

# Silencing Political Opinions: An Assessment of the Influence of Geopolitical Contexts in Colombia

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## Abstract

One of the most understudied aspects of the spiral of silence theory is the influence on opinion expression of different social structures anchored in geopolitical units, such as cities or states. This study evaluates political opinion expression after an election by relying on national survey data collected in Colombia (Latin America) and using multilevel analytic techniques to assess geopolitical and individual contexts of influence. Results provide evidence that a disagreeable *national* context—an election outcome contrary to one’s preference—matters in explaining citizens’ political expression. In addition, individual-level variables in the form of self-censorship were studied. Rather than an individual’s level of self-censorship contributing to expression inhibition, it appears that aggregate *city* levels of self-censorship affect the likelihood of an individual expressing his or her opinion after a presidential election.

## Keywords

geopolitical contexts, spiral of silence, self-censorship, multilevel models, Colombia

Shortly after the U.S. Presidential election in 2004, Republican consultant Frank Luntz visited the University of Wisconsin-Madison. Luntz found himself in a liberal town that had overwhelmingly voted for John Kerry and in a state that also had gone for Kerry, but in a context where George W. Bush had won the *national* election. Luntz quizzed the audience about who had voted for Bush. A couple of hands were cautiously raised.

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Immediately, Luntz disclosed that he would not have raised his hand, that he would have remained silent. “Guys! We are in Madison!” Luntz was assuming that the audience had predominantly *not* voted for Bush, and so his preference for remaining silent (along with the perceived minority) was in line with the tenets of the spiral of silence theory.

The spiral of silence (Noelle-Neumann, 1974, 1993) posits that individuals are likely to silence their opinions when facing a disagreeable context, that is, a climate of opinion perceived as contrary to their own. In the original theory, the perception of a climate of opinion was influenced by one consonant, ubiquitous, and cumulative media (1993). Although research over the last four decades has validated the spiral of silence (with hundreds of works on the topic), scholars have started slowly to deconstruct the idea of an omnipotent media by showing that media influence is neither unique nor ubiquitous (Eveland, 2002; Hoffman & Glynn, 2008). Instead, various contexts or macro-level factors exert an influence on individuals (Cho, 2008; Hoffman, 2013; Kim, Wang, Gotlieb, Gabay, & Edgerly, 2013).

One such context to consider is space. Although its meaning varies greatly, the meaning of space used here refers to the realm of (broadly understood) discourse, materiality, and action that is governed by politics (Keith & Pile, 2004). The notion that political location and space matter is not new (see Keith & Pile, 2004). Space is considered an active actor, so it cannot be perceived “as if it were a passive, abstract area on which things happen” (p. 2). One of the ways to examine space is through societal structures such as geopolitical contexts. Geopolitical contexts are political or geographic jurisdictions such as cities, counties, and nations. Geopolitical contexts have been explored as it relates to the spiral of silence. However, to date, spiral of silence research on the relationship between geopolitical context and opinion expression has only been tested cross-nationally, with studies attesting to differences between (a few) countries (Huang, 2005; Lee, Detenber, Willnat, Aday, & Graf, 2004), but not within nations. Do geopolitical contexts of reference matter within a nation?

Clearly, Luntz was alluding to geopolitical contexts when he thought of the “foolish” Bush voters who made themselves visible in a (presumed) crowd of liberals. Did many Bush voters remain silent under the influence of the liberal local context? Were those who raised their hands influenced by the conservative national context? It is not clear which geopolitical context, national or local, was the influencing reference for the audience Luntz addressed. Situations of multiple and overlapping jurisdictions are common in democracies (e.g., states are relevant for presidential and gubernatorial elections in the United States, but not for mayoral ones). This is especially true in emerging democracies such as Colombia in Latin America, in which the national state is not firmly consolidated. The spiral of silence analyzed how individuals can influence each other, but beyond the individual, the sources of communicative influence remain largely understudied (Pan & McLeod, 1991).

The present study examines political opinion expression at different geopolitical levels of influence (local or city, and national). Our study aims to contribute to the literature in five ways. The first contribution uncovers whether and how the spiral of silence theory works in higher-level—macro—contexts. This is crucial to public opinion

formation and communication research more broadly (Scheufele & Moy, 2000). To our knowledge, this is the first study to consider the influence of geopolitical contexts on public opinion.

Current research on the spiral of silence focuses on established Western democracies or comparisons of individualistic and collectivistic cultures,<sup>1</sup> but not on emerging democracies such as Latin American countries with less tradition of democratic ideals such as free speech. For the second contribution, we shift the focus of empirical observation to Colombia, a particularly understudied country. Given Colombia's violent past, people have less tolerance for dissent as well as stricter, and often more drastic, social sanctions than most Western democracies (e.g., use of threats to make people vote one way; Rodríguez Raga & Seligson, 2008). Social sanctions can make the effects of a disagreeable context more robust (Glynn, Hayes, & Shanahan, 1997). So testing the influence of geopolitical contexts in Colombia may explain why the theory has not worked at times, or why small effects have persisted (Glynn et al., 1997).

Considering contexts at different levels requires the use of multilevel analytical techniques. Although multilevel models in communication studies have long been advocated precisely to assess individuals' contexts of reference (McLeod & Pan, 1989; McLeod, Pan, & Rucinski, 1995; Mutz, 1998; Scheufele & Moy, 2000)—particularly for phenomena like the spiral of silence (Pan & McLeod, 1991)—their presence in the literature is still scarce. Hence, we anticipate that use of multilevel analytical techniques in this study will be the third contribution.

The fourth contribution will be to test the theory in a scenario where we can contrast the effect of geopolitical context with self-censorship (Hayes, Glynn, & Shanahan, 2005a, 2005b) both at the individual and city levels. Finally, in order to address some of the critiques of spiral of silence research, the fifth contribution will be to use a post-electoral environment in which the distribution of opinion is mostly unequivocal (Price & Allen, 1990), and to use non-hypothetical conversations (Glynn et al., 1997).

## Literature Review

The following literature review provides grounding for the elements of the present study. This review is organized in the order of and expands on the above five anticipated contributions to spiral of silence research and public opinion at large.

### *The Notion of Space and Geopolitical Context in the Spiral of Silence*

According to Noelle-Neumann (1974, 1993), members of a social group are constantly monitoring the public opinion context—the climate of opinion—of the society in which they live. This constant evaluation allows people to avoid the social isolation that results, or may result, from expressing an opinion that does not follow the opinion of the majority, a phenomenon Noelle-Neumann dubbed the *spiral of silence*.

In the original version of the theory, Noelle-Neumann (1974) described how people perceive information about the prevailing climate of opinion from “others” and the mass media. Based on these indicators, an image of dominant opinion forms (an image

that may or may not reflect the actual distribution of public opinion), and individuals begin to modify their own opinions or behavior according to their perception of the dominant opinion. The justification that Noelle-Neumann offered for this adaptive behavior is the fear of isolation from certain social groups that could result from not holding the (perceived) opinion of the majority.

