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National Security Frameworks and Cross-Border Electoral Interference: Media Influence Operations Led by U.S. Political Parties

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SUMMARY: *Develop an empirical model to examine the phenomenon of Cross-Border Electoral Interference triggered by US-party-centred media influence operation activities. Based on a public-domain collection of 62 observed cases occurring from 2010 through 2024; coding six influence channels, five electoral narrative targets, three election stages, five regional environments, and three tiers of national security significance. Analysis is organised through the National Security-Constrained Media Influence Graph (NS-CMG) to link actors' loci, media channels, narrative targets, election periods, hosts-States of vulnerability, attributive ambiguities, and evidence convergences. Construct two indexes, namely the influence exposure index of channel-narrative intensity and the cross-border risk index of review salience. The results show that platform advertising and data-targeting have risen from 19.8 to 87.6 on a 0-100 exposure scale from 2010 to 2024; Allied media narrative syndicated information has increased from 20.4 to 84.1. The strongest contribution appears in election-integrity response linked to election-integrity claims, with a mean value of 36. The three-dimensional risk surface shows that, at this point of the combination index of high saliency + attribution ambiguity ≥ 4.17; At the event level, F1 is 0.82, ROC-AUC is 0.90, and the expected calibration error is -0.048. The subsequent forms add restrictions on reviewing the external effects of countries/regions separately in terms of descriptions, attributions, and reasonsableness.*

KEYWORDS: *Cross-border election interference; National Security; Media operation influence; Political Parties; Influence Graph.*

1 Introduction

Nowadays, elections have become battlegrounds for multiple forces such as domestic campaigns, international aid programmes, private consultants, platform promotions, overseas broadcasting and party rhetoric converging at the same time during an election period. A host-state regulator might come across various forms of media such as televised messages from abroad, digital advertisements arranged overseas services companies, training programs provided by subordinate institutions affiliated with other parties, or platforms' post series identical in accusation against ballot integrity. Every part of them is legally valid individually. The security issue appears as a cross-border campaign environment for such goods to affect voters' perceptions and public confidence in institutions or even threaten the legitimacy of elections. There are several issues with implementation: democratic support, cross-border campaign consultation and foreign election intervention can share the tool use, communication

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Channel, Rhetorical method etc.

This issue directly results in policies. If the category of foreign influence is broadened excessively, normal international Cooperation, media exchanges, and Party-Party dialogues may be seen as political reprisals by others. If the category is restricted too strictly, organised media operation may create electoral conditions without entering the scope of analysis for national-security reviews. The media-assistance scholarship has always regarded free media, electoral information and civic communication as part of the support for democracy [1]. The international party assistance literature recognises that parties, foundations and democratisation promotion organisations can contribute to promoting pluralism through their provision of training, comparisons, etc. As professional campaign communications, platform promotions, and narrative constructions for competition-oriented elections get tighter together with such campaigns.

The US political party system has particular relevance as its campaign tactics have spread broadly via consultants, training programmes, pollsters' findings, fast-response communication strategies, TV formats, and voter analysis systems. Early research into campaigns' solicitation for consultancy abroad presented the internationalisation process of the US-style political consulting industry as a large-scale market moving across borders [2, 3]. According to subsequent studies on the world-wide dissemination of American election-campaign techniques, messages discipline, polls, negative advertising, and media control are presented abroad in service forms rather than as official State instructions. The same history makes simple attribution difficult. The media-action source is typically from the parties' neighbouring institutions, consultancy contracts, sympathised-media organisations towards the parties side, as well as the local diaspora networks providing their own political interest incentive. National-security Frameworks need to find ways of analysis that do not collapse all Party-connected activities as covert interventions.

Literature review of electoral intervention also provides another anchor. Works on great-power electoral intervention indicate that foreign entities have always sought ways to impact election results by various methods both publicly and secretly in the past; Under certain conditions, such interventions may influence elections. Partisan Electoral Interventions by the Great Powers dataset also shows that there are various forms of intervention, beyond military and intelligence agencies, including campaign aid, making public statements, financial support, etc., aimed at gaining a competitive edge in elections [4-6]. The following papers establish the backdrop of treating electioneering as a security problem from history. Although it does not cover the present-day media operation models involving multiple jurisdictions that involve formal party membership, platform privilege and personal agent influence in a semi-public-narrative-production system.

Digital disinformation research adds a third line of inquiry. Policy research on dissemination disorder identifies its negative impacts such as distorted public discussion and institutionalised suspicion on the basis of fabricated information [7]. Research by Sanders in 2016 showed that, apart from being analytic but still unable to determine the influence of voting behaviour after deducting direct attribution due to lack of sufficient proof. Following are some empirical studies that show measurable impacts of tweets from the Russian Internet Research Agency and have not overemphasised the effects on behaviour. The above results provide reference for identifying the categories of exposure, participation and voting in this study. A national-security framework does not need to prove that a media operation changed votes in order to classify it as relevant. Need to provide proof that its operation caused organised transnational pressure on the information condition of an election.

Legal and platform-governance dispute issues are responsible for this sharp classification problem. In terms of platforms', strategies for content moderation, truth-telling about

advertisements, determining responsibility in accounts and managing access to data. Foreign influence policy is also paying attention to it in detail. Its definition now includes three elements: behaviour, organisational hiding; Coordination mechanisms; And the destruction of institutions. This construction provides an auditable demand at the level of events in governance. Also have a problem of methodology. Most of the discussion in policies uses narrative methods; Meanwhile, several computation experiments show platforms' traces and difficulties linking to electoral institutions, party organisations, and host-state legal frameworks.

The largest discrepancy exists for party-centred entities based on the United States. In this paper, "party leadership" specifically refers to the source of media's power and has nothing to do with illegal interference issues under the law. It covers both formally party-affiliated institutions and grassroots connected consultancies; aligned media brokers and platforms facing service providers are also included in this category of public source connections for elections-related activities overseas. Excludes the US Government's intelligence activities, news reports of independent media organisations, and merely domestically-focused US election publicity. This range is intentionally limited. It allows an examination of cross-border party-media activities without compromising their classification as either lawful democratic support, commercial political consulting or national security-related interventions.

Existing approaches remain insufficient in four respects. Firstly, the state-centred frameworks typically highlight intelligence sponsorship or diplomatic intervention at the expense of recognising party-associated organisational approaches. Firstly, content-focused methods typically emphasize falsehoods; While influence actions might select what to highlight, time-shift and platform-cross-repetition strategies or procedural doubt may exist but lack evidential falsities. Secondly, Platform centric Detection cannot determine the reason that some coordination patterns are more beneficial to political participation and sovereignty of the nation; Fourth, legal and policy approaches often treat election integrity as a protected public good, yet they rarely provide measurable indicators for when cross-border media activity should enter security review rather than ordinary campaign regulation.

Therefore, there is an analytical difficulty in connecting these three layers often studied independently in practice: The organisational layer with party-centric actors; The media Layer With Channels And Narratives; The National-Security layer Of Attribution, Vulnerability And Institutional Impact. There needs to be a certain amount of connection for comparisons among cases; it cannot label legally permissible speech or help as an obstacle. Only based on the type of content, an organisational coupling will be missing; Only based on actor Identity, there will be an overestimation of Risk; Based solely on National Security is to Lose an Electoral Mechanism. Regarding the above-mentioned problems in dealing with how media influence operations can be seen as observable events instead of a single message.

The problem also occurs in the management during the election cycle. The electoral commission often collaborates with the disclosure rule, campaign-finance limit, media fair-play stipulation and open-access regulations. National-safety Organs cooperate in issues Identification, Risk Analysis and Assessment; manage Important Targets Safely, etc. Platform Teams work together with Advertising Libraries, Account Integrity, Coordinated Behaviour and Content Policy. The party-centred cross-border media activity crosses multiple institution-based boundaries. A campaign consultant is observable by the election management office, but not by the police. Diasporas' outlets can be spotted by media regulators but not included in platforms' library systems. The Party-affiliated training program is open as support, but the following media reports are hard to distinguish from candidates' communications. boundary problems have different standards for treatment.

This paper will focus on American political parties due to their maturity in the campaign-advisory industry, international activity of party-affiliated democratic organisations, global

reach of media ecosystems, and platforms for regulating political advertisements cross-jurisdictionally. It does not indicate that the US's party-centred activities are unique problems. Other States and Party Systems also import campaign strategies and political discourses abroad. The US case provides empirical reference due to its varied participants and a public-speaking feature. Allowing the investigation into whether lawful assistance, professional services and media coverage are interrelated while not taking on an authoritative stance.

The measures need to have supporting evidence. Foreign electoral interference has been discussed through dramatic cases, but the policies reviewed depend on record citations that can be questioned and modified later. A media operation should not be classified through impressionistic similarity or partisan dislike. Thus, the frame selects public-source convergence to serve as its dependent variable. Only one media report can determine the lead; however, an event with greater confidence must be confirmed by at least two source families or those holding official status. Decrease with increasing classifiability and improve stability. It also introduces a conservative bias; some opaque activities will not be recognised due to inadequate public evidence.

The empirical design of this study accepts this bias, and the article aims to conduct national-security-related reviews. Public Accountability designating a framework that is not reliant on inaccessible intelligence or exclusive platform data. Public-source analysis is narrower than the classified assessment; It is more appropriate for academic reference and legal discussion. Therefore, the model estimates review relevance under evidence limitations. It cannot detect all of the elections; it is not designed for assessing the impacts on votes. Its function is to make it apparent that there is a Value on Display at the moment of Classification; That is, who has access to whom through which medium and under what conditions?

Furthermore, in terms of distinguishing between electoral injury and harm to state security. Electoral damages include widespread homespun campaigns, misstatements during the event, lackluster press release strategy, and lapses in fund use supervision. National-security harm requires an additional cross-border condition: external organization, unclear sponsorship, jurisdictional displacement, or foreign leverage over the informational environment of the vote. The party-centred operation cannot occur because it often employs legal political means. Polling, advertisement, Media relations, coalitions, etc., are commonly seen during democratic contests. Concern arises when these instruments are arranged internationally in such a manner as to impair the home government's capability for identifying responsibility or explaining its own sources of election-related allegations.

Difference produces words in the articles. Media-influence operation refers to a manifestation of actors, channels, narrative paths and time arrangements observed as a whole. There is no indication of deceitfulness. "Cross-border election interference", reserved for high-visibility cases involving examination reviews under the context of safeguarding national security. Avoiding the two erroneous vocabularies here. There are some errors in treating all international political communications as intrusions. Either is that an application for a security check must provide evidence showing covert State sponsorship first. The proposed framework is situated in this error as to whether the event has a measurable attribute warranting more meticulous examination.

