Credibility, Revenue, and Threatened Media Freedom: A Survey Experiment on Political Native Advertising*

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ABSTRACT

We examine a new form of propaganda, *political native advertising*, in which political actors, including foreign governments, buy space in independent media outlets to publish advertisements that camouflage themselves as standard news stories. Those who engage in this form of propaganda hope to exploit the higher credibility of the hosting media site and enhance the persuasiveness of their message. While there is a large literature that focuses on the type of hard and heavy-handed propaganda that is easily detected, relatively little attention has been paid to the type of soft propaganda associated with political native advertising. This is despite the obvious political implications and ethical issues at stake. Our article begins to redress this imbalance. We provide a simple theoretical framework for understanding political native advertising. Using an online survey experiment with real political native advertisements in the *Washington Post* and *The Telegraph* bought by the Chinese government, we also provide one of the first empirical evidence on some basic but important features of political native advertising. We find, among other things, that respondents struggle to distinguish political advertisements from standard news stories regardless of their level of education and media literacy, that political advertisements are more convincing if they appear on and are perceived as news from an independent hosting media site than in a government-controlled news outlet, and that trust in the hosting media site declines if the political advertisement is detected.

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Since 2010, readers in the United States have been able to obtain news on China from a multi-page special section named *China Watch* in the *Washington Post*, the *Wall Street Journal*, and the *New York Times* (Cook, 2017; Fallows, 2011). Unfortunately, instead of being a special editorial column on China, the *China Watch* section is a paid supplement provided by *China Daily*, a Chinese government-controlled English-language newspaper (Fallows, 2011). As of March 2018, *China Daily* had cooperated with, and provided *China Watch* content to, more than 40 legacy news media in over 20 countries with a circulation of 4 million people.[1] This is all part of *China Daily*'s strategy to use the platforms and reputations of partnership publishers to increase the worldwide audience for its news stories (China Daily, 2018). China is not the only country that pays western legacy media outlets to publish news stories from government-controlled media. For example, *Russia Beyond*, a Russian government-controlled media outlet, has also paid to place news stories in the *Washington Post* under the title *Russia Now*.[2] Unlike conventional sponsored content or advertisements, the news stories provided by *China Watch* and *Russia Now* are camouflaged as standard editorial content coming from the hosting media outlet. As a result, people are often unaware that they are reading sponsored and paid content provided by a foreign government.

While China and Russia's international propaganda might be striking in its scale, political parties in democracies have also engaged in similarly deceptive advertising activities. In the United States, for example, both Democratic and Republican candidates have paid to insert campaign advertisements that mimic news stories and other forms of standard editorial content in several domestic media outlets. On the Democratic side, *BuzzFeed* cooperated with President Barack Obama during the 2012 presidential election campaign and with presidential candidate Bernie Sanders during the 2016 election campaign to post campaign advertisements that resembled *BuzzFeed*'s standard news content (Iversen and Knudsen, 2017; Dykhne, 2017; Murtha and Gourarie, 2016). On the Republican side, Congressman Devin Nunes' reelection campaign created an online news site named *The California Republican* that is self-labeled as a media/news company. The site has

[1] Legacy media refer to older and more traditional media outlets such as newspapers, television, and radio, in which the audience does not actively "interact" with the media content.

[2] The hosted website and column, `russianow.washingtonpost.com`, disappeared in 2015. For information and reports on *Russia Now*, see Barton (2015) and the Washington Free Beacon (2014).

an appearance similar to that of other media outlets, with news articles covering the U.S. and California. However, at the bottom of the website, in small font, is a disclosure that the site is paid for by the Devin Nunes campaign committee.

Communication and journalism scholars refer to paid content and advertisements camouflaged as standard editorial content as *native advertising* (Howe and Teufel, 2014). To date, existing studies have focused on native advertising almost exclusively in the context of commercial products (Carlson, 2015; Iversen and Knudsen, 2017; Jamieson et al., 2000; Batsell, 2017; Edmonds, 2017; Einstein, 2016; Mullin, 2016). The *New York Times* is generally considered the first media outlet to accept native commercial advertising when it published a story about millennials in the workplace paid for by the U.S. technology company Dell in January 2014 (Benton, 2014; Wu et al., 2016). As indicated, though, various actors also engage in native advertising in the political sphere. We use the term *political native advertising* to refer to situations where governments and other political actors engage in native advertising.

The emergence of political native advertising actually predates native commercial advertising. China and Russia, for example, both started placing paid advertisements camouflaged as news stories in mainstream Western legacy media as early as 2011. Despite this, political native advertising has received almost no scholarly attention. While there is a large and growing literature dealing with political propaganda, it tends to focus on issues of media control and the types of hard and heavy-handed propaganda that is easily detected (Di Tella and Franceschelli, 2011; Stockmann, 2013; Gehlbach and Sonin, 2014; Archer and Clinton, 2018; Huang, 2015, 2018; Little, 2017). A common claim in the literature is that propaganda, perhaps because it is often so easily detected, is not designed to achieve persuasion but is instead designed to achieve other goals such as identify loyalists or signal the coercive capacity of the state (Crabtree, Kern and Siegel, 2018; Little, 2018; Marquez, 2018; Huang, 2018, 2015). Relatively speaking, very few studies have examined the type of soft propaganda that is harder to detect and is the hallmark of political native advertising. This is despite the obvious political implications and ethical issues that are at stake with this sort of propaganda. In this paper, we begin to redress this imbalance in the literature by providing one of

the first investigations of political native advertising, particularly as it relates to its use by foreign governments.

We provide a simple theoretical framework for understanding political native advertising. The agreement of two actors is necessary for political native advertising. On the one hand, a political actor must want to engage in political native advertising and on the other hand a media outlet must be willing to accept the advertisement. Both actors face a tradeoff when trying to achieve their goals. The political actor faces a tradeoff between control and credibility. Political actors have an incentive to influence how the media covers politics. However, they recognize that attempts to exert control through direct methods such as media ownership may mean that the reported news stories are not considered credible. Political native advertising shifts this control-credibility tradeoff in favor of the political actor as she gets to directly control the content of news reports while maximizing the credibility of these reports by mimicking standard editorial content and exploiting the good reputation of the hosting independent media. The media outlet faces a tradeoff between credibility and revenue. Media outlets need revenue and one way to generate revenue is to accept political sponsorship or subsidies. Accepting political support, though, threatens the credibility and reputation of the media outlet. Political native advertising shifts this revenue-credibility tradeoff in favor of the media outlet as its deceptive nature allows the media outlet to generate additional revenue without its audience necessarily being aware of the political influence. In effect, media outlets will accept political native advertising whenever the additional revenue outweighs the expected costs. The expected costs of accepting political native advertising depend both on the probability that the political advertisement is detected and the size of any reduction in trust or credibility that results from detection.

Little is known empirically about the nature of political native advertising. We use an online survey experiment with real political advertisements in the *Washington Post* and *The Telegraph* that were paid for by the Chinese government to obtain some basic and important, but as yet unknown, information about political native advertising. To what extent can readers detect political native advertising? Is political native advertising considered persuasive? Do media outlets suffer a cost if

the political native advertising is detected? We find that people often struggle to distinguish paid political advertisements from standard news stories regardless of their level of education and media literacy. This particular result challenges the common assumption that citizens, especially those with higher education, are able to detect government propaganda. We also find that the content found in political native advertisements is perceived to be more persuasive than the same content published by a government-controlled media source. Finally, we also find that people significantly reduce their level of trust in the media outlet if they detect the political native advertising.

Native Advertising and (Foreign) Political Native Advertising

In January 2014, the *New York Times* published what is commonly considered to be the first native advertisement (Benton, 2014). Like all forms of native advertising, the paid advertisement was designed to give people the impression that they were reading a standard *New York Times* news story. It was not long before other major legacy media outlets such as the *Wall Street Journal*, *The Washington Post*, *USA Today*, and *The Guardian* also started collaborating with various businesses to produce native commercial advertisements. Unlike traditional pop-up or banner advertisements that clearly indicate that one is reading a paid advertisement, native advertisements are designed to imitate a traditional journalistic style and are placed with other standard editorial content rather than in a separate section devoted to paid advertisements (Howe and Teufel, 2014; Wang and Li, 2017; Carlson, 2015). In other words, native advertisements borrow both the style and platform of the editorial content on a hosting media outlet.

