The Nation-State in the Digital Age: A Contextual Analysis in 33 Countries

JIA LU1
Tsinghua University, China

XINCHUAN LIU
Peking University, China

The rise of the Internet brings up a debate about its role in eroding or strengthening the nation-state. Taking the perspective of media ecology, this article explored the Internet’s impacts on social context in which national identity and trust in the state are formed. Using the data from the World Values Survey, this article carried out multilevel analyses with 47,965 respondents in 33 countries. The results illustrated two conclusions. First, the Internet as a context threatens the mutual support between the nation and the state, leading to the separation of the nation-state. Second, democracy harnesses the Internet. On the one hand, digital freedom neutralizes the challenges brought by digital infrastructure. On the other hand, digital infrastructure favors the civic approach over the ethnic approach.

Keywords: nation-state, the Internet, media context, comparative media system

The nation-state serves as the fundamental structure of the modern world system. There is a long history about the research of media and the nation-state. Anderson (1983) suggested that the concept of the nation-state is created through people’s imagination of participating in the daily ritual of newspaper reading across the country (also see Gellner, 1983). This theme appeared repeatedly with the advent of radio (Fry, 1998; Hayes, 1996; Mrazek, 1997) and of television (Edensor, 2002; Katz, 1996; McQuail, 1992) as well as with the more recent introduction of the Internet.

Research about the Internet and the nation-state started with the approach of technology determinism, arguing that the Internet’s deterritorial capacity would erode the nation-state. However, the approach of social construction of technology prevailed later, arguing that social and individual predispositions domesticate the Internet and transform it into a tool used to consolidate the nation-state. Although few scholars would disagree with the fact that the Internet has played a critical role in national...
building, research on the Internet and the nation-state have been criticized for controversial and idiographic claims (P. Smith & Phillips, 2006). As a result, it lacks a quantitative evidentiary footing about how the Internet forges patterns of collective attachment to the nation-state.

This article aimed to run a comprehensive quantitative test of the debate and make an up-to-date assessment of the direction and strength of the Internet’s impacts on people’s national identity and trust in the state. Taking the approach of media ecology, this article saw the Internet as a context and explored how it affects social context in which national identity and trust in the state are formed. Using the data from the World Values Survey (WVS) 2010–2014, this article carried out multilevel analyses with a big probability sample of 47,965 respondents from 33 countries.

The Nation-State: The Ethnic Approach and the Civic Approach

Nation is a cultural term, referring to a body of people who are naturally bounded together by certain affinities that give them a sense of unity by making them feel that they have something in common and differ from other people (Connor, 1978). State is a political term, referring to a body of people who live on a definite territory and are unified under a set of institutional forms of governance, which possess monopoly of coercive power and demand obedience from people (Connor, 1978). The merger of the two terms implies that politics and culture support each other, where a state derives the legitimacy to rule from its endorsement of a specific cultural group, and in turn a culture survives and thrives by the aid of political power.

For individual persons, their attachment to the nation-state is expressed through two concepts—national identity and trust in the state. To form a national identity means that a person develops a sense of belonging to a particular country, becomes emotionally attached to that country, is aware of his or her rights and obligations as the country’s citizen, and devotes him- or herself to the cause of the country in a state of patriotic infusion (Keillor, Hult, Erffmeyer, & Babakus, 1996). Political trust is critical for a state’s legitimacy (Bianco, 1994; Dogan, 1994; Scholz & Lubell, 1998). Without citizen trust and support, the state is not able to exercise its governance on all cylinders (Dalton, 1996; Dogan, 1994; Listhaug, 1995; Newton & Norris, 2000).

A. D. Smith (2005) used two theoretical approaches to conceptualize the formation of the nation-state: the ethnic approach and the civic approach. For national identity, the ethnic approach (also known as ethnic nationalism) believes that a nation is held together by shared heritage, including a common language, a common culture, and a common ethnic ancestry (A. D. Smith, 1986, 2000). The civic approach (also known as civic nationalism), meanwhile, believes that a nation is held together by democracy, where its members have equal rights and its legitimacy comes from the “will of people” it represents (Miller, 1995, 2000; Tamir, 1993).