Based on the development of a national security-constrained media-influence graph to analyse US party-centred cross-border electoral-media influence. Combining a public-domain event corpus, a channels and narratives code scheme and a risk scoring model to predict the degree of national security. Threefold in the contribution. First of all, this paper presents an unambiguous definition and data structure of party-centred media influence operations, distinguishing organisational proximity from legal attribution. Secondly, it introduces graph-based indexes to link actor location, the media channel, narrative object, election period,

attribution uncertainty, and host-state vulnerability. Thirdly, determine if the new model is better than four benchmark approaches: rulebased; textonly; contentcoordination baseline. As the main research questions, the first one: How to determine that there has been a form of election interference involving media and public opinion from within foreign-funded political parties?

In addition, the system builds an Interpretation Discipline. The higher the score is; i.e., whether a certain entity such as a reviewer has met its obligations of review. A lower score indicates that the public has not been sufficiently verified; therefore, the activity itself will not have a political impact. To avoid an exaggerated sense of success causing chaos among the political rivals and unannounced events showing biased treatment against voters. Therefore, the research takes classification as a bound administrative act underpinned by evidence-based diagnosis and re-examinable coding.

Therefore, it is also needed from a practical perspective. Other scholars may substitute the U.S. party-centred actor layer for another type of party system but maintain all other parts as before.

The same fields may also directly be compared in later parties-centred, state-centred or platform-natured influence cases.

2 Methods

2.1 Public-Source Corpus, Scope Definition, and Event Coding

Empirically, it is based on a bounded object rather than an all-encompassing statement of foreign interference. The unit of observation is an event record, that is, a publicly observed phenomenon consisting of the union of one or more US-centred actor loci and media coverage about it. An event may contain a training programme with public communication output, a consultancy arrangement including campaign messages; A platform-advertisement operation, a diaspora broadcasting relay, allied-media narrative sequence and other forms of circulation that go beyond borders for election-integrity response work. There must be an electoratelier, a media outlet and other means of communication with external publicity components involved in linking activities to parties as actors' centres. To prevent conflating a large amount of ideological identity with demonstrating impact.

There were a total of sixty-two games from 2010 to 2024 inclusive. At this time, platform advertisement, data-driven campaign and cross-media political Communication were becoming more noticeable in the public's reportage after 2010 for a period of consistent code. The end point collects the current policy Environment for artificial intelligence-enhanced misinformation, coordinated inauthentic behaviour and foreign election warning treatment as routine issues of electoral security. Public-domain; the analysis of this corpus. It is not an officially verified collection of events; thus, not all occurrences can be deemed as unlawful intrusion. Sources of democracy assistance reports, party-assistance documents, platform-threat notices, public-electoral-safety alerts, studies on voting interference by institutions, as well as cases involving institutional sources. Public documents were favoured if they mentioned the actor's location, channel type, election period, and proof basis had sufficient details for comparison.

Based on the existing party assistance and political party programme research literature from abroad, this paper has a clear scope of application to help Chinese government parties establish more scientific and effective programmes. Moreover, this paper also takes a stance that democratic-party development is not equivalent to political-partisan involvement at home and abroad [8-13]. The work of International IDEA on the party's participation abroad offers

another reference for identifying programme support as an independent category outside covert electioneering [14]. The boundaries of these data sources were set at the level where party-affiliated organisations, media activities and elections had all occurred simultaneously. Routine diplomatic statements, independent journalism and general civic education without an election-oriented media component are excluded.

The first type of Figure follows after the Scope Definition; Readers need to see how the National Security Frame includes the Party-Centred Media Object. National-security classification starts with the host-state's electoral environment and then determines whether the party-centred media activities increase exposure, ambiguity or institutional vulnerabilities. Figure 1 shows this containment relation. The outside is the legal and security review; The middle part contains the media Channel; And the inside is party-centred organisational source. Thus, this arrangement avoids starting from suspicion towards one particular Party actor at first.

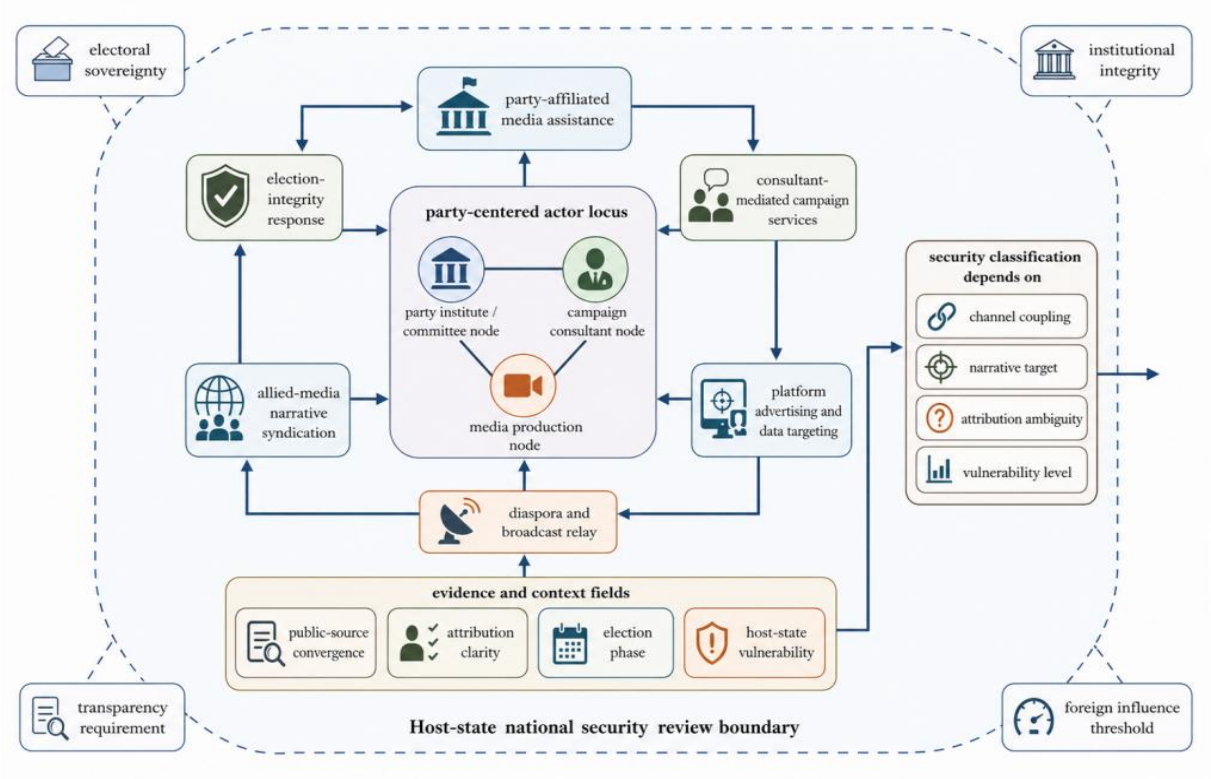

Figure 1: National Security Framing Mechanism of Party-Centered Cross-border Media Influence.

As shown in Figure 1, the national-security review Boundary encloses the media-influence object; The party-centred actor loci are located within the media-channel layer, not outside of the security frame. The coding rules of this corpora are as follows: Party affiliation must be indicated; The saliency of different channel, narrative target, attribution ambiguity and host state vulnerability combinations is not the same.

Each event was recorded in 6 media impact Channels. Firstly, the party-affiliated media assistance includes training, creating messages, organising media-relations activities, and providing public Communication support via Party-related institutions. The second way is consultant-mediated campaign Services: Including polling, strategic Communication, Advice on negative Advertising, candidate Image Management etc. The third channel is platform advertisement and data-targeting, which includes: Paid Digital Promotion (PPC), Audience Segmentation, Platform-Related Campaign Services. Diaspora and broadcast relay refer to

overseas-language broadcasting, diaspora media and other forms of dissemination abroad, etc. The fifth path of allied-media narrative syndication involves related media or commentaries spreading the same idea across borders. The sixth Channel is election-integrity Response: Including claims, Counterclaims, Fact-checking Campaigns and Public Warnings about ballot Security, counting Procedures or Post-election Legitimacy.

The following five electorates appear in the story level: candidate's capability, election faithfulness; Geopolitical direction; Institution confidence; Social mobilization. Candidate competence concerns the suitability or credibility of a candidate or party. Concerning the Rules and Administrations concerning Security and Fairness regarding Votes in Elections. Geo-political alignment addresses foreign-policy orientation or coalition construction. institutional trust refers to courts, electoral committees, legislatures, mass media and other entities. Mobilisation of the public is concerned with turnout, protests, party memberships, etc. These categories are unassociated with the channels; therefore, an event may have multiple channels or different narrative objects.

Elections phases; Region Settings; Types of Evidence; Convergence of Public Sources: National-Security Issues; Election time is divided into pre-campaign, campaign and election; post-election dispute. The coding of regional Setting is Latin America, European Countries, Asia-Pacific Regions, Middle Eastern and African Countries, etc. The types of evidence include: official reports; Platform Reports; Academic Datasets; Institutional Documents; Court Records/Regulatory Actions; Verified Media Reports. Public-source convergence records if the event has appeared once, twice, or multiple times across different sources. National-security importance is categorised as low, medium-high and high. Low salience refers to transparent aid or consultation with little cross-border transmission. Moderate Salience: Channel coupling, Narrative Sensitivity and Attribution Uncertainty result in higher risk. High salience applies when the event combines multiple channels, election-integrity or institutional-trust narratives, ambiguous sponsorship, and host-state vulnerability.

Before defining the exposure score for the event profile, this study sets aside its description to be classified as not involving national security matters.

$$IEI_i = 100 \times \frac{\sum_{c=1}^{C} \omega_c x_{ic} + \sum_{n=1}^{N} \eta_n z_{in}}{\sum_{c=1}^{C} \omega_c + \sum_{n=1}^{N} \eta_n} \quad (1)$$

In this case IEI_i represents the influence exposure index of event i. Binary values x_{ic} and z_{in} respectively indicate that channel has been triggered by event, and that target narrative has been identified; Weights ω_c and η_n correspond to the importance of channels and narratives, respectively. There are a total of C coded channels, and there are G narrative units. Scaled between 0 and 100 points. A larger number reflects wider recognisable exposures; it is not evidence of illegality.

Table 1 shows the main coding categories. Additionally, it is determined that some are descriptive and others have entered the security classificaiton model. No interference to the extent that could cause a change in volume is present here. A high-visibility consulting event may be inaudible due to transparency or contractuality and only provide basic advice for the campaigns. A lower-visibility incident can be recognised as medium-to-high importance if it relates to the contest over vote counting and has an associated channel that lacks accountability.

Table 1: Corpus field definition and coding scale.

