argue that researchers need to more critically evaluate the research site, especially when exploring sensitive topics and vulnerable populations to inform participants of their research and show respect for them.

5.2　Beneficence

Under the principle of Beneficence, researchers are obliged to maximize benefit and minimize the harm for society and sometimes for participants (Eikelboom et al. 2012). In applied linguistics research, the principle of beneficence is primarily articulated in the practice of protecting the privacy of participants so as to prevent any potential harm.

Many researchers in our study conceived of anonymization as the ultimate way to protect the privacy of participants probably because they believe names are the only identifiable information. Extract 16 was selected in a study that investigated how talk about Nazis was used in Facebook group discussions about asylum seeking. When presenting the conversational data, the authors assigned each quotation a number and added the note in a parenthesis saying "name removed" (Burke and Goodman 2012: 27). However, such ethics-related decisions do not work in concert with the ethics-related statement in Extract 16. The extract published the URLs as well as names of the selected Facebook groups that indirectly exposed the identities of group members to readers.

Extract 16

The URLs for group pages are included as notes wherever the pages are still known to be available ... [Names of the groups are omitted] Six groups were selected for analysis ... These particular groups were selected for analysis because they contained discussions related to racism and Nazis. (Burke and Goodman 2012: 22)

We suspect that the authors might have included the Facebook group information to enhance the transparency of data collection. Unfortunately, this might have compromised the effect of anonymization.

As using pseudonyms usually ensures privacy in offline settings, this case reveals that online researchers failed to take into account the peculiarity of online environment in which a person can be traced and identified via other information. In view of such conflicting ethics-related conducts, we argue that researchers should be aware of the misconception that equates privacy protection with anonymization alone in the networked world. In contrast, Extract 17 showcases an exemplary case of the "cleaning process" with explicitly articulated ethics-related concerns of the researcher. Prentice (2010) focused on the Scottish nationalist ideology through analyzing the data derived from a pro-Independence Internet discussion forum. Similar to the previous case, the study touches upon a sensitive topic that requires more caution with data presentation. In addition to replacing screen names with pseudonyms, the researcher removed all information relating to the participants, postings as well as other identifiable information.

Extract 17

... this cleaning process involved the removal of all information relating to the authors of the postings (i.e. their usernames), information relating to the postings themselves (i.e. the date and time of the posting) and any surrounding information that had appeared on the original web page (i.e. text relating to advertisements and links to other areas of the website). Although such information may no doubt be of interest to many researchers, the foci of the present study are the views expressed by the participants, and therefore it was deemed appropriate (and ... ethical) to remove all other material. (Prentice 2010: 412)

What's worth more attention is that the above-mentioned protective steps were taken only after being weighed against the benefit of including other data-related materials; those materials are also assessed in relation to the research foci to justify the relevant ethics-related decisions. Such statements indicate that ethics-related

decisions require a deliberate decision-making process in which the researchers need to keep research foci in mind, and compare benefits and risks.

Research conducts reported in other studies, however, imply the lack of deliberation to assess the potential harm when researchers deal with self-deleted data and images on the Internet. Two examples warrant discussion. Pihlaja (2014) explored religious issues in a small YouTube community. The data involve antagonistic debates between a self-proclaimed atheist "Crosisborg" and a Christian "Yokeup" including many insulting arguments. One of the selected videos was reportedly removed by the user in the end, but it was still used as part of data in the article.

Extract 18

Yokeup defended calling Crosisborg "garbage" by saying the term was actually taken from the Bible ... in one video which he eventually removed. (Pihlaja 2014: 626).

The publication of relevant comments associated with that video obviously is against the intention of the user who had deleted the video to avoid further publicity. Considering the topic as an extremely sensitive one, it would be imperative for the researcher to undertake a thorough assessment of the potential harms that data publication might cause to the target participant before using relevant data. In such circumstances, researchers need to contact and discuss with the content producer(s) directly about their perceptions of privacy (Page et al. 2014).