The two approaches also explicate trust in the state. The ethnic approach (also known as the cultural theory of political trust) contends that trust in the state results from long-standing, deeply rooted cultural values, which people learn through early life socialization (Almond & Verba, 1963; Inglehart, 1997). A homogenized, shared national culture fosters interpersonal trust, laying a solid base for people to
cooperate with each other in local civic associations and national political institutions (Putnam, 1993). Thus, trust in the state is an extension of interpersonal trust, which is developed through cultural transmission and projected onto political institutions. The civic approach (also known as the institutional theory of political trust) argues that political trust depends on the performance of political institutions (Mishler & Rose, 2001). People trust the institutions that perform well and distrust the ones that fail to meet their demands. Democracy is one of important indicators people use to evaluate the performance of political institutions. Prior studies reported that political trust increases when people feel that their civil liberties are well protected (Inglehart, 1999; Levi, 1998; Uslaner, 2003).

The Internet and the Nation

Since its inception, the Internet has been viewed as an important tool for globalization (Castells, 1997, 2000; Knorr-Centina, 1999, 2005). A number of studies pointed out that the Internet makes global communication more prevalent, creating opportunities for people not only to enjoy a wide range of products and services but also to shape global consciousness around transnationally circulated cultural goods (see Beck & Sznaider, 2006; Bohman, 2004; Cannon & Yaprk, 2002; Fraser, 2007; Jenkins, 2008; Stratton, 1997; Tomlinson, 1999; Ugarteche, 2007). The free flow of information and the rise of global consciousness sever people’s ties to locality and undermine the hegemony of national identity (Eriksen, 2007; Soffer, 2013). In addition, the Internet brings about social fragmentation and cultural individualization, eroding a collective sense of national identity (Castells, 2000; Lash, 2002; Poster, 1999). The Internet offers a wide range of informational options and social identities users can choose to consume, leading to the end of an integrated identity (Eriksen, 2007; Soffer, 2013).

On the other side of the debate, Curran (2012) criticized that the Internet’s capacity of promoting global understanding is crippled by the socioeconomic structure of the world system, including disparate distribution of wealth and resources, language differences, bitter conflicts of values and beliefs, dominance of national cultures, and manipulation of authoritarian governments. On the contrary, the Internet contributes to the formation of national identity. First, the Internet is largely organized around nation-states, including national borders (Bharat, Chang, & Henzinger, 2001; Halavais, 2000), country domain names (Shklovski & Struthers, 2010), and native languages (Dor, 2004; Hafez, 2007). Second, national characters are strongly embedded with the contents of the Internet, particularly in online consumption of national news (Curran, 2012; Soffer, 2013), in times of war and national crisis (Mihelj, 2011), and among diasporas populations (Enoch & Grossman, 2010; Graham, 1998; Miller & Slater, 2000; Morozov, 2011).

The Internet and the State

A similar debate also occurred for the state. The early studies anticipated a diminishing role of the state in the digital age, where the Internet renders the state powerless. The Internet’s threats concentrate on weakening four historical functions of the state—providing national security (Chroust, 2000), regulating economic activities (May, 2002; Perritt, 1998), preserving moral and cultural values (Jordan, 1999; Ownby, 2008), and participating in international cooperation (Coyle, 1997; Sklair, 2002; Virkar, 2013). Another widespread belief is that the Internet would subvert authoritarian regimes because it can break through the state’s control and bring about direct democracy to citizens (Hague & Loader,
On the other side of the debate is what Mueller (2013) called “cyberconservatism,” advocating that the state is able to take advantage of the Internet and continue its power and dominance in the digital age. First, the state plays a leading role in fighting the information war and maintaining national security (Eriksson & Giacomello, 2009; May, 2002; Virkar, 2015). Second, the state is capable of enforcing laws in cyberspace and regulating online economic activities (Birnhack & Elkin-Koren, 2003; Eriksson & Giacomello, 2009; Gasser & Ernst, 2006; Goldsmith & Wu, 2006; Taylor, 1999). Third, the state serves as a primary defender of social norms against huge amounts of out-of-control information on the Internet (Eriksson & Giacomello, 2009; Mechling, 2002; Virkar, 2013). Fourth, the state is actively engaged in international cooperation on the Internet regulation covering a variety of issues, such as intellectual property, human rights, consumer fraud, and obscenity (Lenk, 1997; Perritt, 1998; Virkar, 2015). In addition, Kalathil and Boas (2003) denied the Internet’s threat to authoritarian rule. They argued that the state can manipulate the Internet development and condition the ways it is used by social members (also see Morozov, 2011). Goldsmith and Wu (2006) concluded that the state succeeds in setting up national borders on the Internet to satisfy the needs of individuals and groups within the territory.

