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ARTICLE / ARAŞTIRMA

Constructing Legitimacy on Social Media: Public Perceptions of Urban Planning in the Context of the 2023 Earthquakes

Sosyal Medyada Meşruiyetin İnşası: 2023 Depremleri Bağlamında Kentsel Planlamaya Yönelik Algılar

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ABSTRACT

The earthquakes that struck Türkiye on February 6, 2023, revealed the structural weaknesses of municipal institutions and significantly affected the legitimacy and visibility of urban planning. While often regarded as a technical discipline, this study positions urban planning as a key policy actor within broader land governance frameworks. Using qualitative content analysis of 1,000 geo-referenced tweets shared immediately after the disaster, the research examined perceptions of planning efficacy, responsibility, and institutional trust. Findings indicate that the profession experiences a brief but intense surge in visibility during crises, primarily shaped by dissatisfaction, accusations, and demands for accountability. The analysis also highlights role strain, planners' perceived powerlessness under political pressure, and public calls for justice, which reinforced a widespread sense of a "governance gap." Regional differences were notable: in provinces such as Hatay and Adıyaman, emotional intensity and loss of trust dominated, while in Ankara and Istanbul, discourse centered on structural reform. Social media emerged not only as a forum for critique but also as a platform for democratic participation, with strong demands for parliamentary representation of planners and technical veto powers. These findings underscore the dual function of social media as a space for real-time feedback and institutional accountability. In conclusion, transparency, accountability, and participation are critical to rebuilding planning's legitimacy in the post-disaster context. Consistent with the findings, the

ÖZ

6 Şubat 2023'te Türkiye'yi vuran depremler, kentsel kurumların sınırlılıklarını gün yüzüne çıkarmıştır. Bu tür yetersizlikler, kentsel planlama birimlerinin meşruiyeti ve görünürlüğü üzerinde dikkate değer bir etki yaratmıştır. Bu çalışma, kentsel planlamayı çoğunlukla teknik bir alan olarak görülmesine rağmen, daha geniş arazi yönetişimi çerçeveleri içinde önemli bir politika aktörü olarak konumlandırmaktadır. Kamuoyunun sorumluluk algısı, kurumsal güveni ve kentsel planlamanın etkinliğine dair görüşleri, felaketin hemen ardından atılan 1.000 coğrafi konumlu tweet'in nitel içerik analiziyle incelenmiştir. Bulgular şehir ve bölge planlama meslek alanının kriz anlarında kısa süreli ancak yoğun bir görünürlük kazandığını göstermektedir. Bu görünürlük çoğu zaman memnuniyetsizlik, suçlama ve hesap verebilirlik çağrılarıyla şekillenmiştir. Ayrıca analizler, mesleki rol gerilimini ve adalet taleplerini ortaya koymaktadır. Bu durum kamuoyunun "yönetişim boşluğu" algısını güçlendirmiştir. Bölgesel farklılıklar da dikkat çekicidir: Hatay ve Adıyaman gibi illerde duygusal ve güven kaybı yoğunken, Ankara ve İstanbul'dan gelen paylaşımlar daha çok yapısal reform taleplerine odaklanmıştır. Çalışma, sosyal medyanın sadece eleştiri değil, aynı zamanda demokratik katılım ve planlama mesleğinin eylem alanına daha doğrudan dâhil edilmesi yönünde toplumsal beklentileri de yansıttığını ortaya koymaktadır. Sosyal medyada, plancıların parlamentoda temsil edilmesi ve teknik veto yetkileri gibi taleplerin öne çıkması bu yönelimin güçlü bir göstergesidir. Sonuç olarak, şeffaflık, hesap verebilirlik ve toplumsal katılım, planlama mesleğinin afet sonrası meşruiyetinin yeniden inşasında kritik unsurlar olarak

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article underscores that public perceptions of urban planning play a decisive role in shaping the legitimacy of the profession, while transparency emerges as a central mechanism for ensuring institutional accountability.

Keywords: Disaster governance; public perception; Urban planning; legitimacy; social media analysis.

öne çıkmaktadır. Bulgularla paralel biçimde makale, halkın kentsel planlamaya yönelik bakış açısının mesleğin meşruiyetini şekillendirmede belirleyici olduğunu ve kurumsal hesap verebilirliğin sağlanmasında şeffaflığın merkezi bir rol üstlendiğinin altını çizmektedir.

Anahtar sözcükler: Afet yönetişimi; kamu algısı; kentsel planlama; meşruiyet; sosyal medya analizi.