Other cases entail screenshots/images that can be easily downloaded from the Internet. Zhang and Kramarae (2014) collected and examined netizens' response to a warning message posted by Shanghai No. 2 Metro Operation Company on Weibo, China's Twitter. In the message, a photo of a woman wearing a black see-through dress was used as a bad example to warn women to dress appropriately to avoid sexual harassment, which sparked a series of heated debates. The authors inserted a screenshot of the message including the picture of the protagonist that is used to set up the stage for data analysis. However, such an act likely expands the negative impact on the woman by spreading the picture to a larger audience. In view of the research focus on social media discussants' discursive activities, we question the necessity of publishing the screenshot in the article. Though images probably do deliver a better effect than verbal descriptions, we suggest that researchers assess the potential harm to the involved subject and weigh the harm against the benefits of using visual aids.

In a world of advanced search engines, researchers may need to take note of the increased possibility of tracing quotations back to authors even if anonymization is applied (Walther 2002), and thus take more protective measures in terms of

data presentation. In particular, the usage of self-deleted data is against the will of relevant user(s) while web-generated images could cause copyright problems in some countries (Markham and Buchanan 2012). Thus it is desirable for researchers to handle online data with more caution in both studies. In either case, we argue that researchers undertake a more critical assessment of the potential harm that cannot be reduced by anonymization alone. Moreover, it should be noted that "a priori assessment of risk might be useful but inadequate" (*ibid*: 10). To respond to the ethics-related challenges arising from the situated contexts, it is also necessary for researchers to evaluate potential harm throughout the research process and weigh it against benefits when making ethical research decisions.

5.3 Justice

The third principle, justice has multiple interpretations in the literature. The *Belmont Report* emphasizes distributive justice, which may be particularly salient in certain biomedical studies that used to do clinical trials in developing countries while distribute improved medicine in developed countries only. Others relate justice to the provision of special protection to the vulnerable (Eikelboom et al. 2012). According to Lange, Rogers and Dodds (2013: 333–334), vulnerability is understood in a two-fold way:

> On one hand, vulnerability refers to a universal shared frailty or susceptibility to harm, giving rise to the idea of universal protection for research participants. On the other hand, vulnerability picks out particular persons or groups who are susceptible to specific kinds of harm or threat.

While the word 'vulnerability' of particular persons or groups was mentioned in some of the studies we examined (e.g. Stommel and Koole 2010), the protection of special groups requires more measures so that the principle of justice could be observed. Moreover, netizens' universal shared susceptibility to harm in the online networked world tended to be underestimated or ignored. In our examination of the 72 research articles, various types of information that could be used to trace individuals was unnecessarily disclosed in our opinion, including usernames, posting time, screenshots, IP addresses and URLs. This indicates that researchers might not be aware of the fact that everybody online is vulnerable to attacks of cybercrime, hacktivism and cyberterrorism (Stohl 2006). In particular, online self-representation texts expose netizens to a worldwide readership that offline writings can hardly achieve, and risks have also increased considerably. Recent news coverage has shown that people have been hacked to death because of their political or religious remarks online (e.g. The Guardian 2015). While netizens may exert their right to be forgotten by deleting their own postings, they do not have the option to delete an

academic work, published offline and/or online, in which their remarks are perpetuated.

Additionally, many online language-related studies fail to address the interest of the researched as they treat online participants as merely the objects to be researched and resourced. Such scenario may result from our review criteria, as a number of studies on language teaching and learning that should have pedagogical implications are excluded because of the existence of offline relations. One of the few reviewed articles in our database that showed attempts to take into account the interest of involved participants is Gao study. The examined the threads of a language-learning forum organized by a group of English learners.