The Internet as a Context

So far, the debate about the Internet has focused on the relationship between individual Internet use and the nation-state but has ignored the broader media context in which national identity and trust in the state are formed, such as media ownership, media development, and content control (Harwood & Roy, 2005). Strate (2008) suggested that the impacts of media technologies concentrate on social context itself instead of specific contents within the context. He further explained how media function as contexts:

A medium is not like a billiard ball, producing its effects by striking another ball. Rather it is more like the table on which human agents play their parts. As environments, media do not determine our actions, but they define the range of possible actions we can take, and facilitate certain actions while discouraging others. (p. 135)

The importance of media context has been widely recognized in social identity theory (Reid, Giles, & Abrams, 2004; Trepte, 2006). Linking social identity theory to mass communication research, Harwood and Roy (2005) advocated an approach that would attend to macrolevel contextual factors as well as intersections between individual factors and contextual factors. Thus, the Internet's impacts on the nation-state can be better explored through the analysis of how it affects social context in which national identity and trust in the state are formed.

Taking the approach of media ecology, Levinson (1999) argued that the Internet, as a grand technology, creates a new media context. First, the virtual environment enables rich and diverse technology-mediated communications and contains a large portion of human experiences. Second,
people’s online interactions resemble their daily contacts in physical reality. Third, the hyperlink structure is similar to human thought processes, incorporating speech into all human actions. Fourth, virtual reality and augmented reality technologies mix the virtual and the physical, making them inseparable (Ruotsalainen & Heinonen, 2015). Likewise, Carey (1998) pointed out that the Internet is creating a new media ecology that alters structural relations among old media and displaces a national system of communications. Within such an ecology, new forms of identities and new representations of nations are formed.

According to Giddens (1991), people’s identities are constructed through two steps—emancipatory politics and life politics. Emancipatory politics describes the extent to which people are liberated to make their own choices. Life politics refer to people’s lifestyle choices that contribute to the process of self-actualization through which their identities are formed. Emancipatory politics creates and defines the environment in which life politics operates. It focuses on divisive distribution of resources and powers and aims to free people from the fixities of traditions and customs by eliminating or reducing exploitation, inequality, or oppression. In addition, Giddens (1991) saw Habermas’s (1987) idea of ideal-speech situation as a communicative framework for emancipatory politics, where well-informed individuals would make free choices about their identities. There emerge two types of emancipatory politics—distribution of resources and distribution of free speech. They jointly determine the extent to which people are allowed to make their own choices on the nation-state.

The Internet as a context, therefore, refers to how the Internet is developed to affect emancipatory politics in a country. First, the distribution of informational resources through the Internet relates to the issue of digital infrastructure—more people have access to the Internet, more widely informational resources are diffused. Second, the distribution of free speech is about the issue of digital freedom—freedom of speech on the Internet. Viewing the Internet as a context, this article aimed to explore how contextual differences on the Internet affect national identity and trust in the state. At the contextual level, digital infrastructure and digital freedom were adopted to specify the degree of emancipatory politics on the Internet, which delineates media context in which national identity and trust in the state are formed.

**RQ1:** How does digital infrastructure affect national identity?

**RQ2:** How does digital freedom affect trust in the state?

In addition to the main effects, this article examined the moderating effects of digital emancipation on the nation-state. The literature above indicated two theoretical approaches to explicate national identity and trust in the state—the ethnic approach and the civic approach. The following research questions are asked about how digital emancipation affect their contributions to national identity and trust in the state.

**RQ3a:** How does digital infrastructure moderate ethnic and civic effects on national identity?

**RQ3b:** How does digital infrastructure moderate ethnic and civic effects on trust in the state?
RQ4a: How does digital freedom moderate ethnic and civic effects on national identity?

RQ4b: How does digital freedom moderate ethnic and civic effects on trust in the state?

**Method**

**Sample**

The individual-level data come from the sixth wave (2010–14) of the World Values Survey (WVS). Initiated in 1981, the WVS is the largest transnational, longitudinal investigation of human beliefs and values in all major cultural zones. Typically, in each country, a sample of 1,000 or more adults was selected using random stratified sampling, and were interviewed face-to-face. The sixth wave is the latest survey, with 85,000 respondents from 57 countries. The country-level data were obtained from the United Nations and the Freedom House. All the data were combined to create the final sample with 47,965 respondents at the individual level and 33 countries at the country level.