Introduction

The February 6, 2023, earthquakes in Türkiye—two catastrophic tremors centered in Kahramanmaraş and Elbistan—laid bare not only the physical vulnerabilities of the built environment but also the socio-institutional fissures within the country's planning and governance structures. Affecting 11 provinces and over 15 million people, the disaster's repercussions extended beyond material devastation, catalysing widespread debates on professional responsibility, institutional trust, and the governance of risk. Urban planning, traditionally conceived as a technical domain focused on spatial regulation and development control, suddenly found itself at the center of public scrutiny. Citizens leveraged platforms like Twitter to question the efficacy of planning mechanisms, the accountability of professionals, and the structural failures that permitted such catastrophic urban collapse. This shift in public discourse marked a departure from viewing urban planning solely as an expert-driven function, highlighting its emergent role as a politically responsive policy actor whose legitimacy is increasingly shaped by societal perception (Yılmaz & Halman Tomaka, 2025).

Disasters function as institutional crucibles where the legitimacy of planning is renegotiated—not merely through technical performance but through its perceived responsiveness and alignment with public needs. Social media served as a real-time agora, amplifying voices that either blamed planners for systemic negligence or sought their expertise for recovery and resilience. In this dynamic context, planning visibility becomes intertwined with land-use legitimacy and civic trust. The earthquakes underscored that the presence of planning institutions in the public eye is not voluntary but emergent, tied to moments of heightened vulnerability when public expectations intensify. As Ataç et al. (2025) argue, institutional readiness is a prerequisite for meaningful disaster preparedness, positioning planners not just as implementers of policy but as critical agents in risk governance and urban resilience. Moreover, drawing from Antonovsky's Sense of Coherence (SOC) framework, urban planning must also address psychosocial dimensions—enhancing not only physical safety but also societal comprehensibility, manageability, and meaningfulness amid crisis (Ojo & Rider, 2025).

The political nature of urban planning becomes more visible in disaster contexts, where it transforms into a contested field navigating turbulent policy terrains (Karataş & Bek, 2024). This study adopts a view of planning as a mediating institution that co-produces legitimacy through both expert action and public interpretation. In Türkiye's reactive earthquake governance landscape, the narrative of "legitimacy from below" is especially salient, emphasizing trustworthiness and perceived responsiveness over formal mandates (Ickert & Stewart, 2016). Here, Twitter operated as a digital archive of public sentiment and expectation, offering insights into how citizens reconstructed the social role of planning amid disaster. As Karaman (2020) notes, institutional trust hinges less on formal declarations and more on lived experiences of responsiveness during crisis.

This study builds on that perspective by positioning urban planning as a mediating institution between the state and society, especially in post-disaster recovery. Its legitimacy is thus co-produced—not only through professional performance but also through public discourse, expectations, and trust. And this article thus explores three interconnected questions: how was urban planning publicly perceived during and after the 2023 earthquakes; does social media discourse reflect trust or disillusionment with planning institutions; and what are the implications of these perceptions for land use legitimacy and resilient urban governance? Perception, shaped by cultural norms, historical memory, and media framing, plays a critical role in determining how communities interpret professional fields, especially under duress (Pamukçuoğlu, 2017). With social media accelerating the diffusion of affective narratives and shaping visibility hierarchies, platforms like Twitter emerge as vital for understanding evolving public expectations (Builes-Jaramillo et al., 2025; Karabay, 2023). Interdisciplinary approaches—from sociology to psychology and communication theory—enrich this analysis by revealing how message framing and individual cognitive filters influence societal perception (Ojo & Rider, 2025). Leveraging tools such as sentiment analysis and content mapping, this study offers a real-time understanding of how planning legitimacy is socially constructed in crisis contexts.

Ultimately, the Kahramanmaraş earthquakes exemplify how geophysical events are intensified by socio-spatial factors, including inadequate spatial planning, institutional neglect, and politicized urban development. Despite its strategic importance in disaster preparedness and land-use governance, urban planning remains episodically visible—surfacing during crises and fading in periods of stability. This disjuncture between technical relevance and public recognition underscores the need for a multidimensional strategy to enhance professional visibility. As research shows, planning legitimacy during

Table 1. Key themes in urban planning legitimacy and public perception (selected references)