Advocates for native advertising often highlight its effectiveness in engaging the audience. By borrowing the format of news stories, native advertisements often contain more information than more traditional forms of advertising and do not interfere with the audience goal of seeking information (Lee, Kim and Ham, 2016). Audiences generally have lower skepticism towards native advertisements and find such content to be more informative than that of traditional advertisements (Tutaj and van Reijmersdal, 2012). A 2014 study by the *New York Times* and web analytics com-

pany Chartbeat found that high-performing native advertisements in the *New York Times* received enough traffic to generate as much engagement as its standard editorial content. Indeed, the most trafficked native advertisement was among the top 1.47% of the most trafficked articles published by the *New York Times*. Fully half of the native advertisements in the *New York Times* outperformed the top $1,000$ standard editorial articles from the 100 largest media sites analyzed by Chartbeat in terms of unique visitors and active time on page (Business Wire, 2015). Businesses have been quick to recognize the advantages of native advertisements. The result is that native advertising has become a significant new source of revenue for media outlets (Ferrer Conill, 2016; Manic, 2015).

To some extent, news outlets have tried to delineate a separation between the content produced by their editorial team and the content appearing in native advertisements by creating an independent advertising department within their organization that is responsible for native advertisements. In this regard, the *Washington Post* has created the WP Brand Studio and the *New York Times* has created the T Brand Studio. Despite this, many journalists and scholars are concerned that native advertising erodes the boundaries between advertising and editorial content and that the effectiveness of native advertising relies on deception (Carlson, 2015; Wu et al., 2016; Schauster, Ferrucci and Neill, 2016). One recent study finds that only 8% of respondents are able to identify a native advertising piece as sponsored, as opposed to standard editorial, content (Wojdynski and Evans, 2016). Similarly, a second study finds that 77% of respondents are unable to recognize that native advertisements are advertisements and that 54% of the respondents feel deceived by the native advertising when it was revealed to them (Contently, 2016).

While the vast majority of scholarly and industrial attention regarding native advertising has focused on commercial advertising promoting businesses, political actors have also been collaborating with media outlets to create native advertisements. In 2012, for example, BuzzFeed posted campaign messages in the form of native advertisements from both Democratic and Republican candidates during the U.S. presidential election. China and Russia started posting political native advertisements on the *Washington Post* even earlier, in 2011. Just as with native commercial

advertising, political native advertising relies on deception and blurs the line between objective journalism and advertising. In addition, though, it also poses a direct threat to media independence and undermines the role that the media plays in monitoring the political system and upholding transparency. This is a concern as an independent press is an essential element of liberal democracy and helps to reduce corruption and promote good governance (Arnold, 2013; Besley and Prat, 2006; Brunetti and Weder, 2003; Besley and Burgess, 2002).

Concerns with political native advertising are particularly apparent when it comes to its use by foreign governments. International or foreign propaganda is obviously not new. Governments have long engaged in various activities, such as state-owned international broadcasting and public relations campaigns, to influence public attitudes in foreign countries.[3] For example, throughout the Cold War, the U.S. government sponsored *Voice of America* to broadcast into the Soviet Union and its satellite states as a strategy to counter Soviet propaganda, and has expanded the languages and geographic scope of its broadcasts since the end of the Cold War (Krugler, 2000). In addition to its government-funded international broadcasting activities, the United States has also implemented public relations campaigns in other countries in which it purchases space or services on a foreign country's media to broadcast messages targeting foreign citizens. One such program, the "Shared Values Initiative", was targeted at the Muslim world after the September 11 attacks and saw the U.S. government pay local media in major Muslim countries to broadcast a series of commercials showing the positive aspects of Muslim life in the United States (Kendrick and Fullerton, 2004).

There are at least two reasons, though, why the relatively new practice of political native advertising by foreign governments is different from these more traditional forms of international propaganda. First, unlike traditional international broadcasting where governments sponsor and maintain broadcasting services in foreign languages and foreign countries, political native advertising uses foreign media outlets themselves as its platform. Compared to government-sponsored

[3]Governments who engage in these activities tend to refer to them as *public diplomacy* to avoid the negative implications often associated with the word propaganda (Black, 2001; Zaharna, 2010). At the same time, they refer to these same activities by foreign governments as *international propaganda* (Misyuk, 2013).

international broadcasting platforms, foreign legacy media outlets are likely to have much larger audiences and greater credibility among the local citizens. Second, unlike much of the historical political advertising in foreign media, foreign political native advertising attempts to imitate the objective journalism of the hosting media outlet. Like native advertising, political native advertising appears as editorial content in an attempt to recreate the experience of reading objective news stories, and in doing so aims to deceive readers. Readers often have no idea that what they are reading is paid content from a foreign government (Ferrer Conill, 2016; Schauster, Ferrucci and Neill, 2016).

It is also important to distinguish political native advertising from the practice of using news articles from third-party sources. It is true that all news outlets use third-party content provided by organizations such as Reuters and Xinhua. However, news outlets must pay for the services and content provided by these third-party organizations. Moreover, they are also able to control the content of this material by selecting and editing the stories according to their own interests. In contrast, political native advertising, such as *China Watch*, involves independent media outlets being *paid* to place content on their platforms *without* the ability to select or edit that content. With political native advertising, the content that is published is chosen not because of its news value but because of the revenue that it generates. Thus, although political native advertising might contain news items, as is the case with *China Watch*, it should be considered advertising and not editorial content from the hosting media outlet.

A Framework for Understanding Political Native Advertising

Although political native advertising has been taking place for at least eight years now, it has received almost no scholarly attention. In this section, we provide a simple framework to begin thinking about political native advertising. Political native advertising requires the cooperation of two distinct actors. First, a political actor must want to engage in political native advertising. Second, an independent media outlet must be willing to publish the advertisement. The political

actor and the independent media outlet both face tradeoffs in achieving their goals.

Political Actor : Control-Credibility Tradeoff

Political actors face a tradeoff between control and credibility when it comes to the information environment. In most countries, the media is in a position to play an important role in holding political actors accountable by providing information to the citizenry. A consequence of this is that political actors have an incentive to try to influence how the media covers politics (Iyengar and Kinder, 2010). Traditionally, governments and other political actors have attempted to influence media coverage through methods of direct control such as media ownership or through methods of indirect control such as sponsorship of, or subsidies to, media outlets (Gehlbach and Sonin, 2014; Stockmann, 2013; Petrova, 2012). Even if they are technically independent, media outlets whose largest advertisers are political actors often demonstrate positive bias in their reporting towards these actors. For example, media outlets tend to provide less coverage to political scandals that involve their political sponsors (Di Tella and Franceschelli, 2011). However, such direct and indirect control of the media comes with potential costs. The more control that political actors exert over the media and the more pro-government bias exhibited by the media, the less likely citizens are to view the stories reported by the media as credible (Gehlbach and Sonin, 2014). This is important as we know that people pay less attention to media that they do not find credible (Johnson and Kaye, 1998) and that the content provided by credible media outlets is perceived as more persuasive (Pornpitakpan, 2004).

Political native advertising shifts this control-credibility tradeoff in favor of the political actor. With political native advertising, political actors do not need to directly control the media, thus mitigating the damage that is usually done to the media outlet's credibility when citizens openly observe political influence. Political native advertising is also more favorable for financial reasons than other strategies designed to indirectly control media outlets. This is because attempts to indirectly control a media outlet typically involve the political actor becoming the media outlet's main sponsor and source of revenue (Di Tella and Franceschelli, 2011). With political native

advertising, political actors do not need to be the primary source of revenue in order to get their message across. Overall, political native advertising helps political actors to directly control the content of news reports while maximizing the credibility of these reports by mimicking standard editorial content and exploiting the good reputation of the hosting independent media.

