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UNIVERSITY OF CALIFORNIA Santa Barbara

Discursive Fields and Intra-Party Influence in Colombian Politics

A Thesis submitted in partial satisfaction of the requirements for the degree Master of Arts in Sociology

by

Devin J. Cornell

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June 2019

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June 2019

Discursive Fields and Intra-Party Influence in Colombian Politics

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ABSTRACT

Discursive Fields and Intra-Party Influence in Colombian Politics

by

Devin J. Cornell

When are politicians influential in shifting party discourse? This study explores how same-party politicians influence one another, and how this influence leads to changes to a party's larger discourse. I suggest that the extent to which politicians are able to influence other party politicians depends on how their messages situate them within the party's discursive field. I further suggest that certain messages are particularly influential when distinctive within a given time period. To assess this effect, I use a case study of just under 1 million Tweets from politicians in the Colombian political party Centro Democrático from 2015-2017. I use topic modeling and network analysis to measure influence within a dynamic discursive field, and a genetic learning algorithm to identify types of messages, as topics, which constitute the field under which we observe the strongest linkage between field position and influence. I find that politicians are influential when posting about current events and when creating symbolic distinctions which are central to the party ideology - in the case of Centro Democrático, distinctions between the concept of peace itself and the peace process developing in Colombia. These results suggest that the discursive field can be a powerful tool for analysis of influence and political discourse.

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As organizations that channel resources and messages from a broader set of political forces, political party ideologies are shaped both by competition with other parties and intra-party influence relations resulting from social dynamics within. Online social media platforms have offered a new terrain across which these processes play out, and politicians are tasked with developing their distinct identities as they attempt to attract the attention of constituents. In this process, however, politicians within the same party are also learning from each other to grapple with this new medium by adopting styles of rhetoric, arguments, and symbolic characterizations of political entities. In doing so, they align individual discourses into coherent party ideologies that in turn will come to define them as politicians. I use the concept of the discursive field formally here to describe how politicians' discursive practices, in this case Tweets, situate them among other party politicians. I suggest that politician Tweets about the world have meaning not only in the semantic content they contain, constructing symbolic imaginaries and social categories, but also in how those relational meanings situate them in their broader social context. This perspective treats discourse as a set of material practices, cemented on the virtual Twitter feed for others to see and interact with, with realworld consequences in the ways politicians learn to refine their own political identities and how those Tweets may affect other politicians; how they shift the larger party discourse.

Building on the relational paradigm from formal studies of culture and theories for interpretive analysis of discourse, I develop two propositions for analysis of discursive fields: (1) the field is mutually constituted by relations between actors and

discourses, and (2) these relations are necessarily linked to particular types of power. These propositions inherently create a problem for empirical analysis: to understand any one structuration of the discursive field is to understand only a single type of power which allows for its transformation.

To address this empirical challenge, I develop a method which allows researchers to search the space of possible structurations of the discursive field along which a particular type of power is observed. I first use topic modeling and network analysis to construct a dynamic model of influence within the party discursive field, then a learning algorithm to search for discursive distinctions which drive the power relations of interest, in our case intra-party influence.

To demonstrate this analysis of the discursive field, I take as a case study just under 1 million 2015-2017 Tweets from the Colombian political party Centro Democrático (CD). This party, while only recently formed, is distinguished by its exceptionally strong leadership in the form of its charismatic leader Álvaro Uribe Velez. Through this analysis, I show that despite strong central leadership, party discourse is at least partially affected by fringe messages, or messages that are distinctive within the party at a particular moment in time. Through use of the novel algorithm I have developed, I identify discourses which are more effective at influencing other party members when used as fringe, and situate actors within the field according to those distinctions.

This work will proceed according to the following agenda. First, I review theories of political parties and suggest that the concept of the discursive field can be used to study intra-party influence as a dynamic process. Second, I draw on principles of the

relational paradigm from formal studies of culture and theories of discourse analysis to develop two propositions for the study of the discursive field. I then show that these two propositions present a major challenge for analysis of the discursive field, and propose a methodology that can reveal the structure of social and discursive relations through which intra-party fringe influence occurs. Using this method, I am able to observe how each politician situates themselves within the field, and the kinds of discourses which tend to be most influential. Finally, I conclude by reexamining the issue of empirical analysis arising from the two propositions, suggesting that future studies of discursive fields use methods that can take these issues into account.

Intra-party Influence and the Construction of Party Ideology

While the study of political parties has often emphasized the role of coalition formation (McCarty & Schickler 2018), capacity building (Mische and Pattison 2000), and the shift of policy positions to follow constituent orientations (Karol 2009), there is an increasing interest in studying parties from institutional and cultural perspectives (Mudge & Chen 2014). Of particular interest to these perspectives is the ways that politicians within the same party are able to influence one another. While a variety of mechanisms have been identified, this study will focus on a particular type of intra-party influence: fringe influence within the discursive field. Fringe influence occurs when actors are most influential when using fringe messages.

Along similar lines, studies often address the question of when politicians are successful in stimulating public reception. Grimmer, Westwood, and Messing (2015) suggest that politicians garner influence by making the "impression of influence" through claims of their own success in fundraising or passing their personal earmark policies. Social movements studies have also focused on questions of actor influence, particularly from the link between individual agency and the broader cultural environment. Snow and Benford (1988) most famously developed a theory of framing, whereby actors mobilize repertoires of perspectives or narratives of events, people, or organizations in a contested space to accomplish personallymotivated goals such as persuading constituents or competing for party positions. In an effort to draw more emphasis to the emergent processes resulting from practices and interaction, further work sought to emphasize the linkage between actor agency and the broader field around them (Steinberg 1999). These perspectives explain political influence as a process of alignment, or resonance, where congruences with ideological worldviews of receivers allow actors to exploit "opportunity structures" (Snow 2007; Spillman 1995; McDonnell, Bail, and Tavory 2017) in public discourse. Advances in computational methods have recently given researchers the opportunity to study discourse, broadly conceived, at scale, particularly analyses of texts generated on virtual media platforms (Bail 2014). These opportunities have come with many new challenges, but most agree they offer new potential for the study of discourse. One such study by Christopher Bail sought out to map out the discursive field of the mass media to understand rapid changes towards negative sentiment of Islam after 9-11, despite large, well-funded pro-Islam media campaigns (Bail 2015).

In this case, the field was composed of mass media organizations represented by the news they produce, and measured using plagiarism detection software. This study emphasized the role of mass media in echoing fringe, extremist sentiments, referring to the influence process as the "fringe effect."

Another study by Bail, Brown, and Mann (2017) showed how organ donation and autism advocacy organizations produce more successful messages when they are on the leading edge of what the researchers call "cognitive-emotional currents." These currents, they suggest, describe the cyclic patterns in the alternating use of both cognitive and emotional language across the organizations. Organization messages are more successful in garnering comments on their posts when they use emotional messages at a time when other organizations are using rational language, and vice versa. This conceptualization considers advocacy organizations to compose the field and cognitive and emotional words to be the types of discourses which situate the advocacy organizations within it.

These empirical studies have shown that the discursive field concept is useful because it links substantive content of discourses with the social relations they produce across the field. Indeed, significant work in social movements research is attempting to re-formulate political strategy in terms of how actors situate themselves within organizational fields (King and Walker 2014). While these studies focus less on intra-party influence, they do emphasize the role of actor (or firm) positions within the discursive field for garnering influence and improving standing. Next, I will draw on the relational paradigm from formal studies of culture and approaches to discourse analysis to carve out a more formalized mode of analysis

for the discursive field. I then offer two propositions that might guide such an analysis, and present the significant methodological challenges that arise from this formulation.

Discursive Fields and Influence

I use the concept of the discursive field to describe the ways that actors position themselves relative to one another through practices of discourse. An actor's position in a discursive field depends only on how their discursive practices (broadly conceived) situate them relative to others in the field (Martin 2015). A hypothetical example of a discursive field would be a field of policy positions, where each actor situates themselves in the field based on the extent to which they agree or disagree on a set of policy issues. As actors discuss issues or make votes on policies, they situate themselves within this field. The dimensions of the field are policy positions, and, if one were to map out relative positions in the field, would find that more central actors would have policy positions that are similar among other actors, and fringe actors would have more atypical policy positions. While positions in the field are based on observed, objective practices, these positions also construct actors as subjects: peers come to understand how they and others are situated relative to other actors within the field. Actors learn subjective understandings of the fields as they find their way through them.

