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Online discussion and the 2014 Scottish independence referendum: flaming keyboards or forums for deliberation?

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Abstract
Referendums often fail to live up to a deliberative standard, with many characterised by low levels of knowledge, disinterest and misinformation, negativity, and a focus on extraneous issues to which voters are voting. But social media offers new avenues for referendums to incorporate a greater deliberative dimension. Through a content analysis of BBC discussion forums, we test whether online discussion of the Scottish independence referendum has deliberative characteristics. Results suggest a mixed picture with conversation displaying some deliberative features (low incidences of flaming/discussion of referendum issues). However, low levels of discussion intensity, dominance by a few, little knowledge exchange, and high gender inequality illustrate that online referendum discussion lacks deliberative characteristics, implying that social media are not a panacea for referendum deliberation.

Keywords: referendums; deliberation; discussion forums; Scottish independence; online content analysis.
1. Introduction

In recent years, the use of referendums to determine matters of public policy in established democracies has grown (LeDuc, 2002; Bjørklund, 2009). Referendums are considered a cornerstone of direct democracy allowing citizens to have a direct say on the great issues of the day and to become more knowledgeable and engaged on issues of public policy. They also provide a ‘people’s veto’ as an additional check on governments (Qvortrup, 1999, 2005). However, referendums are not without their problems. Many are synonymous with a lack of knowledge among voters on the topic on which they are voting (for e.g.: Sinnott, 2002; Hobolt, 2005; Sinnott and Elkink, 2010; Whiteley et al., 2012; Suiter and Reidy, 2013; Elkink and Sinnott, this volume). They can suffer from weak voter interest, a particular problem in countries that hold frequent plebiscites (for e.g.: United States and Switzerland), and where voter engagement tends to be low (LeDuc, 2003). Furthermore, many referendums are characterised by what are considered as ‘second-order’ issues, with government popularity and/or partisan politics determining the outcome rather than the issue voters are being asked to decide on (for e.g.: Franklin et al., 1994; van der Eijk et al., 1996). More frequently referendum campaigns are also peppered with strong negativity and misinformation (for e.g.: Luskin et al., 2005; Quinlan, 2009).

These drawbacks put the focus on whether citizens are well served by the referendum process. Proponents of deliberative democracy would contend that political choices, such as those made in a referendum, should ideally take place in an atmosphere of civility, characterised by extensive discussion, knowledge exchange, due consideration being given to all options, and an openness to changing one’s mind on the basis of rational thought (for e.g.: Chambers, 2003; Fishkin and Luskin, 2005; Fishkin and Laslett, 2008). However, it is evident that many referendums fall far short of this ideal standard.

The growth of social media in politics offers hope to those who want to see referendum campaigns contain more deliberation. Social media, in particular online discussion forums, do at the very least offer the opportunity for political discussion to take place, negating geographical boundaries and offering easy access to discussion forums at a low cost. The growth in the number of online discussion forums and blogs focusing on politics (for e.g.: Drezner and Farrell, 2004; Davis 2005; Koop and Jansen, 2009, p. 158) does suggest an appetite exists to “talk politics” online. Accordingly, we might assume that online political discussion could be an outlet for
referendum deliberation to take hold. On the other hand, sceptics may point out that online discussions are frequently known to descend into cacophonies of insults with participants simply reiterating their already held fixed opinion (for e.g.: Davis, 1999, 2005; Sunstein, 2000, 2009).

To date, there has been little exploration of the impact that social media can have on referendum campaign dynamics. This paper seeks to fill this void by exploring whether online discussion of referendums can be classified as deliberative, and in the process whether social media can assist referendums in living up to a deliberative standard.¹ Our data comes from the BBC Have Your Say (BBC HYS) discussion forums focusing on the Scottish independence referendum. On 18 September 2014, Scottish voters went to the polls to decide whether Scotland should secede or remain within the United Kingdom. On a turnout of 84.6% of registered voters, Scots decided by 55%-45% that the country should remain part of the United Kingdom (Electoral Management Board for Scotland, 2014). While this referendum was without precedent, Scottish independence/nationalism has been a dominant cleavage within Scottish politics for the past forty years and a referendum on the issue has been much flagged with the pro-independence SNP in power in Scotland since 2007. Considering this and the fact that there have been two other referendums on Scottish devolution in the past thirty five years (see Bolsom and McAllister, 1979 & Mitchell et al. 1998) we argue that there is strong potential for referendum deliberation to have taken hold far in in advance of the vote as this was a familiar issue on the political agenda.

We conduct a content analysis of four discussion threads focusing on Scottish independence over a nineteen-month period, capturing important events in the early part of the 2014 referendum campaign. Our objective is to ascertain whether online discussions in the campaign have deliberative characteristics, and whether social media offers a new avenue for referendum campaign deliberation.

Our results paint a mixed picture. The balance of evidence shows online discussions of the Scottish referendum do lack many of the features of deliberation: there is little discussion intensity with low levels of engagement between contributors and dominance of the conversation by a small select few. There are also low levels of

¹ This study is part of a wider social media project on Scottish independence funded by the UK Economic and Social Research Council (ESRC) in conjunction with the Applied Quantitative Methods Network (AQMEN) as part of the ‘Future of the UK and Scotland’ research programme [www.esrc.ac.uk/major-investments/future-of-uk-and-scotland].
information exchange and a lack of participatory equality, with male voices preeminent.

On the positive front, the conversations do show a relatively high level of civility with little stereotyping of individuals, low evidence of ‘flaming’, and a relatively satisfactory level of engagement with policy issues, at least in comparison to the proportion of discussion given over to partisan politics and stereotypes. So while there is evident promise, the potential of social media to contribute to referendums becoming more deliberative has yet to be fully realised and our results imply that social media is not a panacea for those wanting referendum campaigns to contain a more deliberative dimension. Our findings illustrate a number of dimensions that would need to be worked on if online discussions of referendums were to become deliberative.

The article proceeds as follows: in the next section, we open by discussing the Scottish referendum, charting Scotland’s road to referendum and establishing that the independence cleavage in Scottish politics makes deliberation on the issue possible. We explore deliberation and the potential for it to take place with the rise of social media in politics, before focusing on online discussion boards as the online forum where this is most likely to occur. We devise a series of hypotheses to test if online discussion lives up to deliberative standards. We conclude by detailing our empirical results followed by a discussion of the implications for social media, deliberation, and referendums.