Media Outlet: Revenue-Credibility Tradeoff

While it seems clear why political actors would be interested in engaging in political native advertising, it is perhaps less clear why independent media outlets would be willing to publish political advertisements that are camouflaged to look like standard editorial content. This is especially the case when the advertisements come from foreign governments.

Whereas political actors face a control-credibility tradeoff when it comes to the information environment, media outlets face a revenue-credibility tradeoff. Media outlets value their independence and credibility, but they also need reliable sources of revenue. Credibility and revenue are not necessarily in conflict. For example, we can imagine that credible media outlets might enjoy larger audiences, which, in turn, lead to higher revenues. However, the increasing ease with which individuals can obtain information from the Internet and social media means that individuals are less willing to pay for news than they were in the past. The decrease in their readership and the extra competition from internet companies and social media in the advertising market has also led to a significant reduction in advertising revenue going to legacy media (Kaye and Quinn, 2010; Benton, 2014). One way for legacy media outlets to generate revenue in the digital era is to accept native advertising. As we noted earlier, native advertisements are considered particularly effective and are, therefore, attractive to advertisers. This, in turn, means that media outlets can charge more for these types of advertisements (Wojdynski and Evans, 2016; Wu et al., 2016).

Accepting political support, though, is likely to damage the credibility and reputation of independent news media outlets. The expected costs of engaging in political native advertising depend jointly on (1) the probability that one's audience is able to detect that the information being provided is a paid supplement from a political actor rather than a standard news story and (2) the

magnitude of the negative impact on the hosting media site's credibility if the advertisement is detected. There are reasons to believe that the probability of detection is low due to the deceptive nature of native advertising. As noted previously, studies examining native advertising in the context of commercial products find that the majority of readers are unable to detect a native advertisement (Wojdynski and Evans, 2016; Contently, 2016). Although existing studies recognize that media outlets are likely to suffer reputational costs if native advertisements are detected, there is no consensus as to exactly how large these costs will be (Schauster, Ferrucci and Neill, 2016). Studies of native commercial advertising, for example, have produced conflicting results with respect to the reputational costs suffered by media outlets (Wu et al., 2016; Sweetser et al., 2016; Amazeen and Muddiman, 2018).[4] The one study that has examined political native advertising finds that trust in political news in general declines but does not specifically examine trust in the hosting media outlet itself (Iversen and Knudsen, 2017). Independent media outlets will accept political native advertising if they believe that the expected costs are low (because the probability of detection is small) relative to the revenue benefits.

An Experiment on Political Native Advertising: *China Watch*

To our knowledge, there has been only one systematic study of political native advertising (Iversen and Knudsen, 2017). The study finds that clearly labelled hypothetical political native advertisements by political parties in Norway reduce citizen trust in political news in general. Given the lack of basic empirical information about political native advertising, we use an online survey experiment to examine the extent to which readers are able to detect political native advertisements, whether political native advertisements are considered persuasive, and whether independent media outlets suffer a cost in terms of trust if readers detect a political native advertisement.

Our experiment focuses on *China Watch*, arguably the largest effort at political native advertising in the world. The Chinese Communist Party (CCP) has invested heavily in international

[4]One explanation for these conflicting results is that these studies do not take account of variation in the ease with which political native advertisements are detected across different experimental settings.

propaganda. Considerable resources have, for example, been put into international broadcasting, such as the foreign language services of Chinese Central Television, with the goal of rectifying the perceived distortion in the international flow of information about China (Brady, 2015; Rawnsley, 2015; Edney, 2012). Studies show that China also uses its state news agency, Xinhua, to provide information directly to U.S. news outlets (Cheng, Golan and Kiousis, 2016). In addition to state-sponsored international broadcasting, the CCP has for a long time engaged in "borrowing foreign newspapers", a strategy that involves building strong relationships with foreign journalists so that they write positive news stories about China (China Daily, 2017). To a large extent, it was this strategy of "borrowing foreign newspapers" that later evolved in the mid-2000s into political native advertising – the practice of directly placing paid news stories disguised as standard editorial content into foreign legacy newspapers and onto foreign-owned television and radio programs (Brady, 2015).

As of March 2018, more than 40 legacy news media in over 20 countries, including the *Washington Post*, the *Wall Street Journal*, and *The Telegraph*, receive and publish political native advertisements from the CCP (China Daily, 2018). These paid advertisements are news articles produced and carefully selected by *China Daily*, an English-language newspaper that is controlled by the Publicity Department of the Communist Party of China.[5] In the United States, *China Daily* has been registered as a foreign agent under the Foreign Agents Registration Act since 1983 (Allen-Ebrahimian and Groll, 2017). The paid advertisements from *China Daily* are placed under a special section in both the print and digital editions of the hosting legacy news media called "*China Watch*" that looks like a special editorial column on China. In Figure 1, we show what the *China Watch* page looks like in the print edition of the *Wall Street Journal* and on the digital edition of *The Telegraph*. The use of political native advertising in the form of *China Watch* is part of President Xi Jinping's larger strategy to influence the attitudes and decisions of foreign governments and societies in China's favor, which includes things like the Belt and Road Initiative, China Global

[5]The Publicity Department of the Communist Party of China, also known as The Propaganda Department of the Communist Party of China, handles issues related to ideology and is in charge of information dissemination. In particular, it enforces media censorship and media control (Brady, 2008).

Figure 1: *China Watch* Page on the *Wall Street Journal* and the *Telegraph*

Print Edition on the *Wall Street Journal*

Digital Edition on the *The Telegraph*

Television Network, China Radio International, and Xinhua News Agency (Brady, 2017, 2018). As Brady (2018) point out, political native advertising along with other policies of Xi Jinping have massively expanded the "magic weapon" from the Mao era to control the information environment and to shape the public opinion.

Our survey experiment, which uses real *China Watch* articles as treatments, was conducted in March 2018. Respondents were recruited from Amazon's Mechanical Turk (MTurk) and were directed to an external Qualtrics survey where the experiment actually took place.[6] A common concern with recruiting a convenience sample from a crowd-sourcing website such as MTurk is that the respondents may be unrepresentative of the population of interest, leading to low external validity (McDermott, 2011). However, recent studies show that MTurk samples are more representative of the overall population than different types of in-person convenience samples (Paolacci, Chandler and Ipeirotis, 2011; Berinsky, Huber and Lenz, 2012). Moreover, there is also evidence that MTurk samples are similar to nationally representative samples along important sociodemographic dimensions related to things such as the urban-rural divide, occupational status, and political ideology (Berinsky, Huber and Lenz, 2012; Huff and Tingley, 2015; Clifford, Jewell and Waggoner, 2015). Importantly for external validity, several studies in political science, law, and psychology have also shown that the magnitude of average treatment effects estimated from MTurk samples are similar

[6]To prevent repeat participation by the same respondent, each unique account at the recruiting platform was allowed to participate in the experiment only once.

to the size of effects estimated from nationally representative samples (Berinsky, Huber and Lenz, 2012; Clifford, Jewell and Waggoner, 2015; Firth, Hoffman and Wilkinson-Ryan, 2017).