Field Theory and the Relational Paradigm

The general idea of field field theory has a long history in sociology, often traced to the social psychologist Kurt Lewin's analysis of a field constituted of a series of forces which cause tensions between possible actions of human activity. Lewin used field theory to explain how habits limit individuals to "particular patterns of action which are customarily used in the culture in which he lives" and that "individual habits as well as cultural patterns have dynamically the character of restraining forces against leaving the paths determined by these patterns" (Lewin, Lippitt, and White 1939).

The Field Theory project was perhaps most influentially taken up by Pierre Bourdieu. In Bourdieu's quest to explain class distinctions through cultural taste, such as clothing style, food, art, and music, he described the field as a system built on distinction. Bourdieu says that "there are as many fields of preferences as there are fields of sty

listic possibilities," and that each of these fields "provides the small number of distinctive features which, functioning as a system of differences, differential deviations, allow the most fundamental social differences to be expressed almost as completely as through the most complex and refined expressive systems available in the legitimate arts; and it can be seen that the total field of these fields offers well-nigh inexhaustible possibilities for the pursuit of distinction" (Bourdieu 1979).

Field theory, as it has been taken up in cultural sociology (Martin 2015), fits within the broader project of relationism promoted by Ernst Cassirer (1923). The relational paradigm suggests that things (in as general a sense as this word implies) have

meaning through relations, rather than essential properties of the things themselves. Cassirer developed this theory by examining the ontology of the taxonomy, which is pervasive in the natural sciences, suggesting that it is an implausible way of understanding the social (as an extension of the natural) world¹. Instead, for Cassirer, the taxonomy can be seen as a special case of the more general apparatus of relations that can be used to understand the world.

This relational paradigm is powerful in the way it has been used to understand how practices lead to the emergence and reproduction of both meaning and social structure. As individuals navigate the field, they also change its composition, affecting all others within the field. The relational project offers a mode of analysis for investigating individuals within the field as they relate to each other among a large number of dimensions.

The relational approach has inspired a number of more formalized approaches for the study of culture. One of the most prominent formalizations of the relational project today is in the study of social networks (Wellman and Berkowitz 1988).

These projects seek to understand the social world in terms of relations between individuals. Whether it be friendships, acquaintances (Granovetter 1973), sexual partners, interactions, correspondences (Goldberg et al. 2016), discourses (Mische and Pattison 2000), influence (Friedkin 2011), or co-memberships (Breiger 1974), analysis of social networks have produced remarkable findings that reveal systematic relationships between social relations and practices.

¹ Of course, this does not mean that the taxonomy is not useful for scientific inquiry, but rather that knowledge itself cannot be described purely through a taxonomic ontology.

There has also been a movement towards measuring meanings themselves as structures (Mohr 1998). In contrast to works which focus only on social structures, these approaches offer a structural conception of the meaning-making process which also considers social relations (Pachucki and Breiger 2010). These formal methods often rely on network analysis because it offers a wide range of mathematical tools that can capture the relational meanings that emerge both within and across groups (Breiger 1974). One recently developed approach is Relational Class Analysis (Goldberg 2011, also see Boutyline 2017), a method which can cluster survey respondents according to the extent to which they agree on the organization of ideological beliefs - that is, on the correlational structure of beliefs rather than on the beliefs themselves. Another such technique, Belief Network Analysis (Boutyline and Vaisey 2015), is able to map out ideological survey questions into networks themselves, applying measures of centrality to identify belief questions which are more fundamental to structuring ideologies. Many other studies have offered sophisticated tools for the quantitative studies, and many of them agree on the fundamental premise that meaning arises through relations. In recent years, the relational paradigm has also been taken up for the study of language (Mohr 2010). Heavily influenced by Harrison White's concept of netdoms, this project specifically attempts to address the emergence of meaning through a combination of networks and switching between domains (White 2008). Domains, as White uses them, allow for meaning to be constructed "through contrast and tension," stemming from experience - not necessarily first-hand experience - and spreading beyond" (Mohr 2010). In terms of language, this operates through temporal and

spatial domains that integrate narratives, rhetoric, styles, and stories. This approach posits that meaning is constructed through systems of oppositions, presented through practices of discourse, with which individuals simultaneously construct themselves (identities, to themselves and others) and their larger social worlds. The relational project, while fundamentally very general, has motivated a large number of methodological developments within formal studies of culture. Formalized theories offer the advantage of having a close relationship with theory, and thus the potential to co-develop with them. Theory itself, however, cannot necessarily be reduced to methods of measurement, and thus interpretation is fundamental to any analysis. Next, I will show how formal studies of culture and the relational project can be applied to the study of the discursive field and its transformation.

Interpretation and Relations

While formal studies of culture have classically focused on quantitative data collected through questionnaires about cultural tastes, social networks, or other practices, other lines of inquiry involve the use of quantitative tools for hermeneutic interpretations of texts (Edelmann and Mohr 2018). Researchers use these approaches to examine meanings in texts through analysis of narratives, frames, themes, or any number of different methods for content analysis (Mohr, Wagner-Pacifici, and Breiger 2015). Work in this area, sometimes referred to as computational hermeneutics, uses computers to assist with, rather than replace, qualitative humanist interpretation, and offer broad possibilities for the study of the emergence of meaning as captured by texts.

Long before the development of computational hermeneutics, Michel Foucault offered a study of discourse that gave less explicit focus on social organization; instead he "sought to describe the historical forms taken by discursive practices." (Dreyfus and Rabinow 1983) His project was to analyze "discourse as an autonomous realm from the outside", whereby he attempted to theorize at a scale much broader than formal studies of culture have often focused on. While his earlier works have been accused of being trapped inside the "illusion of autonomous discourse" (as the name suggests, a study of discourse without consideration of the social structures that produced them; see Dreyfus and Rabinow 1983), his later work engaged with structuralism and hermeneutics to show how these perspectives consider human beings as both objects and subjects.

In his work *Archeology of Knowledge* (1969), Foucault uses his conception of the *statement* as a framework that can be used to map out discursive fields. Foucault uses the term statement with specific intent to build a particular mode of analysis: that is, the statement is to be analyzed without total embrace of actor subjectivities nor its objective substance in isolation. While suggesting it is impossible to reduce or expand the concept of the statement to mean a sentence, utterance, position, or other conception of a finite act of discourse, he suggests that we should look for meaning in the relations with other statements and the conditions which make them possible. Using this conception of the statement, he suggests that in any analysis of a discursive field, "we must grasp the statement in the exact specificity of its occurrence; determine its conditions of existence, fix at least its limits, establish its correlations with other statements that may be connected with it, and show what

other forms of statement it excludes." Through the concept of the statement,

Foucault is able to suggest that any analysis of discourse must include an analysis

of how it is situated among other discourses.

Perhaps the most ambitious of Foucault's endeavours (and arguably the least developed), is that of his approach to the study of power. It is along these theoretical lines that Foucault contributes a theory of (or at least a way of thinking about) power to the relational paradigm. In what would later be referred to as a postmodernist theory of power, Foucault suggests that power is not captured merely in institutions, but rather is "multidirectional, operating from the top down and bottom up." Less a theory of power itself, he offers instead a mode of analysis, with the aim to "isolate, identify, and analyze the web of unequal relationships set up by political technologies which underlies and undercuts the theoretical equality posited by the law and political philosophers" (Dreyfus and Rabinow 1983). To study power, one must consider the lines of discursive practices available to actors and the relations or forces which constrain or enable actors to take them.

While Foucault did not explicitly engage with the relational project, his contribution was in the study of discourse and power which inherently took on a relational form. He had a complicated relationship with structuralism (see Power 2011; although it is not important whether he may be neatly categorized as such), but tended to promote (or follow, depending on perspective) many of the same premises on which the relational paradigm is founded. In particular, Foucault emphasized, thorough his archeological method, the analysis of statements as discursive practices which have meanings and power through the ways they are situated within the broader field.

The relational paradigm and formal studies of culture suggest that the construction of meaning emerges through the systematic structuration of relations, and Foucault offers that an analysis of power must orient itself to particular types of relations in the discursive field. Building on these two perspectives, I offer two propositions for the study of the discursive field that will, in turn, come to define the methodological approach I use to study intra-party influence.

Two Propositions for Analysis of Discursive Fields

From these two perspectives I offer a conception of the discursive field which
operates on two primary principles: (1) the field emerges from the mutual
constitution of meanings and social relations, created through particular distinctions
between practices of discourse; and (2) power is expressed through particular
structurations of these mutual relations.