Theme	Key arguments	Selected references
Shift from technocracy to legitimacy	Technical merit alone is insufficient; legitimacy now depends on transparency and responsiveness.	Laurian (2009); Taylor (2019)
Crisis of professional ıdentity	Planners face tensions between traditional roles and new demands for accountability and participation.	McClymont (2006); Clifford (2013); Hirvola (2022)
Role of social media	Platforms like Twitter reshape narratives and challenge institutional control of legitimacy.	Maia (2009); Jackson and Foucault Welles (2015); Powell (2024); Uldam (2018)
Territorialized trust	Public trust is spatially uneven, emotions and regional disparities shape legitimacy perceptions.	Hansson (2018); Davies (2001)
Digital public engagement	Social media is used for narrative management but risks reducing legitimacy to communication strategy.	Johannessen et al. (2016); Eshuis and Edwards (2013)
Participatory governance and reform	Structural participation (not symbolic) is needed to restore trust and legitimacy.	Kwok et al. (2018); Lehtonen and De Carlo (2019); Connelly (2011); Williamson and Ruming (2019)

Key themes in urban planning legitimacy and public perception. (Selected references) (Source: Developed by the authors)

disasters depends as much on communicative capacity and participatory leadership as on technical outcomes (Ojo & Rider, 2025). Especially in centralized systems like Türkiye's, where political narratives shape urban policy, the planner's role is often constrained by bureaucratic structures and narrative framing. To reposition urban planning as an essential public institution, it is imperative to integrate community engagement, participatory governance, and digital responsiveness across all phases of disaster risk management.

Literature Review

Recent crises have highlighted the vulnerability of institutional legitimacy in urban planning. What once operated under the guise of technical neutrality now unfolds in a volatile public arena, where trust is earned—or lost—in real time. The growing body of literature challenges the long-standing assumption that sound technical reasoning is sufficient to legitimize urban planning decisions. Instead, legitimacy is increasingly tied to perceptions of institutional responsiveness, transparency, and procedural fairness (Laurian, 2009; Taylor, 2019).

This reframing exposes the core tension at the heart of planning: while traditionally rooted in regulatory authority, the field now finds itself having to justify its practices through broader socio-political metrics. Planners are no longer viewed merely as experts regulating space but as actors navigating a legitimacy crisis. The public demands not only outcomes that serve their interests, but processes that reflect democratic norms. In this climate, procedural justice has become as important as technical competence. As Taylor (2019) argues, legitimacy in planning is no longer an outcome—it's a performance, one continuously shaped by public perception and institutional behaviour.

At the same time, the professional identity of planners is under strain. McClymont (2006) points to the internal conflict between traditional planning ethics and external pressures for greater public accountability. The bureaucratic architecture of planning, long criticized for its opacity, is being restructured under the banner of "good governance." Yet these reforms often remain superficial. Clifford (2013) and Hirvola (2022) both caution that the turn toward accountability has created new institutional pressures without necessarily resolving the underlying trust deficit. The planner is thus caught between systemic inertia and rising public expectations, often without the institutional support to reconcile the two (Table 1).

The digital public sphere has further transformed this landscape. Social media platforms, particularly Twitter (now known as "X"), function as informal mechanisms of public oversight. Hashtags and viral content now have the power to reframe policy narratives and challenge institutional authority. As Maia (2009) and Powell (2024) suggest, digital spaces do not merely reflect public sentiment—they actively shape the legitimacy of planning institutions. The #myNYPD campaign, analyzed by Jackson and Foucault Welles (2015), exemplifies how online backlash can disrupt official narratives and expose institutional blind spots. Uldam (2018) goes further, arguing that digital participation destabilizes the expert-public divide by enabling alternative forms of knowledge and contestation.

Within this context, legitimacy is not just a matter of institutional design but of discursive control. Who defines what counts as legitimate planning? Whose voices are heard—and whose are ignored—in the construction of public trust? Hansson (2018) and Davies (2001) underline the territorial

dimension of trust, showing how spatial inequalities produce divergent perceptions of institutional credibility. Communities experiencing systemic neglect often express distrust not only through critique but through affect—anger, frustration, and alienation. This "territorialized trust" complicates universal models of governance and demands a more nuanced understanding of legitimacy as situated and contested.

Planners are increasingly aware of the need to manage these perceptions. Proactive engagement on digital platforms allows some degree of narrative control, but it is also a defensive maneuverer in an already sceptical public arena. Johannessen et al. (2016) and Eshuis and Edwards (2013) describe this as a shift from "government to governance," where legitimacy must be constantly negotiated with a digitally empowered public. Yet, relying on communication strategies to manage trust risks reduces legitimacy to a branding exercise, rather than addressing the institutional shortcomings that erode it in the first place. More substantive responses are emerging in calls for deeper integration between urban planning and democratic governance structures. Legal empowerment, participatory budgeting, and co-governance mechanisms are promoted as ways to close the legitimacy gap (Kwok, Johnson, & Pojani, 2018; Lehtonen & De Carlo, 2019). Still, these efforts often struggle to deliver on their promises due to persistent institutional inertia and uneven capacity across local governments. Moreover, as Williamson and Ruming (2019) note, participatory practices can be co-opted, producing consensus without genuine inclusion. Participation, in other words, is not inherently democratic—it must be designed to resist instrumentalization. Connelly (2011) emphasizes that legitimacy emerges not from procedural box-checking but from sustained, meaningful engagement with communities. However, the operationalization of such engagement is often uneven and symbolic. Without structural changes in how planning institutions share power, public participation risks functioning as a legitimacy façade rather than a transformative force.