Experimental Design

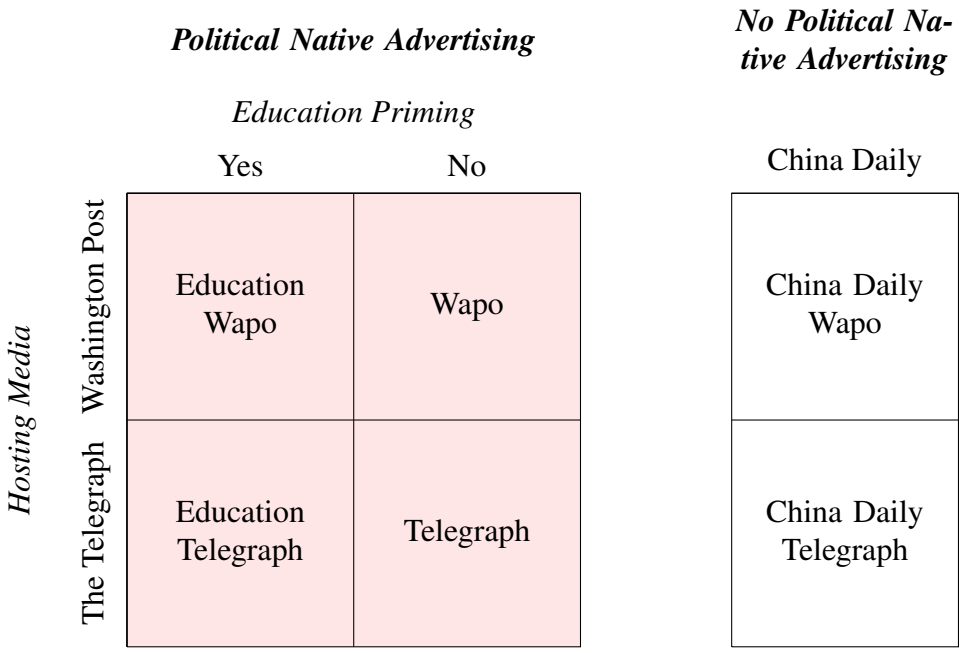
In the experiment, respondents are provided with *one* of two real articles produced by *China Daily*. Some respondents read an article that appeared on the *China Watch* page of the *Washington Post*, while some read an article that appeared on the *China Watch* page of *The Telegraph*. In effect, these particular respondents received a political native advertisement. A third set of respondents read one or the other of these two articles but as it appeared on *China Daily*'s own webpage. In effect, this third set of respondents did not receive a political native advertisement. Although it would be ideal for the content of the two *China Watch* articles to be identical, this is not possible. *China Daily* deliberately avoids displaying the exact same articles in different media outlets across countries. We therefore chose similar articles that addressed the same topic — China's plan to continue with market reforms. We chose to use articles that focused on economic news because this is the main type of news story found in the *China Watch* sections of both the *Washington Post* and *The Telegraph*. Importantly, respondent perceptions of the articles they received did not differ across the two China Watch articles.[7]

To examine whether an increased awareness of political native advertising would increase the likelihood that respondents can detect the true source of the *China Watch* articles, we also include an *Education Priming* treatment related to political native advertising. Specifically, half of the respondents who received *China Watch* articles were also randomly selected to receive information about the practice of political native advertising. This *Education Priming* treatment came before the respondents received their *China Watch* article. The exact wording of the *Education Priming* treatment is

> "Foreign countries, such as China and Russia, have started to launch international propaganda campaigns using a technique called native advertising. For example, they buy

[7]This analysis can be found in the Online Appendix A.

Figure 2: Full Experimental Design



Note: Respondents received one of two similar articles related to China's plan to continue with market reforms. These articles appeared in the *Washington Post* or *The Telegraph* (Political Native Advertising) or in *China Daily* (No Political Native Advertising). Half of the respondents who read a political native advertisement were randomly selected to receive an *Education Priming* treatment in which they were told about the practice of political native advertising.

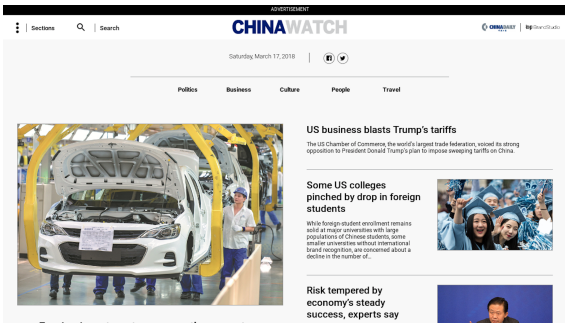
> space on western mainstream media outlets to publish government-sponsored content produced by government-owned media, such as *China Daily*."

A graphical overview of the full experimental design is shown in Figure 2. 660 respondents were randomly assigned among each of the six groups shown in Figure 2.

Detecting Political Native Advertising

To examine whether respondents are able to detect political native advertising as non-editorial content, respondents who receive one of the *China Watch* articles are asked to identify the source of the article immediately after reading it. They are given four options: *New York Times*, *China Daily*, *Washington Post*, and *The Telegraph*. The likelihood that individuals can detect political native advertising should depend on the style and level of disclosure found on the hosting media

Figure 3: *China Watch* on the *Washington Post* and *The Telegraph*



China Watch on the *Washington Post*

China Watch on the *The Telegraph*

outlet. Due to different disclosure rules, there is considerable variation in both the clarity and style of disclosure regarding the *China Watch* pages across the *Washington Post* and *The Telegraph*. Screenshots of the *China Watch* pages on the two hosting media outlets are shown in Figure 3. In *The Telegraph*, the *China Watch* page is located under *The Telegraph*'s World News section and closely resembles its own editorial content. Above the *China Watch* articles, there is a statement in small font that reads, "This content is produced and published by *China Daily*, People's republic of China, which takes sole responsibility for its content." Significantly, there is no indication that the articles are paid supplements from a foreign government. The disclosure on the *Washington Post*, although still confusing, is clearer and more prominent than that found on *The Telegraph*. The web address for the *China Watch* page clearly links it with the *Washington Post*.[8] However, the material itself looks less like the standard editorial content produced by the *Washington Post*. The *Washington Post* also uses the term "advertisement" at the top of the page and additional information at the bottom of the page states that "This content is paid for and provided by an advertiser, and the site is managed by WP BrandStudio. The Washington Post newsroom and WP BrandStudio were not involved in the creation of this content." Given the variation in the clarity of disclosure, we would expect that respondents who receive a *China Watch* article on the *Washington*

[8]The *China Watch* page on the *Washington Post* used to be accessible through `http://chinawatch.washingtonpost.com/`. The *Washington Post* removed the site in the summer of 2018, while continuing to deliver the print version of China Watch with the printed *Washington Post*.

Post will be more likely to detect the political native advertising than the respondents who receive a *China Watch* article on *The Telegraph*.

Those who receive the *Education Priming* treatment should be more likely to detect the political native advertisement irrespective of where they see the *China Watch* article. This is because they are primed to look for native advertising, especially as it relates to China. Whether this is, in fact, the case is important as it speaks to the possibility that information campaigns can immunize readers against the deceptive nature of political native advertising. There may be an interaction between the *Education Priming* treatment and the identity of the hosting media outlet. This is because education on political native advertising and the clarity of disclosure on the hosting media site may act as complements when it comes to helping readers detect political native advertising. Recall that we expect respondents who receive the *China Watch* article on the *Washington Post* to be more likely to detect the political native advertisement due to the greater clarity of disclosure. This positive effect of good disclosure may be stronger among those who received the *Education Priming* treatment. This is because these readers are primed to look for native advertising and are more likely to pay attention to non-content information related to disclosure such as top banners and bylines. Respondents who are less informed about the practice of political native advertising are more likely to ignore the disclosure on the hosting media site even when the disclosure is clear. Due to the symmetry of interactions (Berry, Golder and Milton, 2012), it also follows that the positive effect of *Education Priming* on the probability that the native advertisement is detected may be larger for those who received the *China Watch* article on the *Washington Post*. This is because those who are primed to look for native advertising are more likely to detect it when the disclosure is clear than when it is not. Whether we find evidence of an interaction is important as it speaks to whether there are 'superadditive' benefits from combining improved disclosure rules and information campaigns for tackling the deceptive nature of political native advertising.

Reputational Costs of Political Native Advertising

Given that respondents may be unable to detect political native advertising on their own, we inform the respondents that the *China Watch* story they have just read is a paid supplement from the Chinese government-controlled *China Daily*. We do this to examine whether there are costs to the hosting media's reputation for publishing political native advertisements. To measure possible reputational costs, we compare the level of respondent trust in the hosting media site *before* they receive their *China Watch* article with their level of trust in the hosting media site *after* they are informed that the article was a paid supplement from a foreign government. A respondent's trust in the hosting media site is measured on a $1-6$ scale, where 1 indicates that the respondent has no trust in the hosting media site at all and 6 indicates that the respondent has a great deal of trust in the hosting media site. If respondent trust falls after being informed that the *China Watch* article is a paid supplement from a foreign government, then this would indicate that respondents dislike the practice of political native advertising and that independent media outlets face a potential reputational cost if they publish such advertising. It would be troubling if we find no evidence of a reputational cost as this would indicate one less constraint on the future spread of political native advertisements.