The first proposition suggests a simultaneous study of both the content of discourses within the field and the social relations created through their differences. Foucault aptly noted that it is difficult, or perhaps impossible, to reduce discourses to discrete units, but nevertheless it is important for any analysis to examine particular meaningful elements being constructed through discursive practices. The analysis of discourse can be performed at any level through particular hermeneutic orientations: categories, social imaginaries, narratives, grammatical forms, or any other level of interpretation desired for the study. As many field theorists have noted, it is the distinction between discourses at the given level of analysis that are important.

Next is to examine how actors situate themselves through the use of discourses relative to other actors in the field. While the content of messages convey

meaningful distinctions, these distinctions also position actors within the larger discursive field. The analysis of the discursive field, being mutually constituted by both symbolic and social relations, must therefore involve mapping out relations between these two elements.

Following that social and symbolic relations are mutually constitutive, the analysis of both social and symbolic relations must be oriented towards the same interpretation of practices. That is, if a particular discursive field is constructed through practices of narrative, social relations must be oriented by the ways actors distinguish themselves using those narratives. According to the first proposition I offer, this is an essential feature of the discursive field.

Computational methods can greatly assist in this dialectic process. Computational hermeneutics, as computer-assisted readings of texts, can orient analyses towards particular symbolic distinctions that discourses create. By measuring aspects of these symbolic distinctions, models of the texts can be created to understand and quantify how they are situated within the larger field. A wide range of algorithms can be used to accomplish this task, and with careful consideration of measurement can capture a wide range of different analyses.

My second proposition is that power in the discursive field is expressed through the mutual constitution of the social and symbolic relations. As the relational paradigm suggests, the duality of meaning and social structure are key to the analysis of power in the discursive field. This feature implies that the interpretation of practices which construct the field also must necessarily dictate the types of power which can

be observed in the field. This also suggests that there are as many ways to understand power within a discursive field as there are ways to express discourse. These two propositions present a major challenge to empirical analysis. If a given discursive field analysis attempts to test whether or not a particular relation of power is observed, the observation of that power depends on the levels of distinction used to create the field itself. That is, the selection of analysis of the discourses necessarily limits the types of power that can be observed in the field. One reasonable solution to this issue is to start with theoretically well-grounded analyses of discourses, and then test the field for that type of power. Then, of course, the composition of the discursive field and the relations within it are being tested together. A shortcoming of this approach is that a null finding may not reveal real power relationships occurring through the dynamics of the field.

To address this issue, the methodology I develop here allows researchers to first identify the power relations of interest, and then search for combinations of discourses which, when considered in their distinctions, construct a field in which this relation is observed.

Case Study: Intra-Party Fringe Influence in Centro Democrático To empirically demonstrate the analysis of the discursive field, I take as a case study intra-party fringe influence in the Colombian political party Centro Democrático on Twitter. Fringe influence occurs when politicians garner influence by using messages which are dissimilar from other messages within the party. Not all messages are fringe-influential; a politician Tweeting about a relaxing vacation may not be influential even if the Tweet is fringe among other party member messages.

As noted along with my two propositions for analysis of the discursive field, the challenge of this study is that the distinctions between discourses are necessarily linked to particular relations of power within the field. In this study, I fix intra-party fringe influence as the relation of power of interest, and then use an algorithm to search for distinctions between discourses which capture intra-party fringe influence. This analysis allows us to understand which distinctions between discourses in the field facilitate this kind of influence. Furthermore, we can use time-averaged structural properties of the discursive field to examine which actors are most consistently fringe, mainstream, or influential, conditioned by the distinctions in discourses which lead to fringe influence.

Centro Democrático (CD) is a political party uniquely centered around a single charismatic leader, Álvaro Uribe Velez. Central party leadership has of course maintained an important role in most theories of party influence, and CD is exemplary of this phenomenon. Figures 1a and 1b show a side-by-side comparison of the party logo and Uribe himself; the outline of the figure in the logo bears remarkable similarity to the photo of Uribe. Despite the role of central party leadership, the party also maintains more extreme ideologues who form the basis of party ideology.

The first step in this analysis will be to map out the range of discourses within the discursive field. While the quantitative analysis will use topic modeling, a statistical model of texts which identify discrete discourses which span the corpus, it is important to first perform a discourse analysis without computational tools.

Colombian politics have for many years been focused on controversy over the peace process that would end a longstanding war between the Colombian government and the FARC-EP, short for Fuerzas Armadas Revolucionarias de Colombia - Ejército del Pueblo (hereafter referred to as the FARC). Central to peace process debates is whether the FARC constitutes a legitimate political group or an illegal terrorist organization, the answer to which depends on which set of international legal standards are considered. This legal grey-zone creates an opportunity for political contestation over several big questions: should a peace process be pursued at all, or should the FARC simply be treated as a terrorist organization and met with military force? Secondly, if a peace process should be pursued, which amnesty laws would best restore to peace and re-integrate the FARC into civil society and Colombian politics?

The CD party was created by Álvaro Uribe Velez in 2013, after his successor and protégé Juan Manuel Santos took the presidency and steered the Colombian government towards peace negotiations. Outraged that Santos had abandoned previous promises that aligned with his own anti-peace process ideology, Uribe founded CD specifically in opposition to the peace process. While the party continued to gain power through seats in the Colombian legislative branches, perhaps their first large victory came in an October 2, 2016 referendum, when their anti-peace process stance garnered mass appeal for a "No" vote against proposed peace accords. While the Santos government quickly moved to pass a modified version of the accords to bypass the No vote, the political expectations for CD were nevertheless grounded in popular support. The party has yet to obtain a majority of

seats in the legislative branch of government, but in 2018 the CD candidate Iván Duque Márquez won the presidency for the 2018-2022 term, suggesting that this anti peace-process ideology will play an important role over the next few years as the peace accords are being implemented.

Reflecting larger topics of political debate in Colombia, several major political subjects are emphasized in CD Tweets: the erupting Venezuelan crisis and leader Maduro, the Santos-led peace negotiations in Havana, and the nature of the FARC and leader Timoleón Jiménez (also known as Timochenko). Throughout discourse on Twitter, the party constantly draws connections between these three subjects, both as symbolic groups with charismatic leaders² and as crises that require immediate action.

Important to discourse from the CD party is the distinction between their own charismatic leader, founder Álvaro Uribe Velez, and the leaders of these other major symbolic groups. The then-president Santos of the opposition party, the president of Venezuela Maduro, and the leader of the FARC Timochenko are all compared both implicitly in terms of their attributes as being corrupt, dishonest, or incompetent, but also by explicitly suggesting that their collusion. In drawing these connections, they are able to highlight the virtues of their own charismatic leader, and in doing so, paint a picture of the party itself in the contrast with the Venezuelan government, opposition parties, and the FARC. In the process of choosing a candidate for the 2018 election, it was easy to shift this rhetorical form of the charismatic leader

² Charismatic in the ways they are symbolically depicted as being the moral/charisteric essence of the party, rather than actually charismatic in the colloquial sense.

symbolically onto their new candidate Iván Duque Márquez who went on to win the presidency.

Party discourse is also oriented to broader audiences; politicians must navigate the larger international context in which the peace process is centered. Being anti-peace appears on the surface to be an indefensible position, but the party navigates this by specifying that they are against the peace process as it is being realized today, rather than the idea of peace itself. The adoption of the hashtag "#LaPazDeSantos" ("The Peace Of Santos") illustrates this attempt at symbolic distinction: they ironically describe the failures and downsides to the peace process being negotiated by opposition parties today rather than questioning the pursuit of peace itself. This is specifically important in this context given the large international pressure placed on Colombia to establish accords and move towards peace that might end human rights violations.

For the purpose of this study, I focus on distinctions between discourses based on symbolic social imaginaries created through the texts. The primary symbols under analysis include the FARC, the opposition party led by Santos, the Venezuelan crisis with leader Maduro, and the CD party itself. Symbols conveyed through discourses offer the opportunity for actors to contribute to common narratives which serve to contrast these major entities.

Data and Methods

To measure intra-party influence among CD politicians on Twitter, I construct empirical models of the party discursive field, then examine the transformation of the field across each day in the sample period. The social and symbolic relations that structure the discursive field are constructed through politician Tweets as practices, and thus the challenge of measurement is in capturing aspects of those practices which determine influence. This is not merely a challenge of measurement, however, but rather one that is fundamental to the question discourse and power. The measurement of influence is entirely dependent on the aspects of practices being measured, but so too are the effects of the enactment of power.

In this piece, I develop a method for the study of discursive fields which relies on automated text analysis tools to capture distinct discourses in politician Tweets, and network analysis to model relations between politicians in the fields. Because the field is structured according to the relations of distinction, I use a learning algorithm to search for relations between discourses and associated relations between actors within which we observe fringe influence: messages that, when used as fringe, are influential in shifting party discourse.