In Noelle-Neumann's (1974, 1993) original conceptualization, little detail was given to the notion of context, that is, the context from which the opinion of those "others" and the media emerges. However, subsequent research showing the influence of context started mounting. Glynn and Park (1997) found that opinion inhibition was stronger among reference groups than in general (anonymous) situations. When applying small group research to public opinion phenomena, Price and Allen (1990) provided a compelling critique of the spiral of silence theory by showing that an opinion debated at a small group level can ultimately crystallize as a majority opinion. This phenomenon suggested that public opinion goes beyond social control but, more importantly for our argument, it also alluded to the need to assess opinion congruity at different levels of analysis. It is plausible, for example, that a liberal person living in a liberal town within a conservative country can experience different levels of expression inhibition depending on whether she considers the town or the nation as her context of reference.

The only remote reference to context that Noelle-Neumann (1993) offered was the conception of public opinion as "tied to a space" (pp. 79, 181). Obviously, the reference to context is critical as it refers to *who* is holding a given opinion. It is likely that, as Noelle-Neumann conceived of the media as omnipotent, it did not add much value for her to be more specific about the concept of space. Yet, once the notion of the omnipotent media has been deconstructed, the spatial context becomes relevant. This context of reference could potentially be one's interpersonal network or one's location,<sup>2</sup> geopolitically (i.e., neighborhood, city, state, or nation) or media defined (i.e., media market). In fact, context has been tested as media markets—which have shown to be a significant predictor of political discussion (Cho, 2008), ambivalence reduction and polarization (Kim et al., 2013), and the perceived winning candidate in an election (Hoffman, 2013)—but not as geopolitical units.

Geography is a product not only of nature but also of history (Tuathail & Toal, 1996). Therefore, although geography has often been assumed to be innocent, it is all about power. When adding political administration to geography, it becomes geopolitics, which embodies the power to organize, occupy, and administer space. Space has been extensively studied as country-level space: the state, nation, or country (Keith & Pile, 2004). However, recent research has validated the idea of local geopolitics as also being meaningful, relevant units (Castree, 2004). Colombia's recent politics have produced the city as a central geopolitical unit (Ojeda, 2013).

### *Colombia and the Case for Larger Effects*

For most of its independent years, Colombia has been a country where violence has played a critical role as a conflict resolution mechanism. Internal wars between

liberals and conservatives characterized the 19th and roughly the first half of the 20th century, and evolved into a confrontation with communist guerrillas in the midst of the cold war. This still unresolved conflict was fueled in the late 20th century by money from illegal drug trafficking.

In the midst of this political turmoil, urban areas led by the capital city of Bogotá have emerged to form political alternatives to Colombia's persistent cycles of violence. A series of local governments emphasizing political accountability, cultural innovations on citizenship, and physical transformation of urban spaces have significantly altered the political landscape (see, for example, Muñoz, Arturo, Bromberg, & Moncada, 2003).

With decreasing violence and the increasing importance of civil society, cities have become testing grounds for a new Colombia—a country that chooses to resolve its political conflicts through inclusion rather than exclusion, and through dialogue rather than force and imposition (for a typology of the latter, see Miller, Boster, Roloff, & Siebold, 1987). When dialogue supersedes violence, understanding the factors that limit expressive behaviors is crucial, because it is through conversation and deliberation that new alternatives to non-democratic political participation may ultimately enhance the quality of political life.

Because strict and drastic social sanctions cannot be immediately removed, Colombia presents a novel ground on which to test the spiral of silence: A country that strives to establish democratic social institutions, but that still struggles to overcome its violent past. In this fashion, social forces in the spiral of silence may lead to larger effects than in more established democracies (Glynn et al., 1997).

### *Multilevel Analysis and the City as Level 2 Unit*

In education studies where classroom or school effects have long been studied (see, for example, Bock, 1989), there is a clear unit of analysis for the notion of context or Level 2: the classroom, the school, or both. However, within the field of communication research, the Level 2 unit depends on the phenomenon under study. In public opinion research, a “natural” macro level of research does not exist (McLeod et al., 1995). Thus, finding the most relevant contextual space that affects an individual's willingness to express opinions is perhaps one of the most daunting tasks for researchers working on the spiral of silence, and for communication scholars in general (Pan & McLeod, 1991)—but it is a necessary task (Neuwirth & Frederick, 2004, p. 675).

Because voting takes place in clearly delimited jurisdictions (such as the county or city where one lives), we make the claim that these geopolitically defined contexts can have an influence on how much citizens express political opinions directly after an election. In the case of Colombia, the city is the relevant unit. We pose a series of arguments to support this claim.

First, we offer a historical argument. Well before its independence, four semi-autonomous regions developed in the area now known as Colombia: the high plains of the Andes, the north coast, Antioquia, and Cauca. The singularities within each region afforded Colombia the reference of “nation of regions” (Williams, 1991). The regional

differences were fueled by dominance rivalries, poor communication systems, ethnic diversity, and economic singularities, which resulted in broad cultural differences and multiple armed confrontations. In the 20th century, a centralized national state finally consolidated in Colombia. However, the cultural differences between regions have persisted, among which is varying levels of expressive political participation (Rojas & Pérez, 2009), an occurrence central to our concerns.

Differing levels of political conversation among regions hint at the importance of considering a multilevel approach to understanding political expressiveness. Beyond individual differences, regional cultural mores can affect whether individuals decide to express their political opinions in general, especially in politically disagreeable contexts. Moreover, regions can serve as the basis for differences in smaller units such as the city.

Second, we pose a face value argument. Colombians living in the same city enjoy a set of shared experiences that they could not have at any other geopolitical level. Citizens from the same city feel a belonging to the city, have similar Spanish usage, benefit from the same public transportation, go to the same shopping mall, and participate in the same “fiestas,” “festivales,” “ferias,” or “carnavales” (different terms that embody year-round city events centered on tradition, culture, and folklore, and open to the public). In addition, in Colombia, urban populations represent 75.4% of the total population (Departamento Administrativo Nacional de Estadística, 2015).

Third, we present an affinity (belonging and esteem) argument. In order to analyze potential higher-level effects, a decision has to be made about the relevant unit of analysis. That is, should we consider the city or the broader region, given the historical argument? Furthermore, should the neighborhood be contemplated as a potential Level 2 unit? To answer this question empirically, we asked Colombians about their level of affinity with these units.<sup>3</sup> The findings suggested that contemporary Colombians identified more strongly with their city than with the broader region or the local neighborhood. Therefore, it makes sense that the appropriate unit for a higher level of analysis is precisely the city level.

Fourth, we pose a design argument. The data used in this study fit a multilevel model by design. Level 2 units (cities) were first sampled, and then Level 1 units (citizens) were sampled within each city. Because Level 1 units (individuals) were not entirely independent of each other, but shared the commonality of being from the same city, a multilevel analysis is suitable. Moreover, in order to assess whether the effects of the independent variables vary among cities, or whether city-level variables matter, multilevel models are the best tools. Failing to account for the multilevel structure of the data tends to make standard errors smaller than they should be, thus leading to spuriously significant results (Type I error; Hox, 2002).

Finally, we tested whether there was an empirical argument for using group effects at the city level. A random-effects analysis of variance (ANOVA) gave an intraclass correlation of .07; the correlation ratio for fixed-effects ANOVA was also .07. When running an empty model (intercept-only model) with the dependent variable, the intraclass correlation was .08. In power analysis, intraclass correlations of .05 and .10 are considered small and medium, respectively (Hox, 2002). Results from this data set

suggest that group effects are non-trivial. Therefore, given this outcome and the above-mentioned arguments, multilevel analysis using the city as the Level 2 variable is suitable and warranted.