Coding field	Values	Use in analysis
Actor locus	party-affiliated institute; campaign consultant; aligned media producer; diaspora organization; platform-facing service provider; election-integrity organization	Defines organizational proximity without assigning legal responsibility
Media channel	party media assistance; consultant services; platform targeting; diaspora relay; allied-media syndication; election-integrity response	Forms channel layer and channel diversity score
Narrative target	candidate competence; election integrity; geopolitical alignment; institutional trust; civic mobilization	Forms narrative layer and channel-narrative risk matrix
Election phase	pre-campaign; campaign period; post-election contestation	Weights temporal sensitivity and target vulnerability
Evidence family	official report; platform report; academic dataset; institutional document; regulatory record; verified media report	Computes source convergence and attribution clarity
Security salience	low; moderate; high	Benchmark label for event-level validation

Use of a two-pass coding process for reducing category drift. During the first pass, events were recorded directly from their main public outlets. In the second pass, source families were compared and fields were revised only when the additional source changed actor locus, channel type, narrative target, evidence convergence, or salience. The disagreements of the two passes mainly appear in three areas: aligned-media syndication, Diaspora Relay and election-integrity verification. These categories of media work at various levels and with multiple functions simultaneously within the same field setting. The final coding rule was that the event description should be an election-appeasing position, not a simple partisanship.

Coding Process deliberately separates the Sponsorship, Coordination and Amplification. The sponsor of a certain event is responsible for providing funding, authorising and initiating the event officially; Coordination is whether several participants or channels can be connected in time, the same content, repetitive sources' claim or explicit organisational relationship. Amplification is the dissemination of a message via channels such as platform transmission, broadcasting relay and allied-media reiteration. There are differences that do not treat visibility as controlled. They also allow a record to carry high exposure and low attribution clarity at the same time, which is common in the public-source evidence base.

Therefore, the descriptions of the data presented here are structured indices. Three channels of a record do not inherently have high saliency. The three channels can be clear, localised authorisation, or for non-campaign purposes only. Conversely, a two-channel event can become moderate or high salience if it targets election administration during a contested count and contains unclear sponsorship. The corpus Design preserves this difference by keeping the exposure variables, Context Variables and Security Labels in different Fields until the Model Stage.

The event log also records exclusion reasons. Exclude records where sources mentioned a general ideological movement without specific elections; those with no clear actor connection are excluded as well; if there is no media presence at all; and activities involving post-election diplomacy instead of the electoral phase should also be eliminated. Excluding it would also be

politically sensitive due to the topic. Many samples will increase simultaneously, reduce the lawfulness of this model to some extent. A tighter domain of reference, while increasing precision.

2.2 National Security-Constrained Media Influence Graph

The second phase creates a heterogeneous Graph through the decoded encoded Corpora. Design the graph as follows to maintain connections between actors' locations, media channels, target of narration, election periods, host-state vulnerabilities, and evidence sources. Avoiding a singular-list classification where every event is assigned to only one type. Because the impact of cross-border electoral media has been formed through association: A consulting arrangement links to platform advertisements, which in turn leads to ally-repetition and finally results in a post-election legitimacy assertion. The flat-coded table can record this group of fields, but it does not show their interrelation.

As shown in the figure below.

$$G = (V, E, W), \quad V = V_a \cup V_c \cup V_n \cup V_t, \quad w_{uv} = \lambda_1 s_{uv}^{time} + \lambda_2 s_{uv}^{content} + \lambda_3 s_{uv}^{source} \qquad (2)$$

G stands for the National Security-Constrained Media Influence Graph. Nodes in set V are the sum of actor-locus nodes V_a, channel nodes V_c,, narrative-target nodes V_n, and electoral-context nodes V_t. G represents the edges connecting nodes with high co-occurrence in an event record. Edge Weight w_{uv} of Nodes and combines temporal Proximity s_{uv}^{time}, Content Similarity $s_{uv}^{content}$, Public Source Convergence s_{uv}^{source}. The weights of the coefficients are λ_1, λ_2, and λ_3. Time distance is greater for linked activities that happen during the same election period. Similar content scores for source identification with the same narrative subject. The source convergence rate increases when independent Source Family supports the same Link.

Using six actor-locus categories: Party-associated institutions; Campaign consultants; Aligned media producers; Diaspora organisations; Platform-facing service providers; And election-integrity organizations. The above classification represents the organisational locations of activities. There is no legal liability of the state party. Channel nodes use the six media channels described above. Target-nodes of narratives include the five electoral targets. Electoral-context nodes record phase, region, and host-state vulnerability. Vulnerability is constructed based on the public indicators of election contestation, institutional fragility, recent political violence, platform transparency constraints and legal capacity for foreign influencer verification. The vulnerability score is ordinal and used only in the risk model.

As shown in Figure 2 below, which shows how a public-source corpus transforms into an ordered form for users to access. Through the transformation of source documents into events, followed by the formation of channel-narrative nodes, and ultimately reaching graph edges capable of being scored. This Figure is meant to show the mechanism, not process, of things. The centre of its event records; around these are sources of evidence, codes, and security parameters.

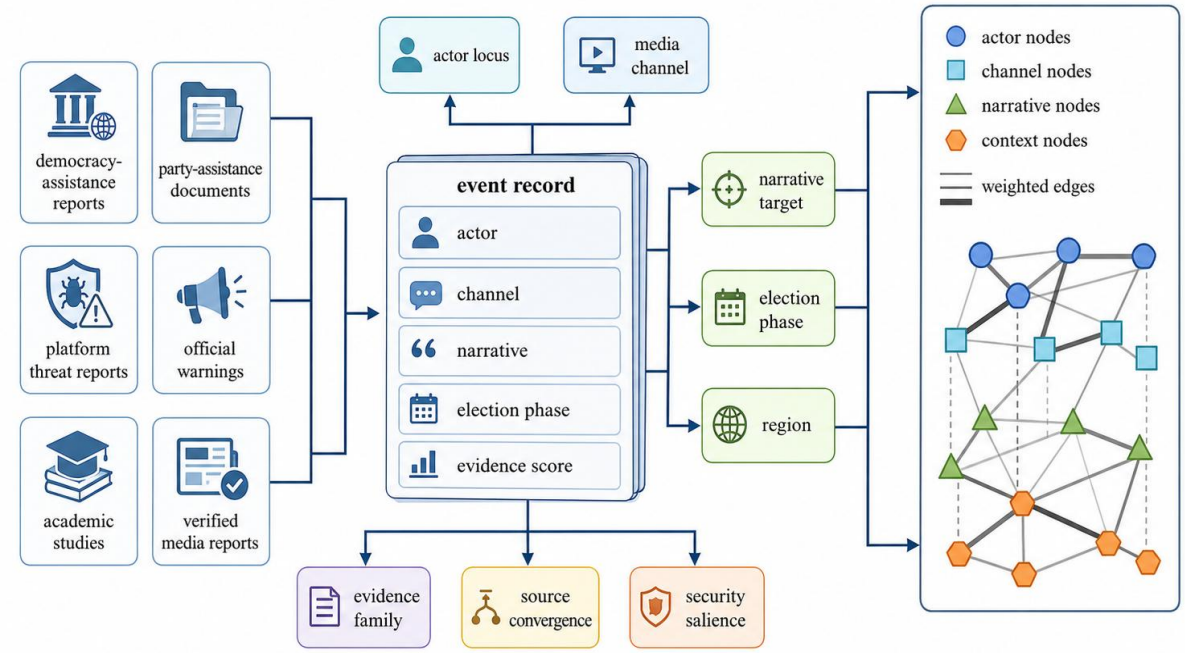

Figure 2: Public-sourced corpus construction and coding mechanism.

As shown in Figure 2, the event records at the core. Public Documents flow to the left, with code areas around them, and validation messages point towards the right side. Evidence convergences are associated with the links, not individual assertions. As shown in Figure 4-1 below is a depiction of our data structure arrangement to ensure that the system functions as expected.

Determine the exposure score and graph weight after that calculate the cross-border risk index. Introduce national security variables to retain the difference in descriptive exposure vs. Security Salience.

$$CRI_i=100\times\sigma(\beta_0+\beta_1 IEI_i+\beta_2 A_i+\beta_3 D_i+\beta_4 P_i+\beta_5 F_i) \quad (3)$$

CRI_i in this equation represents the cross-border risk index of event i. $\sigma(\cdot)$ function converts the weighted summation result into a range of [0,100]. β_0 is the constant term; β_1, β_5 weight exposure, attribution ambiguity, channel diversification, policy friction and target vulnerability refer to these factors. A_i stands for attributions of uncertainty. Variable D_i stands for Channel Diversity. P_i stands for the policy friction index, defined as how much the host-government's laws lack an explicit path of disclosure, registration and other forms of openness. Variable F_i stands for electoral targets' sensitivities; it is the combination of election-phase-sensitivity and institution-a-potential.

As the primary cause of attribution ambiguity and its effect on party-centred media behaviour. A record may show that a consultant, institution, or media organization has engaged in electoral communication, but whether there is actual involvement as sponsor(s), coordinator(s), or Party-affiliated status remains ambiguous. This absence is treated as part of the problem with security-related prerequisites alongside Channel Diversity and sensitive stories.

$$A_i=1-\frac{1}{M_i}\sum_{m=1}^{M_i} q_{im} \quad (4)$$

The expression of attribution ambiguity for the event in A_i. M_i represents the total number

of similar cases or sources citing Event i. Value q_{im} is a source-claim clarity score ranging between 0 and 1 corresponding to claim. Higher q_{im} means better identification of Sponsorship Authorization and Coordination. There will be more Uncertainty after a public complaint appears insincere, inconsistent or insufficiently verified.

The national-security restriction comes in via the interpretation of the Cross-border Risk Index. The model does not suggest suppressing the content and also classifies ideological messages as threats. Estimates the additional requirements of a re-examination. Low-risk events can be archived monitored or ordinary campaign announced. For moderate-risk cases, verify through transparency check, platform-ad library review, etc., if necessary. High-risk situations require joint decision-making of the election authority, platform integrity group and security institution according to law. A multiple-layered interpretation at this time aims to avoid excessive constraints while maintaining accessibility for short election periods.

Table 2 shows the distribution of corpora used for model calibration. Partly due to a larger quantity of public-sourced information within Latin America and Europe as election assistance, consultancy, diaspora-media outlets, and platform transparency documents have been more readily identifiable there. Asia-Pacific has fewer records but a high median of channel numbers due to the combination of diaspora media, platform communication and geopolitical positioning stories. Middle East and North Africa records show higher ambiguity because public sources often identify media activity but provide less detail about sponsorship or campaign coordination. Sub-Saharan Africa includes a combination of training and party-building documents, as well as less than five platforms.

Table 2: Profile of public-sourced corpora by region.