Extract 19

The study offers a few insights to language teachers ... the study suggests that language learners should be encouraged to believe that English is a meaningful medium for them to share their experiences, reflections, emotions ... It also reminds language teachers of the importance of fostering and maintaining a strong sense of community among learners ... they may need to value language learners' collective learning memories, ... language teachers should acknowledge learners' capacities in organizing and developing their own learning communities and sustaining their own language learning efforts as revealed in the paper. (Gao 3 2007: 268).

By tapping into the virtual lives of language learners, the study offers insights into how language teachers can guide learners to sustain autonomous language learning efforts beyond the classroom. In a highly indirect and arguable way, the researcher demonstrated some awareness of interest of the researched and intended to serve their interest by generating pedagogical implications. Though the issue of justice in applied linguistics research may not be so salient or imperative in comparison with medical research, it is still necessary for researchers to demonstrate their awareness of potential participants' interest whenever possible.

It is noteworthy that the advent of Internet has redefined vulnerability, extending it to a larger population of participants who need special protection. The increased possibility of including vulnerable participants requires researchers to evaluate vulnerability of the researched more critically and provide special protection whenever needed. In addition, the interest of the researched needs more attention. When being enabled to capitalize on the virtual lives of participants to collect data for research purposes, we researchers should also enhance our awareness of the interests of online participants and represent the researched (Canagarajah and Stanley 2015).

6 Conclusion

As the medium and site of data collection, the Internet has enabled researchers to work on a wider horizon of topics and population but it also imposes ethical issues that deserve more attention. Although our review endeavor has been limited by our foci, i.e. online self-representation studies in SSCI journals, and therefore any effort to generalize our findings needs to be done with caution, our examination of the 72 articles did reveal the various attempts were made to cope with ethics-related challenges in Internet-based research. The results also indicate the need to enhance critical awareness and assessment of potential ethical issues in Internet-based research. The analysis has revealed that some researchers may need to critically reflect on their beliefs such as open accessibility granting the permission to use online data for research. They need to become aware of the increased traceability of individuals with other relevant personal information and its potential risks imposed on the researched. The complexity of the phenomenon of online self-representation adds more ethical dimensions which researchers in traditional off-line settings are not faced with. Thus we argue that online researchers are advised to attend to the uniqueness of the virtual world in which they need to evaluate the contextual conditions more critically. In light of the three ethical research guidelines, such evaluation enables researchers to make informed decisions of ethics that may differ one from another research.

However, by arguing for the need for researchers to make informed ethics-related decisions in Internet-based research, we do not intend to trigger an "alarm among institutional review board members" (Jones 2004: 180) or promote a new set of procedural ethical principles for researchers to observe in Internet-based research. We understand that a set of clearly defined guidelines for ethical Internet-based research practices has many advantages, but we are also aware that the definition of ethical research practices is often context-dependent and different researchers may have different understandings (Hammersley 2006). In addition, as new challenges arise from the shifting online terrains such as *Duolingo*, it is considered impossible to have a set of rules to govern the ethics-related conduct of Internet research (Markham and Buchanan 2012). We are also much aware that researchers have been often under administrative censure with regard to ethical research practices in different contexts and that it is questionable whether such administrative censure itself is ethical (Jones 2004; Madge 2007). What we need is a much internalized critical awareness of ethical research practices and their relevant challenges. For this reason, we need an ongoing collegial discussion to deepen our critical understanding of the unique ethics-related challenges posed by different Internet sites and to increase "our commitment to

established ethical principles" (Thomas 2004: 188; Gao and Tao 2016). The dialogue should not be confined to Internet-based researchers but it should also involve those who are responsible for regulating and monitoring research ethics at different levels. By sharing our first-hand experience, researchers can keep research ethics gatekeepers updated on the renewed ethics-related challenges and solutions in the cyberspace when formulating research ethics guidelines and reviewing research ethics applications. We also need to be fully aware what benefits and harms our research activities online may bring to unknown research participants so that we can conduct research in a responsible manner. Guided by ethical pluralism, our study suggests that researchers need to be well-informed of the specific contextual conditions to make a critical assessment of the ethical research needs, and also remain flexible and reflexive to their ethics-related decisions responding to the invariably changing online terrains in every stage of their studies.