To test for the influence of cities on opinion expression, we pose the following hypotheses and a research question on the importance of context and which of the contexts (national or local) matters the most:

**Hypothesis 1a (H1a):** People in a disagreeable national context will express political opinions less frequently.

**Hypothesis 1b (H1b):** People in a disagreeable local context will express political opinions less frequently.

**Research Question 1 (RQ1):** Which geopolitical context, national or local, is the most important disagreeable context of reference for political opinion expression?

### *Self-Censorship at Individual and City Levels*

*Effects at the individual level.* Scholars working with the spiral of silence theory have called attention to personal characteristics (psychological variables) that might influence expression beyond opinion context (Hayes et al., 2005b; Neuwirth, Frederick, & Mayo, 2007; Willnat, Lee, & Detenber, 2002)—that is, individual-level influence. These scholars have sought additional explanatory mechanisms in individual characteristics that, despite context (or interacting with it), might result in expression inhibition. Individual-level variables that have been associated with expression inhibition include a general communication apprehension (McCroskey, 1978; Neuwirth et al., 2007; Willnat et al., 2002), shyness (Hayes et al., 2005b), low knowledge of a subject (Salmon & Neuwirth, 1990), low certainty of being correct (Huang, 2005; Lasorsa, 1991), low level of interest in a given topic (Baldassare & Katz, 1996), and certain demographics such as being young, female, and having low socio-economic status (Noelle-Neumann, 1993; Willnat et al., 2002).

Recently, Hayes and colleagues (2005a, 2005b) developed a self-censorship scale. Self-censorship is an attribute that reflects the prevalent individual-level variability within a group context in the willingness to confront an opposing opinion majority, as well as in the willingness to engage in (perceived) taboo behaviors (Hayes, 2015). The Willingness to Self-Censor (WTSC) scale (Hayes et al., 2005a, 2005b) measures the inhibition of expressing one's own opinion with people who may not be in agreement with it, *regardless of specific context or issue*. Our study approaches the notion of self-censorship as a psychological variable that can affect the disposition to speak about politics in the midst of disagreement. As a disposition, self-censorship is relatively stable over time and in a variety of situations; thus, its measurement from cross-sectional data should be valid (Hayes et al., 2005b). More importantly, the WTSC scale recognizes individuals' differing levels of self-suppression when speaking an opinion publicly (Hayes et al., 2005a), even in real conversation settings (Hayes, Uldall, & Glynn, 2010).

The WTSC scale has been validated in several countries and is significantly correlated with fear of social isolation (Matthes et al., 2012) typical in spiral of silence research. This correlation makes it possible to use self-censorship in lieu of fear of social isolation (Matthes et al., 2012). Several studies have made this substitution (Hayes et al., 2005a; Hayes et al., 2010) or other substitutions for fear of isolation (Matthes, Rios-Morrison, & Schemer, 2010) without compromising the correct testing of the spiral of silence theory. We also take this approach. Thus, the WTSC construct seems most appropriate to capture individual-level differences and explore the main effects of personality and climate of opinion, and potential interactions between them.

*Effects at the city level.* The scant research on the spiral of silence or opinion expression using multilevel models primarily has used media markets as the Level 2 variable, either measuring newspaper content (Hoffman, 2013), political ads (Cho, 2008), or both (Hoffman, 2013). Instead, this study uses cities as the Level 2 variable. In the case of Colombia, and in particular regarding city indicators, we chose to aggregate self-censorship at the city level. Aggregation is defined as the grouping of individual-level data into the macro level, either by using different average techniques or products (Snijders & Bosker, 1999). Aggregation is a customary procedure that helps establish which effects (individual or aggregate) matter most (for a review, see Hox, 2002 and Snijders & Bosker, 1999). The self-censorship city-level construct represents an indicator of how much, in general, citizens living in a given city are willing to confront an *opposing majority* with an opinion that is *contrary to this majority*. In the case of Colombia, an individual living in a city like Cartagena where self-censorship is at its lowest will presumably be *more* likely to speak out about a contrary opinion than an individual living in Pereira, where self-censorship is at its highest—other things being equal.

There are several reasons for the choice of aggregating self-censorship at the city level. First, aggregating is theoretically sound. The validity of aggregation ought to be evaluated for each particular case (validity and statistical appropriateness). Although researchers must be cautious and assess the appropriateness of aggregation on a case-by-case basis, there is no theoretical argument against aggregation per se (Hofmann, 2002; Klein & Kozlowski, 2000a, Snijders & Bosker, 1999).

Second, in this study, aggregating self-censorship is valid because the construct of self-censorship is composed of a psychological factor linked to the spiral of silence (Hayes et al., 2005a, 2005b) that is relatively stable over time (Hayes et al., 2005b). Psychological constructs like self-censorship can be applied easily to higher or collective levels such as the city via aggregation (Hofmann, 2002). One could argue that cities do not self-censor, that only individuals do. However, people frequently speak of characteristics or abilities attributed to collectives like the city. For instance, it is often said that the city of Madison (WI) is liberal, when liberal usually is inferred at the individual level. The critical aspect is to recognize that structure (how a characteristic like self-censorship originated) and function (the effects of that characteristic) are different for individuals and collectives (Morgeson & Hofmann, 1999). By having both self-censorship at the individual and at the city level, we are thus able to control the

effects of each construct. Moreover, by averaging self-censorship, we can compare its effects with the equivalent individual-level variable and test for cross-level interactions.

Third, self-censorship has already been used as a Level 2 construct (at the country level) by Matthes and colleagues (2012), confirming measurement invariance across countries (including Mexico and Chile). The same way that friendliness or happiness varies across regions, states, and cities in the United States, self-censorship varies across towns in Colombia where differing cultural heritages that stem from colonial times are linked to regional variance in political conversation and outspokenness (Puig-i-Abril & Rojas, 2007).

Fourth, in terms of statistical appropriateness, the  $F$  test of the intraclass correlation for self-censorship is significant,  $F(12, 510) = 5.53$ , thus justifying the aggregation of self-censorship at the city level in Colombia (Klein & Kozlowski, 2000b). Once, the *theoretical* rationale is in place as to why an individual-level variable should be aggregated at a higher level, if there is also *empirical* justification for higher-level aggregation (like here), the necessary conditions for aggregation are considered met (Klein & Kozlowski, 2000b). Given the arguments in support of the city as the Level 2 variable in the Colombian context, self-censorship is thus part of this fabric of shared experiences within Colombian cities.

Scholars in the field of education typically aggregate Level 1 units into Level 2 variables and use them as explanatory variables alongside the matching Level 1 unit (Hox, 2002). The same applies to industrial organization (Klein & Kozlowski, 2000b) and group research (Tasa, Taggar, & Seijts, 2007; Yuan, Fulk, Monge, & Contractor, 2010). Yet, aggregating is not widespread in the field of communication—with only a few works published (see Eveland & Hutchens, 2013; Kim, 2007)—probably due to the overall paucity of multilevel research.

To test the effects of self-censorship both at the individual and city levels, and to compare their respective influence, the following hypotheses and research questions were developed:

**Hypothesis 2 (H2):** People with higher self-censorship levels will express political opinions less frequently.

**Hypothesis 3 (H3):** People in cities with higher levels of self-censorship will express political opinions less frequently.