Region	Event records	Median channel count	High-salience share	Median CRI
Latin America	18	3.2	0.33	68.4
Europe	15	3.0	0.27	64.1
Asia-Pacific	13	3.4	0.31	66.8
Middle East and North Africa	7	2.7	0.29	61.5
Sub-Saharan Africa	9	2.4	0.22	54.7
Total	62	3.0	0.29	63.2

Graph Construction Also References Studies of Influence Operations and Coordinated Behaviours in Computational Science. Contents based indicators have shown that they can be used for prediction of influencer operations; However, its effect is conditioned by external behavioural Environment. Coordinated network methods demonstrate that time, shared accounts and repetitive interactions Patterns can be observed in activities organised through a series of posts. The research on the coordination of behaviour also shows that amplification can occur without individual persuasive messages in the network structure [17]. Recently, research on propaganda signals has focused more on the integrated effect of content, network path and inferential influence conditions for political influence transmission [18]. The NS-CMG model applies the above rule to public sources' elections record by replacing untraceable platform trace codes with channel links, source convergence and attribution accuracy.

Edge weights are therefore conservative. Temporal proximity gets high weights only when source places activities in the same election stage. Content similarity gains greater weight only if there is a repetition of the same narrative goal across at least two Source descriptions, or it explicitly links these activities. Sources converge if and only to their own family of sources being mutually related. To reduce the likelihood of constructing a densely connected graph

through inference. Therefore, in short, there are insufficient links to be recovered from these missing data points.

Host-state vulnerability is regarded as a kind of context rather than a measure for political maturity. Field observations in the observable condition for cross-border effects: A narrow margin of elections, a recent constitutional conflict, insufficient disclosure regulations, difficulty accessing platform transparency information, disputed election management procedures, or confirmed political violence. The coding does not rank countries by democratic quality. It investigates if such an election-setting offers more capability for influencing the institution's sense of trust or reaction speed among cross-border media. The following are different: In some cases, weak democracies may show instability near voting or in counting;

Policy friction serves the same purpose. Some jurisdictions clearly stipulate the foreign-agent registration rules, political-advertising archives, campaign-finance disclosure systems, and rapid-reaction election communication regulations. Some others have scattered authorities or unclear guidelines for foreign campaign services and online political advertisements. Policy friction refers to the discrepancy between an event and the institution-based path of appeal. A high policy-friction score does not mean that the host state is weak; rather, this suggests that in some situations, it may be more difficult to handle under regular law during the election period.

Normalise the input data to eliminate differences in magnitude caused by factors such as exposure, ambiguity, diversity, policy friction and vulnerability during their co-assessment. The number of different channels that appear at each moment; It was normalized between 0 and 1 after scaling. Policy friction and target vulnerability are ordinal fields normalized to the same interval. Based on the training fold estimates of weights, and then test its consistency with validation split. No weight has no interpretation as a cause. To classify and review priority; It is not causal analysis of the election impact.

Imputation of missing values is done conservatively. If the public-source failure to identify sponsorship completeness, it belongs in the mid-level or higher grades of ambiguous information. When there are insufficient data about the host-state's legal capacity, it will be estimated at the median level of that group. Avoiding over-classification, these are chosen as well. They also mean that the model will understate risk in opaque cases with thin public documentation. Error analysis will return here in the future.

2.3 Baselines, Validation Protocol, and Evaluation Metrics

To validate that the proposed graph-based model outperforms other models in classifying national-security saliency under a specific validation scheme. Determine whether each event belongs to the category of a high-salience one or not. Non-high salience uses a combination of low and medium labels; namely, whether the event should be transferred from routine surveillance to strengthened scrutiny. There are 18 high-salience benchmarks and 44 non-high entries in the corpus. The benchmark tag is only added if several sources' family support channels coupling, sensitive narratives targeting, and increased attribution or vulnerability criteria.

Three baselines are employed. The first rule taxonomy groups an event as highly salient if it includes either platform advertising or the response of election integrity and has at least one sensitive narrative target. The other one is a text-based classifier based only on the source-summary terms and narrative tags. The third is a content-and-coordination base line that adds the indicators of channel count and source convergence but excludes attribution ambiguity, vulnerability, etc., and policy friction. The suggested NS-CMG approach employs all components of the graph and security metrics. To determine if the national security variables provide additional explanatory power over content recognitions and basic coordination indicators alone.

Validation of the model via stratified fivefold event-level cross-validation. Split is stratified by the high-salience label and regional setting to avoid a single group in any one area. Since the corpus is relatively small and there are some errors in public-labels; Therefore, report model performance using metrics such as precision, recall, F1-Score, ROC-AUC, Precision-Recall Curve, etc. To ensure that the ranking function of the election-security system does not only present information in a non-decreasing or decreasing manner, but also takes risk levels amenable to people's grasp as input data. An over-sell scenario can divert operators' attention; specifically, the conjunctions of public-speaking and foreign-language application examinations are likely to sway.

The training target, in the form of regularised binary loss.

$$L=-\frac{1}{K}\sum_{i=1}^{K}\left[y_i \log \hat{y}_i +(1-y_i) \log (1-\hat{y}_i)\right] +\gamma\|\theta\|_2^2 \quad (5)$$

L is the loss function; K represents the number of training samples, y_i denotes the reference high-salience label for event i, and $\hat{y}_i$ stands for the predicted probability of high saliency. The parameter vector contains model weights, and γ controls L2 regularization. Regularisation is needed due to a small-sized corpus and potential correlations among the graph-variables. The loss function estimates probabilities, and the fitted weight cannot be considered a direct cause-and-effect relationship in this context.

The assessment Plan also includes two Resistor tests. The first case of temporal split is to remove data from 2023-2024 when training and test on the rest of the dataset. It tests whether the model has learned to identify more recently released election-integrity and platform-reporting cases based on earlier ones. The first one is source-family holdout; events that have reported on platforms account for a higher proportion than those reporting to other sources among the event sources. Because the platform report contains more behavior data than the policies themselves, an overfitting model on this language will not be effective in other fields of national security assessment;

As shown in Figure 3 at this time, it presents the evaluation system. Connect the split of data, base model, added graph variables, score output, and final judgment level. The figure must include an error-analysis loop that brings back misclassified items to the input fields again. In order to make clear that the classification error in this part is significant. A False Positive could drive out real democratic support and Participation. A false negative may leave a high-salience cross-border operation outside coordinated review. As shown in Figure 3: The NS-CMG evaluation and verification procedure.

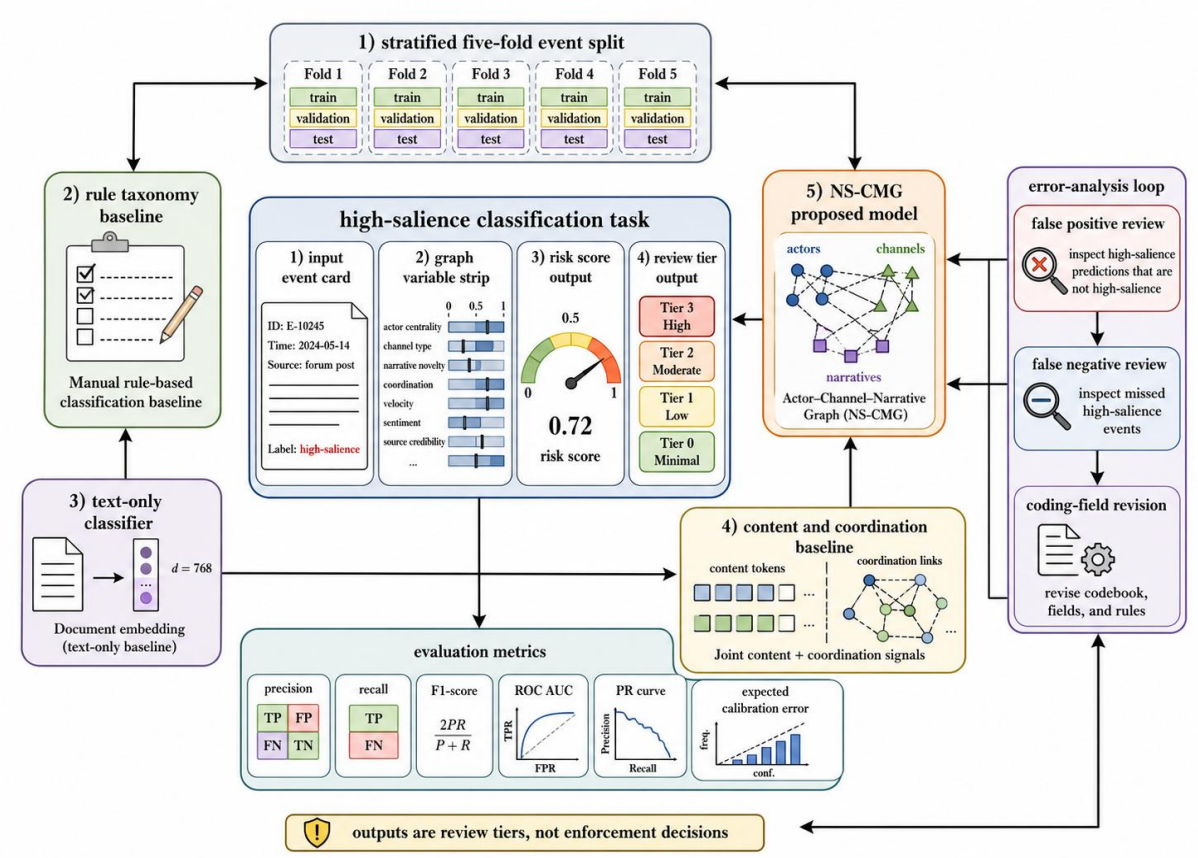

Figure 3: NS-CMG evaluation and validation process.

As shown in Figure 3, the experiment follows a compact Protocol. The central subject of the high-salience classification problem. Around it is the corpus split, three baseline models, the proposed graph model, evaluation metrics and error analysis loop. As shown in the diagram, it is the inspection batch and not an administrative penalty notice.

Selecting the thresholds of interpretation, not maximally optimised by retrospective fitting. Above 0.70 probability represents the highest review priority; from 0.40 to 0.70, it falls into medium-level; Below 0.40, The lowest level of Review Priority is considered Low. The corresponding values for these three situations are immediately multiple actors' reviews, ongoing supervision; ordinary file filing management. Various countries' standards for identifying the court's jurisdiction vary. Reporting scores instead of just class labels to help analysts spot the borderlines among candidates' work.

This has an explicit aim or intention behind it. Each false alarm is verified against whether it relies on sensitive words; If not distinguished between aids and interventions, or if the pressure exceeds one channel. Check each case of a false negative for hidden coupling, weak source convergence, and multilingual repetition that the graph missed identifying. Part of this audit procedure as it has a significant asymmetry in loss and is also politically difficult. The model, which can help analysts find the sources of uncertainty but not conceal them behind one number.