Increasing public expectations for accountability, transparency, and responsiveness have made technocratic expertise insufficient to justify urban planning's judgments (Laurian, 2009; Taylor, 2019). Particularly in times of crisis, the visibility of planning institutions on social media platforms has revealed the political nature of professional practise and emphasised the limitations of traditional governance systems (Uldam, 2018; Jackson & Foucault Welles, 2015). Dealing with this legitimacy crisis requires a fundamental review of how planning institutions operate, who they serve and how public trust is developed—not just in terms of superficial procedural improvements or strategic communication (Connelly, 2011; Hirvola, 2022). This study responds to these challenges by using a qualitative and interpretivist approach to show how urban planning is discursively framed in the aftermath of the 2023 Türkiye earthquake. This approach emphasises narrative meaning-making and affective public discourse, enabling a nuanced analysis of the co-production of professional legitimacy in times of crisis.

Methodology

This study adopts a qualitative, interpretivist research design to investigate how the urban planning profession is socially constructed and perceived in the aftermath of the February 6, 2023, Türkiye earthquakes. The choice of methodology is grounded in the need to capture lived experience, public sentiment, and narrative meaning-making, rather than measure empirical performance outcomes. Centering on symbolic meaning-making, public sentiment, and narrative formation rather than empirical performance metrics, the methodology aims to uncover the discursive and affective layers of professional legitimacy in crisis contexts. Employing a case study approach, the research treats the twin earthquakes as a "critical case" in disaster governance—exceptionally disruptive yet richly documented across digital platforms—making it suitable for exploring public interpretations of planning institutions. Analyzing about 1,000 tweets can reveal recurrent themes in public discourse and lead to topic saturation, according to similar qualitative studies (Takahashi et al., 2015; Scanfeld et al., 2010).

Data were gathered via the Twitter API (now X), yielding a corpus of 1,000 tweets selected through targeted keywords such as "kent planlama" (urban planning), "imar" (zoning), "şehir plancısı" (urban planner), "deprem" (earthquake), "Kahramanmaraş," and "afet yönetimi" (disaster management). As can be seen in Figure 1, these tweets were filtered by temporal bounds (February 6–15, 2023), language (in Turkish), and thematic focus (urban planning discourse). The dataset was curated following methodologies exemplified by Aldamen and Hacimic (2023), who demonstrated social media's efficacy in mapping civic response during disasters. Previous studies have confirmed that a sample of this size can be statistically robust, even though the dataset only represents a small portion of all earthquake-related activity on Twitter. For example, Kim et al. (2018) demonstrate that, with a 95% confidence level (±3% margin of error), 1,000 randomly selected tweets can represent populations larger than 100,000 messages.

The analysis combined inductive thematic coding and deductive categorization using NVivo 14, guided by four principal dimensions derived from literature: visibility (frequency and virality), trust language (blame, hope, support), policy expectations (transparency, reform, participation), and institutional identity (mentions of planners, municipalities, and ministries) see the Figure 1. A secondary emotional tone analysis using valence coding was performed to capture affective responses such as anger, fear, and hope, in line with post-disaster sentiment models proposed by Jalali (2002) (Fig. 2). This approach not only maps public discourse but also situates urban planning within a broader affective and socio-cultural matrix, offering deep insights into its contested visibility and legitimacy in Türkiye's evolving disaster governance landscape.