Centro Democrático on Twitter

To study the party discursive field, I started by identifying politician Twitter accounts that should be included. I first identified the Twitter account of every CD politician who was on the 2018 election ballots or on the official CD Twitter list linked from Alvaro Uribe Velez's Twitter account. This search resulted in over 140 Twitter accounts with ties to the Centro Democrático party. Figure 3 shows the number of Twitter accounts in existence at each month in the sample period.

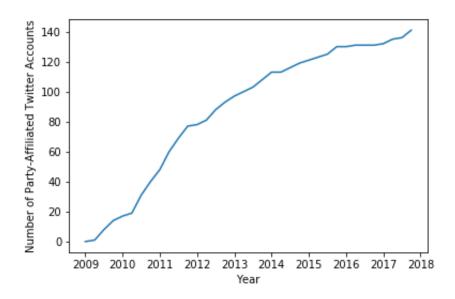


Figure 1: Number CD Party-affiliated Twitter accounts since 2009.

Next, I downloaded all Tweets from these accounts in the period 2015-2017 (inclusive) which have not been deleted, and applied additional criteria for inclusion in the study: each account must have Tweets from more than 730 days (about $\frac{2}{3}$ of the sample days) and the accounts must have at least 500 followers at the time of data collection. After filtering, I was left with 46 Twitter accounts including the official party account @CeDemocratico. There are just under 1 million tweets in the sample from the identified politicians. Figure 4 shows that the number of Tweets from the selected politicians for each month ranges between twenty thousand and forty-five thousand.

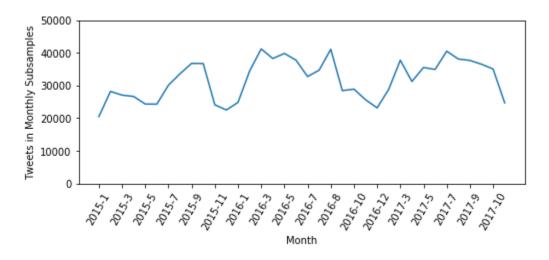


Figure 2: Tweets per month over the sample period.

Measuring Fringe Influence in the Discursive Field

Discursive field measurement will proceed in three steps: (1) topic models are generated to distinguish between dimensions of discourse in Tweet content, (2) the discursive field is constructed according to similarity measures between politician Tweets for each day in the sample, and (3) a statistical model is used to evaluate the effect of fringe messages on politician influence. Finally, a search for topic subsets is performed to identify dimensions of the discursive field within which the use of fringe or mainstream messages are influential in shifting party discourse. To determine the discursive relations which give rise to the social order, we then perform interpretive analysis on Tweets from the identified topics.

Topic Modeling

The first step in the analysis is to construct a model of discourse from party Tweets.

Topic Modeling is used to capture distinct dimensions of discourse in texts

(DiMaggio 2013; see Mohr and Bogdanov (2013) for an accessible introduction to topic modeling). For this analysis, I use the Latent Dirichlet Allocation (LDA) algorithm, which constructs a generative model of the texts; it identifies parameters of a statistical model which could have plausibly generated the observed Tweets given some conditions³. The model consists of two components: (1) topic-word distributions, which define the probability of observing each word in documents generated by each topic, and (2) document-topic distributions representing the probability of each document having been generated by the given topic. As such, the LDA model produces a representation of each Tweet as a probability distribution over the latent topics.

A generated LDA topic model is dependent on both hyper-parameters and random initialization of an optimization algorithm. While some analyses rely on best fit metrics to select a topic model, many studies, particularly those used for interpretive cultural analysis, are based on the ability of the model to draw distinctions that are of interest to the given analysis. In the vein of interpretive analysis, DiMaggio, Nag, and Blei (2013) suggest that "The point is not to estimate population parameters correctly, but to identify the lens through which one can see the data most clearly. Just as different lenses may be more appropriate for long-distance or middle- range vision, different models may be more appropriate depending on the analyst's substantive focus."

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³ This does not imply that statistical generation of the texts is a necessary assumption of the algorithm use, it is merely a common approach to model estimation.

Before performing the topic modeling itself, standard preprocessing steps are applied. First, tweets are tokenized into lower-case words after removing whitespace and punctuation. Following critiques of stop-word removal (Breiger 2016), I choose not to remove words from the corpus before training. Next, I split the corpus of Tweets into distinct train and test partitions: a 30/60 train/test split is used to maintain as many Tweets for statistical model construction as possible while offering enough data for analysis of the discursive field. This means the model is being trained on only 30% of the 1 million Tweet corpus. I used a topic model with hyperparameters⁴ $N_{top} = 50$, $\alpha = 1/N_{top}$ and $\beta = 1/N_{top}$ and fixed random seeds for train/test split and topic model initialization. While it is possible to produce many topic models on the same data set, we choose one model arbitrarily because it allows us to examine particular dimensions of distinction that capture particular types of influence. Another topic model could be used for the same analysis, and the analysis of influence and power would change only according to the relations being captured through the model.

Measurement of the Discursive Field

To construct a model of the discursive field, I first average the topic distributions of Tweets from each politician produced in each day. For every actor n on every day t, we have a single topic distribution which I will denote symbolically as $S_{t,n}$. This analysis will require us to perform a search across a topic selection space, so I will

⁴ I used the suggested α and β =1/N_{top} because in this situation we have no prior evidence that particular hyper-parameter values would be more useful.

use the notation $T_{t,n}$ to describe the normalized (probability) topic distribution conditioned on a given selection of a subset of the model topics.

The discursive field is represented mathematically by a complete weighted network for each day. Each politician Twitter account is a node which is connected to every other account with a similarity weight value indicating how similar their Tweets are on a given day. The similarity edge weight value will be denoted by $w_{t,n,m}$ for the similarity between distinct politicians n and m on day t.

Jensen-Shannon divergence⁵ (JSD) is used to calculate similarity between two topic distributions. I define the similarity edge weight between two arbitrary distinct users n and m at day t as $w_{t,n,m} = \left[1 - JSD(T_{t,n}||T_{t,m})\right]$. Larger weights indicates more similar topic distributions, and the measure scales linearly with divergence. Each edge weight satisfies $0 \le w_{t,n,m} \le 1$ from the definition of JSD with log base 2, and so the similarity network consists of edges where larger weights correspond to more similar topic distributions.

The extent to which a politician is fringe on a given day is measured through degree centrality, a common network node property. Degree centrality is simply the average weight attached to each other node at time t: $d_{t,n} = \frac{2}{N_t(N_t-1)} \sum_{m \in N_t} w_{t,n,m}$ (where N_t is number of politicians tweeting on day t). Because we are analyzing fringe influence in this study, degree centrality will be our independent variable of interest.

⁵ The Jensen-Shannon divergence between distributions P and Q is given by $JSD(P \mid \mid Q) = \frac{1}{2} *KL(P \mid \mid M) + \frac{1}{2} *KL(Q \mid \mid M)$ where $M = \frac{1}{2} *(P+Q)$ and the Kullback-Leibler divergence is given by $KL(P \mid \mid Q) = -\Sigma_i P(i) * log_2(Q(i)/P(i))$. For log of base 2, $0 \le JSD(P \mid \mid Q) \le 1$.

The dependent variable of interest is a measure of influence of a given politician n at time t based on how much other users' Tweet topics converge to theirs in the next day. The quantified expression for influence is given by Equation 1. A politician has a positive influence value if future politician Tweets are, on average, more similar to the user's Tweets in the next day compared to the same day.

$$I_{t,n}(T) = \frac{1}{N_{t+1}} \sum_{m \in N_{t+1}} \left[1 - JSD(T_{m,t+1} || T_{n,t}) \right] - \frac{1}{|N_{t,l}|} \sum_{m \in N_t} \left[1 - JSD(T_{m,t} || T_{n,t}) \right]$$
(1)

Both the influence measurement $I_{t,n}$, discursive field centrality $d_{t,n}$, and some of the included controls⁶ for alternative explanations $X_{t,n}$ depend on an arbitrary topic selection T. The effect of $d_{t,n}$ on $I_{t,n}$ (which relies on both t and t+1) implies that centrality in the discursive field constructed by the given topic selection is predictive of influence within those same dimensions of the discursive field.

$$I_{t,n}(T') \sim \beta d_{t,n}(T') + \alpha X_{t,n}(T') + \eta R + \epsilon$$
 (2)

Figure (2) gives the expression for the influence model. $R = [t, n]^T$ is a random effect vector which accounts for correlations within both time periods and actors.