Reproduction of the program code belongs to fixed-code-field and public-source-evidence-log-based methods, respectively. Each record includes the following: the sources of each line; The quotation/paraphrasing reference of actor location; Channel Coding (CC) judgment, narrative objectives, election status indicators, and saliency tags. The evidence log is not included in this paper; several of them are politically sensitive accusations. Codings are still

divided into specific types, and another person can repeat this process independently with different data sets. In this way, it maintains the suitability for academic application while upholding the controversy in connection with elections.

In short, finally in terms of visualisation within verification. Temporal curves, heat maps, coupling networks, risk surfaces, validation curves, ablation plots, and diagnostic maps can be employed for checking whether the model's numerical result conforms to recognisable event structure. In particular for the application of national security, an unclear judgment result might not be accepted easily. The numbers show the risk assumptions clearly so that reviewers can determine which cases are affected more by channel quantity, attribution ambiguity, narrative sensitivity, or context-based weakness.

The visual Audit is recorded in this paper, and others may still check it when reading the data later.

Additionally, the auditing result may determine an absolute peer-revealed boundary clearly.

3 Results and Discussion

3.1 Temporal, Channel, and Narrative Structure of Cross-Border Media Influence

The first results sub-section verifies whether the whole body of cases is built on time-stamped facts or just an assembly line of disconnected anecdotes. Starting with the phenomenon of exposure, as this will be visible before conducting a legal or national-security review. Then, it is followed by channel-narrative coupling and finally actor-channel-target connections. Following the measurement Design: Descriptive intensity, then Narrative Risk and finally Organizational Configuration.

The temporal exposure profile has divided the five recurring channels and recorded the influence exposure index values within the time range of 2010-2024; See Fig. 4. As shown in Figure 4, platform advertisement and Data-driven reached the highest point of 87.6% by 2024; The amount of Allied media narratives syndicated rose from 20.4% to 84.1%. Party-affiliated media assistance showed a continuous increase, rising from 23.0% to 83.0%; Consultant-Mediated Campaign Service increased from 18.0% to 71.7%. Diaspora and Broadcast Relay were below Platform and Allied- media channels, with an increase from 18.7% to 70.2%. In addition, the post-2016 slope of the Platform-linked Activity category increased from 48.6 in 2016 to 87.6 by 2024.

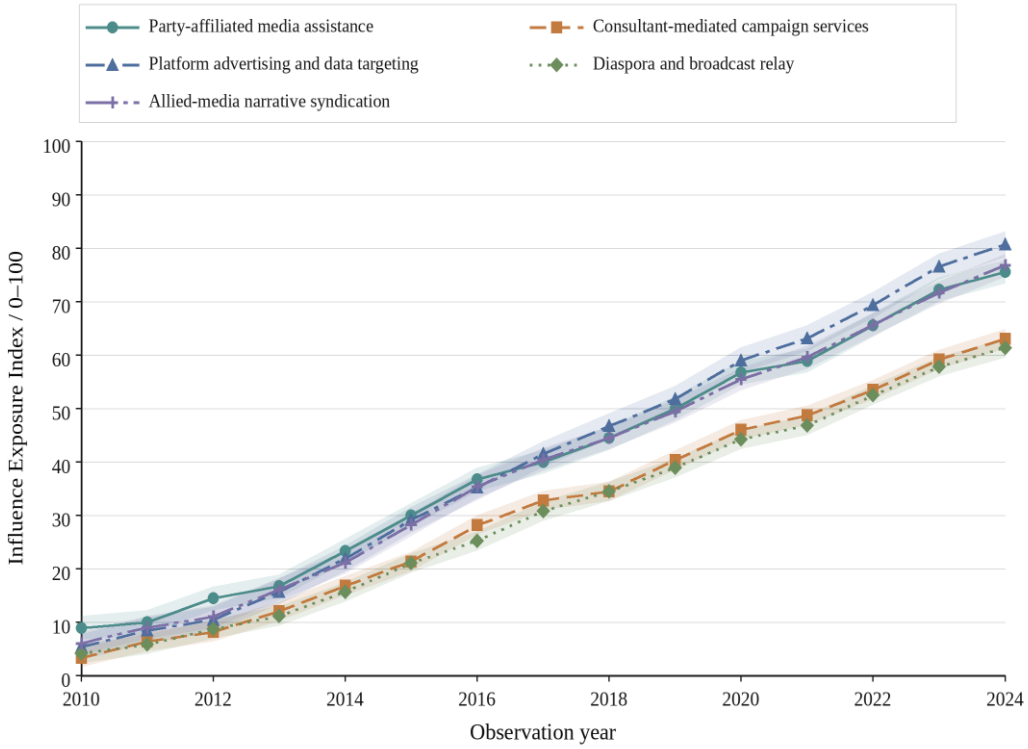

Figure 4: Temporal Channel Exposure Profile, 2010-2024.

Figure 4 shows that there is no single channel for the expansion of cross-border electoral media influence. Platform advertisement's strongest acceleration has yet to be matched by ally-media narrative syndicated influences; rather, it is the accumulation of audience reach through multiple channels with shared emotions. Party-affiliated media support still exists in the age of digitalisation, and it has gradually become one of several channels alongside platform activities and syndicated-media content. Supports Graph Design in the aforementioned study. A state-centric or platform-only framework would miss the combined growth of party assistance, consulting, diaspora relay, and allied-media repetition.

Next, what are the most influential Channel-Narratives Combinations in terms of Security Salience? As shown in Figure 5, the channel-narrative contribution matrix. Among them, the highest-cell is "election integrity responses" and its mean participation score was 36 points. The all media-narrative syndicated news anchor to geo-political alignment adds up to 33 points, whereas platforms' advertisement linking with elections add up to 31 points. The election-Integrity response based on the institutional trust adds 31 points. Platform focusing on geopolitically aligned entities adds 29 points, and allied-media syndication associated with institutional trust receives another 29 points.

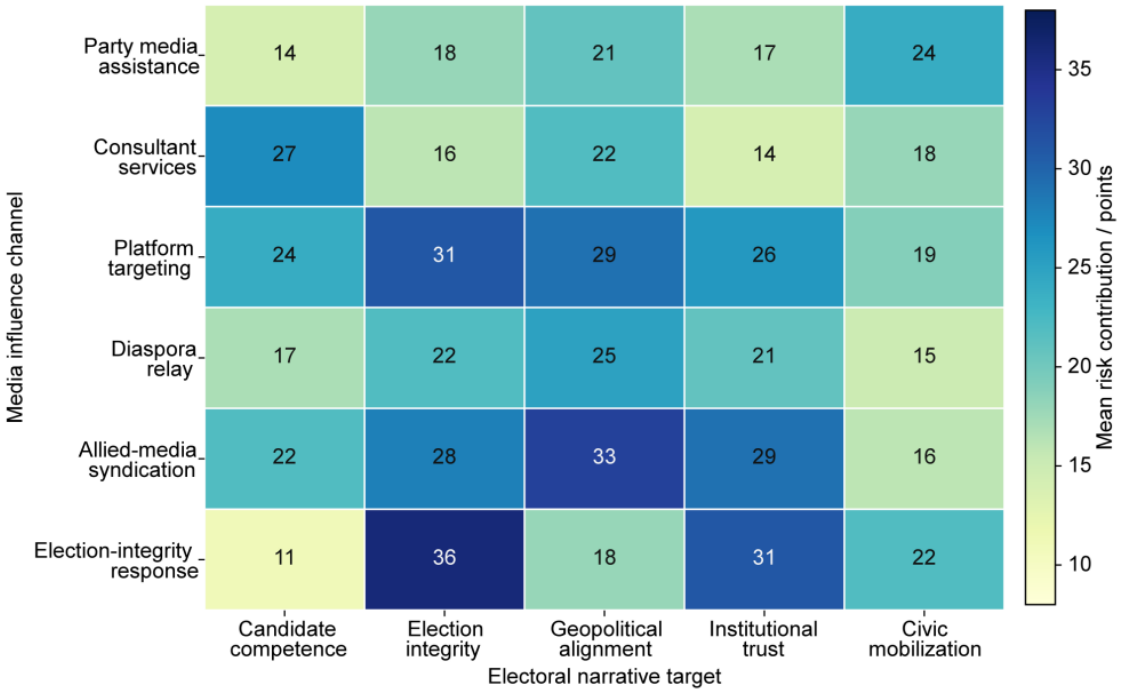

Figure 5: Channel-narrative risk contribution matrix.

As shown in Figure 5, National Security salience is highest at intersections among media convergence and the narrative of electoral rules and legitimacy. Candidate competence is political but has relatively smaller average contributions in the matrix due to its closeness to a general form of campaign competition. Because election-integrity narratives can influence the public's acceptance of results, trust in the administrator, and post-election compliance more directly. Geopolitical alignment obtains large scores when distributed by ally-media aggregation or platforms due to the connection between domestic elections and foreign policy positions. Institutional trust sits between these two patterns: it becomes high salience when repeated through platform or election-integrity channels.

The heat map displays which kind of target or fact is mentioned in this paper. Although the message may contain factual information but create an environment of security-related pressure under certain circumstances by being strategically timing-cross-border-difficult to trace-aimed at a weak election agency. Therefore, the model gives contributions based on the channels, targets and contexts of its falsities. This type of handling conforms to the Policy's requirement for not allowing excessive content police but recognises organised activities affecting election sovereignty.

As shown in the figure below: Actor Locus, Media Channel and Electoral Targets. Party-affiliated Institutes have the highest connection to training and message discipline; their weighted score is 31. The campaign consultant links most closely to ad targeting and data service, and its weight is 27. Aligned media producers have linked narratives through the weighting method at 30. The weight sum for diaspora organisation broadcasting, dissemination through their own networks (relay) is 24. At the target end, the weighting results for narrative syndication and geopolitical alignment are both high at 33; The weights of narrative syndication and institutional trust align on-election integrity response is 32.