**Measurement**

To measure national identity, this article adopted two questions in the WVS. V211 asks, “How proud are you to be [your own nationality]?” The answers include four categories, from very proud to not at all proud. V214 asks how much respondents agree or disagree with the statement, “I see myself as part of my nation.” The answers include four categories, from strongly agree to strongly disagree. V211 and V214 were combined into a scale to measure national identity (α = .593).

To measure trust in the state, this article adopted Newton and Norris’s (2000) scale, including six questions in the WVS. Respondents are asked, “I am going to name a number of organizations. For each one, could you tell me how much confidence you have in them: Is it a great deal of confidence, quite a lot of confidence, not very much confidence, or none at all?” The following organizations are listed: the churches (V108), the armed forces (V109), the press (V110), television (V111), labor unions (V112), the police (V113), the courts (V114), the government (in your nation’s capital) (V115), political parties (V116), parliament (V117), the civil service (V118), universities (V119), major companies (V120), banks (V121), environmental organizations (V122), women’s organizations (V123), and charitable or humanitarian organizations (V124). A factor analysis was run with all 17 variables (KMO: 0.924; Bartlett’s test of sphericity: p < .001). V113, V114, V115, V116, V117, and V118 were loaded up into one factor and were combined into a scale (α = .869), describing one’s confidence in the state.

At the country level, digital infrastructure is measured by the Internet infrastructure index, which, released by the United Nations, is a composite of the penetration rates of Internet-based services, including Internet users in general, fixed broadband subscriptions, wireless broadband subscriptions, and mobile-cellular subscriptions. Digital freedom is measured by the Internet freedom index, which is released by the Freedom House to rate the state of online freedom in a country, including obstacles to access, limits on content, and violation of user rights. Because the infrastructure index and the freedom index are annually updated, the data in the year of 2014 were singled out for analysis. To diagnose
potential multicollinearity, two indices were centered and the VIF of each was computed. The results are below the threshold of considering the multicollinearity problem (digital infrastructure: 1.847; digital freedom: 1.127).

To measure the ethnic approach, this article adopted the traditional/secular-rational values index in the WVS, where the traditional orientation and the secular-rational orientation take two ends of one continuum (the lower the score, the more traditional). According to Inglehart and Welzel (2005), the traditional orientation values religion, family, history, and authority but rejects divorce, abortion, and euthanasia. In contrast, the secular-rational orientation has the opposite preferences on all of these topics. Thus, the respondents who are inclined to the traditional orientation are likely to endorse the dogmatic imperatives of tradition and religion, which are inherited from older generations.

To measure the civic approach, this study used two questions in the WVS. V114 asks, “How democratically is this country being governed today?” Respondents are required to choose a position on a 10-point scale, from not at all democratic to completely democratic. V115 asks, “How much respect is there for individual human rights nowadays in this country?” The answers include four categories, from a great deal respect to no respect at all. V115 was transformed into a 10-point scale by recoding four categories into 1, 4, 7, and 10. Then, V114 and V115 were combined into a scale measuring the civic approach (α = .603).

In addition, two groups of individual-level variables were entered into the models as controls. One is about other types of media use, including newspaper (V217) and television (V219), radio (V220), and Internet (V223). The other is about demographic variables, including income (V239), gender (V240), age (V242), and education (V248).

**Analysis**

To account for the nested nature of respondents in countries, a series of hierarchical linear regression models (HLM) are constructed to examine both country-level and individual-level effects. They allow us to see whether or not individual and contextual variables can significantly affect dependent variables and to observe the interactions between the two levels. Group mean centering was used at the individual level, and grand mean centering was used at the country level. Table 1 shows the descriptive statistics of all key variables.
Table 1. Descriptive Statistics.