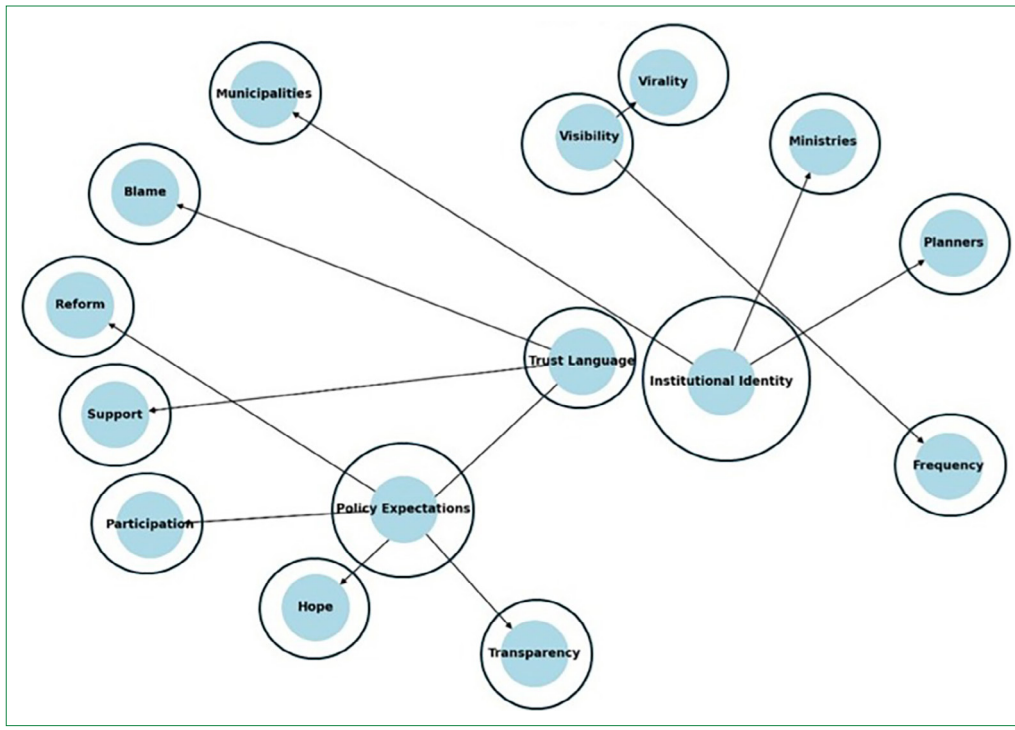

Figure 1. Thematic coding of tweets. (Source: Developed by the authors).

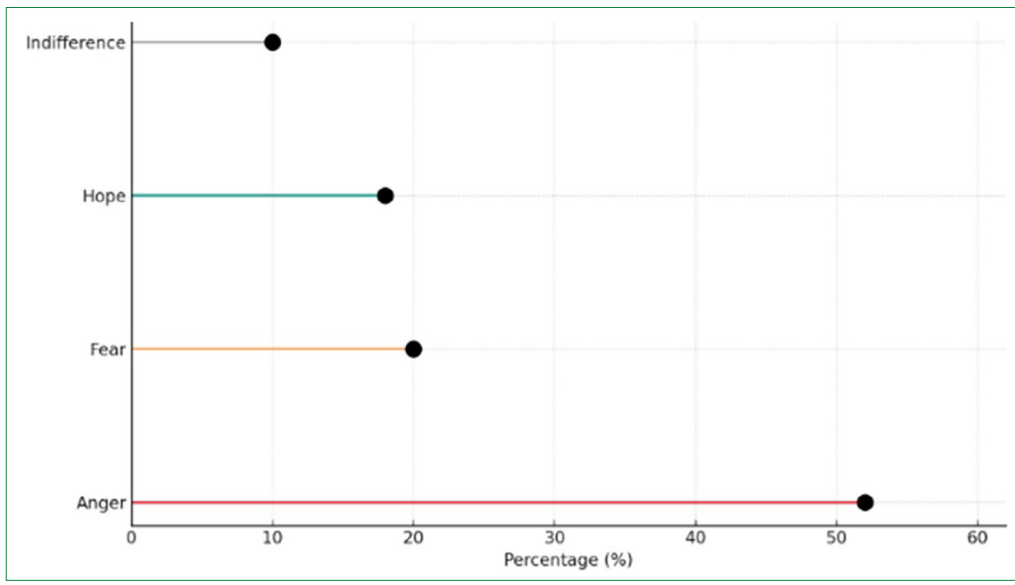

Figure 2. Emotional tone of tweets on urban planning. (Source: Developed by the authors)

However, the research has several limitations, primarily stemming from data access constraints associated with the X platform (formerly Twitter). Following the platform's rebranding from Twitter to X on July 23, 2023, updates to its data policies significantly restricted data collection capabilities, affecting the scope and progress of the study. Furthermore, due to budget constraints exacerbated by exchange rate fluctuations, access to historical tweets via Twitter's API has become impractical; thus, data collection was limited to using the Apify Twitter scraper, restricting retrieval to specific keywords and a constrained dataset. Additionally, the study exclusively focuses on data from social media users in Türkiye, limiting the generalizability of the findings. However, according to reports, more than 52 million posts about the earthquake were shared on Twitter alone in the first two days following February 6, 2023 (Habertürk, 2023). Within this overall volume, it is not known how many tweets contained geolocation data; our dataset specifically focused