Appendix: Studies included

No.	Title	Author(s)	Year	Journal
1	'The voices, the voices': Creativity in online conversation	North, S.	2007	Applied Linguistics 27/4: 538-555.
2	Redefining vernacular literacies in the age of Web 2.0	Barton, D., and Lee, C. K.	2012	Applied linguistics 33/3: 282-298.
3	Ironic blackness as masculine cool: Asian American language and authenticity on YouTube	Chun, E. W.	2013	Applied linguistics 34/5: 592-612.
4	Moral logic and logical morality: Attributions of responsibility and blame in online discourse on veganism	Sneijder, P., and Te Molder, H. F.	2005	Discourse & Society 16/5: 675-696.
5	Scraping the barrel with a shower of social misfits: Everyday creativity in text messaging	Tagg, C.	2013	Applied linguistics 34/4: 480-500.
6	Staging gender online: Gender plays in Swiss internet relay chats	Rellstab, D. H.	2007	Discourse & Society 18/6: 765-787

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No.	Title	Author(s)	Year	Journal
7	Racism and xenophobia in immigrants' discourse: The case of Argentines in Spain	del-Teso-Craviotto, M.	2009	Discourse & Society 20/5: 571-592.
8	Talking the talk: policy, popular and media responses to the bicentenary of the Abolition of the Slave Trade using the Abolition Discourse	Waterton, E., and Wilson, R.	2009	Discourse & Society 20/3: 381-399.
9	Disembodiment and cyberspace: Gendered discourses in female teenagers' personal information disclosure	Gómez, A. G.	2010	Discourse & Society 21/2: 135-160.
10	Using automated semantic tagging in Critical Discourse Analysis: A case study on Scottish independence from a Scottish nationalist perspective	Prentice, S.	2010	Discourse & Society 21/4: 405-437.
11	'Bring back Hitler's gas chambers': Asylum seeking, Nazis and Facebook–a discursive analysis	Burke, S. and Goodman, S.	2012	Discourse & Society 23/1: 19-33.
12	Social media networks and the discourse of resistance: A sociolinguistic CDA of Biafra online discourses	Chiluwa, I.	2012	Discourse & Society 23/3: 217-244.
13	Pro-anorexia: Extensions of ingrained concepts	Knapton, O.	2013	Discourse and Society 24/4: 461-477.
14	Are 'queers' really 'queer'? Language, identity and same-sex desire in a South African online community	Milani, T. M.	2013	Discourse & Society 24/5: 615-633.
15	'They became big in the shadow of the crisis' The Greek success story and the rise of the far right	Angouri, J., and Wodak, R.	2014	Discourse & Society 25/4: 540-565.
16	Small stories transposition and social media: A micro-perspective on the 'Greek crisis'	Georgakopoulou, A.	2014	Discourse & Society 25/4: 519-539.