**Research Question 2 (RQ2):** Which self-censorship effect is the largest, the individual or the city?

**Research Question 3 (RQ3):** Is there a cross-level interaction between city and individual levels of self-censorship?

Last, the study will assess the empirical evidence of different geopolitical contexts of influence:

**Research Question 4 (RQ4):** Is there a justification for geopolitical contexts in spiral of silence research?

## *Unequivocal Climate and Non-Hypothetical Conversations*

From Noelle-Neumann's conceptualization, many scholars have further developed the spiral of silence theory and specified contingencies that modify her earlier work (Glynn et al., 1997; Glynn, Shanahan, & Hayes, 2007). One issue that captured the initial interest of researchers was the ability of people to *correctly* evaluate the distribution of opinion in a social group (Lin & Salwen, 1997; Neuwirth, 2000; Perry & Gonzenbach, 2000; Willnat et al., 2002).

Reliance on issues, for which the distribution of opinion is equivocal (Price & Allen, 1990), can lead to confounding misperceptions of the "real" climate of opinion with projection biases (Fields & Schuman, 1976; Kennamer, 1990; Marks & Miller, 1987). Projection biases ultimately regress to the mean, thus underestimating spiral of silence phenomena, a documented phenomenon in controversial discussions such as environmental issues (Glynn & Park, 1997), affirmative action (Hayes, 2007), interracial marriages (Lee et al., 2004), death penalty (Hayes, 2007), legalization of same-sex marriages (Ho & McLeod, 2008), and equal rights for homosexuals (Lee et al., 2004). This confounding phenomenon reinforces the importance of considering unequivocal situations, that is, when people are made unambiguously aware that they are in the majority or the minority, like after an election result. In effect, a post-electoral environment makes the signal of public opinion climate clearer—public opinion "has spoken" (Glynn & McLeod, 1984) as there are clear results stemming from voting.<sup>4</sup> Colombia provides an unequivocal environment for research with its 2006 election results.

In 2006, Uribe, with his *Partido de la Unión*, was reelected with 62.4% of the popular vote, an ample margin over opposition candidates (Polo Democrático Alternativo, Partido Liberal, and the Alianza Social Indígena). Although Uribe was popular, his critics pointed to various scandals involving corruption in government contracts, human rights violations, and illegal monitoring of opposition parties, all of which enhanced skepticism and distrust for those with differing views (Rodríguez Raga & Seligson, 2008). This distrust can be captured as an intensifying left/right ideological divide. People who identified with the center decreased while people identifying with the extreme right increased (Wojcieszak & Rojas, 2011). Both sides (left and right) became increasingly skeptical of each other, providing a clear, unequivocal societal division.

Critics have also questioned the use of hypothetical conversation scenarios, instead of actual conversations, to assess the influence of opinion climates on expression likelihood (Glynn et al., 1997). Although empirical evidence in other areas suggests that behavioral intentions and actual behaviors are correlated (Ajzen, 1991), it is not always a perfect relationship. Moreover, it is plausible that in hypothetical conversations, people overestimate the likelihood of voicing their true opinions because of optimism biases (Weinstein, 1980).

Research using hypothetical conversations has shown that individuals' reluctance to express their true opinion when in the minority is a significant, albeit small-size effect (Glynn et al., 1997). This reluctance is also heightened when it concerns topics

that people perceive to be controversial or that have strong moral implications (Hornsey, Majkut, Terry, & McKimmie, 2003; Lin & Salwen, 1997; Neuwirth, 2000; Neuwirth et al., 2007; Willnat et al., 2002), such as electoral results. We hope that the use of non-hypothetical political opinion expression in the form of self-reported past opinion expression will serve as a better test of the theory than hypothetical opinion expression.

Thus, the Colombian environment provides an appropriate scenario to examine the hypotheses and research questions posed in this study. Colombian cities offer the possibility to assess effects at the city level, beyond the individual level, using multilevel analysis. In addition, the use of multilevel analysis allows testing self-censorship—central to the spiral of silence—at both the individual and city levels, as well as testing cross-level interactions. Ultimately, Colombia embodies the possibility to examine Latin American countries, which still are underrepresented in spiral of silence research. Contemporary spiral of silence research is based on historically democratic societies in which “silence” might actually be underestimated due to increased tolerance of dissent, an aspect that is still developing for Colombia. Although most research in the spiral of silence has considered social sanctions rather than physical retribution, Noelle-Neumann (1993) had both in mind when defining her theory. For instance, she claims “psychological sanctions . . . begin, perhaps, when people stop greeting someone and end when the ‘dead member drops from the social body’ as [Edward A.] Ross put it” (p. 95).

## Method

### Data

The study relied on national survey data collected between June 22 and July 10, 2006, in 13 key Colombian cities. The data were designed to represent Colombia’s adult urban population. First, the largest four cities in Colombia (in population size) were selected. Then, the capitals of the nine main departments (provinces) were chosen so that, taken together, these 13 cities represented the different geopolitical regions of the country.<sup>5</sup> Data collection took place 1 month after the Presidential election held on May 26, 2006.

Survey respondents were selected using a multi-step stratified random sample procedure that selected households randomly proportionate to each city’s size according to census data. First, the number of households to be drawn for each city was determined; second, within each city census, sections were randomly chosen proportionate to the housing districting or strata; third, a number of city blocks were randomly selected proportionate to the housing districting or strata; and finally, individual households were randomly selected within each block. Then, using the “adult in the household who most recently celebrated a birthday” technique, an individual respondent was randomly identified. Up to three visits to each household, if needed, were made to increase participation in the survey. The data were collected by a local professional polling firm and generated 1,009 face-to-face completed responses, for a

response rate of 84%.<sup>6</sup> Our final sample was reduced to the 511 people who participated in the election. Hence, the sample was  $N = 13$  cities,  $n = 511$  individuals.

Additional data were gathered to construct the Level 1 context variables, which were based on the national and city electoral results from the 2006 Presidential election. The data were taken from the official website of the Civil State National Registry, the electoral authority in Colombia (Registraduría Nacional del Estado Civil, 2007). Table 1 shows these results by cities.

## Measurement

*Dependent variable.* *Political opinion expression* after the election was measured with the item “Given the electoral results, how willing to express political opinions have you been?” on a scale from 0 (*not at all*) to 5 (*very much*). The question was designed to inquire about *past* political opinion expression given the previous electoral results, that is, non-hypothetical opinion expression. This is different from most spiral of silence research designs in which the question is designed to inquire about the *likely* willingness to express a political opinion. The approach to using a single-item variable is similar to that of public opinion (Cho, 2008; Hoffman, 2013) and political science scholars (Weitz-Shapiro & Winters, 2011) working with multilevel models.