<table>
<thead>
<tr>
<th>Variables</th>
<th>N</th>
<th>Mean (SD)</th>
<th>Min, Max</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>National identity</td>
<td>47,965</td>
<td>3.02 (1.09)</td>
<td>1, 7</td>
<td>7 being highest level</td>
</tr>
<tr>
<td>Trust in the state</td>
<td>47,965</td>
<td>9.60 (4.24)</td>
<td>1, 19</td>
<td>19 being highest level</td>
</tr>
<tr>
<td>Ethnic approach</td>
<td>47,965</td>
<td>0.64 (0.17)</td>
<td>0.01, 1</td>
<td>1 being highest level</td>
</tr>
<tr>
<td>Civic approach</td>
<td>47,965</td>
<td>11.09 (4.16)</td>
<td>1, 19</td>
<td>19 being highest level</td>
</tr>
<tr>
<td>Internet use</td>
<td>47,965</td>
<td>2.72 (1.76)</td>
<td>1, 5</td>
<td>5 being highest level</td>
</tr>
<tr>
<td>Newspaper</td>
<td>47,965</td>
<td>3.29 (1.56)</td>
<td>1, 5</td>
<td>As above</td>
</tr>
<tr>
<td>TV</td>
<td>47,965</td>
<td>4.48 (1.06)</td>
<td>1, 5</td>
<td>As above</td>
</tr>
<tr>
<td>Radio</td>
<td>47,965</td>
<td>3.46 (1.64)</td>
<td>1, 5</td>
<td>As above</td>
</tr>
<tr>
<td>Income</td>
<td>47,965</td>
<td>4.92 (2.11)</td>
<td>1, 10</td>
<td>10 being highest level</td>
</tr>
<tr>
<td>Age</td>
<td>47,965</td>
<td>41.05 (15.98)</td>
<td>16, 98</td>
<td>age</td>
</tr>
<tr>
<td>Education</td>
<td>47,965</td>
<td>5.86 (2.32)</td>
<td>1, 9</td>
<td>9 being highest level</td>
</tr>
<tr>
<td>Sex</td>
<td>47,965</td>
<td></td>
<td></td>
<td>Male (50%) Female (50%)</td>
</tr>
<tr>
<td>Digital freedom</td>
<td>33</td>
<td>60.06 (16.99)</td>
<td>13, 92</td>
<td>0–100, the lower the score, the worse freedom</td>
</tr>
<tr>
<td>Digital infrastructure</td>
<td>33</td>
<td>45.35 (23.47)</td>
<td>8.28, 93.50</td>
<td>0–100, the lower the score, the worse infrastructure</td>
</tr>
</tbody>
</table>

Two null models were first created to give full information on the variance components for the two levels of influence and to serve as baselines for comparison with subsequent models. Chi-square tests for variance components indicate the significance of the results ($p < .001$), suggesting that there are variances in the outcome variables caused by the Level 2 groupings. The Intraclass Correlation Coefficients (ICC) are 20.5% for national identity and 17.2% for trust in the state, indicating the percentage of the variances for explaining outcomes at the country level.

Then, two random intercepts and slopes models that combine an intercept-as-outcome model and a slope-as-outcome model were built. All the individual and contextual variables were simultaneously entered into the models. In addition, cross-level interaction terms were also included to examine moderating effects. The explanatory powers of two random intercepts and slopes models at the country level are 47.2% for national identity and 31.5% for trust in the state. The explanatory powers at the individual level are 15.8% for national identity and 23.1% for trust in the state (see Tables 2 and 3).
### Table 2. Estimated Effects of Individual and Contextual Variables on National Identity (Random Intercepts and Slopes Model).