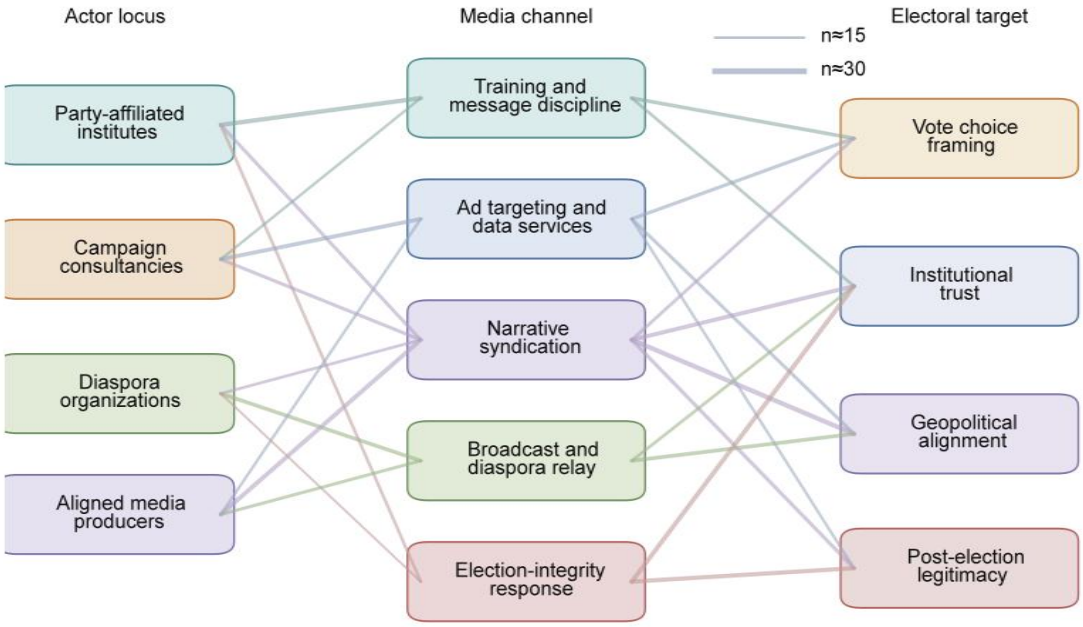

Figure 6: Actor, Channel and Electoral Target Coupling Network.

As can be seen from Figure 6, the concept of party-oriented impact is primarily organised channels. The party institute, consultant, diaspora organisation, and aligned media producer do not have the same effect. Links to Channels or Targets are Different. Party-affiliated Institutes tend to produce training and message-discipline; these are less likely to be highly salient unless there is a linkage with sensitive events or lack of transparency. Consultants; Platform-facing business focuses on targeting advertisements and performs Audience segmentation. Media Production Enterprises and the diaspora groups can strengthen cross-regional reproduction by matching their own national interest needs or improving institutional authority.

This Structure supports the above-mentioned conclusions. U.S. party-centred media influence should not be equated with formal party programmes. Among the most security-related configurations are typically those conducted by consultants, aligned media, platform-facing services, and diaspora-relayed transactions outside of this formally organised event space. Second, national-security salience depends on coupling. The same actor locution generates various risk values through channels and audience receptions, respectively. The party-organized training activity focusing on civic engagement remains low-profile; The same organisational structure associated with platform selection and election-corruption accusations in a contested counting period becomes high-sensitivity scrutiny. Therefore, the corpus will support a configurational model rather than an actor-label one.

Regional cross-sections strengthen the above-channel structure. Latin America has the most consultant-mediated service and platform-oriented activities listed among all regions, corresponding to its long-term status as a destination for US-style campaign consultancy within competitive presidential Systems. Europe has better alliance- media News Synergy construction capabilities and a stronger guarantee for election Integrity Verification against manipulation links. Asia-Pacific Records integrate the narrative of Diaspora Relay more frequently than those from other regions. These Differences Do Not Indicate A Uniform Regional Hierarchisation Of Risk. The same party-centred ecosystem may appear as various media shapes under different Electoral Institutions, Media Markets, Language Communities and Platform Access.

The time distribution shows that both legacy and Digital channels currently exist together.

Party-affiliated assistance and campaign consultation decreased with the increase of platform target audience. As part of an even larger one. Visible in the record of training, message discipline and poll assistance is a strategic language system that later becomes part of advertisements, associated media commentaries and diasporic broadcasting. The weighted graph represents the aforementioned relationships through edges. A simple periodization may not capture how older forms of campaigning practice have merged with the New Media system.

Its direct consequence, however significant in importance. The corpus shows no indication that the party-centred operation altered electoral results. It can be seen that the surrounding election observation media Environment is becoming increasingly diverse Channels and categorised becomes harder to judge. Only covert state sponsorship security models fail to cover the paths adjacent to parties. only focus on errors in content but not strategies of repeated communication or attribution uncertainties. The exposure results therefore motivate a risk model centered on configuration.

3.2 Risk-Surface Estimation and Model Robustness

Secondly, this Section verifies whether the suggested scoring approach generates reliable risk-separating results and observable benefits compared with more basic models. The above descriptions present higher levels of exposure and increased channel-narrative coupling. Next, will the above-mentioned factors constitute an operationalised national security risk space? The good surface is that can display the effects of exposure, ambiguity and channel diversity interaction; Avoiding each factor treated separately in making correct judgments.

As shown in Figure 7, the three-dimensional risk surface of channels' diversification degree versus attribution uncertainty is depicted. As shown in Figure 7, events with channel diversity lower than 2.0 and attribution ambiguity higher than 0.35 are usually below the risk level of 48 after including politically sensitive information. Risk peaks at an ambiguous coefficient exceeding 0.55 and a channel variation index over three; Channel Diversity reaches 3.5+ and Attribution Ambiguity exceeds 0.62; The expected risk region passes through multiple times. Above the channel-diversity level of 5.0 and the ambiguity at about 0.85, the surface is approximately 90% high.

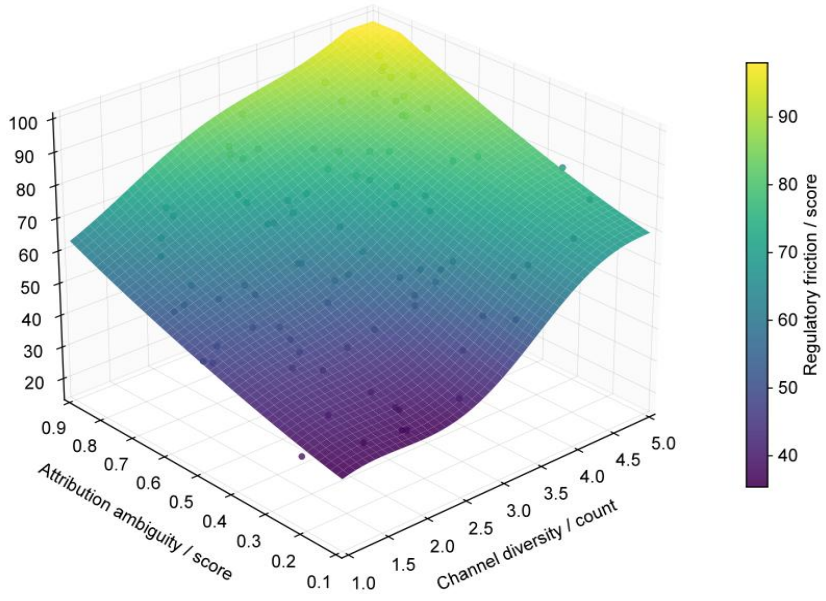

Figure 7: Three-dimensional national-security risk surface.

Figure 7 provides the strongest visual support for the national-security constraint. Only high exposure cannot be in the most risky area. If several paths exist, the angle will not be apparent anymore. This Design addresses the main problem. Transparent consulting and aid are not opaque in themselves; they can be exposed through regular disclosures. Ambiguous multiple channels of activities will cause problems; The host's state is uncertain in terms of sponsorship, coordination, and the intended relationship with media activities and electoral legitimacy. Therefore, the Surface offers a Review logic based on combined Conditions.

Table 3: Results of event-level validation The rule taxonomy achieved a precision of 0.69, a recall rate of 0.61, an F-score of 0.65, an ROC-AUC value of 0.72, and an expected calibration error of 0.118. Text-only classifier achieves an F1-score of 0.70 and an AUC of 0.78; Its calibraton rate is only at 0.094. The precision, recall and the Coordination baseline reached a score of 0.76F1andAUCof0.84respectively. The proposed NS-CMG model reaches precision of 0.86, recall of 0.79, F1 of 0.82, AUC of 0.90, and expected calibration error of 0.048. The gain over the content and coordination baseline is 0.06 in F1 and 0.06 in AUC. Calibration gain may be of interest as models' scores will primarily serve to guide triage, not detailed recounting.

Table 3. Model's performance during event-level validation.

Model	Precision	Recall	F1-score	ROC AUC	ECE
Rule taxonomy	0.69	0.61	0.65	0.72	0.118
Text-only classifier	0.73	0.68	0.70	0.78	0.094
Content and coordination	0.80	0.73	0.76	0.84	0.071
NS-CMG proposed	0.86	0.79	0.82	0.90	0.048

As shown in Figs. 8a-c, these also exhibit similar behaviours. NS-CMG in the ROC curve is consistently above each baseline at various false positive rates. The performance of the content and coordination baseline is good in general, but it fails to meet expectations as the false-positives drop. It is practicable in operation, and election-security examinations usually have a weak mechanism and cannot accept many overvotes. Among them: The precision at over 80% in Recall-precision curve; Among which, the rule-based classification performance tends to be affected by increasing recall rates during training.

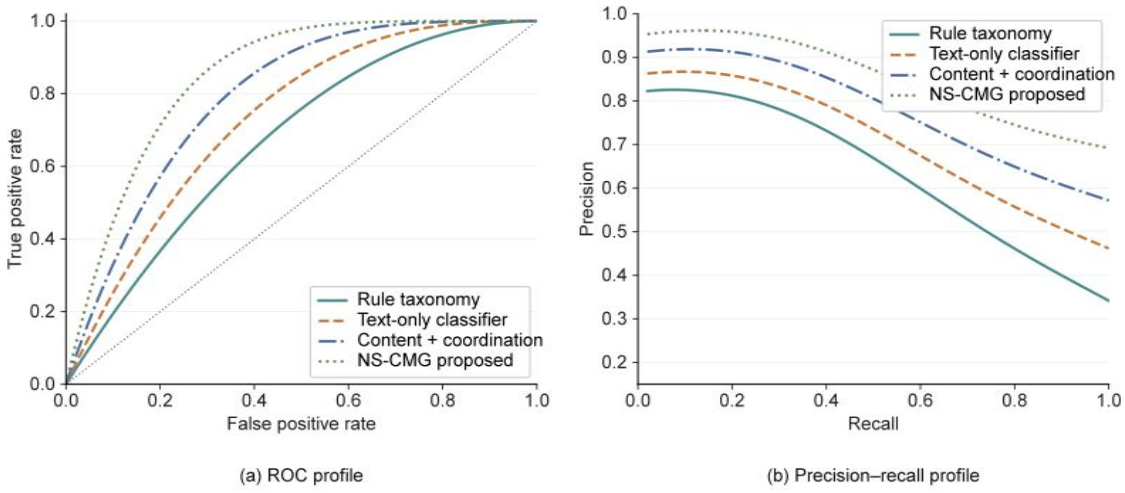

Figure 8: Model validation Curves under Event-Level Cross-Validation.