*Independent variables.* Two variables representing the national and the local context were built. *Disagreeable national context* was a variable indicating how much of a disagreeable context individuals experienced given the national electoral results (average was 30%). Because there was only one national result, this variable took on only two values: the percentage of citizens who voted for the winner (64%) and therefore did not face a disagreeable context, and the percentage of citizens who did not vote for the winner (36%) and therefore faced a disagreeable context. If a participant had voted for the winner, his or her disagreeable national context was the percentage of people who did not vote for the winner. Conversely, if a participant did not vote for the winner, his or her disagreeable national context was those who did vote for the winner.<sup>7</sup>

*Disagreeable local context* was a variable representing the extent to which one had a disagreeable (political) context in his or her city (average was 44%). At the extreme, this variable could take values between 0 (*no disagreeable context*; everybody voted for the winning candidate including oneself) and 1 (*a very disagreeable context*; everybody voted for the winning candidate, except oneself). The variable was constructed using the percentage of votes for the winner in each city. For those who did *not* vote for the winner, their disagreeable local context value was precisely the percentage of people who did vote for the winner. For those who voted for the winner, the disagreeable local context value was  $(1 - \text{percentage who did not vote for the winner})$ , that is, their disagreeable context was the people who had not voted for the winning candidate. For instance, in Bogotá, Uribe won with 64% of the vote (Registraduría Nacional del Estado Civil, 2007). Hence, those who voted for him faced a disagreeable context of 36%; that is, an individual who voted for Uribe had to face 36% of people

**Table 1.** Disagreeable Local Context.

City	Disagreeable context <sup>a</sup>
Barranquilla	56%
Pasto	50%
Bucaramanga	50%
Cartagena	46%
Bogotá D.C.	36%
Cali	36%
Cucuta	34%
Montería	32%
Ibague	32%
Villavicencio	30%
Manizales	31%
Pereira	28%
Medellín	25%

Note. Disagreeable local context indicates percentage of individuals with a disagreeable context for each city.  $n$  (Level 2 units) = 13;  $n$  (Level 1 units) = 511.

<sup>a</sup>From Registraduría Nacional del Estado Civil (2007).

with an opinion contrary to his or her own. On the other hand, for those who did not vote for Uribe, the disagreeable context was 64% (see Table 1).

The *WTSC* scale (from Hayes et al., 2005a, 2005b) was used using six of the original eight items that comprise it<sup>8</sup>: The questions were as follows: (a) "It is difficult for me to express my opinion if I think others won't agree with what I say." (b) "There have been many times when I have thought others around me were wrong but I didn't let them know." (c) "When I disagree with others, I'd rather go along with them than argue about it." (d) "I'd feel uncomfortable if someone asked my opinion and I knew that he or she wouldn't agree with me." (e) "I tend to speak my opinion only around friends or other people I trust." (f) "It is safer to keep quiet than publicly speak an opinion that you know most others don't share." The items were on a scale from 0 (*low self-censorship*) to 5 (*high self-censorship*) (Cronbach's  $\alpha = .79$ ). The *city WTSC* was gauged by averaging the individuals' self-censorship scores within each city so that each participant in a given city would have the same city *WTSC*. The individual and city level of self-censorship had a zero-order correlation of .27, indicating a moderate relationship but not a tautological one.

The variables representing disagreeable context together with the *WTSC* scale constitute the spiral of silence main predictors at the individual level, while the city *WTSC* constitutes the spiral of silence predictor at the city level (see Table 2 for details on these measures).

**Controls.** Four demographic variables, political ideology, news media use, political discussion networks, political interest, and personal security were all used as controls. *Gender*, with female = 1 (58% female); *age*, in years ( $M = 40.58$ ,  $SD = 15.80$ ); *education*, on

**Table 2.** Descriptive Statistics and Partial Correlations.

Variables	Mean/%	SD	Opinion expression	WTSC	Disagreeable national	Disagreeable local
Op. exp.	2.03	1.46	—	—	—	—
WTSC	2.51	1.09	-.06*	—	—	—
Dis. national	30%	—	-.06	.02	—	—
Dis. local	44%	—	-.06	.00	.77***	—
City WTSC	2.52	0.35	-.12***	.16***	.02	-.14**

Note. Controls: Gender, age, education, income, political ideology, news media use, political networks, political interest, and security.  $n$  (Level 2 units) = 13;  $n$  (Level 1 units) = 511. WTSC = Willingness to Self-Censor.

\* $p \leq .05$ . \*\* $p \leq .01$ . \*\*\* $p \leq .00$ .

a scale from 1 (*incomplete basic schooling*) to 6 (*undergraduate degree and above*) (median = 4, some high school); and *income*, measured using house energy strata,<sup>9</sup> from 1 (*lowest*) to 6 (*highest*) ( $M = 2.82$ ,  $SD = 1.30$ ), constitute the demographic variables. *Political ideology*,<sup>10</sup> a predisposition, was also used as a control. It was measured on a scale from 0 (*very liberal*) to 10 (*very conservative*) ( $M = 5.54$ ,  $SD = 2.15$ ).

Communication and political variables were also considered. *News media use* was gathered using 14 items that asked participants whether they watched TV news, watched current affairs programs, read newspapers, listened to radio news, searched for news on the Internet, and so on, and how much attention they paid to international, economic, political, public, and local affairs. All the items were on a scale from 0 (*low use/attention*) to 5 (*high use/attention*) ( $M = 2.27$ ,  $SD = .89$ ; Cronbach's  $\alpha = .83$ ). *Political discussion networks* was estimated using seven items that addressed network size (four items) and frequency of talk (three items) among friends, family, co-workers/fellow students, and neighbors on a scale from 0 (*never*) to 5 (*frequently*) ( $M = 1.59$ ,  $SD = 1.98$ ; Cronbach's  $\alpha = .72$ ). *Political interest* was measured using three items that asked participants how much they were interested in local, national, and international politics on a scale from 0 (*not at all*) to 5 (*a lot*) ( $M = 1.79$ ,  $SD = 1.47$ ; Cronbach's  $\alpha = .89$ ).

In the context of Colombia, in which violence is more present in the resolution of political disputes, it is also essential to control for how citizens perceive the issue of personal security. Individuals' feelings of insecurity could be linked to perceptions of social punishment for speaking out against established viewpoints. The variable *security* asked participants whether they felt their personal security had improved in the past year on a scale from 1 (*had worsened*) to 3 (*had improved*) ( $M = 2.19$ ,  $SD = .57$ ).

## Analysis

We used the Hierarchical Linear and Non-Linear Modeling (HLM) software (Raudenbush, Bryk, & Congdon, 2007) to conduct all the estimations and tests and ran full maximum likelihood in order to test the hypotheses and research questions above.<sup>11</sup>

This estimation choice was preferred over Restricted Maximum Likelihood because the former allows testing models that are nested using deviance estimates, especially when there is an interest in evaluating the significance of variance components above and beyond the fixed parts.

The following models were estimated: (a) political opinion expression on national context and self-censorship; (b) political opinion expression on local context and WTSC<sup>12</sup>; (c) political opinion expression on local or national context, WTSC, and city WTSC; and (d) political opinion expression on local or national context, WTSC, city WTSC, and a cross-level interaction between individual and city WTSC.

The slope of the disagreeable national context was designed as fixed, because it was assumed that this slope would affect individuals equally irrespective of which city they live in. However, for the disagreeable local context, this was not true. We hypothesized that this context may affect individuals differently depending on their city of residence—hence, the choice of random slopes. For the WTSC, a random slope was chosen because the concept was latent, which is best served using random slopes.

As this study's central focus is on city effects, rather than the individual contribution of each variable, all the controls were residualized. The (unstandardized) residuals from regressing political opinion expression on the controls were used as the dependent variable.<sup>13</sup>

All the variables in the models were grand mean centered, even though their original zero values were interpretable. This was done because it was unlikely that individuals would have a zero value on these variables. Moreover, one of the models proposed had a cross-level interaction, which is easier to interpret if the variables are grand mean centered. The zero value on the predictors indicates a citizen with an average self-censorship level, an average level of adversity in both contexts, and who lives in a city with an average level of self-censorship. The level of significance for all the tests was chosen at 5%. Descriptive statistics and partial correlations are shown on Table 2.