While we expect that all respondents will lower their reported trust in the hosting media site when they are told that it is accepting political native advertisements from a foreign government, it is possible that this negative effect will be larger for those respondents who were unable to detect the political native advertising for themselves. This is because these individuals learn that they have been deceived by the hosting media outlet and the foreign government advertiser into thinking that the political native advertisement is standard editorial content. This additional sense of deception may cause their drop in trust in the hosting media outlet to be particularly marked.

The Persuasiveness of Political Native Advertising

To examine whether political native advertising on an independent media site is more persuasive than the same content on a government-controlled site, we compare how convincing the respon-

dents find the two *China Watch* articles on the *Washington Post* and *The Telegraph* with how convincing they find the exact same articles when published on *China Daily*. Respondents are asked to rate how convincing their article is on a scale of $1-5$, where 1 indicates that the article is not at all convincing and 5 indicates that the article is very convincing.[9] From the perspective of a political actor, the primary appeal of political native advertising is that her message is more convincing if it is camouflaged as standard editorial content on an independent, and thus more credible, hosting media site. This would suggest that the news stories in our experiment will be considered more convincing, on average, if they appear on the *China Watch* pages of the *Washington Post* and *The Telegraph* than in the government-controlled *China Daily*. Note, though, that the increased persuasiveness of political native advertising ultimately relies on successful deception. If respondents are able to identify the political native advertisement and hence the true source of the news story, then there is no reason to believe that they will find the *China Watch* articles any more (or less) convincing than the same articles in *China Daily*. Thus, political native advertising should only increase the persuasiveness of a news story among those respondents who fail to detect the political native advertisement.

Sample Information

In Table 1, we provide demographic information on the 660 respondents in our sample. The information is provided for each of the six treatment groups shown in Figure 2 as well as for the sample as a whole. To make valid causal inferences, respondents must be assigned randomly to the different treatment conditions. In other words, there should not be any factors that influence the treatment assignments (Trochim and Donnelly, 2006). Although all of our treatments were randomly assigned, it is possible that the respondents in the various treatment groups could still differ demographically. To evaluate this, we conducted difference-in-means tests in which the baseline group included those respondents who received the *Education Priming* treatment and

[9]Those respondents who received a *China Watch* article were asked to rate the article *before* being informed that the article was a paid supplement from the government-controlled *China Daily*.

Table 1: Demographic Balance Across Treatment Groups

	Group Means						
	Education Wapo	Wapo	Education Telegraph	Telegraph	China Daily Wapo	China Daily Telegraph	Full Sample
Age	41.97	41.56	39.21*	39.27*	40.73	41.50	40.72
	(11.45)	(11.63)	(11.79)	(10.83)	(12.71)	(12.60)	(11.86)
Female	0.56	0.60	0.58	0.59	0.59	0.55	0.58
	(0.50)	(0.49)	(0.50)	(0.49)	(0.49)	(0.50)	(0.49)
Education	4.5	4.51	4.46	4.71	4.38	4.49	4.51
	(1.30)	(1.37)	(1.39)	(1.29)	(1.39)	(1.39)	(1.35)
Income	6.38	6.35	6.11	6.64	6.24	6.58	6.38
	(3.42)	(3.02)	(3.42)	(3.50)	(2.94)	(3.39)	(3.28)
N	116	109	112	107	105	111	660

$^{*}p < 0.1$; $^{**}p < 0.05$; $^{***}p < 0.01$ (two-tailed)

Note: Table 1 indicates the means for different demographic variables across the six treatment groups and the sample as a whole; standard deviations are shown in parentheses. The six treatment groups correspond to those shown in Figure 2. *Education* is measured on a $1-8$ scale, with larger numbers indicating higher levels of education. *Income* is measured on a $1-12$ scale, with larger numbers indicating higher income. The *Education Wapo* treatment group is treated as the baseline group for conducting difference-in-means tests. Welch's t-test, which allows for unequal variances, was used for the difference-in-means tests. All demographic information was gathered prior to the experimental treatments.

received the *China Watch* article on the *Washington Post* (Education Wapo). As Table 1 indicates, the six treatment groups are mostly balanced in terms of age, gender, education, and income. There is some evidence that the respondents in the Education Telegraph and Telegraph groups are slighly younger on average than the respondents in the Education Wapo group. As a result, we controlled for age in all of the relevant analyses.

Experiment Results

We now present our results on whether respondents can detect political native advertisements, whether independent media outlets suffer a reputational cost if readers detect political native advertising, and whether political native advertisements are considered persuasive.

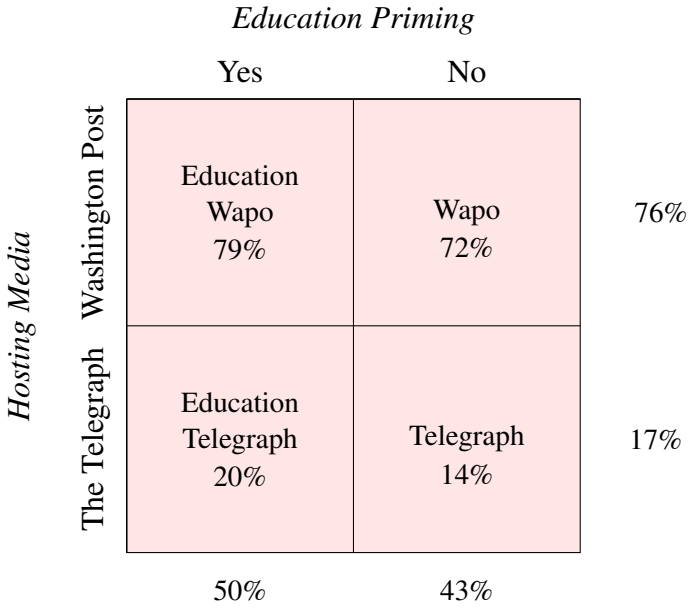
Detecting Political Native Advertising

We begin in Figure 4 by showing the percentage of respondents who were able to correctly identify that the *China Watch* article they received was a political native advertisement from *China Daily*.[10] As expected given the greater clarity of disclosure on the *Washington Post*, a higher percentage of respondents were able to identify the true source of the *China Watch* story as *China Daily* on the *Washington Post* site (76%) as opposed to on *The Telegraph* site (17%). Also as expected, we find that the percentage of respondents who were able to identify the true source of the *China Watch* story was higher among those who received the *Educating Priming* treatment (50%) than among those who did not (43%). These preliminary results suggest that both improving the clarity of disclosure and implementing an education campaign can help to immunize readers against the deceptive nature of political native advertising.

To further examine the factors that influence the probability that respondents are able to identify the true source of the *China Watch* story, we estimated a logit regression model in which the dependent variable, *Correct Source*, was coded 1 if the respondent identified the source of the news story as *China Daily* and 0 otherwise. The results from three slightly different model specifications are shown in Table 2. All three models control for respondent age as there was some evidence from Table 1 that respondent age was not perfectly balanced across all of the different treatment groups.

[10] Recall that respondents in the experiment were presented with four possible options for the source of the news story. The vast majority of the respondents chose either the hosting media outlet or *China Daily* as the source of the news story. The fact that only 1.7% of the respondents chose an 'irrelevant' media outlet as the source of the news story speaks to the high quality of the responses in our experiment.

Figure 4: Percentage of Respondents Who Identified the Source Correctly



Note: The percentages refer to the percentage of respondents who correctly identified that the *China Watch* article they received came from *China Daily* as opposed to the hosting media site.