<table>
<thead>
<tr>
<th></th>
<th>Coefficient</th>
<th>SE</th>
<th>t ratio</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intercept</td>
<td>8.256</td>
<td>0.088</td>
<td>93.881***</td>
</tr>
<tr>
<td><strong>Country-level effects</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Digital infrastructure</td>
<td>−0.024</td>
<td>0.003</td>
<td>−6.894***</td>
</tr>
<tr>
<td>Digital freedom</td>
<td>0.018</td>
<td>0.005</td>
<td>3.465**</td>
</tr>
<tr>
<td><strong>Individual-level effects</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ethnic approach</td>
<td>3.159</td>
<td>0.167</td>
<td>18.971***</td>
</tr>
<tr>
<td>Civic approach</td>
<td>0.037</td>
<td>0.006</td>
<td>6.619***</td>
</tr>
<tr>
<td>Income</td>
<td>0.008</td>
<td>0.007</td>
<td>1.273</td>
</tr>
<tr>
<td>Sex</td>
<td>−0.077</td>
<td>0.018</td>
<td>−4.227***</td>
</tr>
<tr>
<td>Age</td>
<td>0.002</td>
<td>0.001</td>
<td>1.956*</td>
</tr>
<tr>
<td>Education</td>
<td>−0.004</td>
<td>0.007</td>
<td>−0.601</td>
</tr>
<tr>
<td>Newspaper</td>
<td>0.010</td>
<td>0.011</td>
<td>0.965</td>
</tr>
<tr>
<td>Television</td>
<td>0.069</td>
<td>0.016</td>
<td>4.183***</td>
</tr>
<tr>
<td>Radio</td>
<td>0.025</td>
<td>0.010</td>
<td>2.550*</td>
</tr>
<tr>
<td>Internet</td>
<td>−0.028</td>
<td>0.009</td>
<td>−3.145**</td>
</tr>
<tr>
<td><strong>Cross-level interactions</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ethnic × Digital Infrastructure</td>
<td>−0.001</td>
<td>0.006</td>
<td>−0.028</td>
</tr>
<tr>
<td>Ethnic × Digital Freedom</td>
<td>0.007</td>
<td>0.009</td>
<td>0.744</td>
</tr>
<tr>
<td>Civic × Digital Infrastructure</td>
<td>0.008</td>
<td>0.001</td>
<td>3.199**</td>
</tr>
<tr>
<td>Civic × Digital Freedom</td>
<td>0.001</td>
<td>0.001</td>
<td>0.315</td>
</tr>
<tr>
<td><strong>Random effects</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Variance components</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Country level</td>
<td>0.282</td>
<td>0.531</td>
<td>55.10 (30)***</td>
</tr>
<tr>
<td>Individual level</td>
<td>0.539</td>
<td>0.734</td>
<td>12.718 (32)***</td>
</tr>
<tr>
<td>Country-level explained variance</td>
<td></td>
<td></td>
<td>47.2%</td>
</tr>
<tr>
<td>Individual-level explained variance</td>
<td></td>
<td></td>
<td>15.8%</td>
</tr>
</tbody>
</table>

*Note. Unstandardized coefficients. \(N = 47,965\). Countries = 33.*

*p < .05. **p < .01. ***p < .001.*
Table 3. Estimated Effects of Individual and Contextual Variables on Trust in the State (Random Intercepts and Slopes Model).

<table>
<thead>
<tr>
<th></th>
<th>Coefficient</th>
<th>SE</th>
<th>t ratio</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intercept</td>
<td>9.448</td>
<td>0.287</td>
<td>32.976***</td>
</tr>
<tr>
<td><strong>Country-level effects</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Digital infrastructure</td>
<td>0.025</td>
<td>0.014</td>
<td>1.787*</td>
</tr>
<tr>
<td>Digital freedom</td>
<td>−0.043</td>
<td>0.021</td>
<td>−2.095**</td>
</tr>
<tr>
<td><strong>Individual-level effects</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ethnic approach</td>
<td>9.424</td>
<td>0.467</td>
<td>20.162***</td>
</tr>
<tr>
<td>Civic approach</td>
<td>0.268</td>
<td>0.012</td>
<td>21.893***</td>
</tr>
<tr>
<td>Income</td>
<td>0.059</td>
<td>0.013</td>
<td>4.402***</td>
</tr>
<tr>
<td>Sex</td>
<td>−0.010</td>
<td>0.038</td>
<td>−0.263</td>
</tr>
<tr>
<td>Age</td>
<td>−0.003</td>
<td>0.003</td>
<td>−1.115</td>
</tr>
<tr>
<td>Education</td>
<td>−0.058</td>
<td>0.024</td>
<td>−2.436*</td>
</tr>
<tr>
<td>Newspaper</td>
<td>0.134</td>
<td>0.029</td>
<td>4.589***</td>
</tr>
<tr>
<td>Television</td>
<td>0.038</td>
<td>0.035</td>
<td>1.097</td>
</tr>
<tr>
<td>Radio</td>
<td>0.080</td>
<td>0.029</td>
<td>2.802**</td>
</tr>
<tr>
<td>Internet</td>
<td>0.039</td>
<td>0.039</td>
<td>1.014</td>
</tr>
<tr>
<td><strong>Cross-level interactions</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ethnic × Digital Infrastructure</td>
<td>−0.043</td>
<td>0.014</td>
<td>−3.092**</td>
</tr>
<tr>
<td>Ethnic × Digital Freedom</td>
<td>−0.025</td>
<td>0.028</td>
<td>−0.892</td>
</tr>
<tr>
<td>Civic × Digital Infrastructure</td>
<td>0.002</td>
<td>0.001</td>
<td>3.148**</td>
</tr>
<tr>
<td>Civic × Digital Freedom</td>
<td>−0.001</td>
<td>0.001</td>
<td>−0.534</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>Variance components</th>
<th>SD</th>
<th>Chi-square (df)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Country level</strong></td>
<td>2.782</td>
<td>1.668</td>
<td>85,56 (30)***</td>
</tr>
<tr>
<td><strong>Individual level</strong></td>
<td>3.144</td>
<td>1.773</td>
<td>12,424 (32)***</td>
</tr>
<tr>
<td>Country-level explained variance</td>
<td></td>
<td>31.5%</td>
<td></td>
</tr>
<tr>
<td>Individual-level explained variance</td>
<td></td>
<td>23.1%</td>
<td></td>
</tr>
</tbody>
</table>