2. The Scottish independence referendum 2014

On 18 September 2014, Scottish voters voted in an historic referendum where voters were asked “Should Scotland be an independent country?” On a turnout of 84.6%, 55% of voters voted in favour of Scotland remaining part of the United Kingdom (Electoral Management Board for Scotland, 2014). While the 2014 referendum represented the first occasion on which the Scottish people formally voted on the independence question, the secession issue is nothing new in terms of Scottish politics. Ever since the electoral breakthrough of the pro-independence Scottish National Party (SNP) in the two 1974 Westminster elections, which saw the party capture 30% of the Scottish vote in the October 1974 election (Cairney, 2011, p. 25), independence has been on the political agenda. And while the SNP’s fortunes have ebbed and flowed in the years since this breakthrough, their presence on the
Scottish political scene has ensured that a nationalist/self-rule/independence cleavage has been a consistent part of Scottish political discourse for the past forty years. This has resulted in Scotland having a distinct political system (for e.g.: Kellas, 1984; McCrone and Paterson, 2002; Keating, 2010).

The pressure for some form of Scottish home rule has been a constant source of political debate from 1974, helped in large part by the Conservative party’s minority position in Scotland and the antipathy to some of its policies during its time in power at Westminster between 1979 and 1997 (McGarvey and Cairney, 2008, pp. 32–6). Preceding this, Scots did get the opportunity to vote on the possibility of devolved government in March 1979 but the referendum failed to cross a threshold of 40% of the electorate voting in favour, which had been set by the Westminster Parliament (see Bolsom and McAllister, 1979).

While any form of Scottish home-rule was inconceivable while the firmly Unionist Conservative government at Westminster was in power, the pressure for Scottish devolution continued apace in the early/mid 1990s. A broad consensus on the issue developed between some of the Scottish political parties (although not the SNP and the Conservatives) and civic groups through the Scottish Constitutional Convention, which set out a blueprint for Scottish devolution in 1995. With the election of a ‘New Labour’ government to power at Westminster in 1997, which was committed to the creation of a Scottish Parliament, Scottish devolution became a reality in 1999 following a referendum in Scotland in September 1997, where voters overwhelmingly supported the creation of a devolved Scottish parliament (Mitchell et al., 1998). Some thought that the introduction of devolution would diminish the likelihood of independence with former British cabinet minister Lord Robertson observing that: ‘devolution would kill nationalism stone dead’ (Paterson et al. 1998). However, with the presence of the SNP as the main opposition in the Scottish parliament, the pressure for independence remained to the fore.

The independence question took on renewed significance in 2007 when the SNP were elected to power in Scotland, albeit in a minority position. Four years later, the SNP were re-elected with an absolute majority in the 2011 Scottish elections. While the party’s victory in 2011 was arguably less on the basis of its pro-independence stance and more to do with its perceived competence in governing Scotland (Johns, Carman, and Mitchell 2011), a referendum on independence was all but guaranteed considering independence is its raison d’etre. The referendum was confirmed with the
signing of the Edinburgh Agreement in November 2012 between the Scottish First
Minister Alex Salmond and the UK Prime Minister David Cameron, paving the way
for the vote to be held in September 2014.

The above summary illustrates that while Scotland’s road to referendum has been
long travelled, the cleavage centred on nationalism/self-rule/independence has been a
constant in Scottish politics for the past four decades. As such, independence, at least
in a general sense is nothing new to Scottish voters (and arguably to British voters
more generally), with the issue having been extensively discussed to varying degrees.
From a deliberation standpoint, we maintain that the issue is a familiar one. Building
on LeDuc’s (2002, 2003) framework of referendum campaigns, which argues that
referendum campaigns fought on political cleavages familiar to voters are more likely
to result in stability, we contend that this makes deliberation much more likely to take
hold far in advance of the referendum. In the Scottish case, voters are somewhat
acquainted with the issue and coupled with the lengthy campaigns waged by both
sides (the ‘yes’ campaign was launched in May 2012, followed by the ‘no’ campaign
in June 2012) are accordingly far more likely to have engaged with the subject in
adequate time before they voted.

Furthermore, we argue that deliberation is more likely to have occurred in this
referendum given the subject matter (i.e.: secession) as the consequences of the vote
affects all aspects of all citizens lives, compared to most other referendums on an
issue such as a moral/social matter, which may only affect some people’s lives
directly. Additionally, the fact that independence is the raison d’etre of the SNP, there
has been a general expectation that a referendum was likely to take place at some
point. We reason that these circumstances bolster the chances for the referendum to
have deliberative features to it.

3. Social media and referendums: potential for deliberative discussion?

3.1 Referendums and deliberation: social media’s potential

LeDuc (this issue) notes, at the beginning of this special issue, the attractiveness of
the deliberative democracy concept. The basic premises of deliberation are that
citizens discuss issues in depth, with interaction characterized by information
exchange, representation of diverse opinions, and openness by participants to
changing their viewpoint. These discussions should be characterized by civility and
openness to debate. Proponents of deliberation (for e.g.: Chambers, 2003; Fishkin and Luskin, 2005; Fishkin and Laslett, 2008) contend that this should result in better decision-making and outcomes. While deliberation appears to be a goal worth reaching, it is arguably not something one would initially associate with referendums, but rather with citizen assemblies or deliberative polling exercises (for e.g.: Fournier et al., 2011, Farrell et al., 2013, Suiter et al., 2014). After all, referendums are in many instances characterised by negativity, citizen information deficits, weak voter interest, and a lack of focus on the referendum issue itself, all of which are rather antithetical to deliberation. This raises the question: can referendums be deliberative? There are differing viewpoints but Tierney (2012) maintains that constituted properly, they can have deliberative features. If this is the case, it shifts the focus to what mechanisms can assist referendums in becoming more deliberative? Social media may be able to offer a helping hand in this regard.

Social media is a regular feature in the lives of most people nowadays, with its use among Internet users and the population generally having grown substantially in recent years (Eurobarometer Standard Report, 2012; Pew Research Centre’s Internet and American Life Project, 2014). Today, 53% of Britons are estimated to use the Internet for social media alone with the UK considered to have the second highest proportion of social networkers in the EU (Office of National Statistics UK, 2013). It therefore comes as no surprise that it is becoming a more important tool in politics. Its potential to play a crucial role in politics was fully realised with Barack Obama’s use of social media channels to engage supporters and raise money during his ascendency to the US Presidency in 2008 (Dalton, 2009). Since then, social media have now become a central plank for political parties (Ackland and Gibson, 2013) and in political campaigning cross-nationally (for e.g.: Gibson and McAllister, 2011; Hang and Nadler 2012).