Considering t as a random effect allows us to control for unmeasured properties of

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⁶ Note that no controls were included that depend only on t or n - those are both considered as random effects in the model. This is to prevent multicollinearity from preventing statistical model convergence.

the entire discursive field (such as the spread or average weight of the network at a given time), and considering n as a random effect allows us to control for unmeasured aspects of actors that may make them more influential on average. According to the specified model, a lower (more negative) β parameter estimate indicates that party members are influential when they use fringe messages along the selected dimensions of discourse T, and a larger (more positive) estimate would indicate that party members are influential when using mainstream messages across particular dimensions of discourse.

Alternative Explanations For Intra-Party Influence

In this model, I also consider several alternative explanations of intra-party influence, captured as $X_{t,n}(T')$: (1) topical content of Tweets themselves (independent of their position in the field), (2) user engagement, and (3) use of engaging media types.

While our interest in discursive fields is primarily centered around how messages position them relative to other politicians, it could be true that certain messages are simply more influential than others. To control for this, we take the sum of the selected topic distributions representing each Tweet. For a given Tweet representation topic selection T, Tweets will be similar if the subset of selected topics are similar, but this measure ignores the relevance of the given Tweet to the selected topics in total. For instance, if a given Tweet is primarily associated with topic k but topic k was not considered in the model, only its relevance to the selected topics will be compared. Without including this as a control in our model, we would not be able to capture this effect on politician influence.

Another explanation is that intra-party influence is driven mostly by public reception. Politicians who receive positive feedback on their Tweets are also influential in shifting the discourse of the party. To test this explanation, we control for the total number of retweets from tweets that day and the total number of favorites from tweets that day. I also consider the average number of followers per day, calculated according to followers at the time of data collection and the date of account creation. Similar to this measure is the estimated number of followers at that day, estimated by interpolating between account creation and data collection date. Finally, Klout⁷, a stable measure of social media influence assigned according to a proprietary formula and integrated into the Twitter public API, is used to control for a consistently influential social media presence outside of the party.

Finally, I control for a number of account activities that may cause a politician to be influential other than Tweet content. Number of Tweets that day, number of Tweets with images posted that day, and number of Tweets with photos that day are all considered in the model.

Dimensions of Influence in the Discursive Field In the specified model, both the dependent variable $I_{t,n}$ and independent variables degree centrality $d_{t,n}$ are subject to the topic model and topic selection T. Any specified topic selection constitutes dimensions of a discursive field in which actors and their messages are situated and in which they influence one another. The challenge of searching the topic selection space for combinations of topics is that the

⁷ Klout is a measure of influence provided by the Twitter public API indicating the overall influence of a Twitter account.

influence measurement depends on differences between topics, rather than the topics themselves. Aside from the fact that topics are correlated (contain non-zero probabilities on the same set of words), the inclusion or exclusion of one topic will affect the relevance of all other selected topics to a degree dependent on the data. Because of this, I choose to use a search algorithm which makes no assumptions about linearity of inclusion/exclusion and excels at searching large spaces without settling on local optima.

I use genetic algorithms, a set of old and well-established optimization algorithms that work well for nonlinear optimization problems across discrete parameter spaces, to search the space of possible topic selections for large β on $d_{t,n}$ in predicting $I_{t,n}$. For a given topic model, the space of possible topic selections is $2^{Ntop}(N_{top})$ is the number of topics specified in the topic model), each resulting in different measures for $d_{t,n}$ and $I_{t,n}$ and associated parameter estimates in the predictive model. For this analysis using $N_{top}=50$, this gives a space of more than $1.1*10^{15}$ topic combinations. By sampling within the T space for large magnitude β , this algorithm can identify combinations of topics and associated dimensions of discourse within which the hypothesized relationship is observed.

The algorithm will run over a pre-specified number of iterations, maintaining a population of independent topic selections to search for optimal combinations without converging quickly upon a locally optimal solution. The algorithm is said to converge when small variations in the topic combinations fail to result in more optimal combinations, and thus the algorithm identifies a locally-optimal solution. Although the algorithm cannot guarantee a globally-optimal solution, several

validation steps can be used to improve confidence in the solution. The first step is simply to run the algorithm multiple times and observe whether it converges upon the same combinations of topics. Also especially useful is the test for local optimality, performed by beginning with the identified optimal solution and including or excluding each possible topic in the model to test if it is most optimal among solutions that are very similar. This validation procedure has an important added benefit: by observing the change in model performance, we can identify the topics which are most important for the optimal model. In our case, this will allow us to identify important topics for interpretive analysis.

It is important to note, however, that a search within the topic selection space which maximizes one particular parameter estimate will not necessarily be able to test for alternative explanations described as controls. When optimizing for a large β coefficient on $d_{t,n}$, the search will not be able to answer the question "does number of retweets predict intra-party influence?", because the algorithm searches only for dimensions of discourse which relate to fringe influence. There may be alternative dimensions of discourse across which public reception does lead to significant intraparty influence, but it would only appear in this search if those variables explained variance that $d_{t,n}$ did not. As articulated throughout my conceptualization of the discursive field, any analysis must necessarily be focused on a particular type of power within the field, whether implicitly or explicitly acknowledged.

Topic Model Interpretation

The final step in analysis of intra-party influence is to interpret the topics which tend to be the most influential when used as fringe. We begin this process by identifying the topics which are most important for our model, described in the above section as the test for optimality. This selection will help guide our interpretive analysis of Tweets through which politicians construct symbolic meanings. Because our analysis of the discursive fields identifies dimensions of discourse which are important in the distinctions they make between one another, it is particularly important to analyze how the selected topics contrast one another, rather than how the selected contrast the unselected.

Following other studies which involve interpretive analysis of topic models, my topic interpretation involves three simultaneous steps: (a) reading and annotating Tweets most closely associated with the given topic, (b) observing words most closely associated with the topic, and (c) extracting words from those topics and comparing them with common words in other topics. While steps (a) and (b) are classically used to perform interpretations of topic models, step (c) is particularly important for our study of the discursive field.

Step (a) of topic model interpretation begins with identifying Tweets most associated with the given topic and including only those above a certain probability threshold of belonging to that topic. A close reading, or thick description, is needed to understand the symbolic meanings being expressed through Tweets. In particular, our analysis will focus on the symbolic construction of Colombian politics - the distinctions,

parallels, and equivalencies of symbolic elements like political parties, events, leaders, or regions.

Step (b) is very straightforward: we must examine the word probabilities (probability of observing particular words in a Tweet condition on it's assignment to that topic), and return to the texts to understand how those words are being used and how they fit into the larger picture of party discourse. While topic-word distributions are not always great at helping analysts distinguish between topics (frequently appearing words are heavily associated with all topics), they are helpful in understanding the details of the model which the algorithm is capturing.

In part (c), we aim to capture which features of topics differentiate themselves from other selected topics. To do this, we take Tweets most closely associated with each topic (done as part of step (a)) and generate term-frequency counts over the subcorpus. Next, these frequency counts are compared with other topics to understand which words come to most closely differentiate the topic from all other topics. In addition to the topic-word distributions identified in step (b), these identified words help guide our understandings of words important for the construction of discourse in the Tweets.

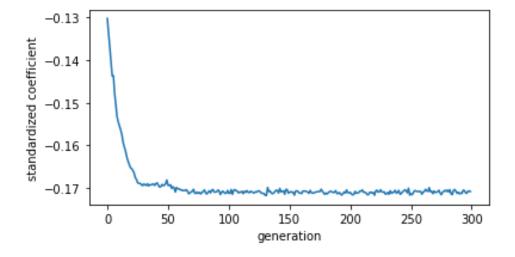
The detailed topic descriptions appear in the supplemental materials - I will only summarize the topics in the main body of this piece.

Results

Topic Selection Learning

After running the genetic algorithm several times, each for 300 iterations, on the same topic model of 50 topics, I identified the exact same 27 topics which compose the discursive field under which we observe maximum fringe influence (lowest, most negative β coefficient - maximum effect of fringe influence). Figure 3 shows that, in one of the runs, the algorithm found the optimal topic selection within approximately 75 generations, and the remaining ~225 generations were spent trying and failing to find a more optimal solution.

Figure 3: Averaged standardized coefficient over the course of each generation of one run of the learning algorithm.