**Note.** Unstandardized coefficients. N = 47,965. Countries = 33.

*p < .05. **p < .01. ***p < .001.

**Results**

For the main effects, digital infrastructure is negatively related to national identity (β = −0.024, SE = 0.003, p < .001) and positively related to trust in the state (β = 0.025, SE = 0.014, p < .05). Digital freedom is positively related to national identity (β = 0.018, SE = 0.005, p < .01) and negatively related to trust in the state (β = −0.043, SE = 0.021, p < .01).
For cross-level moderating effects, digital infrastructure strengthens the positive relationships between the civic approach and national identity ($\beta = 0.008, SE = 0.001, p < .01$) as well as between the civic approach and trust in the state ($\beta = 0.002, SE = 0.001, p < .01$). As digital infrastructure increases, these relationships become stronger. Digital infrastructure, meanwhile, weakens the positive relationship between the ethnic approach and trust in the state ($\beta = -0.043, SE = 0.014, p < .01$). As digital infrastructure increases, this relationship becomes weaker.

**Discussion**

Digital infrastructure has antithetical main effects. The negative relationship between digital infrastructure and national identity reflects the approach of technology determinism, highlighting the Internet's deterritorial capability. The positive relationship between digital infrastructure and trust in the state reflects the approach of social construction of technology, highlighting the critical role the state plays in domesticating Internet technology. Public confidence is critical for the state. A number of studies described how hard the state works to embrace the Internet, through which huge resources are mobilized and a wide range of measures are taken to serve the public (see Brewer, Neubauer, & Geiselhart, 2006; Chadwick & May, 2003; Goldsmith & Wu, 2006; Kalathil & Boas, 2003; Morgeson, van Amburg, & Mithas, 2011; Welch, Hinnant, & Jae Moon, 2005). The result of this study supports the institutional theory of political trust, where trust in the state increases when the Internet has been used to improve the performance of the state's institutions. Thus, the state's efforts compromise the deterritorial potential of the Internet and transform it into a tool being used to build up public confidence in the state.

Like digital infrastructure, digital freedom also has antithetical main effects. On the one hand, digital freedom is positively related to national identity. Digital freedom is about free speech on the Internet, which is seen in the theories of Giddens (1991) and Habermas (1987) as an important instrument to protect an open, free context. In such a context, individuals can use their own rational devices to discern truth from error by sifting through competing opinions. Dworkin (1996), however, argued that the value of free speech lies not just in its consequences but also in its commitment to equality by offering everyone an opportunity to speak. It constitutes an essential feature of democratic fairness. Any curtailment of free speech would infringe on the very democratic value of political equality. Thus, digital freedom is not only an instrument but also a liberal ideology advocating protection of civil liberties. The result on national identity supports the civic approach, where democracy serves as an ideological link to unite people into a nation.