Social media has many potential political functions. Chief among them has been its agenda setting role. This is perhaps not surprising given that many users of channels such as Twitter are journalists and news organizations (for e.g.: Fahri 2009; Bruno 2011). This political agenda setting potential was aptly illustrated by the 2011 Irish Presidential election. During the final debate between the candidates, the moderator read out a ‘tweet’ live on air that questioned the financial affairs of the leading candidate. This shifted the focus of the remaining part of the debate to the said candidate’s probity. The candidate in question was widely perceived to have
answered the questions unsatisfactorily both during the debate and in its aftermath. The incident was subsequently shown to have been a contributory factor to his defeat in the election (Red C, 2011; O’Malley, 2012).

Social media also have the potential to have behavioural impacts on voters. For example, experiments conducted by Bond et al. (2012) showed that receiving Facebook messages encouraging participation directly influenced voter participation in the 2010 US midterm elections.

While the above mentioned uses of social media in politics are noteworthy, perhaps the most important function of social media for politics is the opportunities it provides citizens: a forum to discuss issues, exchange views, and a medium to obtain and analyse information. This is a purposeful function considering that political discussion has been shown to be positively associated with higher levels of political knowledge and engagement (for e.g.: Huckfeldt and Sprague, 1995; McClurg, 2003; Toka, 2009). This potential has strong implications both for deliberation and referendums. Many referendums have been associated with citizen information deficits. For deliberation to take place, an informed and engaged citizenry is a prerequisite. Social media provides a new avenue where citizens can become more engaged and more informed on an issue, at a relatively low cost and by which geographical boundaries/location can be overcome. They also have the power to assist citizens’ in their ability to evaluate political information (Gainous and Wagner, 2011). Accordingly, social media offers the potential to bridge the gap between deliberation and the electoral process. The key question is whether this potential is actually borne out? To assess this, we focus on one type of social media – online discussion boards, as this is where we would expect deliberation is most likely to take hold, considering, at least in theory, that this channel is specifically designed not only for comment, but also for interaction.

3.2 Online discussion forums and deliberation

Existing research paints a divergent picture about online discussion boards potential to foster deliberative discussion. Technological optimists argue that the ability of online discussions to transcend geographical boundaries are a huge advantage, facilitating the bringing together of people with diverse opinions, and ensuring a varied representation of viewpoints (for example, in our case that could be Scottish and English people or a Scottish person living abroad). Optimists also point
out that seeing as interaction is through the written word (as opposed to the spoken), conversations should be more rational and reflective (Jansen and Kies, 2005) as people have time to consider their views before interjecting, which is perhaps less likely in face-to-face conversation. Furthermore, the anonymity provided to individuals by social media may allow individuals more freedom to express their ‘true’ feelings on controversial issues, with previous research suggesting that individuals are more likely to do so when they are unidentified (for e.g.: Siegel et al., 1985; Suler, 2005; Johnson et al. 2009). This may lead to the emergence of sincere discussion (Jansen and Kies, 2005).

But technological pessimists maintain that we are unlikely to observe deliberation in online discussion boards for three reasons. The first reason given is the proliferation of online boards discussing politics individuals are in fact more likely to discuss politics with other people or within forums that share their predisposed views. Consequently, far from a deliberative form of discussion, we are more likely to observe opinion polarization (i.e.: a reinforcement of participants original views - for e.g.: Davis, 1999, 2005; Sunstein, 2000, 2009; Adamic and Glance, 2005). However, the opinion reinforcement view does not go unchallenged. Recently, Gentzkow and Shapiro (2010) and Conover et al. (2011) found that individuals who engaged in political discussion on social media were not simply exposed to content of agreement. Brundidge (2010) came to a similar conclusion arguing that people may be exposed to some political difference online, even if it is inadvertent.

The second objection concerns the relative anonymity online discussion provides users with. Pessimists argue that as a consequence, we are more likely to observe discussion that is ‘flaming’ in tone – that is conversation characterized by personal attacks, stereotypical assumptions, online shouting, uncivil behaviour, and impolite exchanges that ignore the rules of netiquette (for e.g.: Hawisher, 1992; McKee, 2002; Lee, 2005). There is mixed evidence for this assertion. Davis (1999, 2005) observed high levels of flaming in his analysis of Usenet political forums in the United States. But Papacharissi (2004, p. 275) found that most messages on political newsgroups were civil. Similar conclusions were reached by Halpern et al. (2013) when they explored sentiments in other social media.

The third critique is that online forums tend to be intensely partisan and accordingly there is little substantive discussion of relevant policy issues. However, this does not always appear to be the case. For example, Koop and Jansen (2009) in
their analysis of political blogs in Canada, found that while online interactions lacked deliberative elements on some fronts, on others, especially issue discussion, contributors were much more likely to focus on substantive issues, especially compared to the mainstream media.

We argue that the conflicting results show that doubt remains but that the potential exists for deliberative interactions to take place online. We also contend that most existing research has focused on partisan forums or boards that have a general focus on political topics. To our knowledge, there has been neither little focus on online discussion in non-partisan boards nor any assessment of online discussion of referendums. There may be cause to expect the potential for different behaviour to take hold, particularly as referendums, at least in theory, should be about issues, with partisanship playing less of a role. The multitude of issues confronting voters with respect to Scottish secession also raises the possibility of citizens seeking out information online to assess the case for independence.

4. Testing the applicability of deliberation in online discussion forums

4.1 Data

One consistent finding from existing research on online forums and their potential for deliberation is that the type and design of the forum is key (Jensen, 2003; Wright and Street, 2007; Velasquez et al., 2014). Factors to consider include who is in control of the forum, the level of moderation, what type of participants it draws, and the newsworthiness of topics that prompts discussion.

This brings us to our data which comes from the BBC Have Your Say (BBC HYS) discussion forums on the BBC News website. Discussions of a topic are usually preceded by a news story of contemporary interest, with a discussion thread opening below for contributors to comment on. Our data is based on four discussion threads at four different time points ranging from January 2012 to September 2013. The discussions were preceded by stories directly related to the Scottish independence referendum. The threads were prompted by the following stories: a story over the type and organization of a referendum (11 January 2012); \(^2\) a discussion on the signing of the Edinburgh Agreement between Alex Salmond and David Cameron.

formally setting out the mechanisms for a referendum (15 October 2012)\(^3\); the release of a UK Treasury department report outlining the potential currency choices facing Scotland if it voted for independence (23 April 2013)\(^4\); And finally a discussion surrounding the one-year anniversary to the referendum (18 September 2013)\(^5\). The fact that these discussions were prompted by stories directly related to the independence referendum bolsters our confidence that we are measuring referendum discussion and not simply general interactions on Scottish nationalism. The discussion threads remain open for a number of hours (depending on how important the story is considered to be). While live, most of the stories that prompted discussion appeared on the main page of the BBC News website, ensuring the thread had maximum exposure to a wide audience.