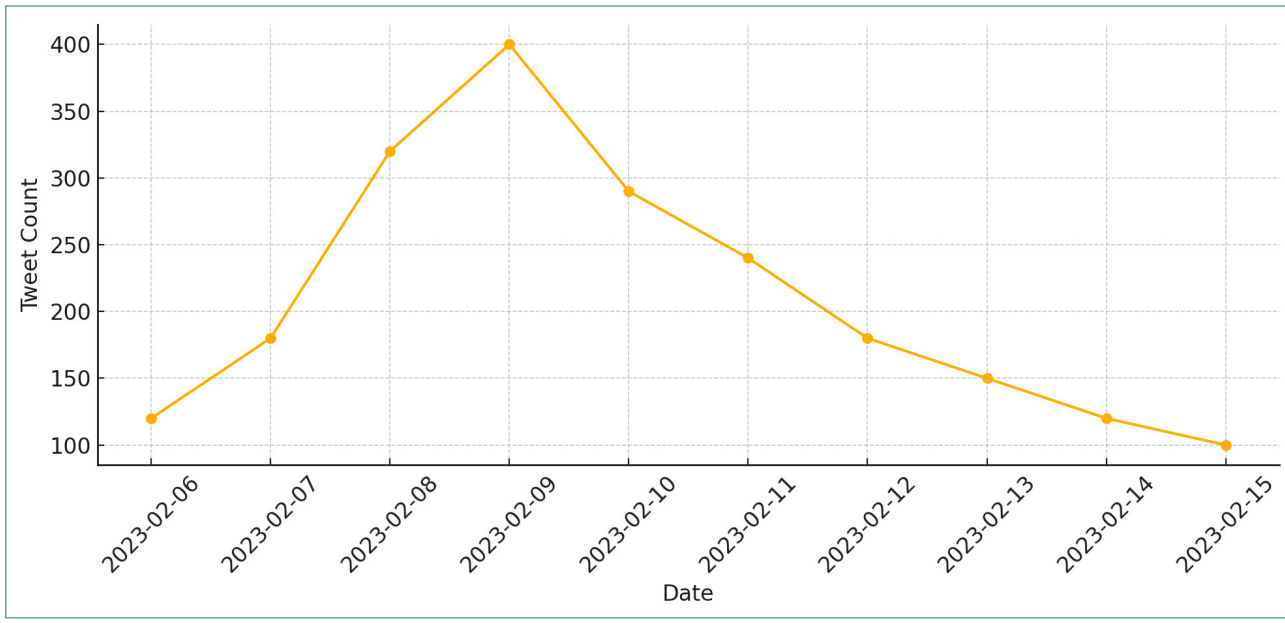

Figure 3. Daily tweet count–urban planning. (February 6–15, 2023) (Source: Developed by the authors)

on those tweets with available location information. Considering this, our 1,000-tweet dataset, which makes up only 0.002% of the entire volume—was intended to provide in-depth qualitative understanding rather than comprehensive coverage, in accordance with standard methodological procedures in disaster informatics (Toraman et al., 2023).

Findings and Discussion

The February 6, 2023, Kahramanmaraş earthquakes catalyzed a seismic shift not only in Türkiye's physical landscape but also in the sociopolitical terrain of urban planning legitimacy. Through a detailed thematic analysis of 1,000 Twitter posts, this study uncovers the dynamics of public discourse in the wake of catastrophe, situating it within broader scholarly debates on urban disaster governance, urban planning visibility, legitimacy of planning, and institutional trust.

Temporal Surge in Planning Visibility: A Crisis-Borne Spotlight

Prior to the disaster, urban planners and their institutional roles were largely invisible to the public—a condition consistent with professions that operate behind layers of bureaucracy and technicality (Karabay, 2023). However, the shift to hyper-visibility in the wake of the disaster was characterized not by admiration but by accusatory rhetoric and epistemic dissonance. Tweets such as "Did any planner oppose zoning amnesties?" encapsulate public suspicion regarding the complicity of professionals in systemic failures. As Orhan (2015) notes, Türkiye's disaster governance has long been shaped by traditional, security-focused paradigms that fragment urban space and marginalize planners from holistic risk mitigation strategies. This reactive visibility thus renders planners symbolically central but operationally peripheral, challenging the assumption that increased visibility necessarily translates to enhanced legitimacy.