## Results

### *National- or City-Level Effects?*

Tables 3 to 4 collect the results of the first two models (with only Level 1 variables), which are designed to test the magnitude and significance of the two different contexts (national and local), as well as self-censorship at the individual level. In the national model (see Table 3), only the national context variable was significant ( $\gamma_{20} = -1.03$ ,  $p = .00$ ). This means that an increase of one unit in the mean national disagreeable context decreased political opinion expression after the election by 1.03, about three fourths of the standard deviation.

This can be considered a remarkable effect, especially given that there is little a person can do to change his or her disagreeable national context.

The random components of the national model (Table 3) were all significant ( $\tau_0^2 = .12$ ,  $p = .00$ ;  $\tau_1^2 = .02$ ,  $p = .00$ ). This implies that there was significant variability

**Table 3.** Opinion Expression After the Election—Hierarchical Linear Model Results for the National Model.

Fixed effects	Coefficients( $\gamma$ )	SE( $\gamma$ )	<i>p</i> value
$\gamma_{00}$ intercept	0.11	.11	.33
$\gamma_{10}$ individual self-censorship	-0.05	.06	.46
$\gamma_{20}$ disagreeable national context	-1.03	.23	.00
Random effects	Variance component		<i>p</i> value
Level 2 random effects			
$\tau_0^2 = \text{Var}(U_{0j})$	0.12		.00
$\tau_1^2 = \text{Var}(U_{1j})$	0.02		.00
Level 1 random effects			
$\delta^2 = \text{Var}(R_{1j})$	1.60		

Note. Full maximum likelihood estimation. *n* (Level 2 units) = 13; *n* (Level 1 units) = 511.

**Table 4.** Opinion Expression After the Election—Hierarchical Linear Model Results for the Local Model.

Fixed effects	Coefficients( $\gamma$ )	SE( $\gamma$ )	<i>p</i> value
$\gamma_{00}$ intercept	0.12	.11	.29
$\gamma_{10}$ individual self-censorship	-0.05	.06	.43
$\gamma_{30}$ disagreeable local context	-0.75	.54	.19
Random effects	Variance component		<i>p</i> value
Level 2 random effects			
$\tau_0^2 = \text{Var}(U_{0j})$	0.11		.00
$\tau_1^2 = \text{Var}(U_{1j})$	0.02		.01
$\tau_3^2 = \text{Var}(U_{3j})$	1.59		.03
Level 1 random effects			
$\delta^2 = \text{Var}(R_{1j})$	1.60		

Note. Full maximum likelihood estimation. *n* (Level 2 units) = 13; *n* (Level 1 units) = 511.

among cities in political opinion expression after the election, but also that there was significant variability among cities in levels of self-censorship.

The results from the local model are collected in Table 4. None of the fixed effects were significant. However, the variance components were all significant ( $\tau_0^2 = .11$ ,  $p = .00$ ;  $\tau_1^2 = .02$ ,  $p = .01$ ;  $\tau_3^2 = 1.59$ ,  $p = .03$ ). Similar to the national model, there is evidence of variability among cities in political opinion expression after the election, and there is evidence of variability among cities in the effects of both self-censorship and disagreeable local context on political opinion expression after the election.

**Table 5.** Opinion Expression After the Election—Hierarchical Linear Model Results for the City-Effects Model.

Fixed effects	Coefficients( $\gamma$ )	SE( $\gamma$ )	p value
$\gamma_{00}$ intercept	0.09	.08	.29
$\gamma_{01}$ city self-censorship	-0.56	.17	.01
$\gamma_{10}$ individual self-censorship	-0.02	.06	.81
$\gamma_{20}$ disagreeable national context	-1.01	.23	.00
Random effects	Variance component		p value
Level 2 random effects			
$\tau_0^2 = \text{Var}(U_{0j})$	0.05		.00
$\tau_1^2 = \text{Var}(U_{1j})$	0.02		.00
Level 1 random effects			
$\delta^2 = \text{Var}(R_{1j})$	1.60		

Note. Full maximum likelihood estimation.  $n$  (Level 2 units) = 13;  $n$  (Level 1 units) = 511.

To evaluate the different contexts of reference (national or city), we calculated Akaike Information Criterion (AIC) and Bayesian Information Criterion (BIC) for the national and local models, which compare non-nested models.<sup>14</sup> Using AIC and BIC’s criteria, the lowest value fell for the national model (AIC = 2656.38, BIC = 2689.11), compared to the local model (AIC = 2667.15, BIC = 2713.91), indicating that the national model had a better fit than the local model.

Taken together, these results indicated that the disagreeable *national* context, and not the local one, mattered in explaining citizens’ context of reference for opinion expression after the election (RQ1). Moreover, we also found that the disagreeable national context was a significant contributor in the national model (H1a was supported), but that the disagreeable local context was not a contributor in the local model (H1b was not supported). Individual levels of self-censorship did not contribute to opinion expression in either of the two models (H2 was not supported). Therefore, only the disagreeable national context was retained in further analysis.

### Self-Censorship at the City Level

Tables 5 to 6 show the results for the multilevel models considered. The city-effects model adds a Level 2 variable (city levels of self-censorship). Results indicated that, among Level 1 variables, only the disagreeable national context mattered ( $\gamma_{20} = -1.01, p = .00$ ). The implication is exactly the same as stated before: An increase of one unit in the mean national disagreeable context decreased political opinion expression after the election by 1.01, around three fourths of the standard deviation. The sole Level 2 variable was also significant ( $\gamma_{01} = -.56, p = .01$ ), implying that an increase in one unit of city self-censorship decreased political opinion expression by .56, a third of the dependent variable’s standard deviation.

**Table 6.** Opinion Expression After the Election—Hierarchical Linear Model Results for the Cross-Level Interaction Model.

Fixed effects	Coefficients( $\gamma$ )	SE( $\gamma$ )	<i>p</i> value
$\gamma_{00}$ intercept	0.10	.08	.25
$\gamma_{01}$ city self-censorship	-0.79	.24	.01
$\gamma_{10}$ individual self-censorship	-0.03	.06	.64
$\gamma_{11}$ City $\times$ Individual self-censorship (interaction)	-0.23	.15	.16
$\gamma_{20}$ disagreeable national context	-1.03	.23	.00
Random effects	Variance component	<i>p</i> value	
Level 2 random effects			
$\tau_0^2 = \text{Var}(U_{0j})$	0.05	.00	
$\tau_1^2 = \text{Var}(U_{1j})$	0.02	.01	
Level 1 random effects			
$\delta^2 = \text{Var}(R_{ij})$	1.60		

Note. Full maximum likelihood estimation.  $n$  (Level 2 units) = 13;  $n$  (Level 1 units) = 511.

Although individual self-censorship was not significant, its variance component was ( $\tau_0^2 = .05, p = .00$ ), potentially indicating that the fixed effect of individual self-censorship may be canceling out. The variance for the intercept was also significant ( $\tau_1^2 = .02, p = .00$ ), thus reinforcing the presence of city effects in the dependent variable.