Our focus on the BBC web boards has implications in terms of the expected profile of participants and moderation. Taking participants first, the BBC News Online is one of the most popular websites among UK Internet users, attracting 20.3 million unique users per week in the final quarter of 2012 (BBC Trust, 2013, p. 25). As it is the BBC, we would expect an audience to encompass not only Scottish contributors but also contributions from beyond Scotland, mostly from the rest of the UK. The BBC online audience tends to disproportionately come from the ABC1 social category, with 55% of this social group using BBC online, compared to only 34% of the C2DE social group. The ABC1 group has above average interaction with the BBC News website in particular (BBC Trust, 2013, pp. 79–81). Consequently, there is an expectation that these individuals using the BBC News will, all other things being equal, be better educated and more knowledgeable and engaged in current affairs. In terms of deliberation, our expectation would be that these individuals would be more likely to engage in deliberative discussion than any other group, an observation that is supported by Lomax Cook et al. (2005) work on deliberative and participatory discussion in the United States. They found a strong link between how educated an individual was and their probability of engaging in deliberative discussion.

Turning to moderation, participants posting in BBC web discussions are subject to


both pre and retrospective moderation (Harrison, 2009, pp. 250–2). Contributors have
to register a username and e-mail addresses and are subject to the BBC HYS ‘House
Rules’ which prohibits defamatory/abusive comments or the use of offensive
language. Furthermore, the fact that the BBC is a public broadcasting service and as
such is subject to partiality guidelines means it is likely to draw a less partisan
audience compared to say other prominent discussion boards such as Guido Fawkes
or Conservativehome.com. Consequently, we would expect flaming to be at a
minimum in this forum, which should at least foster the potential for a deliberation.
Taking all this into account, we maintain that the type of moderation and the expected
profile of participants make the BBC HYS forums an ideal testing ground to explore
whether deliberation takes hold with respect to online discussion.

4.2 Hypotheses

We argue that deliberation is not a simple dichotomy of whether it exists or whether
it doesn’t. Rather, we maintain that deliberation is a spectrum and should be
considered in terms of degrees, with online discussions having potentially different
levels of deliberation on a wide range of dimensions.

To test if deliberation is present in a discussion, we use the framework outlined by
LeDuc (this issue) where four themes are identified to test if referendums have
deliberative qualities, namely: clarity; participation and engagement; information;
and politics.

Clarity in the Scottish referendum was not an issue as the question put forward to
voters in the referendum was agreed by all parties and supported by the Electoral
Commission. And while there are a multitude of issues for Scottish voters to contend
with in the referendum, the fact that the independence/nationalism cleavage has been
a factor in Scottish politics for forty years, and that the referendum campaign began
two years in advance of the vote itself, means that there is likely to be a general
knowledge of some of the issues involved. Consequently, our analysis concentrates
on the three other criteria outlined by LeDuc.

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8 For more on the importance of referendum question wording in general see LeDuc, 2013; Democratic Audit UK, 2013 and for the Scottish case see Black, 2013.
4.2.1 Participation and engagement

There are five different angles on which we examine engagement in online forums. Three focus on participation and interaction: discussion intensity, conversational reciprocity, and equality of participation, while the latter two test tone by measuring politeness and civility. First: discussion intensity. A pillar of deliberative discussion is that there is some semblance of equality in terms of the distribution of discussion and the representation of different viewpoints. One means of testing this is to examine the distribution of contributions. Previous research on discussion forums has noted that conversations are dominated by a small number of people (Schneider, 1997; Davis 1999, 2005; Jensen, 2003), which would be counter to the deliberative ideal that engagement is both wide (in terms of contributions) and interactivity (that there are multiple posts from interjectors). Assuming deliberation, our first expectation is that:

H1: the distribution of interjections will be relatively evenly spread out across interjectors, and not confined to a small number of interjectors.

But how much of online discussion is actually interactive? Research by Schneider (1997) suggests that the level of conversational reciprocity in online discussions can be low. Deliberation requires interaction between discussants to allow knowledge exchange, diffusion of views, and the development of rational narratives to flourish. Consequently, for a discussion to be considered deliberative we expect that:

H2: the level of conversational reciprocity between interjectors (i.e.: direct responses and engagement with other interjections/interjectors) will be high.

Equality of participation in deliberation provides for divergent voices to be heard. In terms of the Scottish independence debate, this brings into sharp focus two specific characteristics of interjectors, namely gender and national identity, both of which have been shown among the general public to have an impact on attitudes towards Scottish independence (Curtice, 2013).

There is a consensus in the literature that on the whole, men are more likely to express a political opinion and show an interest in politics than women (Campbell
and Winters, 2008). Coupling this with the fact that women appear less likely to engage in political discussion (Miller et al., 1999) and men are less probable to conceal their identities online (Tufecki, 2008) leads us to expect that a greater share of posts will come from men. However, considering that women have been shown to be less likely to support independence than men (Ormston, 2014), some mix of male/female views will be necessary for the discussion to be classified as deliberative. Assuming deliberation, we hypothesise that:

H3a: *the proportion of interjections will not be skewed towards a particular gender.*

We also know that national identity is an important factor in determining Scottish (and indeed English) attitudes towards secession: the greater the extent a person feels British, the more likely they are to have a pro-union sentiment (Curtice et al., 2013). This is unsurprising given the context of the referendum that involves one nation (Scotland) considering separation from a larger entity (Britain). For the conversation to be classified as deliberative, we would expect:

H3b: *the proportion of interjections will not be skewed towards a particular group (i.e.: national identity).*

The next step is to examine the tone of discussion. Here we explore whether discussion of Scottish secession adheres to netiquette or descends into so-called ‘flaming’. Flaming is when online interactions are characterised by impoliteness, hostility, negativity, or insults (for e.g.: Hawisher 1992; McKee 2002; Johnson et al. 2009). As is evident, flaming can come in many different forms and is not always easily identified (McKee 2002).