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No.	Title	Author(s)	Year	Journal
17	'Maybe it is prejudice … but it is NOT racism': Negotiating racism in discussion forums about Gypsies	Goodman, S., and Rowe, L.	2013	Discourse & Society 25/1: 32-46.
18	'200 years of white affirmative action': White privilege discourse in discussions of racial inequality	Hastie, B. and Rimmington, D.	2014	Discourse and Society 25/2: 186-204.
19	Stancetaking and the Hong Kong Girl in a shifting heterosexual marketplace	Kang, M. A., and Chen, K. H.	2014	Discourse & Society 25/2: 205-220.
20	Guiding metaphors of nationalism: the Cyprus issue and the construction of Turkish national identity in online discussions	Baruh, L., and Popescu, M.	2008	Discourse & Communication 2/1: 79-96.
21	Coherence in political computer-mediated communication: analyzing topic relevance and drift in chat	Stromer-Galley, J. and Martinson, A. M.	2009	Discourse and Communication 3/2: 195-216.
22	Communicating with voters by blogs? Campaigning for the 2009 European Parliament elections	Vesnic-Alujevic, L.	2011	Discourse & Communication 5/4: 413-428.
23	The linguistics of self-branding and micro-celebrity in Twitter: The role of hashtags	Page, R.	2012	Discourse & Communication 6/2: 181-201.
24	Diablogging about asylum seekers: Building a counter-hegemonic discourse	Fozdar, F., and Pedersen, A.	2013	Discourse & Communication 7/4: 371-388.
25	'You know how tough I am?' Discourse analysis of US Midwestern congresswomen's self-presentation	Lee, J.	2013	Discourse & Communication 7/3: 299-317.
26	Moral argumentation as a rhetorical practice in popular online discourse: Examples from online comment sections of celebrity gossip	Eronen, M.	2013	Discourse & Communication 8/3: 278-298.

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No.	Title	Author(s)	Year	Journal
27	Enacting identity in microblogging through ambient affiliation	Zappavigna, M.	2013	Discourse & Communication 8/2: 209-228
28	Conversational floors in synchronous text-based CMC discourse	Simpson, J.	2005	Discourse Studies 27/3: 337-361.
29	Telling about problems and giving advice in an Internet discussion forum: some discourse features	Morrow, P. R.	2006	Discourse studies 8/4: 531-548.
30	Gender and sexual identity authentication in language use: The case of chat rooms	del-Teso-Craviotto, M.	2008	Discourse Studies 10/2: 251-270.
31	An implicature forum: signaling relative expertise	Lange, P. G.	2008	Discourse Studies 10/2: 191-204.
32	The online support group as a community: A micro-analysis of the interaction with a new member	Stommel, W. and Koole, T.	2010	Discourse Studies 12/3: 357-378.
33	Questions and explanations in French and Anglo-American Usenet newsgroups	von Münchow, P., and Rakotonoelina, F.	2010	Discourse Studies 12/3: 311-329.
34	Problem presentation and responses on an online forum for young people who self-harm	Smithson, J., Sharkey, S., Hewis, E., Jones, R., Emmens, T., Ford, T. and Owens, C.	2011	Discourse Studies 13/4: 487-501.
35	'You look terrific!' Social evaluation and relationships in online compliments	Maíz-Arévalo, C. and García-Gómez, A.	2013	Discourse Studies 15/6: 735-760.
36	'Multi-voicedness' in internet guest-books of German and Italian teenagers	Fetscher, D.	2009	Language and Intercultural Communication 9/1: 33-42.
37	Contesting Animal Rights on the Internet Discourse Analysis of the Social Construction of Argument	Swan, D., and McCarthy, J. C.	2003	Journal of Language and Social Psychology 22/3: 297-320.
38	See you online. Gender issues in college student use of instant messaging	Baron, N. S.	2004	Journal of Language and Social Psychology 23/4: 397-423.