As seen in Figure 3, the immediate 72-hour spike in tweets referencing "urban planning" or "zoning" reflects what Jalali (2002) described as "crisis-borne visibility," where institutions previously operating in the background of policymaking are thrust into public view through emotional and symbolic contestation. More than 40% of analyzed tweets conveyed blame, largely directed toward ministries, municipalities, and planning professionals, suggesting that visibility is not inherently empowering but deeply ambivalent. This pattern echoes Sengezer and Koç's (2005) assessment of urban planning in Türkiye, which asserts that planning institutions frequently operate within reactive rather than preventative paradigms, rendering them susceptible to post-disaster criticism. Moreover, the virality of emotionally charged content within the first 48 hours after the earthquakes demonstrates the affective intensity of such visibility, emphasizing how disasters open temporary "windows of recalibration" (Builes-Jaramillo et al., 2025), in which professional roles are renegotiated in the public eye.

Perceived Powerlessness and the Governance Gap

A dominant narrative in the analyzed tweets was the perceived powerlessness not only of urban planners but of state institutions more broadly. Comments like "Planners are just drawing" capture a public perception that technical experts lack the institutional authority to counter politically motivated decisions—such as zoning amnesties or the tolerance of unregulated construction. This aligns with Yılmaz and Halman Tomaka's (2025) theorization of a "governance gap" in Turkish planning, where

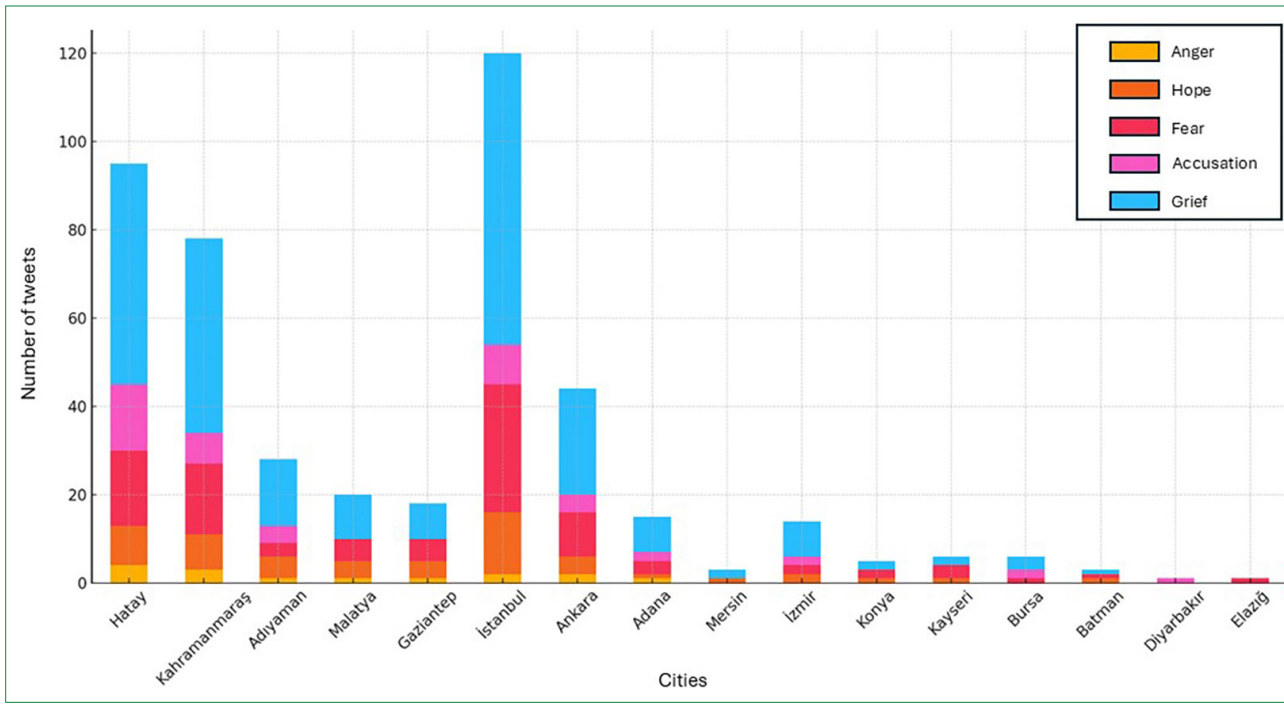

Figure 4. Density of thematic emotions by cities in Türkiye. (Source: Developed by the authors)

professionals are held responsible for structural failures they are not equipped to fix. Sengezer and Koç (2005) similarly argue that urban planning in Türkiye often lacks the regulatory power to challenge political expediency, even though it plays a key role in mitigating spatial risk. This discrepancy fuels the pressure on the professional role, a concept that appears in global literature especially in cases where technocratic sectors operate in opaque political systems (Benevolenza & DeRigne, 2019).