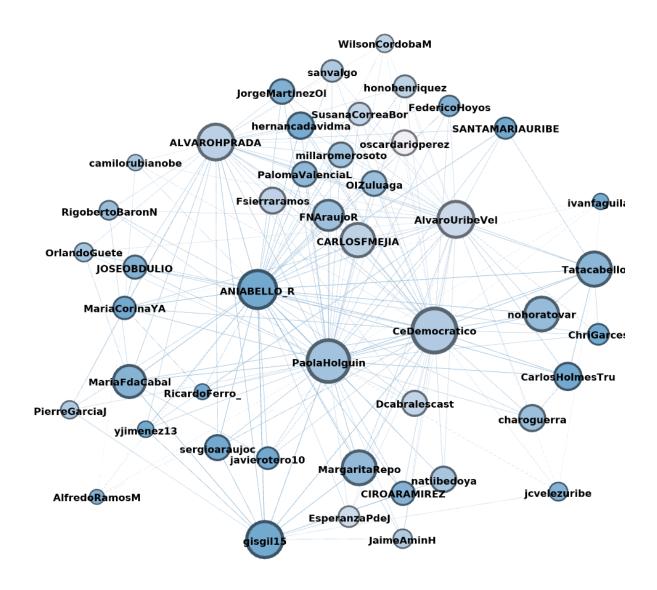


Party Discursive Field

As an embodiment of the social field in which actors situate themselves, the discursive field captures a set of dynamic social relations present each day in the sample period. Figure 4 shows a visualization of the measured discursive field

constructed by averaging similarities between every node pair over each day in the sample period according to the selected topics. Because the field is dynamic and not all actors appear in each day, this visualization can be seen as a high-level overview of the field which does not necessarily capture its dynamic nature. The network visualization shown in Figure 4 was created by (1) averaging edge weights over each day in the sample, (2) sparsifying the network by retaining the 5 edges from each node with highest weight, (3) projecting the network onto a 2d plane using a force-directed layout algorithm, and (4) applying node and edge color and size attributes. Darker node color indicates actors are more average-influential, and larger node size indicates that the actor is more average-central throughout the sample period. Thicker edge lines represent higher-weight edges.

Figure 4: Discursive field, averaged over the sample period. Larger nodes are, on average, more mainstream and darker nodes are more influential. Both features are controlled for as random effects in the statistical model.



From this visualization you can see that Álvaro Uribe Velez (party leader; @AlvaroUribeVel), the official party account (@CeDemocratico), and the prominent politician Paola Holguin (@PaolaHolguin) maintain some of the most central positions in the field, but don't appear to be particularly influential (indicated by light-colored nodes). Furthermore, we see a type of clustering in the field which politicians self-organize into. In the top-center, we see the largest cluster, mostly of fringe (small node) politicians. On the right, we see a cluster of actors most notably containing the radical politician-ideologue Carlos Holmes Trujillo

(@CarlosHolmesTru), one of the most fringe-influential politicians on average. On the left, we see a cluster containing Jose Obdulio (@joseobdulio) and Marina Corina (@marinaCorinaYa), two ideologues who tend to be more radical in articulating party values.

Most Average- Fringe and Mainstream Politicians

Tables 1 and 2 show the most fringe and most mainstream politicians, respectively, in the sample. The most average-mainstream politicians were the official party account, Paola Holguin (prominent party member), Gilma Sossa Isaza (a less well-known politician), Álvaro Hernán Prada (house representative), and Álvaro Uribe Velez (CD party leader). While this descriptive analysis of the discursive field says little about relations of influence and power, these discursive field positions play an important role in the dually-ordered system of social and symbolic relations.

The relatively mainstream positions of such prominent party members suggests that these accounts serve primarily to articulate party values using mainstream messages. With the exception of Gilma Sossa Isaza, these politicians are also some of the most followed (on the Twitter platform) of all party politicians. This observation appears to line up with theories of party discourse that give emphasis to prominent party politicians serving to center party values.

Table 1: Most average-mainstream politicians in the sample.		
Name / Twitter Handle	Description	Average Z-Score Centrality
Centro Democrático - Official Party Twitter	Official party Twitter account.	1.426534

Account @CeDemocratico		
Paola Holguín @PaolaHolguin	Presidential advisor to Uribe since 2003; Colombian senator since 2014; prominent party leader.	1.264960
Gilma Sossa Isaza @gisgil15	Loyal "Uribista" (followers of Uribe's ideology); former candidate for the Colombian House legislative branch; Known for finance and banking experience.	0.812650
Álvaro Hernán Prada @ALVAROHPRADA	House representative for Centro Democrático; Twitter bio says "Lawyer, horseman, and defender of the Family."	0.803514
Álvaro Uribe Velez @AlvaroUribeVel	Party founder; current party leader; creator of the ideological doctrine "Uribismo."	0.797999

The most average-fringe politicians are Alfredo Ramos Maya (career politician with popular and active Twitter account), Camilo Rubiano (a lesser-known politician who is not particularly active on Twitter), Ricardo Ferro (also not particularly popular/active on Twitter), and Iván Aguilar Zambrano (also a less well-known politician). This information reveals that not all, but many, popular politicians occupy fringe positions in the discursive field.

Table 2: Most average-fringe politicians in the sample.		
Name / Twitter Handle	Description	Average Z- Score Centrality
Alfredo Ramos Maya @AlfredoRamosM	Career politician from politically active family; Senator for Medellin since 2014. Very active/popular on Twitter.	-0.931446
Camilo Rubiano @camilorubianobe	Translated Twitter bio: Lawyer at Javeriana University with specialization in State, Public Policies, and Development.	-0.860098
Ricardo Ferro	Translated Twitter bio: Representative to the	-0.854846

@RicardoFerro_	House. Committed to the #Tolima [region in Colombia] and the service of the people. Giving #PasosFirmesHaciaElFuturo [steady steps to the future]. Democratic Center	
Iván Aguilar Zambrano @ivanfaguilar	Translated Twitter bio: Former Deputy of the Departmental Assembly, Founder of CD Santander [province/department], proudly from San Juan.	-0.846783
Yohana Jiménez @yjimenez13	Advocate for children in Colombia - uses #TodoPorNuestrosNinos (all for our children) in her Twitter name; while only loosely affiliated with the CD party itself, the support for children in Colombia implicitly places her in opposition to the peace accords, which would give too many accommodations to the FARC.	-0.707677

Politician Influence

While the conception of the discursive field I use here follows Foucault's analysis of power as dynamic forces enacted through practices, it stands to reason that some actors will inherently be more influential on average. Figure 5 shows the ten most average-influential politicians within the discursive field of the party.

Figure 5: Most influential politicians in the sample.

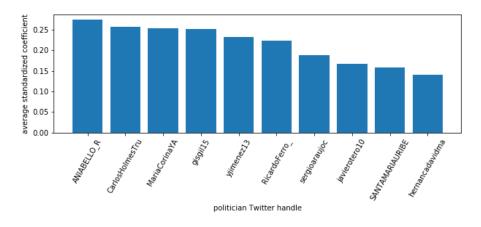


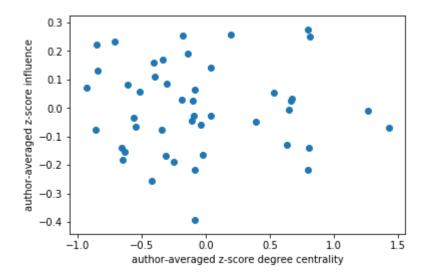
Table 3 gives more detail on the 5 most average-influential actors. Where several of the most influential actors are journalists, several of them explicitly identify as "Uribistas", or followers of the ideology of Uribe (party founder and charismatic leader).

Table 3: Details of most influential actors.		
Name / Twitter Handle	Description	Average Z-Score Influence
Ani Abello @ANIABELLO_R	Former Senate candidate for CD; opinion columnist for online periodical "Los Irreverentes" (The Irreverent), with translated tagline "journalism without censorship."	0.273959
Carlos Holmes Trujillo @CarlosHolmesTru	Politician with a long history as part of CD leadership. Currently foreign minister for president Ivan Duque, he was previously mayor of Cali, presidential candidate against Santos, noted "Uribista" (followers of Uribe's ideology).	0.257504
María Corina Machado @MariaCorinaYA	Venezuelan politician with close ties with CD - listed on official Twitter list.	0.252718
Gilma Sossa Isaza @gisgil15	Loyal "Uribista" (followers of Uribe's ideology); former candidate for the Colombian House legislative branch; Known for finance and banking experience.	0.251368
Yohana Jiménez @yjimenez13	Advocate for children in Colombia - uses #TodoPorNuestrosNinos (all for our children) in her Twitter name; while only loosely affiliated with the CD party itself, the support for children in Colombia implicitly places her in opposition to the peace accords, which would give too many accommodations to the FARC.	0.232295

I control for politicians (as random effects) in the statistical model used for analysis of influence, but still it is interesting to note that influence measurement and actor centrality are uncorrelated on the averaged discursive field (see Figure 6). The

model I used in this work captures power as something that is dynamic and fused with symbolic distinctions actors create through individual practices of discourse, and this result suggests that the model most optimal for that analysis does not reveal generalized, averaged relationships between the field and influence. This result, however, does not rule out the possibility of a static, averaged relationship between the two variables because we did not optimize the topic selection according to such a phenomenon.