In Model 1, we examine the additive effect of the *Hosting Media* and *Education Priming* treatments. Consistent with the descriptive statistics shown in Table 1, we find that the probability of identifying the true source of the *China Watch* article is higher for those respondents who saw the article on the *Washington Post* as opposed to *The Telegraph* and for those respondents who were informed about the practice of political native advertising as opposed to those who were not. This is indicated by the positive and statistically significant coefficients on *Washington Post* and *Education Priming*. The effect of the hosting media site, and implicitly the clarity of disclosure, is substantively large. The predicted probability that a respondent is able to identify the true source of the *China Watch* article increases by 0.569 [0.503, 0.631] if a respondent sees the article on the *Washington Post* as opposed to *The Telegraph*.[11] Two-tailed 90% confidence interval are shown in square brackets. The substantive effect of the *Education Priming* treatment is smaller. To be

[11]This change in predicted probability is calculated for a respondent who is 41 years old (sample mean) and who did not receive the *Education Priming* treatment. The change in predicted probability is qualitatively similar for a respondent of the same age who did receive the *Education Priming* treatment: 0.587 [0.523, 0.647]. The slight difference in effect size is due to the inherent interaction built into non-linear models like logit (Nagler, 1991).

precise, the predicted probability that a respondent is able to identify the true source of the *China Watch* article increases by 0.075 [0.003, 0.151] when a respondent receives the *Educating Priming* treatment.[12]

In Model 2, we examine the possibility that an education campaign and better disclosure are complements when it comes to helping readers identify the true source of a political native advertisement. We do this by adding the interaction term, *Washington Post* $\times$ *Educating Priming*, to our original model specification. While the coefficient on the interaction term is positive, which is expected if these factors are complements, it is substantively small and statistically insignificant. This suggests that while an education campaign and better disclosure can each help respondents detect political native advertising, they are not complements for each other and their positive effects are not superadditive.

In Model 3, we examine whether a respondent's level of education, media experience, media literacy, and media trust affect the probability that she is able to identify the true source of the *China Watch* article. We do this because there is a common assumption in the existing literature that well educated and more media savvy individuals are able to detect propaganda and misinformation in general (Potter, 2018; Little, 2017; Craft, Ashley and Maksl, 2017; Kennedy, 2009). We employ standard media and education measures from the existing literature. *Media Experience* is based on five dimensions (news consumption, experience, expertise, familiarity, and access), each of which is measured on a 5-point scale. *Media Experience* is calculated as the sum of the scores for each of these five dimensions; its possible values run from 5 to 25, with higher numbers indicating more media experience (Flanagin and Metzger, 2000). *Media Literacy* captures a respondent's understanding of media ownership, media and politics, media effects, news framing, agenda-setting, and the role of journalists. It draws on 14 survey items that are each measured on a 5-point scale. *Media Literacy* is calculated as the sum of the scores for each of these items; its possible values run from 14 to 70, with higher numbers indicating greater media literacy (Ashley, Maksl and Craft, 2013).

[12]This change in predicted probability is calculated for a respondent who is 41 years old and who saw the *China Watch* article on the *Washington Post* site. The change in predicted probability is qualitatively similar for a respondent of similar age who receives the article on *The Telegraph* site: 0.057 [0.002, 0.116].

Table 2: Identifying the Correct Source for the *China Watch* News Story

	Dependent Variable: Correct Source (0,1)		
	Model 1	Model 2	Model 3
Washington Post	2.726***	2.720***	2.846***
	(0.241)	(0.351)	(0.251)
Education Priming	0.413*	0.406	0.466*
	(0.238)	(0.367)	(0.245)
Washington Post × Education Priming		0.012	
		(0.482)	
Education			0.149
			(0.091)
Media Experience			0.034
			(0.041)
Media Literacy			−0.022
			(0.035)
Media Trust			0.050
			(0.048)
Age	0.011	0.011	0.012
	(0.010)	(0.010)	(0.011)
Constant	−2.271***	−2.267***	−3.784*
	(0.473)	(0.500)	(2.021)
Observations	444	444	439
Log Likelihood	−222.462	−222.461	−214.544
Akaike Inf. Crit.	452.923	454.923	445.088

*$p < 0.1$; **$p < 0.05$; ***$p < 0.01$ (two-tailed)

Note: The dependent variable, *Correct Source*, is a dichotomous variable that equals 1 if a respondent correctly identifies the true source of the *China Watch* article as *China Daily*, and 0 otherwise. Only those respondents who received a *China Watch* article are included. Estimates are based on logit regressions. Standard errors are shown in parentheses.

Media Trust uses seven survey items, each measured on a 5-point scale, to measure an individual's level of trust in the general media (Tsfati and Cappella, 2003). *Media Trust* is simply the sum of the scores on the seven survey items; its possible values run from 7 to 35, with higher numbers indicating greater trust in the news media in general. As noted earlier, *Education* is measured on a $1-8$ scale, with larger numbers indicating higher levels of education.[13] As the results in Model 3 indicate, none of these variables have any significant effect on the probability that a respondent is able to identify the true source of the *China Watch* articles. A likelihood ratio test indicates that the media and education variables are also jointly insignificant. These variables are also insignificant if we remove our two treatment variables, *Washington Post* and *Education Priming*. In sum, there is no evidence that more educated or more media savvy individuals are any better at identifying political native advertising than other individuals. This speaks to the deceptive nature of political native advertising compared to more heavy-handed forms of government propaganda.

Reputational Costs of Political Native Advertising

In Table 3, we compare the mean level of trust in each of the two hosting media sites before the respondents receive their *China Watch* article (Pre-Treatment) and after the respondents are informed that the article is a paid supplement from a foreign government (Post-Treatment). The third column, Paired Difference, indicates whether the mean of the paired differences in the pre-treatment and post-treatment levels of trust for each respondent are statistically different.[14] As expected, trust in both the *Washington Post* and *The Telegraph* declines in a statistically significant way when respondents are told that the *China Watch* article comes from the Chinese government-controlled *China Daily* and not the hosting media outlet. The magnitude of the decline in trust is almost identical for both media outlets — the average decline in trust is 0.80 points for those respondents who received the *China Watch* article on the *Washington Post* and 0.77 points for

[13] More information on these independent variables can be found in Online Appendix B.

[14] To be clear, the numbers in the Paired Difference column do not show the difference in the means shown in the Post-Treatment and Pre-Treatment columns. Instead, they reflect the mean difference in the *paired* post-treatment and pre-treatment levels of trust from each respondent. A paired difference-in-means test is more powerful than an unpaired test because it reduces intersubject variability.

Table 3: Comparing Pre- and Post- Treatment Trust in the Hosting Media Outlets

	Trust in Hosting Media Outlet (1-6)		
	Pre-treatment	Post-treatment	Paired Difference (Post−Pre)
Washington Post	4.09 (1.34)	2.97 (1.43)	-0.80^{***}
The Telegraph	3.39 (1.34)	2.4 (1.27)	-0.77^{***}

*p<0.1; **p<0.05; ***p<0.01

Note: The pre-treatment and post-treatment columns indicate the mean level of trust in each of the two hosting media sites before the respondents receive their *China Watch* article and after respondents are informed that the article is a paid supplement from a foreign government. Standard deviations are shown in parentheses. The paired difference column indicates the mean of the paired differences for each respondent between their pre- and post-treatment levels of trust.

those respondents who received the article on *The Telegraph*. These differences are substantively meaningful as they equate to a 27.4% decline in trust for the *Washington Post* and a 29.2% decline in trust for *The Telegraph*. The fact that the decline in trust is similar across the two hosting media outlets is interesting as it suggests that the better disclosure provided by the *Washington Post* does not immunize it against potential reputational costs if the political native advertising is detected.

Recall that we expect respondents who are unable to detect political native advertising on their own to exhibit a particularly marked reduction in their trust towards the hosting media outlet after they are told that the *China Watch* article is a paid advertisement from the Chinese government. This is because they will feel that they have been deceived by the hosting media outlet and the foreign advertiser. In line with our expectation, the results reported in Table 4 indicate that the decline in trust towards the hosting media outlet is significantly larger among the respondents who were unable to detect the political native advertising for themselves than among those respondents who were able to detect it. This is true irrespective of whether the respondents saw the *China Watch* article on the *Washington Post* or *The Telegraph*. Together the results show that hosting media outlets who accept political native advertising can expect to suffer a reputational cost if the political native advertising is discovered, especially if readers feel that they have been deceived.