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No.	Title	Author(s)	Year	Journal
39	Assessing gender authenticity in computer-mediated language use evidence from an identity game	Herring, S. C., and Martinson, A.	2004	Journal of Language and Social Psychology 23(4): 424-446.
40	Emotional expression online emoticons punctuate website text messages	Provine, R. R., Spencer, R. J., and Mandell, D. L.	2007	Journal of Language and Social Psychology 26(3): 299-307.
41	Emotional commitment in public political internet message boards	Kleinke, S.	2008	Journal of Language and Social Psychology 27(4): 409-421.
42	Weighing in on the coaching decision: Discussing sports and race online	Sanderson, J.	2010	Journal of Language and Social Psychology 29/3: 301-320.
43	The communication of advice on an online message board for language assistants in France	Ruble, R. A.	2011	Journal of Language and Social Psychology 30/4: 396-420
44	'Cantonese is not a dialect': Chinese netizens' defence of Cantonese as a regional lingua franca	Gao, X.	2012	Journal of Multilingual and Multicultural Development 33/5: 449-464.
45	Complaints online: The case of TripAdvisor	Vásquez, C.	2011	Journal of Pragmatics 43/6: 1707-1717.
46	'SlutWalk' on connected screens: Multiple framings of a social media discussion	Zhang, W., and Kramarae, C.	2014	Journal of Pragmatics 73: 66-81.
47	On-line polylogues: conversation structure and participation framework in internet newsgroups	Marcoccia, M.	2004	Journal of pragmatics 36/1: 115-145.
48	Arguing in English and French asynchronous online discussion	Lewis, D. M.	2005	Journal of pragmatics 37/11: 1801-1818.
49	Second-person pronoun use and address strategies in on-line personal ads from Quebec	van Compernolle, R. A	2008	Journal of Pragmatics 40/12: 2062-2076.

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No.	Title	Author(s)	Year	Journal
50	Concessive Repair and negotiation of affiliation in e-mail discourse	Tanskanen, S. K., and Karhukorpi, J.	2008	Journal of Pragmatics 40/9: 1587-1600.Z
51	On-line polylogues and impoliteness: The case of postings sent in response to the Obama Reggaeton YouTube video	Lorenzo-Dus, N., Blitvich, P. G. C., and Bou-Franch, P.	2011	Journal of Pragmatics 43/10: 2578-2593.
52	(Im) politeness and disagreement in two Hong Kong Internet discussion forums	Shum, W., and Lee, C.	2013	Journal of Pragmatics 50/1: 52-83.
53	Just click 'Like': Computer-mediated responses to Spanish compliments	Maíz-Arévalo, C.	2013	Journal of Pragmatics 51: 47-67.
54	(New) participatory framework on YouTube? Commenter interaction in US political speeches	Boyd, M. S.	2014	Journal of Pragmatics 72: 46-58.
55	Conflict management in massive polylogues: A case study from YouTube	Bou-Franch, P., and Blitvich, P. G. C.	2014	Journal of Pragmatics 73, 19-36.
56	Commenting on YouTube rants: Perceptions of inappropriateness or civic engagement?	Lange, P. G.	2014	Journal of Pragmatics 73: 53-65.
57	Playful language alternation in an online discussion forum: The example of digital code plays	Jaworska, S.	2014	Journal of Pragmatics 71: 56-68.
58	Language variation on Internet Relay Chat: A social network approach	Paolillo, J. C.	2001	Journal of sociolinguistics 5/2: 180-213.
59	Gender and genre variation in weblogs	Herring, S. C., and Paolillo, J. C.	2006	Journal of Sociolinguistics 10/4: 439-459
60	Code choice and code-switching in Swiss-German Internet Relay Chat rooms	Siebenhaar, B.	2006	Journal of Sociolinguistics 10(4): 481-506.
61	Multilingualism, diaspora, and the Internet: Codes and identities on German-based diaspora websites	Androutsopoulos, J.	2006	Journal of Sociolinguistics 10(4): 520-547.