Table A−2 shows the specific results of some classification algorithms. Text-only classifiers recognize sensitive phrases; however, they are unable to differentiate between routine campaign

accusations and cross-border media operations involving ambiguous sponsorship clearly. The content and coordination baseline do not include channel count or source convergence; thus, they lack the legal and institutional basis to determine security salience. The proposed model links all of these components through a graph. Its advantage appears most clearly where high-salience cases are scarce and false positives carry governance costs.

In Figs. 9-10 show the contributions of each component in the ablation experiment, respectively. Reducing the narrative target layer decreases F1 by 0.064. Removing the coordinate edge weight decreased F1 by 0.058. Channel diversity removal decreases F1 by 0.052. Reducing attribution ambiguity decreases F1 by 0.046. Removing the target vulnerability increases F1 by 0.038; Removing the policy-friction term decreases F1 by 0.031. These losses indicate that there is no single driving factor for this result; The largest loss occurs at the level of narrative targets and coordination structures; thus it can be inferred that there are multiple mechanisms for forming national-security salience.

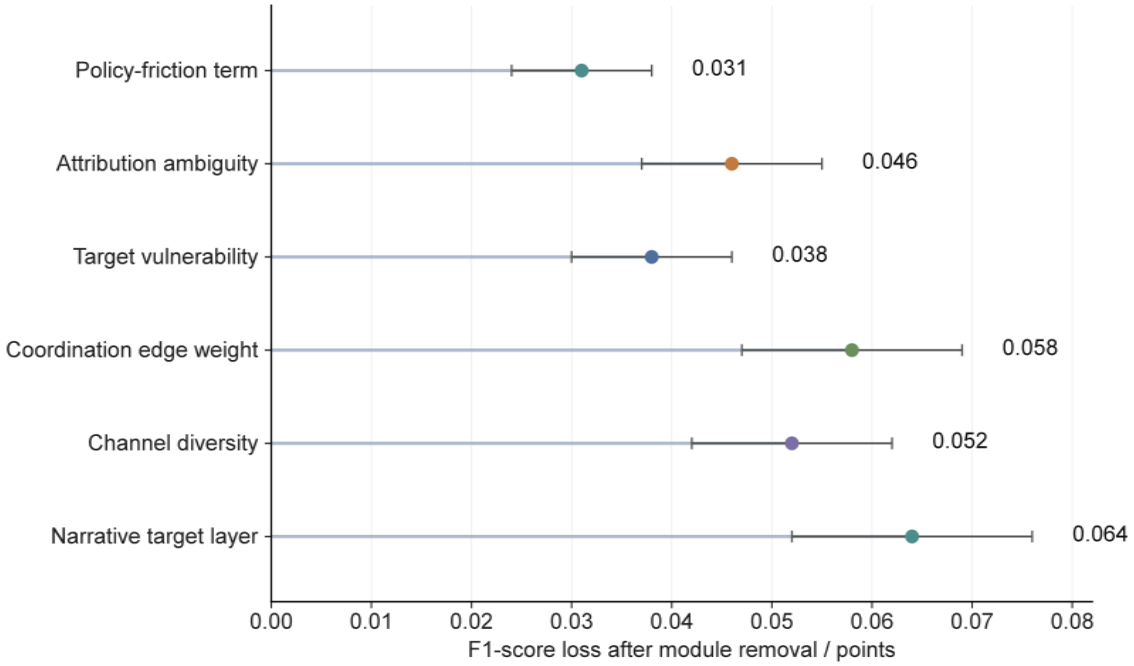

Figure 9: Module ablation effect on F1-score.

Figure 9 also illustrates why only content detection is inadequate. There must be a definite purpose in narrating for the words; under different presentations regarding candidates' traits, voting procedures and systems of political power distribution will bear many nuances. Coordination Edge Weight Matters Because Repeated Activity Across Channels Changes the Function of a Message. Because of this reason, influence Pathways are more difficult to supervise if multiple entities such as consultants, platforms, associated Media and Diasporic networks participate simultaneously. Attribution ambiguity is important because uncertainty in sponsor relationships affects informationDisclosure, reaction Timedistributionandpublic explanation. There are small yet apparent loss items of target vulnerability and policy friction; thus, although not dominant in this case, the hosts' state impacts to a certain extent.

Robustness Checks also reach the same conclusions. During the Temporal Hold-out Test, The proposed model's F1 decreased from 0.82 to 0.78; However, The baseline For content & Coordinations declined from 0.76 to 0.70. A drop is expected, as 2023-2024 records include more election-integrity warnings and AI-enabled content issues. Despite its still maintainable performance, the model does not directly correlate with the period's definition of uncertainty or

multi-channel divergences. The Source-Family Hold-out test shows that the proposed model still has an AUC of 0.86 in events with platform reporting as a non-dominant source category. This outcome decreases the likelihood of the model only capturing platform-reports' language. It can also utilise public institutional Documents and other academic Materials within a restricted environment due to lack of platform Data Access.

Verify the classification capability of the model's cross-validation function; In the policy design, if an inappropriate high-scoring point triggers unexpected escalation, and if a bad-faith low-score entry hinders transparency implementation until after a narrative sets public expectations. The proposed model's expected calibration error of 0.048 indicates that predicted probabilities align more closely with observed high-salience labels than the baselines. Because the rule taxonomy has been rated least accurately, treating the existence of a sensitive channel as virtually certain. Text-Only is better, although it still has a reaction to charged words. Although the type and adjustment baseline can be improved to capture the multi-channel Structure; Still lacking policy friction or vulnerabilites.

The ablated results can be used to collect more training data in the future. The goal of encoding needs to be clear in advance, otherwise the effect will not be good when deleting. The third item, coordination edge weight, will be discussed next; Source Descriptions connecting actors and Channels are more valuable than isolated assertions. Channel diversity focuses on recording the second-order channels of analysis; when the first-order channel is prominent, it must be noted as such. Attribution ambiguity and vulnerability require cautious coding, but the model shows that they are not optional. They help distinguish high-exposure but transparent activity from high-exposure and hard-to-audit activity.

Temporal hold-out results are applicable to newly appearing AI and platform cases. The 2023-2024 hold-out set has more entries related to synthetic contents, election-integrity alerts, and platform-threat notifications. A text-based system trained using old data performs poorly after learning new terms. Graph models are relatively independent of word sequences. Is there a mix of channels in the event? Is the sponsor clear? Is the target electorally-sensitive? And is it not allowed by the host-state review path? This explains why the out-of-period F1 remains 0.78. The value of the framework is not the particular lists, but the stable structure of variables.

3.3 Case-Level Diagnostics, Error Sources, and Deployment Implications

The final Results section converts the score structure into cases of diagnosis and describes errors. Because the national-security review cannot be solely based on such aggregated indicators here. A case may be close to the limit, have inconsistent evidence, and involve legitimate aid that is politically sensitive. The deployable system needs to assist users in identifying the reason for selecting cases and areas of attention.

See Figure 10 for all 62 violations according to normative ambiguities and operation levels; The background contour depicts estimated deployment risks. A threshold of 0.50 for high-ambiguity judgment, and a threshold of 0.60 for relatively high operational ability. The events at the top right have received the highest attention. There are a total of twenty-one such occurrences within the corpora. Latin America and Europe have the most abundant high-priority observations due to richer visible connections among consulting services, platform-oriented advertisements, and allied media-syndicated content in their records. Asia Pacific events Regions are located in mid-high latitude areas that show opposite effects of Diaspora Media and Geopolitical Positioning Narratives. The Middle East and North African region shows few observations and high ambiguity. Sub-Saharan Africa records are more dispersed, with several assistance-oriented events in lower zones.

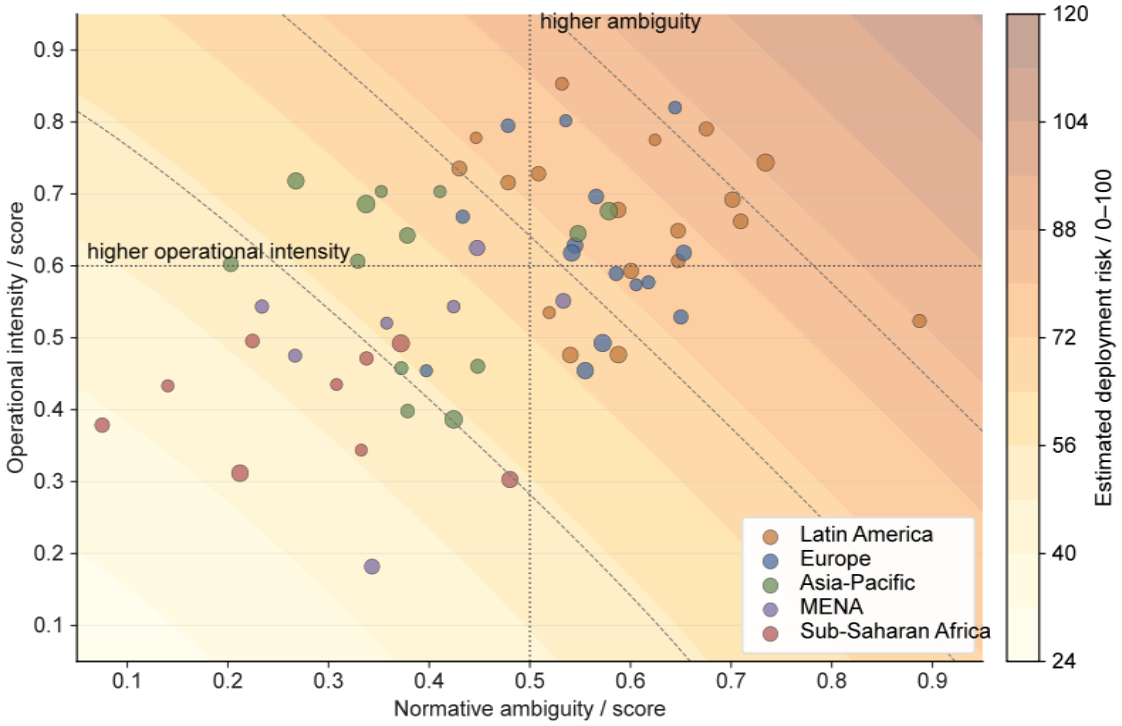

Figure 10: Case-level diagnostic map of deployment sorting.

As shown in Figure 10, diagnostic Placement is neither praise nor blame. Several events with high operational intensity are below the ambiguity threshold; thus, only disclosure or ordinary campaign regulation will suffice. Many ambiguities have occurred in the process; some were only noted later on. Ambiguity and strength are in conflict with each other in the upper-right area. When a situation where a host-state authority needs to carry out an organisation of platform transparency review, foreign agent identification and analysis, election committee communication, or security assessment occurs after exceeding the boundaries of institution reaction.