We examine flaming in a number of ways. The first is by assessing the level of netiquette in the discussion. If the conversation were to meet the deliberative standard, we would expect a high degree of netiquette— i.e.: we should observe little so-called online emoting such as excessive punctuation (e.g.: ‘!!’ or ‘??’) and/or CAPITALIZATION of words (Gorres, 2010; Yassine and Hajj, 2010; Moghaddam et al., 2012), the latter of which is considered to be a form of online shouting. Consequently, we suppose:

H4a: *a large majority of interjections will avoid emotive deployment of excessive punctuation and CAPITALIZATION in their interjections.*
Another means of assessing the extent of flaming is to explore the level of civility. Civility goes beyond netiquette or impoliteness. It is essentially a measure of whether a discussion descends into a slanging match of insults and generalizations, and inappropriate contributions. Considering the sensitivity of Scottish independence, it might be expected that this type of flaming could be more likely to manifest itself compared to other referendums.

We assess civility in two ways. The first is to examine the extent of negative stereotyping of ‘Scotland/The Scots’ inherent in the discussion. The greater the extent of negative stereotyping in the discussion, the less deliberative it can be considered. Consequently, assuming deliberation we hypothesize:

**H4b:** *a large majority of interjections will not engage in negative stereotyping of ‘Scotland/The Scots’.*

Our second means of tapping civility is to examine the proportion of interjections removed by the moderators for what they considered a violation of the forum’s rules. If the discussions were deliberative, we would expect to observe low levels of moderation. Accordingly, if the discussion is to be considered deliberative, we expect:

**H4c:** *The moderators of the forum will remove a low proportion of interjections from the discussion.*

### 4.2.2 Information

An important function of a deliberative process is that citizens become more knowledgeable from their interactions with others and information is readily exchanged. They are exposed to new information and competing sides of an argument, which should foster rationalization of issues and lead participants to make an informed decision. To tap information exchange, we focus on interjections/interjectors use of statistical information and weblinks to sustain arguments put forward (Moghaddam et al., 2012). If online discussions on Scottish secession are to be considered deliberative then we assume:

**H5:** *Information exchange will be demonstrated by a large proportion of interjections referencing a web link and/or contain a statistic to support their argument.*
4.2.3 Politics

The intrusion of partisan politics is considered a stumbling block to referendums living up to a deliberative standard (LeDuc, 2013, this volume). The presence of second-order effects (e.g.: focusing on likability of a party/government/politician etc…) is thought to be a distraction to voters in terms of sizing up the issue on which they are voting. While LeDuc (2013, this volume) points out that it is unlikely that second-order effects intruding into the referendums can be avoided (especially in the Scottish case given the independence cleavage) we would expect a greater focus to be given to policy issues compared to partisan politics if referendums were to live up to a deliberative standard. We test this by assessing the proportion of discussion focused on policy issues (e.g.: in the Scottish case these could be classified as economic, public services, referendum process issues) as opposed to second-order effects, classified as mentions of partisan politics (mentions of parties or politicians). So, we hypothesize that if discussion is to be deliberative that:

\[ H6: \text{a greater proportion of interjections will focus on policy/referendum specific issues than partisan politics.} \]

4.3 Research strategy and measures

Our investigation is based on a content analysis and consists of a sample of 5,320 valid interjections from 2,570 interjectors. Our analysis operates at two levels: interjection (the comment) and the interjector (the contributor) with our results encompassing both levels of analysis.

Coding (as explained below) was undertaken by one of the investigators on the project. To ensure reliability and replication, intra-coder and inter-coder tests (for e.g.: Neuendorf, 2002; Hayes and Krippendorff, 2007; Krippendorff, 2013) involving two other investigators were conducted on all variables with the results blind of the original coder and of the intra-rater test. Using krippendorff’s \( \alpha \) as our base measure of reliability, Table A2 in the appendix details the results of our tests along with appropriate confidence intervals for each variable that provide estimates of uncertainty. Our tests illustrate satisfactory levels of agreement in excess of 0.6 on all measures (Landis and Koch, 1977) and in line (on all but one variable, namely national identity – \( \alpha = 0.64 \)) to the base standard set by Krippendorff (2013:325) of
Our operationalization of our measures is devised with reference to previous analyses of online discussion forums (for e.g.: Schneider, 1997; Papacharissi, 2004; Jansen and Kies, 2005; Koop and Jansen, 2009; Gorres, 2010 Yassine and Hajj, 2010; Moghaddam et al., 2012).

**Discussion intensity** is classified by examining the proportion of interjections from each interjector in order to gain an insight into the distribution of interjections in the discussion. **Conversational reciprocity** is measured by counting the number of interjections made in direct response to another interjection/interjector (i.e.: the interjection should specifically refer to another comment(s)/interjector(s) in their contribution).

**Equality of participation** is measured by examining the proportion of interjections by gender and national identity, two measures which are complicated by Internet anonymity. Accordingly we have to rely on self-identification. Gender classification is on the basis of the username of the individual (for e.g.: ‘Caroline’ is classified as a female and ‘Mike’ is classified as male). We also identify the gender on the basis of an interjector identifying as a man or woman in their interjection (for e.g.: ‘As an Englishman...’). A similar strategy is employed for the national identity variable. In total, we are able to identify the gender of 38% (n=983) of interjectors and the national identity of 26% (n=679) of interjectors. Considering the sizeable N of our sample, we contend that these partial measures provide a satisfactory indication of participatory trends.

Our assessment of tone is divided among three metrics, namely politeness, stereotyping, and interjections removed. **Politeness** is measured by classifying interjections that use excessive punctuation (for e.g.: two or more occurrences of excessive punctuation such as ‘!!’ or ‘??’) and/or CAPITALIZATION of a word as impolite. We measure civility in two ways. The first is to examine the extent of **negative stereotyping** of ‘Scotland/the Scots/the Scottish’ by assessing whether each comment included a negative view of ‘Scotland/the Scots/the Scottish’ or not (for e.g.: ‘What did Scotland do before the Union in 1707? Other than a few military adventures I can't think of much’ or ‘An independent socialist Scotland will be about as dynamic as North Korea. The last two Scots I've worked with have been absolutely bond idle. A nation of benefits wasters’) A second measure is to count the proportion of **interjections removed** from the discussion by moderators.
Information exchange is measured by examining the proportion of interjections that a) contain statistical information (for e.g.: ‘26% of the electorate…’) and b) contain a web link. Finally, we examine the proportion of interjections that mention a referendum related policy classified as interjections focusing on the economy, defence and foreign affairs, referendum process issues, social security and public services. We compare this to the number of interjections that focus on partisan politics, assessed by the number that mentions a politician and/or a party in their interjection. Table A1 in the appendix provides summary statistics for the relevant variables.