We used a Wald test to assess whether the self-censorship effects differed between levels, that is, we tested  $\gamma_{10} \neq \gamma_{01}$ . The result was significant ( $p = .00$ ), meaning that the effect of self-censorship at the city level ( $\gamma_{10} = -.56$ ) was significantly larger than the individual self-censorship effect ( $\gamma_{01} = -.02$ )—a very intriguing result. It matters whether individuals live in a city whose citizens have a tendency to self-censor, but not whether those citizens, individually, censor themselves.

Finally, in the cross-level interaction model, we added a cross-level interaction between individual and city levels of self-censorship. The results (in Table 6) were not remarkably different from the city-effects model. Again, only city levels of self-censorship and national context were significant ( $\gamma_{01} = -.79, p = .01$ ;  $\gamma_{20} = -1.03, p = .00$ ), with the cross-level interaction coefficient not making any significant contribution ( $\gamma_{11} = \text{n.s.}$ ). This implied that the effects of self-censorship on political opinion expression occur at the city level with no direct or moderation effect at the individual level. Shifting from a favorable to a disagreeable national context decreased political opinion expression by about one unit, which is over three fourths of its standard deviation. Finally, an increase in one unit of city self-censorship decreased political opinion expression by .79, almost 1 point or over half of the dependent variable's standard deviation.

The random section of the model behaved similar to the city-effects model, with  $\tau_0^2 = .05, p = .00$ ;  $\tau_1^2 = .02, p = .01$ . Again, there was evidence of city effects in the dependent variable.

In conclusion, having a disagreeable national context reduced political opinion expression after the election, even after including Level 2 variables in the models (H1a was supported). However, there were no significant effects of individual self-censorship (H2 was not supported). Instead, what mattered most was the level of self-censorship at the city level (H3 was supported). Between the individual and city levels of self-censorship, the city-level effect was larger in reducing political opinion expression (RQ2). Finally, the cross-level interaction was not significant (RQ3), meaning that the effect of self-censorship at the city level was not moderated by individuals' level of self-censorship.

### *City-Level Effects in the Spiral of Silence Research*

When assessing the contribution of each model, from the empty model with only an intercept and no predictors (not shown here) to the national model, to the city-effects model with city levels of self-censorship, the decrease in deviance was significant at each step ( $p = .00$ , for both), indicating an improvement in fit. Another way to understand the magnitude of these improvements is to consider the  $R^2$  at each level for all the models.<sup>15</sup> The  $R^2$  indicates that between the national and the city-effects models, there was not much of an improvement in Level 1 variance explained (from 2.51% to 2.59%), but in Level 2, the improvement was substantial (from 15.84% to 55.40%). Adding the cross-level interaction reduced  $R^2$  at Level 2 (from 55.40% to 48.12%), but it increased  $R^2$  for Level 1 (from 2.59% to 3.26%).

The variance explained ( $R^2$ ) is also a measure of effect size (Woltman, Feldstain, MacKay, & Rocchi, 2012). Thus, there is evidence of the importance of self-censorship and geopolitical context in the spiral of silence theory, at least in the case of Colombia. Level 1 variables do not account for much of the Level 1  $R^2$  of political expression, but the sole Level 2 variable explains half the Level 2  $R^2$  in the dependent variable. Hence, city-level variables and multilevel models in this study are warranted (RQ4).

## **Discussion**

This study examined different levels of influence in the spiral of silence theory. We began by examining whether and how spiral of silence theory works in macro contexts that are tied to geopolitical space. The theory was tested in Colombia, an emerging democracy with stringent social sanctions. We used multilevel models to capture simultaneously individual- and city-level effects affecting political opinion expression. The study used self-censorship as an explanatory variable at two levels (individual and city). Finally, to address common critiques of the theory, we applied the theory in a post-electoral environment in which the distribution of opinion was unequivocal and used a non-hypothetical scenario. This approach is novel and offers new directions that expand both the spiral of silence theory and the scope of potential sources of public opinion formation.

Overall, study results provide support for the importance of geopolitical context as an antecedent of political expression and, equally crucial, suggest that when expressing political opinions after a *presidential* election, the national context of reference

matters more than the local context. The importance of the national over the local context of reference for opinion expression could be due to the nation being the most relevant unit after a *presidential* election. After all, cities all get the same president. Another explanation for our findings could hinge on media coverage, which in presidential elections tends to focus more on the national outcome at the expense of the local one, thus leaving citizens with a less clear signal for geopolitical reference regarding the city. The main issues in the 2006 election were security and economic development (Holmes & Gutiérrez de Piñeres, 2012). Although these issues can affect cities differently (e.g., guerrilla politics is a hot issue in Medellín), in the context of presidential elections, the treatment that issues receive in the media relates to how each candidate is doing on the issues (the horse race), which has a national focus. Other plausible explanations for our findings include the use of a broad measure of political opinion expression, instead of an issue-specific one like guerrilla politics. For these specific issues, local contexts might carry more weight. However, this is something that future research will have to address because the study measure is limited in this fashion.

Our study found that the biggest influence on individuals' political opinion expression was the aggregate—city—levels of self-censorship. It is not individuals' level of self-censorship—which is not significant—but the macro level of self-censorship that significantly and positively correlates with silencing political opinions. In the main, we argue that individuals in Colombia take the *national* context as their geopolitical context of reference to express political opinions. That is, they survey the national context to determine the climate of opinion. Yet, Colombians' social forces (self-censorship, akin to fear of isolation) are determined at the city level. People seem to have a strong perception of the level of self-censorship that surrounds them, and they comply with it. This tendency may be at the expense of people's own individual predispositions.

In the spiral of silence research, individual-level perceptions of opinion climate are key (Hayes et al., 2005a, 2005b; Jorg Matthes et al., 2012; Noelle-Neumann, 1993), but there also has been a move to analyze other forms of influence (McLeod et al., 1995; Pan & McLeod, 1991; Scheufele & Moy, 2000). Further theoretical work hinted at the influence of social and geographic structures (Huckfeldt & Sprague, 1995). These structures have been tested as media markets (Cho, 2008; Hoffman, 2013; Kim et al., 2013), but not as geopolitical units. With this study, the intention is not to delegitimize media markets—on the contrary—but to add geopolitical space to the macro-level set of influencing factors. With these results, we are returning to the root of the spiral of silence, where context is critical and is analyzed at different levels. This contribution may make the spiral of silence theory more appealing for the field of public opinion research, which traditionally has focused on micro- and meso-theoretical approaches (Scheufele & Moy, 2000).

Regarding self-censorship, this study provides intriguing evidence of the importance of the social aspects of communicative behaviors: Rather than a person's own level of self-censorship hindering his expressive behavior (Hayes et al., 2005a, 2005b), it appears that what truly matters is whether someone lives in a locality with high levels of self-censorship. That is, an individual living in a city with high levels of

self-censorship such as Pereira or Medellín will be less likely to speak about politics than someone with the same level of self-censorship but who lives in a city with reduced levels of self-censorship, like Cartagena. These differences stem from Colombia's pre-colonial heritage of the Andean/Coastal divide. So, it is not surprising that Cartagena (a coastal city) is the city with the lowest levels of self-censorship, while Pereira or Medellín (cities in the Andes) have among the highest. Medellín, for instance, has been one of the cities in Colombia facing more violence in recent history, which, in addition to the pre-colonial heritage, could also lead to higher levels of self-censorship at the city level.