Table 4: Change in Trust in the Hosting Media Outlets

		Trust in Hosting Media Outlet (1-6)		
		Pre-treatment	Post-treatment	Paired Difference (Post−Pre)
Washington Post	Self-Detected	4.09 (1.39)	3.05 (1.45)	-0.76^{***}
	Not Self-Detected	4.08 (1.25)	2.75 (1.35)	-0.93^{***}
The Telegraph	Self-Detected	3.36 (1.47)	2.68 (1.23)	-0.63
	Not Self-Detected	3.43 (1.34)	2.34 (1.27)	-0.80^{***}

*p<0.1; **p<0.05; ***p<0.01

Note: The pre-treatment and post-treatment columns indicate the mean level of trust in each of the two hosting media sites before the respondents receive their *China Watch* article and after respondents are informed that the article is a paid supplement from a foreign government. The two rows for each media outlet distinguish between those respondents who were able to detect the political native advertisement on their own and those respondents who were not. Standard deviations are shown in parentheses. The paired difference column indicates the mean of the paired differences for each respondent between their pre- and post-treatment levels of trust.

Persuasiveness of Political Native Advertising

In Table 5 we compare how persuasive the respondents find the two *China Watch* articles based on whether they saw the article on one of the hosting media outlets (Political Native Advertising) or on *China Daily* (No Political Native Advertising). The third column indicates whether the average level of persuasiveness is higher when the articles are read on a hosting media outlet. As expected, the mean level of persuasiveness is always higher when the articles are read on the hosting media outlet as opposed to on the Chinese government-controlled *China Daily*. However, this difference is only statistically significant for those respondents who saw the *China Watch* article that appeared on *The Telegraph*. This finding is consistent with our claim that political native advertising will be more persuasive but only if it goes undetected. Recall from earlier that over 70% of those respondents who read the *China Watch* article on the *Washington Post* were able to correctly identify the true source of the article. This was compared to just 20% of respondents who read the *China Watch* article on *The Telegraph*. These percentages suggest that the difference in the level of persuasiveness between the hosting media outlet and *China Daily* would be much lower for the *Washington Post* than the *The Telegraph*. This is exactly what we find. Further

evidence for this line of reasoning comes from the fact that the persuasiveness of the *China Watch* article viewed on the *Washington Post* (3.57) is significantly lower than the persuasiveness of the *China Watch* article viewed on *The Telegraph* (3.79).

We can more explicitly test our claim that political native advertising is more persuasive but only if it goes undetected by distinguishing between those respondents who were able to identify the true source of the *China Watch* article and those who were unable to do so. Only those who failed to identify the political native advertising should find that the article viewed on the hosting media outlet is more persuasive than the same article on *China Daily*. The results from such a test are shown in Table 6. Consistent with our expectations, the articles that appear on the hosting media site are considered significantly more persuasive only when the respondents fail to identify the true source of the article. This is true both for those respondents who saw the article on the *Washington Post* and those who saw the article on *The Telegraph*. There is no statistically significant difference in the level of persuasiveness among the respondents who were able to detect the political native advertising. This is exactly what we expected and highlights the fact that the effectiveness of political native advertising relies on the deception being successful. To sum up, our results suggest that political native advertising, when it goes undetected, allows political actors to borrow the credibility and greater reputation of the hosting independent media outlets to increase the persuasiveness of their propaganda.

Conclusion

In this article we study an overlooked, yet important, form of propaganda, political native advertising, in which political actors buy space on independent media sites to publish political advertisements that mimic the standard editorial content found on the hosting media site. We provide a theoretical framework for understanding such propaganda in which we highlight the control and credibility trade-off faced by the political actors and the revenue and credibility trade-off faced by

Table 5: Persuasiveness and Political Native Advertising

	Mean Level of Persuasiveness (1-5)		
	On Hosting Media	On China Daily	Difference
Washington Post China Watch Article	3.57 (0.84)	3.47 (0.89)	0.10
The Telegraph China Watch Article	3.79 (0.88)	3.43 (1.07)	0.35***

*p<0.1; **p<0.05; ***p<0.01

Note: The first column indicates how persuasive the respondents found each of the two *China Watch* articles on average when they read the stories on the hosting media outlet. The second column indicates how persuasive the respondents found each of the two articles on average when they read the stories on *China Daily*. Standard deviations are shown in parentheses. The third column indicates whether the mean level of persuasiveness was significantly higher when the articles were read on the hosting media outlet. Welch's t-test, which allows for unequal variances, was used for the difference-in-means tests.

the media outlets. While it might seem puzzling that an independent media outlet would risk its reputation by cooperating with political actors, we argue that the expected reputational cost to the hosting media outlet depends on both the likelihood of detection and the expected magnitude of the decrease in its reputation if the propaganda is detected. Because of the deceptive nature of political native advertising, the expected costs associated with allowing this sort of advertising, relative to the revenue that is generated, is often quite low.

As one of the first empirical studies on political native advertising, we examine some basic but important key features of this type of propaganda. Specifically, we examine the deceptiveness and persuasiveness of political native advertisements and the reputational costs associated with political native advertising to the hosting media outlets. Using an online survey experiment with real political native advertisements, China Watch, we find that unless the political native advertising is clearly disclosed, respondents are unlikely to detect the true source of political native advertising, irrespective of their level of education and experience as a news consumer. This finding challenges the view that citizens with a high level of education and media literacy are able to detect propaganda and misinformation in general. Although the respondents' level of trust in the hosting media outlets significantly decreased after they learned that a news story is a paid advertisement, the low likelihood that news consumers will detect the true source of the information means that the

Table 6: Persuasiveness, Deception, and Political Native Advertising

	Mean of Persuasiveness (1-5)			
	On Hosting Media			
	Identified True Source	Not Identified True Source	On China Daily	Difference
Washington Post China Watch Article	3.49 (0.83)		3.47 (0.89)	0.02
		3.77 (0.84)	3.47 (0.89)	0.31*
The Telegraph China Watch Article	3.27 (0.96)		3.43 (1.07)	−0.17
		3.87 (0.84)	3.43 (1.07)	0.44***

*p<0.1; **p<0.05; ***p<0.01

Note: The first two columns indicate how persuasive the respondents found each of the two *China Watch* articles on average when they read the stories on the hosting media outlet. The first column focuses on those respondents who identified the true source of the *China Watch* article, while the second column focuses on those respondents who failed to identify the true source of the article. Standard deviations are included in parentheses. The third column indicates how persuasive the respondents found each of the two articles when they read the stories on *China Daily*. The final column indicates whether the mean level of persuasiveness was significantly higher when the articles were read on the hosting media outlet instead of *China Daily*. Cells shown in gray refer to those respondents who failed to detect the political native advertisement.

expected reputational costs to the hosting media outlet of allowing political native advertising are low. The deceptive nature of political native advertising makes it an effective tool for political actors to influence the citizenry. As we show in our results, the same message is perceived as much more persuasive when it comes in the form of native advertising and is perceived as coming from the hosting independent media outlet than when it comes in the form of news on a government-controlled media site.

Although our findings may seem troubling in that citizens are often unable to detect political native advertising and are likely to be influenced by such propaganda, our analysis also suggests two possible ways to deter such propaganda: disclosure regulations and information campaigns. Much of the effectiveness of political native advertising and the size of the reputational costs accruing to the hosting media site depend on the deceptiveness of the advertising. This suggests that better regulations regarding the disclosure and/or information campaigns that highlight and publicize the presence and use of political native advertising can reduce the effectiveness of such

propaganda techniques and increase the reputational costs for independent media outlets. These two approaches will hopefully reduce the incentives that political actors have to engage in these sorts of propaganda activities and deter independent media outlets from cooperating with political actors. Our results also have important regulatory implications for native advertising in general. Although Wojdynski and Evans (2016) also find that using “advertising" or “sponsored" words and positioning them at the bottom can increase respondents’ advertisement recognition compared to other types of disclosure, respondents were still largely unable to detect native advertising even under better disclosure conditions. Our finding that respondents were mostly able to detect the true source of the China Watch article on *The Washington Post* suggests that increasing the degree of separation between the native advertising and editorial content might be a better method than simply using certain words and phrasing to disclose native advertising.