5. Empirical results

We begin by examining engagement. Our first metric is to explore the level of discussion intensity. The top panel of Figure 1 displays the number of interjections by the number of interjectors, the latter of which is split into categories based on the number of comments left by an individual: those who left one comment; interjectors who left between 2-5 comments; those who made between 6 and 10 posts; those who made between 11-20, and finally those who commented 21 times or more. The top panel illustrates a positively skewed distribution, demonstrating that discussion is far from evenly distributed across interjectors. Instead, the vast majority of interjectors (65%) make just one comment in the discussion. Among the 35% who contribute more than one comment, 28% do so between two and five times, while the remaining 7% do so eleven times or more.

Figure 1 about here

Another way of looking at this is to explore the proportion of discussion by interjectors. Table 1 examines the distribution of interjections by quarters and its relationship with the distribution of interjectors. Of the 5,320 interjections, 25% came from just 4% of interjectors. Furthermore, half of the interjections come from just 16% of interjectors. In other words, we are observing discussion dominance, with a small number of contributors accounting for more than half of the conversation. Accordingly, we reject H1. Online discussions of Scottish secession are being dominated by a small number of interjectors, meaning that the forum is best
characterised as a comment forum rather than a discussion forum, hardly the hallmarks of deliberation.

Table 1 about here

The bottom panel of Figure 1 tests what we refer to as conversational reciprocity: a measure of interjections that directly respond to another interjection/interjector. If the discussion is to be considered deliberative, we might expect individuals to engage with one another specifically, responding to the flow of conversation and to points raised in the course of conversation. Figure 1 shows that 26% of interjections directly responded to another interjection/interjector. This is further evidence of it being a comment rather than discussion forum, and consequently we reject H2. Again, another key trademark of deliberation is absent.

Within the forums we find substantial differences between the proportion of men and women participating in the discussion. Of the 2,570 interjectors who participate, we can classify gender for 39% of these individuals (n=983; krippendorff $\alpha=0.77$, 95% C.I=0.67, 0.87). The top panel of Figure 2 shows that the overwhelming majority of interjectors are men (91%) compared to only 9% who are women, a ratio of 10:1. And while the differences do decline somewhat when examining the interjection level (the ratio here is 9:1 in favour of men), male voices are clearly preeminent.

While the differences above probably exaggerate the gender gap considering that men are more likely to self-identify themselves online and by the fact that we are only able to classify two fifths of our sample on this indicator, the magnitude of the differences are large enough to enable us to conclude with some confidence that there is a lack of female representation in the discussions. From a deliberative perspective, this is problematic. Deliberation assumes representation of different viewpoints, all the more important in this debate considering the acknowledged gender gap in terms of how people feel about Scottish independence. On this basis, we reject H3a. The discussions are clearly lacking a deliberative edge in terms of equality of gender participation.

Figure 2 about here
The national identity indicator is a little more complex to interpret. Of the 27% of interjectors who self-identified (n=679, krippendorff $\alpha=0.64$, 95% C.I=0.41, 0.94), the bottom panel of Figure 2 would seem to suggest a relative equality of participation on this dimension. Forty-two per cent of contributors identify as Scottish while 45% identify as English, and about 8% say that they are British in one form or another. The remaining 5% identify themselves as something besides these three categories (for e.g.: Welsh). But when one examines discussion at the interjection level, a more nuanced picture emerges. Firstly, those that self-identify appear more likely to comment in the forum. Secondly, there are a greater proportion of interjections attributable to self-identifying Scots than English, which suggests that Scots are more likely to post comments more often. That being said, the differences here are small. On the whole, one may be tempted to conclude that the share of interjections/interjectors would indicate a relatively even and diverse set of opinions from the two biggest national groups which the debate affects (i.e.: the Scottish and the English). However, we are cautious: we have strong suspicions that many contributors that we have been unable to identify conclusively are more likely to be non-Scottish, which would tip the skew in favour of a lack of equal representation. We are also cognisant that our inter-coder reliability tests, while yielding $\alpha=0.64$, has a high degree of uncertainty associated with it (95% C.I= 0.41, 0.94). Consequently, our evidence is somewhat inconclusive as it points to mixed picture with some support for H3b but we are cautious considering that we could only classify just over a quarter of the sample.

Turning to tone, the top panel of Figure 3 illustrates the extent of politeness in the forum. From a deliberative perspective, our results here are more positive. Most interjections can be classified as polite with the vast majority devoid of CAPITALIZATION and double punctuation (only 9% of interjections contain any of this). Capitalization is the more common form of impoliteness being present in just about 6% of interjections, with only 4% of interjections containing double punctuation. Hence, there is support for H4a – netiquette is more or less observed in the Scottish secession debate, which increases the chances for deliberation to take hold.
Figure 3 about here

The bottom panel of Figure 3 shows our first measure of civility, which examines the proportion of interjections removed by moderators. Again, there is reason to be positive from a deliberative perspective. Only 3% of interjections in our sample were deemed uncivil to the extent that the moderators removed them from the discussion. One could deduce that a relatively high level of civil discourse existing would provide support to H4b: online discussion of Scottish secession displaying the civility necessary for deliberation to take hold. However, we must bear in mind that interjectors who participate in BBC discussions do have to register an account with the BBC beforehand. Consequently, the impact of anonymity fostering uncivil discourse may be somewhat lessened due to the forum’s design.

The proportion of interjections that contain a negative stereotypical remark about ‘Scotland/The Scottish’ provides a stronger indicator of civility. The top panel of Figure 4 explores the number of interjections that resort to stereotyping. It indicates that 3% of interjections make negative generalizations about ‘Scotland/The Scots’, a very low proportion overall.\(^9\) Coupled with the low levels of moderation necessary, we can conclude that the discussion on Scottish independence is very civilized, with little ‘flaming’. In fact, there appears to be more discussion about the perceived negative stereotypes of ‘Scotland/The Scottish’ than is actually taking place. This may be a consequence of approximately 1/3 of the interjections focusing predominately on Scottish politicians and parties, the tone of which is overwhelmingly negative. This might give rise to the perceptions of more prevalent negative sentiments towards Scotland in general. But it is important to distinguish between the two. In sum, there is support for H4a and H4b – the BBC HYS forums can be considered to be predominately civil, adding credence to the idea that there are at least some features of deliberation present.

Figure 4 about here

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\(^9\) Even if we assume that all the comments removed from the thread by the moderators were done so the basis of stereotypical generalizations, the overall proportion of the discussion that is uncivil/flaming would still be low.
If a forum were to be a true place of deliberation, we would expect to see participants exchanging relevant information with one another. The bottom panel of Figure 4 illustrates this does not appear to be the case, with little information exchange between participants. As little as 5% of interjections include a statistic or a weblink in support of their point. Among those that chose either, the use of statistics was more prevalent. Nonetheless, this is quite low from a deliberative perspective, where knowledge exchange is expected to be high and arguments expected to be rational and supported by evidence. While we acknowledge that this is only one measure of information exchange, the relative lack of statistical evidence or additional information through weblinks means that we reject H5. The online discussion of the referendum does not appear to contain the type of information exchange we would expect to see if it was deliberative.