Identifies the following as frequent false positive causes: The first type of transparent democracy support, which employs election-facing media language. Training programmes, party debates, and civic communication projects may include words related to campaigning without violating the law. Second, there is adversarial journalism or the Commentary of aligned media. such content may be partisan or cross-border, but it might still be classified as protected journalism or political expression. Third, there are post-election commentaries repeating the claim of legitimacy after the official election results have been announced. These records may be overly severe in textual categorisation; however, the security validity is contingent upon time, sponsors, and connections with organised mobilisation.

There is another situation of false negatives. Some records have a low text density, but high organisational coupling. Among them, consultancy contracts, advertising agencies and Diaspora Communication Relay are all included among the general media; however, their association results in numerous ways of spreading. Other records contain limited public evidence because platform libraries, funding disclosures, or subcontracting documents are incomplete. The third group is multilingual narrative repetitions between different local-language publications without any text repetition. The above examples explain how source convergence and graph edges function. A purely lexically-based system misses translation repetitions, indirect coordination and even some weakly evidenced sponsorages.

The deployment consequence is a triage model with protections. This framework can help

prioritise cases for human judgment; request the platform to disclose more information voluntarily; organise an agency meeting on issues related to elections; etc. It cannot function as a fully automatic execution apparatus. The US and their allies have warned that foreign agents might utilise false information, fraudulent media, and platform interference at election time [15-19]. In addition, Europe's regulations on information manipulation and information accuracy have a proportionality principle of transparency; They also follow legal implementation pathways. NS-CMG model can be compatible with such a constrained postures, because the review weight has been assigned to configuration of evidences instead of political viewpoint.

Recently, the reports of influence and cyberspace have emphasised the significance of boundless assertions. OpenAI’s 2024 threat report described multiple influence operations but noted limited viral engagement in the cases it assessed [20, 21]. Microsoft's 2024 campaign reporting on the election also treated influence campaigns as active but different types [22]. Not all cross-border media operating activities can be considered election-related impacts. Following this, the present research uses exposure and risk salience instead of a change in votes. Mainly produces non-causal impacts on the outcomes of elections; A structured estimation of whether a case needs to be subject to National Security Review.

Additionally, this framework links with the policy discussions on AI-generated misinformation and deterrents. AI-powered content generation has lowered the price for multiple language communication, image creation and rapid narration adaptation [23]. That such development can add value to graph-structured features due to increased ease in creating but difficulty in verifying individual artefacts. Deterrence scholarship posits that foreign election interference is a matter of "punishment", "denial" or "delegitimisation" in response to corresponding policy instruments according to different types of threats [24, 25]. The results here suggest that denial and delegitimization require better event-level classification. The authorities should determine if it is an ordinary case of political expression, transparent aid, commercial advisory, coordinated pressure, or a high-visibility offshore enterprise.

Therefore, the case diagnoses offer an adjusted, operational feasible national-security system. The most powerful negative evaluations do not involve party identification or ideology. Channel diversity, attribution ambiguity, sensitive electoral narratives, source-supported coordination, and hosts' state vulnerability. The establishment, critique and reiteration of these parameters. Moreover, it will be more convenient for the court, regulatory authorities, platform operators, etc., when checking later on. There is an area of excessively sensitive security claims that would damage the competition for power; auditing standards are actually necessary demands.

The practical review work flow starts from the diagnostic map and not the legal judgment result. Determine whether it falls into the categories of low-risk, medium-risk or high-risk in different parts. Thereafter, by examining the recorded events and finding out which variable caused them to occur. If there is a lot of ambiguity and low operating pressure, then increase the degree of disclosure or platform-library inspection. Operational Intensity is high and the attribution is obvious; then, an ordinary campaign regulation would suffice. Both being high is defensible for narrating that concern elections' integrity and trust in institutions if they fit this case.

European Union's research on foreign information manipulation and interference divides it into three categories: manipulation techniques; Actor behaviour pattern, etc., as well as public reaction. The present findings are compatible with that approach but add a party-centered election lens. They demonstrate that party-adjacent media influence may be security-relevant outside of the classical model of hostile state campaigns. Therefore, this diagnosis can be used to compare governance. Also have broad application when researching other types of parties;

particularly suitable for use with foreign persons involved in the political activity related to elections abroad.

The necessary realisation support guarantee is controllable. Actors who have been identified through the review should be able to resist the code-making power over channels' appearances, attributions, etc., and divergent sources; Record reviews of cases that have been downgraded due to transparency in assistance or reporting by journalists, and not those controlled by intermediaries. Downgrade Paths Are Essential to Achieve Democratic Legitimacy. The model of a sole escalation route will generate the overbreadth as required by this framework.

4 Conclusion

Developed a national security system to evaluate the situation of cross-border election interference caused by media influence activities organised via US-party-centred networks. The analysis treated the party-centred organisation as a scope condition, not as evidence of guilt. By integrating 62 events from the period of 2010-2024 using national security-constrained media influence graphs with actors' loci, media channels, narrative targets, election phases, attribution ambiguities, and host-state vulnerabilities. The results show that high-salience reviews are the most warranted under conditions of multiple media channels, sensitive election narratives and unclear attribution co-occurring.

(1) The first is to present an organisational method of difficulty in policy domains. Separate transparent assistance, commercial consultation, Diaspora media, associated-media imitation, platform positioning, and election integrity confirmation measures without bundling them under a single restriction label. This organisation enables the national-security inspection to start from observable events and no longer suspect all foreign or hostile speeches at once.

(2) Secondly, The proposed Model improves Risk Classification. NS-CMG reaches F1=0.82, ROC-AUC=0.90; Expected Calibration Error is -0.048, better than rule base method, text only method and content coordination method respectively. As shown in Figure 1-4 below: Maximum at which channel diversity reaches over 3.5 and attribution ambiguity over 0.62. Abolition results also show that the components of narrative target, coordination edge weights and channel diversity are more critical.

(3) Third, there are limitations to this framework in future research directions. Based on public channels, it does not cover opaque subcontracting or private platform data as well as localized language repetitions without being collected. Risk Scores Do Not Measure the Review Salience of Causal Election Effects. In the future, based on extending the acquisition of multilingual materials, conducting experiments under varied us-central-influence-system environments; Establishing a legal review system after disputing classifications results are needed. The main policy Value orientation of this scheme is "bound review", that is to say, under what circumstances should coordinated cross-border media activities be subject to legal supervision to maintain orderly order?

Therefore, the framework should be regarded as an organisation of evidence and a triage aid. Its primary application areas are:early reviews, comparison studies and well-organised communications of the electoral, platforms and security agencies. As yet, the results have not been sufficiently verified using more reliable sources of evidence.

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References

[1] International Institute for Democracy and Electoral Assistance. (2015). Media assistance and elections: Toward an integrated approach. Stockholm: International IDEA.

[2] Kumar, K. (2004). International political party assistance (Conflict Research Unit Working Paper No. 33). The Hague: Clingendael Institute.

[3] Farrell, D. M. (1998). Political consultancy overseas: The internationalization of campaign consultancy. PS: Political Science & Politics, 31(2), 171-178.

[4] Plasser, F. (2000). American campaign techniques worldwide. The Harvard International Journal of Press/Politics, 5(4), 33-54.

[5] Levin, D. H. (2016). When the great power gets a vote: The effects of great power electoral interventions on election results. International Studies Quarterly, 60(2), 189-202.

[6] Levin, D. H. (2019). Partisan electoral interventions by the great powers: Introducing the PEIG dataset. Conflict Management and Peace Science, 36(1), 88-106.

[7] Tenove, C. (2020). Protecting democracy from disinformation: Normative threats and policy responses. The International Journal of Press/Politics, 25(3), 517-537.

[8] Allcott, H., & Gentzkow, M. (2017). Social media and fake news in the 2016 election. Journal of Economic Perspectives, 31(2), 211-236.

[9] Eady, G., Paskhalis, T., Zilinsky, J., et al. (2023). Exposure to the Russian Internet Research Agency foreign influence campaign on Twitter in the 2016 US election and its relationship to attitudes and voting behavior. Nature Communications, 14, 62.

[10] Chachko, E. (2021). National security by platform. Stanford Technology Law Review, 25, 55-140.

[11] Kahler, M. (2024). Foreign influence and democratic governance: Defining and countering malign influence (Council on Foreign Relations Special Report No. 98).

[12] National Democratic Institute. (2013). Political party programming guide. Washington, DC: National Democratic Institute.

[13] Storm, L. (2022). New perspectives on international party assistance. Democratization.

[14] International Institute for Democracy and Electoral Assistance. (2007). Effective party assistance: Stronger parties for better democracy. Stockholm: International IDEA.

[15] Alizadeh, M., Shapiro, J. N., Buntain, C., et al. (2020). Content-based features predict social media influence operations. Science Advances, 6(30), eabb5824.

[16] Pacheco, D., Hui, P. M., Torres-Lugo, C., et al. (2021). Uncovering coordinated networks on social media: Methods and case studies. Proceedings of the International AAAI Conference on Web and Social Media, 15(1), 455-466.

[17] Weber, D., & Neumann, F. (2021). Amplifying influence through coordinated behaviour in social networks. Social Network Analysis and Mining, 11, 111.

[18] Sela, A., Neter, O., Lohr, V., et al. (2025). Signals of propaganda: Detecting and estimating political influences in information spread in social networks. PLOS ONE, 20(1), e0309688.

[19] Federal Bureau of Investigation, & Cybersecurity and Infrastructure Security Agency. (2024). Just so you know: Foreign threat actors likely to use a variety of tactics to develop and spread disinformation during 2024 U.S. general election cycle (Public Service Announcement I-101824-PSA).

[20] European Parliamentary Research Service. (2024). Online information manipulation and information integrity. Brussels: European Parliament.

[21] OpenAI. (2024). Influence and cyber operations: An update (Threat Intelligence Report, October 2024).

[22] Microsoft Threat Analysis Center. (2024). Russia, Iran, and China continue influence campaigns in final weeks before Election Day 2024 (Microsoft Threat Intelligence Report).

[23] Romanishyn, A., Malytska, O., & Goncharuk, V. (2025). AI-driven disinformation: Policy recommendations for democratic resilience. Frontiers in Artificial Intelligence, 8, 1569115.

[24] Palmer, J. M., & Wilner, A. (2024). Deterrence and foreign election intervention: Securing democracy through punishment, denial, and delegitimization. Journal of Global Security Studies, 9(2), ogae011.

[25] European External Action Service. (2025). 2024 report on EEAS activities to counter FIMI. Brussels: EEAS.