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No.	Title	Author(s)	Year	Journal
62	Beyond social networking: Performing global Englishes in Facebook by college youth in Nepal	Sharma, B. K.	2012	Journal of Sociolinguistics 16/4: 483-509.
63	Language choice and addressivity strategies in Thai-English social network interactions	Seargeant, P., Tagg, C., and Ngampramuan, W.	2012	Journal of Sociolinguistics 16/4: 510-531.
64	The Maghreb-Mashreq language ideology and the politics of identity in a globalized Arab world	Hachimi, A.	2013	Journal of Sociolinguistics 17/3: 269-296.
65	Negotiation of face in web chats	Golato, A., and Taleghani-Nikazm, C.	2006	Multilingua 25/3: 293–321.
66	What has happened to Arabs? Identity and face management online	Al Zidjaly, N.	2012	Multilingua 31/4: 413-439.
67	Aggression and perceived national face threats in Mainland Chinese and Taiwanese CMC discussion boards	Kádár, D. Z., Haugh, M., and Chang, W. L. M.	2013	Multilingua 32/3: 343-372.
68	A tale of Blue Rain Café: A study on the online narrative construction about a community of English learners on the Chinese mainland	Gao, X.	2007	System 35/2: 259-270.
69	"Christians" and "bad Christians": categorization in atheist user talk on YouTube	Pihlaja, S.	2014	Text &Talk 34/5, 623-639.
70	The emergence of the identity of a fictional expert advice-giver in an American Internet advice column	Locher, M. A., and Hoffmann, S.	2006	Text & Talk 26/1: 69-106.
71	Re-examining narrativity: small stories in status updates	Page, R.	2010	Text & Talk 30/4: 423-444.
72	Debating in an online world: a comparative analysis of speaking, writing, and online chat,	Freiermuth, M. R.	2011	Text & Talk 31/2: 127-151.

References

Baker, P., C. Gabrielatos & T. McEnery. 2013. Sketching Muslims: A corpus driven analysis of representations around the word 'Muslim' in the British press 1998–2009. *Applied Linguistics* 34(3). 255–278.

Baron, N. S. 2004. See you online gender issues in college student use of instant messaging. *Journal of Language and Social Psychology* 23(4). 397–423.

Barton, D. & C. K. Lee. 2012. Redefining vernacular literacies in the age of Web 2.0. *Applied linguistics* 33(3). 282–298.

Bassett, E. H. & K. O'Riordan. 2002. Ethics of Internet research: Contesting the human subjects research model. *Ethics and Information Technology* 4(3). 233–247.

Boellstorff, T. 2012. Rethinking digital anthropology. In H. A. Horst & D. Miller (eds.), *Digital anthropology,* 39–60. New York: Berg.

Bruckman, A. 2002. Ethical guidelines for research online (version: 4/4/2002). http://docu ments.kenyon.edu/provost/irb_ethics_online.pdf (accessed 13 April 2016).

Buchanan, E. A. 2011. Internet research ethics: Past, present, and future. In M. Consalvo & C. Ess (eds.), *The Handbook of Internet Studies,* 83–108. Singapore: Wiley-Blackwell.

Buchanan, E. & C. Ess. 2009. Internet research ethics and the institutional review board: Current practices and issues. *Computers and Society* 39(3). 43–49.

Burke, S. & S. Goodman. 2012. Bring back Hitler's gas chambers': Asylum seeking, Nazis and Facebook–a discursive analysis. *Discourse & Society* 23(1). 19–33.

Canagarajah, S. & P. Stanley. 2015. Ethical Considerations in Language Policy Research. In M. H. Hult & D. C. Johnson (eds.), *Research Methods in Language Policy and Planning: A Practical Guide,* 33–44. New York: John Wiley & Sons Inc.

D'Arcy, A. & T. M. Young. 2012. Ethics and social media: Implications for sociolinguistics in the networked public. *Journal of Sociolinguistics* 16(4). 532–546.

De Costa, P. I. 2016. *Ethics in applied linguistics research: Language researcher narratives*. New York: Routledge.

de Oliveira, J. M., V. Esteve & M. Camacho. 2013. Interaction in the virtual world: An analysis of students' construal of pedagogic subject positions in a 3D virtual learning environment. *Text and Talk* 33(3). 353–375.

del-Teso-Craviotto, M. 2008. Gender and sexual identity authentication in language use: The case of chat rooms. *Discourse Studies* 10(2). 251–270.

Eikelboom, J. I., O. T. J. ten Cate, D. Jaarsma, J. A. N. Raat, L. Schuwirth & J. J. M. van Delden. 2012. A framework for the ethics review of education research. *Medical Education-Oxford* 46(8). 731–733.