Our final measure explores the proportion of conversation given over to partisan politics (mentions of politicians and political parties) vis-à-vis mentions of policy issues associated with the referendum (including economic, public services, referendum process issues etc.…). Figure 5 illustrates that a majority of interjections (57% in total) mention policy issues related to the referendum. This compares to about one third that mention partisan politics. From a deliberative perspective, this is a positive finding. Deliberation assumes engagement with relevant issues and here it seems that discussions are at least more issue focused than partisan focused. Even when we discount discussion that is related to referendum process (e.g.: voting eligibility, referendum question wording etc.…) and focus more on the so-called ‘core’ issues in respect of independence, much more of the online discussion is devoted to these things compared to the amount of discussion given to partisan politics. Yet, of the one third of interjections that do make reference to parties and politicians, the tone is overwhelmingly negative (for more see Quinlan et al. 2014). This does indicate that a substantial segment of the conversation may be conditioned by partisanship, which would not bode well for deliberation. In sum, while we do find support for H6 that there is some potential for deliberation with relevant issues of secession taking precedence in the online exchanges, the extent of negativity about
politicians and political parties, which could be suggestive of partisanship, could be expected to undermine the extent of deliberation possible.

6. Discussion and implications
We know that increasing use is being made of referendums to decide matters of public policy. Nonetheless, referendums are criticised on a number of fronts: from misinformation and heightened negativity in campaigns, through inadequate knowledge amongst voters of the issues, to the infiltration of second-order issues into the debate. As such, referendums appear to fall short in terms of living up to the so-called golden standard of deliberative democracy, where ideally, informed citizens, having weighed up all the arguments through discussion and consideration, followed by making a rational choice. This focuses our attention on ways and means that referendums can become more deliberative. The growth of social media discussion forums offers new channels to help address these concerns by providing online interactive arenas where referendum issues can be teased out.

Our contribution is to explore online discussion of the historic Scottish independence referendum of 2014. Unlike previous studies, our research examined a non-partisan forum in the form of the BBC Have Your Say discussion threads. Our aim was to assess how well a series of online discussions of the referendum have contributed to deliberation and by consequence whether social media offers the much heralded new promise that is often ascribed to it with respect to changing how people are engaging with politics.

In terms of deliberation, the results are mixed. On the positive front, we find that there are relatively low levels of flaming, with few posts removed by moderators and the tone of discussion, for the most part, has been civil and maintained a strong degree of netiquette. A majority of interjections do relate to policy issues that are of relevance to the referendum, with more issue focus than partisan point scoring and negative stereotyping of identities. All of this would seem to offer hope to those who want referendum campaigns and discussion to have a more deliberative flavour.

However, there is more reason to be concerned from a deliberative standpoint. There is little engagement from participants in the discussion: the forum is instead more comment driven than discussion focused, with participants failing to interact with one another to any great extent, thus falling short of a cornerstone of deliberation. Men dominate the conversation and a small minority of individuals tend
to monopolise it. There is also scant evidence of information exchange. Moreover, while partisan politics is not widespread, and is much less discussed than policy, a third of interjections do discuss partisan politics. The tone associated with these interjections is overwhelmingly negative with a strong anti-party and anti-politician sentiment to the fore, which might undermine deliberation taking hold.

Of all the online discussion forums on Scottish independence that we could have analysed, the BBC HYS forums are arguably among the last places where we would expect to find evidence of poor quality debate. In short, we purposefully set ourselves a hard test – if deliberation is going to happen, we maintain that it would be most likely to happen on the BBC discussion boards than anywhere else considering the type of participant likely to visit the BBC News site, the level of forum moderation, and the fact that the forum is non-partisan. Yet our results suggest that while there is some promise, the discussion on the BBC HYS forums fall below deliberative standards on several dimensions, which raises a number of concerns about the capacity for social media forums to contribute to deliberation. Accordingly, we conclude that while we don’t observe ‘flaming keyboards’, there still appears to be some way to go before online discussion can be considered the solution to ensuring referendums exhibit more deliberative features.

We acknowledge that this analysis represents a focus on one form of social media–online discussion forums. There is a need for future analyses to consider other forums, including unmoderated channels such as Twitter (see Shephard et al. 2014), to establish if other social media channels can contribute to deliberation. We also accept that multiple conceptualizations of our measures are possible. Information exchange, for instance, could be measured according to other measures than those manifest measures we deploy here and we therefore acknowledge that our measures are indicative of knowledge exchange, not inclusive of all knowledge transfer per se. However, given the extremely low levels of information exchange we did observe, we have confidence in our conclusion that knowledge exchange is low. Our analysis has also explored one dimension of online discussion, namely the quality of exchanges between participants. Yet future research might devote more focus to the participants in these activities, especially to establish if engagement in discussion results in any change of mind.

Our findings have two implications. First, it is evident that there is a long way to go if social media forums are to be considered panacea like in terms of increasing
deliberative discussion, or more broadly in altering citizen engagement with politics. Secondly, if social media forums are to deliver many of the potentials of deliberation that in theory they are capable of doing, we need to take heed of our findings and highlight ways online discussion could become more deliberative going forward. One means of doing this might be for discussion hosts to create short accompanying guides to netiquette and responsible posting so as to expose the challenges to deliberation caused by partisan posts, stereotyping, and uncivil behaviour. Another objective should be the trying to encourage more women to engage in online discussions so as the discussion is more representative of the general public, as well as broadening the base of contributors and contributions in other ways such as making the debate more interactive. The means of achieving these latter goals however are less clear. Nonetheless, with the proliferation of referendums and the growing use and importance of social media in people’s daily lives and politics, it is important that the evident promise that these channels provide in terms of allowing greater citizen engagement with the political process is fully harnessed. The reality is that so far, this promise is at best only partially being fulfilled.

Acknowledgements

We would like to thank Theresa Reidy, Jane Suiter, and the anonymous reviewers for providing comments on this paper.

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Figure 1 Measures of discussion intensity (top panel) and conversational intensity (bottom panel) (%). Please note: Measured at the interjection level (n=5,320). Source of data: Content analysis of the BBC HYS discussion forums on Scottish independence referendum 2012-2013.
Figure 2 Measures of equality of participation % (top panel: gender; bottom panel: national identity).