Figure 6: Average actor z-score degree centrality and influence. Correlation is nearly zero and insignificant.



Discourse and Influence

After identifying the topics which minimize the β coefficient, we are left with the statistical model of intra-party influence depicted in Figure 7. We can see from this figure that degree centrality, a measure of the extent to which messages are fringe, has the largest single significant effect in the model, explaining just over 18% of the

variance in influence. Second most significant is the number of Tweets: politicians are more influential when they produce more Tweets.

The purpose of adding control variables is to prevent conflation of other factors with the effect of fringe messages, but the approach used here disallows us from drawing certain conclusions about control variables from the model. We cannot assume, for instance, that the average number of tokens does not drive influence within certain dimensions of the discursive field, because we only optimized for topics related to fringe influence. This is an inherent limitation of the approach used here. We can, however, consider that under the particular topic selection, some variables do have an effect.

Intrinsic properties of the Tweets also appear to affect influence. Politicians are more influential when they use messages with fewer words and characters, less relevant topic content (Tweets that are less-related to topics which have been selected), and when they include links to videos. Public perception also seems to play a role: politicians are influential when garnering fewer retweets and achieving a higher Klout rating (as assigned by the Twitter platform).

It is important to keep in mind that because this influence model captures dynamic influence measurements by including politician as a random effect, observed effects do not necessarily apply at the aggregate level. That is to say, that this model captures when certain behaviors increase intra-party influence without making a claim on average properties of more influential politicians. Although politicians are more influential when using fringe messages under this model, we cannot say that

more fringe politicians are more influential. The same applies to all other model variables.

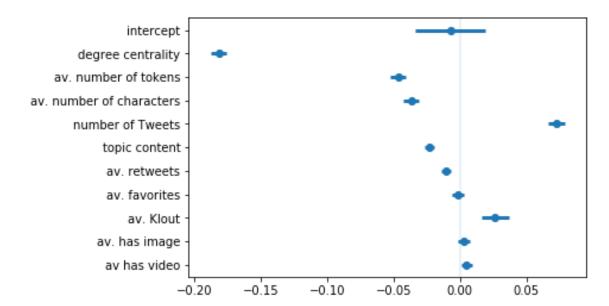


Figure 7: Statistical model of fringe influence.

Dimensions of Power and Distinction

Equally important to the analysis of selected topics is their comparison with those that were not selected. Within our theoretical framework of the discursive field, non-selected topics have been deemed to be unimportant in the ways actors use them to distinguish themselves for fringe influence, but that does not mean that the distinctions they offer are necessarily unimportant for the analysis of other types of power. Figure 8 shows that the non-selected topic Tweets use distinctive words "columna" (column, usually as in periodical), "puede" (third-person verb "can"), "hace" (third-person verb "to do"), "me" (my), "colombianos" (Colombians), and "mil" (thousand; number). Tweets from the selected topics discuss "debate" (debate),

"democratico" (democratic - usually appears as part of party name), "acuerdo" (accord), "comunidad" (community), "sobre" (about), "via" (by way of), "hora" (hour; often used in the title "Hora de Verdad", a Colombian television show where CD politicians often appear for interviews), and "farc" (FARC political group in Colombia).

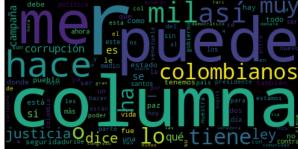
This comparison of distinctive words suggests that fringe-influential messages more often discuss debates (often telling constituents about television or radio broadcasts - see also "hora" part of the title of a major television show which generally supports the party), the accords (a defining characteristic of the party), the party Centro Democrático itself, and the FARC (rebel group against which CD is directly opposed). It also appears that columns (invited, written opinion pieces), justice (as a value - often related to accords and the FARC), and discussion about Colombians are all unimportant in the ways they distinguish themselves with other topics.

Figure 8: Word clouds constructed by identifying words most commonly observed in selected topics (left) vs those selected in un-selected topics (right).

Fringe-influential Topic Words

Non-fringe-influential Topic Words





Selected topics are important in the ways they distinguish actors and symbolic relations within the field. Symbolic relations created through discourse require an

interpretive approach to make sense of. The learning algorithm used here identified the discourses which structure the discursive field under we observe fringe influence, but interpretive analysis is needed to understand those symbolic relations. On the selected topics, I use a simple classification scheme to try to make sense of discourses which are fringe-influential. Of particular interest to this analysis of Colombian politics are the major political entities and events that relate to the peace process. I have condensed the selected topics to several of these identified categories: the FARC, Santos (and existing government, by extension), Peace and Peace Accords, and the party Centro Democrático itself.

The first category I have identified includes 7 topics about the FARC, the political entity with which the Colombian government has been fighting a war for more than 50 years. The key pillar in CD's rejection of the peace accords rests on the claim that the FARC is not a legitimate political actor according to international law. Although of course international law varies (and enforcement is often selective), the identification as a political actor implies that the conflict with Colombian government is a war, rather than a series of acts of terrorism. If the FARC is not a political actor than they are a terrorist organization to be condemned by international law and and responded to with military action. While the UN has deemed this conflict as a war and have issued diplomats to follow standard peace process procedures, CD challenges this assertion in their rejection of the peace accords.

Alongside this legal claim on the FARC being a political actor, CD gives a moral characterization of the FARC as criminals that should be punished for their war crimes, and any accommodations in the accords that give impunity to FARC leaders

is an injustice. Of those narratives, the major characterizations are (a) they encourage rural farmers to grow illicit crops, particularly cocaine, and call those activities "narco-terrorism"; (b) they recruit and arm children, often against their will, to help fight their war; (c) they will not give up their weapons as they say after they sign the peace accords; and (d) they often attack innocent civilians with bombings and physical attacks on enterprises such as oil pipelines.

Table 4a: Topic Category - FARC		
Topic	Hand-Created Description	
12	Crimes of the FARC, particularly narco-terrorism, recruiting children to fight, and potential non-interest in peace.	
36	Statistics about narco trafficking and illicit crops and moral claims about violence against children.	
41	Focusing on material goods, emphasizes FARC activities involving drugs and evidence that the FARC have weapons and do not plan to give them up.	
11	How Santos is allowing the FARC to get away with crime and terrorism without suffering consequences.	
6	FARC, won't give up weapons when ceasefire agreement is made.	
49	FARC are criminals and the peace accords leave them unpunished.	
22	Generally discussing crimes of the FARC, but many Tweets are in English - particularly related to the United States.	

As a natural feature of party discourse, the party often attack the oppositional party that maintain the presidency. These discourses, listed in Table 4b, paint a picture of current president Santos as a corrupt leader who, through the peace process, may be plotting with the FARC, failing to improve the economic situation and inequality in Colombia, and acquiring unconstitutional powers which undermine democracy and what the people desire.

Table 4b: Topic Category - Current President Santos / Government		
Topic	Hand-Created Description	
17	Critique of Santos administration from a particularly economic perspective, offering many statistics and facts to support the argument for his lack of competence.	
34	Accusations of corruptness often used to contrast with Uribe.	
46	Criticizing Santos from acquiring too much power from congress, suggesting that it is unconstitutional.	
20	Current government is corrupt, but the people can change it.	

Table 4c shows topics directly about peace (the concept) and the peace accords currently being negotiated between the FARC and the Santos administration that would end the war. CD is opposed to the peace accords, and justifies this position by distinguishing between peace itself and the accords being negotiated. They point out that the accords are an instrument of Santos and the FARC which and does not represent the will of the people, particularly after the October 2nd referendum where, by popular vote, the public rejected the accords. They also link their characterization of the FARC as terrorists by pointing out they shouldn't be receiving accommodations such as immunity from punishment (justice) and guaranteed government representation.

Table 4c: Topic Category - Peace / Peace Accords		
Topic	Hand-Created Description	
42	Attempts to differentiate peace itself, as an idea, from the current peace process led by the Santos administration.	
0	Reparations being given to FARC as part as peace agreement are too lenient.	