On the other hand, digital freedom is negatively related to trust in the state. It coincides with previous findings about the pervasive decline of public confidence in state institutions in democratic countries (Dalton, 1996; Dogan, 1994; Niemi, Mueller, & Smith, 1989; Norris, 1999; Nye, 1997; Nye & Zelikow, 1997). It reflects the core value of pluralist democracy, where media freedom is supposed to lower public confidence in the state because "obviously, no political system, not even a democratic one, is perfect. No institution can escape criticism from some segment of society. Unanimity is a ridiculous pretension of totalitarian regimes" (Dogan, 1992, p. 121).
The abovementioned results illustrate the paradoxical role of digital freedom. The concept of national identity is abstract and intangible, existing in people's imagination. Experiences with online freedom build up people's awareness and support of democratic ideals, which in turn foster their sense of belonging to a national community. Trust in the state, however, is concrete and tangible, depending on actual functioning of institutions in practice. Media freedom makes people more demanding and more critical about institutional performance so as to diminish their trust in the state (Norris, 1999). The distinction between abstract ideology of democracy and specific trust in the state was also noted in previous studies. For example, Harding, Philips, and Fogarty (1986) reported that a significant portion of the population express loss of confidence in state institutions, but very few of them are ready to give up the entire democratic system. The vast majority still have strong faith in democracy as the guiding ideology of governance (Lipset & Schneider, 1983). Inglehart (1999) argued that the postmodernization phase of development in advanced industrial countries erodes respect for authority but gives rise to growing support for democratic principles.

Digital freedom works against digital infrastructure on their main effects. Although digital infrastructure weakens national identity, digital freedom inhibits its deterritorial potential and protects national solidarity. Although digital infrastructure strengthens trust in the state, digital freedom compromises the state's control and maintains the diversity of opinions and pluralist democracy. Here, digital freedom functions to neutralize the technological bias resulting from digital infrastructure and levels the subsequent digital divide that favors the state with plenty of resources. The relationship between digital infrastructure and digital freedom illustrates a negotiation process on the Internet, in which the distribution of informational resources is counterbalanced by ideological diffusion of democracy to maintain cohesiveness and equality of a society.

Democracy, however, does not always oppose Internet technology—they also work together to bolster the nation-state. The results show that digital infrastructure strengthens the positive contributions of the civic approach to national identity and trust in the state. Prior research pointed out a positive relationship between the Internet and democracy. At the individual level, for example, Internet use increases people’s demand for democracy by providing them pluralistic contents and allowing them to actively participate in public issues (Bratton, Mattes, & Gyimah-Boadi, 2005; Groshek, 2009; Lei, 2011; Nisbet, Stoycheff, & Pearce, 2012). At the country level, Internet penetration is positively related to the democratic level of a country (Best & Wade, 2009; Groshek, 2009; Howard, 2009; Kedzie, 2002). Groshek (2009) explained that users in a context with a higher level of Internet penetration are exposed to more pluralistic contents, which in turn promote their demand for democracy. In this study, likewise, digital infrastructure increases people's demand for democracy. When this demand is satisfied through the civic approach, their endorsement of the nation-state is enhanced.

In contrast to the strengthening effects on the civic approach, digital infrastructure weakens the positive relationship between the ethnic approach and trust in the state. The ethnic approach argues that trust in the state comes from interpersonal trust among citizens, who are unified by a long-standing, shared national culture. The Internet, however, brings about social fragmentation and cultural individualization, undermining the cultural basis of interpersonal trust as well as political trust (Castells, 2000; Eriksen, 2007; Lash, 2002; Poster, 1999; Soffer, 2013). For people who live in a country with a
higher level of digital infrastructure, therefore, their trust in the state is less likely to be derived through the ethnic approach.

**Conclusion**

The findings of this article jointly reveal two general conclusions. First, the Internet as a context threatens the mutual support between the nation and the state. On the one hand, digital infrastructure weakens the nation and strengthens the state. Thus, the nation is unable to provide cultural support for the state, leading to “a state without a nation.” On the other hand, digital freedom strengthens the nation and weakens the state. Thus, the state is unable to provide political endorsement for the nation, leading to “a nation without a state.” Any bias toward either side would separate the nation-state. Its unity can only be achieved through the coordinated development of digital infrastructure and digital freedom.

Second, democracy harnesses the Internet. On the one hand, digital freedom works against digital infrastructure on their main effects over national identity and trust in the state. As an ideology of democracy, digital freedom functions to neutralize the challenges resulting from technological development. On the other hand, digital infrastructure shows favoritism to the civic approach over the ethnic approach. As digital infrastructure increases, people’s attachment to the nation-state would rely more on the universal appeal of democracy than on the particular appeal of ethnicity.

**References**


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