Please note: Measured at the interjector level (n=983 for gender; n=679 for national identity).

Source of data: Content analysis of the BBC HYS discussion forums on Scottish independence referendum 2012-2013.
Figure 3 Measures of politeness (top panel) and civility: interjections removed by moderators (bottom panel) (%).

Please note: Measured at the interjection level (n=5,320 for politeness; n=5,482 for civility moderation metric).

Source of data: Content analysis of the BBC HYS discussion forums on Scottish independence referendum 2012-2013.
Figure 4 Measures of negative stereotypes (top panel) and information exchange (bottom panel) (%).

Please note: Measured at the interjection level (n=5,320).
Source of data: Content analysis of the BBC HYS discussion forums on Scottish independence referendum 2012-2013.
Figure 5 Measures of issue discussion (top panel) and partisan political discussion (bottom panel) (%).

Please note: Measured at the interjection level (n=5,320).

Source of data: Content analysis of the BBC HYS discussion forums on Scottish independence referendum 2012-2013.
<table>
<thead>
<tr>
<th>Proportion of interjections</th>
<th>Proportion of interjectors (N)</th>
</tr>
</thead>
<tbody>
<tr>
<td>25%</td>
<td>4% (103)</td>
</tr>
<tr>
<td>50%</td>
<td>16% (414)</td>
</tr>
<tr>
<td>75%</td>
<td>47% (1203)</td>
</tr>
<tr>
<td>100%</td>
<td>100% (2570)</td>
</tr>
</tbody>
</table>

*Source of data:* Content analysis of the BBC HYS discussion forums on Scottish independence referendum 2012-2013.
Appendix

Table A1 Summary statistics of variables

<table>
<thead>
<tr>
<th>Variable</th>
<th>Mean</th>
<th>S/d</th>
<th>Range</th>
<th>N</th>
</tr>
</thead>
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<tr>
<td>Conversational Reciprocity</td>
<td>0.26</td>
<td>0.438</td>
<td>0–1</td>
<td>5,320</td>
</tr>
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<td>Gender 10</td>
<td>0.09</td>
<td>0.283</td>
<td>0–1</td>
<td>983</td>
</tr>
<tr>
<td>National identity 10</td>
<td>1.96</td>
<td>1.376</td>
<td>0–7</td>
<td>679</td>
</tr>
<tr>
<td>Capitalization</td>
<td>0.06</td>
<td>0.229</td>
<td>0–1</td>
<td>5,320</td>
</tr>
<tr>
<td>Punctuation</td>
<td>0.04</td>
<td>0.187</td>
<td>0–1</td>
<td>5,320</td>
</tr>
<tr>
<td>Politeness</td>
<td>0.09</td>
<td>0.304</td>
<td>0–2</td>
<td>5,320</td>
</tr>
<tr>
<td>Stereotyping: Scotland/Scots</td>
<td>0.03</td>
<td>0.174</td>
<td>0–1</td>
<td>5,320</td>
</tr>
<tr>
<td>Statistics</td>
<td>0.04</td>
<td>0.194</td>
<td>0–1</td>
<td>5,320</td>
</tr>
<tr>
<td>Weblinks</td>
<td>0.05</td>
<td>0.498</td>
<td>0–1</td>
<td>5,320</td>
</tr>
<tr>
<td>Information Exchange</td>
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<td>0.227</td>
<td>0–2</td>
<td>5,320</td>
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<tr>
<td>Policy issues mentioned</td>
<td>0.57</td>
<td>0.495</td>
<td>0–1</td>
<td>5,320</td>
</tr>
<tr>
<td>Political parties mentioned</td>
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<td>0.347</td>
<td>0–1</td>
<td>5,320</td>
</tr>
<tr>
<td>Politicians mentioned</td>
<td>0.23</td>
<td>0.423</td>
<td>0–1</td>
<td>5,320</td>
</tr>
</tbody>
</table>

Source of data: Content analysis of the BBC HYS discussion forums on Scottish independence referendum 2012-2013.

---

10 Measured at interjector level.
### Table A2 Intra-coder and inter-coder reliabilities tests for independent variables

<table>
<thead>
<tr>
<th>Theme</th>
<th>Variable (Range)</th>
<th>Intra-coder reliability</th>
<th>Inter-coder reliability</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Krippendorff $\alpha$</td>
<td>95% confidence intervals</td>
</tr>
<tr>
<td>Engagement</td>
<td>Conversational reciprocity (0-1)</td>
<td>0.94</td>
<td>0.84 1.00</td>
</tr>
<tr>
<td></td>
<td>Gender (0-1)</td>
<td>0.80</td>
<td>0.71 0.90</td>
</tr>
<tr>
<td></td>
<td>National identity (0-7)</td>
<td>0.68</td>
<td>0.56 0.79</td>
</tr>
<tr>
<td></td>
<td>Capitalization (0-1)</td>
<td>0.85</td>
<td>0.61 1.00</td>
</tr>
<tr>
<td></td>
<td>Punctuation (0-1)</td>
<td>0.91</td>
<td>0.70 1.00</td>
</tr>
<tr>
<td></td>
<td>Stereotyping: Scotland/Scots (0-1)</td>
<td>0.82</td>
<td>0.45 1.00</td>
</tr>
<tr>
<td>Knowledge</td>
<td>Statistics (0-1)</td>
<td>0.82</td>
<td>0.48 1.00</td>
</tr>
<tr>
<td></td>
<td>Weblinks (0-1)</td>
<td>1.00</td>
<td>N/A</td>
</tr>
<tr>
<td>Politics</td>
<td>Policy issues mentioned (0-1)</td>
<td>0.73</td>
<td>0.58 0.86</td>
</tr>
<tr>
<td></td>
<td>Political parties mentioned (0-1)</td>
<td>0.94</td>
<td>0.86 1.00</td>
</tr>
<tr>
<td></td>
<td>Politicians mentioned (0-1)</td>
<td>0.95</td>
<td>0.87 1.00</td>
</tr>
</tbody>
</table>

Reliability tests conducted on a random sample of 10% of data. After missing cases are excluded, these tests comprised a valid n=515 cases at interjection level; 139 cases at the interjector level. We use Krippendorf’s $\alpha$ as our reliability coefficient. 95% confidence intervals are calculated on the basis of 1,000 bootstrap simulations on the basis of classification on being a nominal or ordinal variable using the SPSS macro ‘KALPHA’ from Hayes, A. F., & Krippendorff, K. (2007) “Answering the call for a standard reliability measure for coding data”. *Communication Methods and Measures*, 1, 77-89.