These results speak to the interactive nature of communication and provide fertile ground for research on self-censorship using multiple levels of analysis. Moreover, the results provide strong support for the city as a critical social influence on opinion expression in the Colombian case. We used a Level 2 variable that was an aggregate measure of a Level 1 variable (self-censorship), which is typical in multilevel models (Hox, 2002). In particular, this sole Level 2 variable accounted for 55% of the variance in Level 2—not a small effect anymore. Even though there were no other indicators of pertinent Level 2 variables, it may just prove difficult to find a variable that can explain as much of the variability in people's political opinion expression after the election as the city level of self-censorship. Furthermore, this study's approach to using a *unique* Level 2 variable was akin to similar research in public opinion (e.g., Cho, 2008; Hoffman, 2013).

Last, the size of the Level 2 effects may also be due to the use of a non-hypothetical measure for political opinion expression embedded in a post-electoral unequivocal scenario. However, only research that manipulates self-censorship at the aggregate level and that controls for non-hypothetical opinion expression and unequivocal scenarios may resolve which factor matters the most: city levels of self-censorship, non-hypothetical measures, or an unequivocal scenario.

Democracy in Colombia is relatively recent, and the institutions that evolve with democracy have just taken off. One such institution is the systematic collection of population- and geopolitical-level statistics. As the availability of data becomes a reality, multilevel research will be able to take advantage of additional constructs calculated at the city level—but this is not yet possible. Another area for thriving research may be the analysis of whether and how the Internet may change levels of influence since our data belongs to a year in which Internet penetration was far from universal. Findings from recent years speak to the importance of Internet technologies for opinion expression under different contexts (Rojas & Puig-i-Abril, 2009).

The results in this article ought to be understood within some limitations imposed by the data. First, the sampling of Level 2 variables was not random, defying an assumption of the model. This is not only due to difficulties in sampling certain areas of Colombia but also because *representation* of major urban areas was sought instead. Nonetheless, this does not jeopardize the validity of the analyses as the critical step in hierarchical linear modeling is the successive sample from one level to the next (Hox, 2002). Second, the assumption of the model regarding the homogeneity of the residual Level 1 variance was not sustained. The test of homogeneity had a chi-square of 30.99

with nine degrees of freedom, which does not support the null of homogeneity. This diagnostic was left untreated due to the lack of theoretical background regarding possible predictors of the variance. Finally, it remains to be seen whether these results would hold in situations in which the opinion climate is less clear, like in off-election periods, and in situations where the opinion climate may be stronger. Similarly, it is not obvious whether the results would hold in cases where the electoral results were more evenly split.

Still, we are optimistic that this study suggests a new venue for research on expression inhibition that takes into account individual and contextual characteristics simultaneously, and at different levels of analysis. If data were available, one could test whether the audience members during Luntz's talk who raised their hands were, indeed, brave to speak up in the face of a disagreeable context, or whether, on the contrary, they were relying on the winning national context that was favorable to them. Results could also indicate whether the geopolitical forces of influence, if any, were as strong as in the case of Colombia. Continuing this line of research would advance further theoretical and methodological aspects of the spiral of silence theory, as well as potentially pinpoint more sources of public opinion formation, both of which are crucial for democracy and the quality of political and civic life—especially in traditionally violent societies like Colombia. It is precisely through conversation and deliberation that alternatives to non-democratic political participation emerge.

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### Notes

1. See, for example, Huang (2005) for Taiwan; Kim, Han, Shanahan, and Berdayes (2004) for South Korea; Willnat, Lee, and Detenber (2002) for Singapore; and Willnat (1996) for Hong Kong.
2. The distinction between political networks (socially defined) and setting or context (physically defined) corresponds to Mutz (2006). She proposed the difference in reference to how and with what consequences individuals engage or encounter heterogeneous political talk.
3. Results from the affinity question on a scale from 0 (*no affinity*) to 5 (*a lot of affinity*), for the city, region, and neighborhood were, respectively,  $M = 4.19$ ,  $SD = 1.01$ ;  $M = 4.06$ ,  $SD = 1.12$ , and  $M = 3.85$ ,  $SD = 1.24$ ; Holm-corrected  $p$  values for the differences (Seaman, Levin, & Serlin, 1991) were all at the .00 level.

4. A situation in which there is a clear message from the electorate is called a “mandate election.” Although researchers admit that not all elections are mandate elections (Shamir & Shamir, 2008), there is wide consensus that the Colombian 2006 win by Uribe was a mandate election.
5. Some key cities in the southwest were not selected due to high risk of surveying in that area.
6. Calculated using American Association for Public Opinion Research (AAPOR) guidelines, [www.aapor.org](http://www.aapor.org).
7. Although four candidates participated in the election, dichotomizing this variable makes sense because the three other candidates all represented political opposition figures from the center and center-left, while Uribe represented a coalition on the right of the political spectrum. People voting for Polo Democrático Alternativo, Partido Liberal, or the Alianza Social Indígena would all have a disagreeable context during the Uribe era.
8. The two excluded WTSC items were reversed items. Their translation (from English into Spanish), albeit correct, ended up turning them into long questions involving double negatives. However, despite having two missing items, the inter-item reliability was acceptable, and Hayes himself has mentioned the redundancy of these two reversed items, when Item 1 (the first question) is present (Hayes, 2005)—which is the case here.
9. House energy stratum is a proxy measure of household income (used for taxation and utility payments) and is based on the government’s classification of households from 1 through 6.
10. We took the approach of measuring political ideology using the same item as the leading Latin American surveys, *Latinobarómetro* ([www.latinobarometro.org](http://www.latinobarometro.org)) and *Lapop* ([www.vanderbilt.edu/lapop](http://www.vanderbilt.edu/lapop)).
11. With full maximum likelihood, the dependent variable is considered continuous. In our case, albeit debated and contested, because the dependent variable contains more than five anchors (it contains six), it can be considered as having interval properties (Hayes, 2005), and thus can be estimated using linear models including multilevel (Snijders & Bosker, 1999).
12. Ideally, we would have included a model with both contexts to be able to test for inequality of coefficient size. However, the two context variables were highly correlated ( $r = .77, p = .00$ ) with collinearity potentially being a serious problem, which prevented us from using them both in the same model.
13. Residualizing is a method to take into account the contributing effect of controls without putting them in the model. Some authors have criticized this method for having a conservative or liberal bias in estimating significant effects (see Darlington & Smulders, 2001). Although we acknowledge these shortcomings, (a) residualizing can be effective in conveying results that could be unnecessarily complex (Weymouth & Feinberg, 2011), and (b) having estimated the model with and without residualization, the results for the pertinent variables (self-censorship and context) are almost identical.
14. Akaike Information Criterion (AIC) = deviance +  $2q$ , where  $q$  is the number of parameters in the model. Bayesian Information Criterion (BIC) = deviance +  $q \ln(n)$  (Hox, 2002). AIC and BIC are indicative criteria of model fit especially useful for non-nested models. Two models are said to be nested if one is a subset of the other. Non-nested models are not comparable this way, and, hence, one is not a subset of the other.
15. In multilevel models,  $R^2$  is calculated at each level. In order to do so, the slopes must be fixed to avoid a negative  $R^2$ . See Hox (2002).

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