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Online Appendix A: Similar Quality of Treatment Articles

In the experiment, we use one *China Watch* article on the *Washington Post* and one *China Watch* article on the *Telegraph* as political native advertising treatments, and the same two articles on their original media outlet, *China Daily*. Although it would be ideal for the treatment articles to have identical content to prevent any effects caused by the different content and quality of the treatment articles, *China Daily* intentionally avoids displaying identical articles in different news outlets and we are unable to identify identical *China Watch* articles on the two hosting news outlets. To minimize any effects associated with the different quality and content of different articles, we used two articles on the same topic making the same argument. In the main text, we claimed that respondents did not perceive any differences in the quality of the two articles. We now discuss the empirical evidence on which this claim is based.

To examine whether the two articles are perceived differently, we compare the two articles in terms of their perceived levels of accuracy, bias, and persuasiveness. An article's level of accuracy is measured on a scale of $1-5$, with larger numbers indiating greater accuracy. An article's level of bias is measured on a scale of $1-5$, with larger numbers meaning that the article was perceived as *less* biased. An article's level of persuasiveness is measured on a scale of $1-5$,

Table 7: Differences in the Quality of Two *China Watch* Articles

	China Daily Wapo	China Daily Telegraph	Difference in Means (t-statistics)
Accuracy	3.35 (0.76)	3.41 (0.79)	-0.06 (-0.59)
Bias	2.95 (0.965)	3.03 (1.040)	-0.08 (-0.54)
Persuasiveness	3.47 (0.89)	3.43 (1.07)	0.03 (0.26)

*p<0.1; **p<0.05; ***p<0.01

Note: The first column indicates the means for the perceived accuracy, bias and persuasiveness of the treatment article for the respondents who read the *Washington Post*'s *China Watch* article on the *China Daily* platform. The second column indicates the same information for those who read the *Telegraph*'s *China Watch* article on the *China Daily* platform. The third column indicates the differences in the means. Welch's t-test, which allows for unequal variances, was used for the difference-in-means tests.

with larger numbers meaning that the article was considered more convincing. We compare the quality of the two articles along these dimensions as they appeared on *China Daily*. The results in Table 7 indicate that the two articles are considered similar in terms of their accuracy, bias, and persuasiveness. The differences between the two articles are not only substantively small but also statistically insignificant.

Online Appendix B: Additional Information on the Media Variables

In the main text, we briefly described the 'media' variables we used to capture the level of respondent media experience, media trust, and media literacy. In this online appendix, we provide more detailed information about each of these variables.

Items for *Media Experience*

Following Flanagin and Metzger (2000), we use five survey items to calculate respondent media experience. Each item is measured on a 5 point scale. *Media Experience* is calculated as the sum of the scores for each of the five survey items. The exact wording of the survey items is:

1. How many hours per day on average did you read/watch/listen to news in the last seven days?
   - 0 hour
   - Less than 30 minutes
   - 30 -60 minutes
   - 1-2 hours
   - More than 2 hours
2. How would you rate your experience of consuming news?
   - No experience
   - Below average experience
   - Average experience
   - Above average experience
   - A great deal of experience
3. How would you describe your expertise of consuming news?
   - No expertise of consuming news
   - Low expertise of consuming news

- Average expertise of consuming news
- High expertise of consuming news
- Complete expertise of consuming news

4. How would you evaluate your level of familiarity with the news?
    - No familiarity
    - Low familiarity with the news
    - Average familiarity with the news
    - High familiarity with the news
    - Complete familiarity with the news
5. How easy is it for you to access the news?
    - Extremely hard to access the news
    - Hard to access the news
    - Easy to access the news
    - Very easy to access the news
    - Extremely easy to access the news

Items for *Media Trust*

Following Tsfati and Cappella (2003), we use seven survey items to measure a respondent's general trust in media. Each item is measured on a 5-point scale. The variable *Media Trust* is calculated as the sum of the score for each of the seven survey items. The exact wording of the items is as follows:

1. How much of the time do you think you can trust media organizations to report the news fairly?
    - Never
    - Sometimes
    - About half the time
    - Most of the time

- Always

2. The news media helps society to solve its problem.
    - Totally disagree
    - Somewhat disagree
    - Neither agree nor disagree
    - Somewhat agree
    - Totally agree
3. The news media should care about being the first to report a story.
    - Totally agree
    - Somewhat agree
    - Neither agree nor disagree
    - Somewhat disagree
    - Totally disagree
4. The news media should care about being accurate in reporting a story.
    - Totally disagree
    - Somewhat disagree
    - Neither agree nor disagree
    - Somewhat agree
    - Totally agree
5. The news media should care about public interests.
    - Totally disagree
    - Somewhat disagree
    - Neither agree nor disagree
    - Somewhat agree
    - Totally agree
6. The news media should care about the government's interests.
    - Totally agree

- Somewhat agree
- Neither agree nor disagree
- Somewhat disagree
- Totally disagree

7. The news media should care about the audience's interests.
   - Totally disagree
   - Somewhat disagree
   - Neither agree nor disagree
   - Somewhat agree
   - Totally agree

Items for *Media Literacy*

Using the *Media Literacy* scale developed by Ashley, Maksl and Craft (2013), we evaluate a respondent's media literacy with 14 survey items that are each measured on a 5-point scale. The variable *Media Literacy* is calculated as the sum of the scores for each of these items. Its possible values run from 14 to 70, with higher numbers indicating greater media literacy. The exact wording of the items is as follows:

1. News media choose stories based on what will attract the largest audience.
   - Totally agree
   - Somewhat agree
   - Neither agree nor disagree
   - Somewhat disagree
   - Totally disagree

2. Individuals can find news sources that reflect their own political values.
   - Totally disagree
   - Somewhat disagree

- Neither agree nor disagree
- Somewhat agree
- Totally agree

3. People pay more attention to news sources that fit with their beliefs than news sources that do not.

- Totally disagree
- Somewhat disagree
- Neither agree nor disagree
- Somewhat agree
- Totally agree

4. People might interpret the same story differently.

- Totally disagree
- Somewhat disagree
- Neither agree nor disagree
- Somewhat agree
- Totally agree

5. People are influenced by news whether they realize it or not.

- Totally disagree
- Somewhat disagree
- Neither agree nor disagree
- Somewhat agree
- Totally agree

6. News makes things seem more dramatic than they really are.

- Totally agree
- Somewhat agree
- Neither agree nor disagree
- Somewhat disagree
- Totally disagree

7. News is designed to attract the audience's attention.
    - Totally agree
    - Somewhat agree
    - Neither agree nor disagree
    - Somewhat disagree
    - Totally disagree
8. A journalist's first obligation should be to the truth.
    - Totally disagree
    - Somewhat disagree
    - Neither agree nor disagree
    - Somewhat agree
    - Totally agree
9. Lighting is used to make certain people in the news look good or bad.
    - Totally disagree
    - Somewhat disagree
    - Neither agree nor disagree
    - Somewhat agree
    - Totally agree
10. Production techniques can be used to influence a viewer's perception.
    - Totally disagree
    - Somewhat disagree
    - Neither agree nor disagree
    - Somewhat agree
    - Totally agree
11. When taking pictures, photographers decide what is most important.
    - Totally disagree
    - Somewhat disagree

- Neither agree nor disagree
- Somewhat agree
- Totally agree

12. A story about conflict is more likely to be featured prominently than other stories.
    - Totally disagree
    - Somewhat disagree
    - Neither agree nor disagree
    - Somewhat agree
    - Totally agree
13. News coverage of a politician candidate will influence people's opinions of him/her.
    - Totally disagree
    - Somewhat disagree
    - Neither agree nor disagree
    - Somewhat agree
    - Totally agree
14. A news story that has good pictures is more likely to show up than other news stories.
    - Totally disagree
    - Somewhat disagree
    - Neither agree nor disagree
    - Somewhat agree
    - Totally agree

Online Appendix: References

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