19	Contrasts the peace people want with the non-peaceful consequences of the
	peace agreement.

Table 4d shows topics which either discuss explicitly or implicitly the values of the party. More so than other types of discourse, these are often articulated through gestures. Telling people about events, online debates, and local-level engagements are ways of suggesting that the party is engaged with the community, through demonstrations rather than explicit claims. This form of discourse is also helpful for distinguishing themselves from the other major party: they discuss actual actions they are taking instead of just using "empty words." In the same way, these discourses paint CD as an organization for the people in the populist sense.

Table 4d: Topic Category - Centro Democrático - The Party Itself		
Topic	Hand-Created Description	
1, 18, 35	Letting people about forums, meetings, workshops, and gatherings with people of the community.	
14, 15	Telling people about online debates and interviews.	
16	Local-level campaign announcements/endorsements.	
30	Discussing what local communities need in a party.	

Table 4e shows discourses that I found difficult to place into one of the aforementioned major categories. These topics appear to serve the role of linking the various aforementioned elements through distinct forms. Two such topics discussed economic and food security directly, using the economic crisis in Venezuela to comprehend the situation in Colombia. While several topics in the

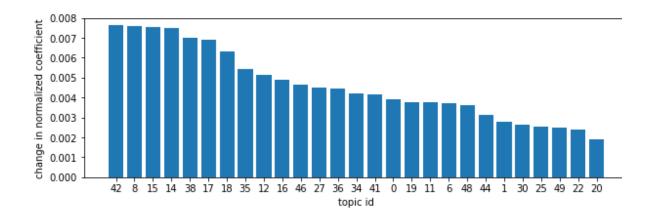
Santos category discussed economic security through a rational lens, these topics use a more morally-oriented perspective to look at the Colombian situation.

Topic 4e: Topic Category - Other		
Topic	Hand-Created Description	
8	Offers praise and gives thanks to specific people, to those who are sympathetic to the party, or even more broadly to family and country.	
27	Primarily encouraging resistance efforts in local regions of Colombia.	
44, 48	Economic and food security - commonly refers to both Colombia and Venezuela, although 48 focuses on Venezuela more.	
25	Primarily discusses value, both in economic and ideological senses.	
38	Builds national identity of Colombia, primarily through descriptions of women and children.	

To simultaneously test for local optimality⁸, and determine which topics are most important, I then ran the influence model leaving out or including each individual topic in the topic model. Of the topics which were selected, the most significant topics are those which, when removed, create the most significant changes in the β coefficient. Based on the assumptions of the model, these are determined to be the most important for fringe influence. Figure 9 shows that the most important topics are 42, 8, 15, 14, 38, 17, and 18, in that order.

Figure 9: Selected topics, ranked according to their differential hold-out scores. Larger scores mean more important for the model.

⁸ Defined as the selection where inclusion or exclusion of any single topic does not improve performance of the model as measured through Beta coefficient.



Topic 42 appears to be most distinguishing in the way it connects "the people" (in the populist sense) and the accords. This type of discourse is particularly powerful because it justifies opposition to the peace accords by suggesting that the accords are not "of the people" (demonstrated by rejection of original accords in Oct 2nd referendum).

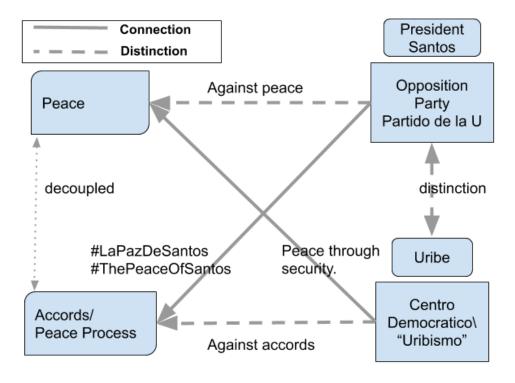
Topics 8, 15, and 14 all seem to be informing the public about debates and interviews with politicians. It is unsurprising that these messages tend to be fringe influential - they spread to bring attention to events and activities of the party. The act of re-tweeting or posting about one of these events serves to demonstrate involvement with the party, and highlight that the politicians are engaging with the public.

Topic 38 serves to characterize the national identity of Colombia itself through hopeful and congratulatory gestures towards women and children. The use of "vida" is used to describe the lives, living conditions of people in colombia. They suggest that people deserve to live with safety and security (suggesting the FARC should be met with military action). These messages suggest that to support women and

children of Colombia is to be against the peace accords; this follows from the common messages which highlight the acts of violence from the FARC against women and children.

Tweets from topic 17 seems to primarily consist of critiques of the existing government (at the time led by Santos) from primarily an economic perspective, listing statistics and facts that suggest the current leadership is unsuccessful at improving the condition of the country. Through the use of facts and statistics, this Tweet attempts to characterize the existing government (held by oppositional party) in terms of their competence and corruption.

Figure 10: Symbolic distinctions in discourse from Centro Democrático.



The diagram in Figure 10 describes symbolic elements from one of the most fringe-influential discourses, the distinction between peace itself and the peace process in Colombia. CD distinguishes between the two by distinguishing itself from the opposition

party led by Santos. The hashtags #LaPazDeSantos (#ThePeaceOfSantos) is often used in the most fringe influential topic (Topic 42).

Conclusions

This study of intra-party fringe influence in the Colombian political party Centro

Democrático demonstrates an analysis of the discursive field which considers the

mutual constitution of social relations between actors and the discursive distinctions
that produce them. I use a novel methodology to orient the analysis towards fringe
influence as a particular type of power, and use a learning algorithm to identify
discursive distinctions which construct the field within which this effect is most
significant. I then analyze the resulting discursive field to understand how actors
situate themselves within the field and the discursive distinctions most important for
fringe influence.

Through this analysis, I found that there is strong evidence of intra-party fringe influence within the CD party, despite the fact that the party maintains a strong central leadership through the charismatic party leader Uribe. The statistical model measuring influence also revealed that some alternative hypotheses of influence hold under the same discursive field. Using fewer and smaller words, Tweeting more in a single day, garnering fewer retweets, posting Tweets with videos, and increasing Klout all result in increased intra-party influence. Because the model includes politicians as random effects, we can say that politicians are influential when they take these actions.

The field resulting from the identified discursive distinctions also allowed for a structural analysis of the party discursive field. The analysis showed that some very mainstream party members tend to occupy more central positions in the field, but that fringe actors include both prominent politicians and ideologues. I also showed, however, that actors that are on average more fringe or mainstream are not necessarily more influential - rather, the identified discursive distinctions in the model capture an expression of influence which is dynamic in nature, and cannot be reduced to a static analysis of party influence.

Among the most fringe-influential discourses is the symbolic distinction between peace and the peace process which has created the backbone of the party ideology since its creation. Other fringe-influential discourses include notification of party forums and interactions with the people, characterization of FARC as a terrorist organization and a threat to women and children, the comparison of the CD leader Uribe against incumbent president Santos, and accusing the accords of offering too many accommodations to the FARC.

The novel methodology I developed here can be used to study the discursive field in a way that links discursive distinctions and the field of social relations they create. My proposition that these two are mutually constitutive and that power is expressed through them offers new challenges for the study of discursive fields. If particular types of power are expressed through these relations, then analysis of the field must consider that domain-specific linkage to capture the desired dynamics of the field. I showed that particular discursive distinctions are more important than others for intra-party influence within this Colombian political party, but under different

conditions or in different studies of discourse we must consider other possible configurations that lead to the expressions of power we are interested in. Methodologically, I show how learning algorithms can be used to explore large spaces of configurations to find conditions under which certain criteria of interest are observed. This framework offers particular potential for the empirical study of culture. Instead of prescribing configurations using theoretical knowledge and testing them as hypotheses, we can create a range of possibilities from which configurations can emerge, and examine the identified configurations against theories that make claims on them. These approaches may reveal new ways of measuring empirical data which follow existing theory, or assist with inductive theory development. Finally, this work is an attempt at exploring intra-party influence in the discursive field of the party Centro Democrático on Twitter. Many have suggested that the rise of social media is a turning point in the process of political engagement, and Colombia appears to be no exception. The No vote against the peace process on October 2nd, 2016 promoted by CD was at least partially moved by engagement with social media on both sides, and in this study I show that certain fringe messages can be particularly effective in influencing that discourse. This and other similar findings raise both concerns and questions about the future of political discourse on social media. How do these platforms change the types of political messages being shared? What kinds of messages are more influential when used on these platforms? How will political organizations adopt these tools as part of their political strategies?

My proposal for the use of the discursive field is one of many attempts to answer these questions, but the development of new computational methods and approaches to theory-building can open new possibilities for the study macro-level discourse.

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