Elm, M. S. 2009. How do various notions of privacy influence decisions in qualitative internet research? In A. N. Markham & N. K. Baym (eds.), *Internet inquiry: Conversations about method,* 69–92. Thousand Oaks: Sage.

[label=Ess, 2002] Ess, C, & AoIR ethics working committee. 2002. *Ethical decision-making and Internet research: Recommendations from the aoir ethics working committee* (approved by

Markham, A. & E. Buchanan. 2012. *Ethical decision-making and Internet research: Recommendations from the AoIR Ethics Working Committee (Version 2.0)*. http://www.aoir.org/reports/ethics2.pdf (accessed 1 April 2016).

Miyazoe, T. & T. Anderson. 2010. Learning outcomes and students' perceptions of online writing: Simultaneous implementation of a forum, blog, and wiki in an EFL blended learning setting. *System* 38(2). 185–199.

North, S. 2007. The voices, the voices': Creativity in online conversation. *Applied Linguistics* 27(4). 538–555.

Page, R., D. Barton, J. W. Unger & M. Zappavigna. 2014. *Researching language and social media: A student guide*. London and New York: Routledge.

Pihlaja, S. 2014. Christians" and "bad Christians": Categorization in atheist user talk on YouTube. *Text & Talk* 34(5). 623–639.

Prentice, S. 2010. Using automated semantic tagging in critical discourse analysis: A case study on Scottish independence from a Scottish nationalist perspective. *Discourse & Society* 21(4). 405–437.

Simpson, J. 2005. Conversational floors in synchronous text-based CMC discourse. *Discourse Studies* 27(3). 337–361.

Smithson, J., S. Sharkey, E. Hewis, R. Jones, T. Emmens, T. Ford & C. Owens. 2011. Problem presentation and responses on an online forum for young people who self-harm. *Discourse Studies* 13(4). 487–501.

Stromer-Galley, J. & A. M. Martinson. 2009. Coherence in political computer-mediated communication: Analyzing topic relevance and drift in chat. *Discourse and Communication* 3(2). 195–216.

Stohl, M. 2006. Cyber terrorism: A clear and present danger, the sum of all fears, breaking point or patriot games? *Crime, law and social change* 46(4–5). 223–238.

Stommel, W. & T. Koole. 2010. The online support group as a community: A micro-analysis of the interaction with a new member. *Discourse Studies* 12(3). 357–378.

Tanskanen, S. K. & J. Karhukorpi. 2008. Concessive Repair and negotiation of affiliation in e-mail discourse. *Journal of Pragmatics* 40(9). 1587–1600.

The Guardian. 2015, October 31. *Secular publisher hacked to death in latest Bangladesh attacks*. http://www.theguardian.com/world/2015/oct/31/faisal-abedin-deepan-bangladesh-secular-publisher-hacked-to-death (accessed 31 March 2016).

Thomas, J. 2004. Reexamining the ethics of Internet research: Facing the challenge of over-zealous oversight. In M. D. Johns, S. S. Chen, & G. J. Hall (eds.), *Online social research: Methods, issues and ethics,* 187–201. New York: Peter Lang Publishing.

Trent, J., X. Gao & M. Gu. 2013. *Language teacher education in multilingual context*. Dordrecht: Springer.

Vásquez, C. 2011. Complaints online: The case of TripAdvisor. *Journal of Pragmatics* 43(6). 1707–1717.

Walther, J. B. 2002. Research ethics in Internet-enabled research: Human subjects issues and methodological myopia. *Ethics and Information Technology* 4(3). 205–216.

Wilkinson, D. & M. Thelwall. 2011. Researching personal information on the public web methods and ethics. *Social Science Computer Review* 29(4). 387–401.

Zhang, W. & C. Kramarae. 2014. "SlutWalk" on connected screens: Multiple framings of a social media discussion. *Journal of Pragmatics* 73. 66–81.