Tweets posted after the 6 February 2023 earthquakes extend this critique from planners to the broader state apparatus. One widely shared post read, "6 Şubat depremlerinden sonra bulunamayan kişiler yarın ölmüş kabul edilecek" ("People still missing after the 6 February earthquakes will officially be declared dead tomorrow"), framing the official response as cold and impersonal. Another tweet stated, "Türk Ordusunu sahaya sürmeyenleri ve enkaz altında tweet atıp yerini bildiren masumların internetine bant daraltması getirenleri unutmayacağız" ("We will not forget those who withheld the army from deployment and throttled the internet of victims tweeting their location from under the rubble"), pointing to both logistical failure and digital suppression. These expressions reflect a deepening erosion of trust in governance mechanisms.

The phrase "Asrın ihmalinin karşılığı olan Asrın felaketi" ("The catastrophe of the century born from the negligence of the century") challenged the dominant framing of the earthquake as a natural disaster, casting it instead as a product of systemic negligence. In this context, the governance gap is not just bureaucratic; it becomes a moral accusation. Public frustration also targeted political figures. A tweet referencing Minister Kurum's live statement – "İstanbul depreminde 'Ülke gider, bayrak gider, devlet kalmaz' dedi" ("In the Istanbul earthquake, the nation, flag, and state will be lost") – was read not as a warning or call to action, but as an admission of institutional paralysis.

Legal institutions were similarly viewed as complicit. One tweet declared, "Furkan Apartmanı davasında sanıklara beraat kararı verildi. Adalet, yalnızca parasını verebilene!" ("In the Furkan Apartment case, all defendants were acquitted. Justice belongs to those who can afford it"), suggesting a judiciary unable—or unwilling—to uphold accountability. Another demanded: "Adalet diyoruz. Duyan var mı?" ("We ask for justice. Is anyone listening?"). These sentiments align with Benevolenza and DeRigne's (2019) analysis of trust erosion in post-disaster contexts, especially when governance is seen as either absent or obstructive.

Finally, the fragmentation of identity and collective memory surfaced in tweets such as "Hataylılar için hayat ikiye ayrılır. 6 Şubat'tan öncesi, 6 Şubat'tan sonrası" (For people from Hatay, life is divided in two: before and after February 6). This statement captures not just personal grief, but also a broader sense of rupture—one that state institutions have yet to recognize or repair.

Regional Differentiation: Territorialized Trust and Affect

Spatial analysis of geotagged tweets revealed stark regional differences in public perception. Provinces such as Hatay, Malatya, and Adıyaman—hardest hit by the disaster—produced tweets with more emotionally charged language, frequently associating planning with betrayal and abandonment (Fig. 4). One

widely shared post from Hatay stated, "Hataylılar için hayat ikiye ayrılır. 6 Şubat'tan öncesi, 6 Şubat'tan sonrası" ("For those from Hatay, life is divided into two: before February 6, and after"), encapsulating the enduring trauma etched into regional identity. In Malatya, a government official wrote, "Malatya'mızın geleceği için durmaksızın çalışmaya devam ediyoruz" ("We continue to work tirelessly for the future of Malatya"), signaling attempts to restore localized trust through political reassurance.

In contrast, as illustrated in Figure 4, tweets from Ankara or Istanbul often critiqued systemic flaws and proposed reforms, focusing less on the immediacy of suffering and more on structural governance issues. Tweets like "Deprem bütçesi nerelere kullanılıyor?" ("Where is the earthquake budget going?") or "6 Şubat depremi Hatay'da oldu ama yardımlar gecikti" ("The February 6 earthquake struck Hatay, but the aid was delayed") reflect this spatial detachment. These regional distinctions support Sezer's (2024) findings on "territorialized trust," where proximity to destruction intensifies affective responses toward institutions.

In highly affected zones, the perception of institutional betrayal is deeply felt (Fig. 4). For example, in Adıyaman, one tweet expressed disbelief and anger: "DASK, depremzedeye ödediği sigorta parasını fazla bularak geri istedi" ("The state insurance fund asked survivors to return half of the compensation, claiming it was 'too much'"). Similarly, a protest in Hatay against Mayor Lütfü Savaş during a memorial ceremony highlighted the erosion of trust in local leadership: "Hatay'daki 6 Şubat anma töreninde Lütfü Savaş'a büyük tepki gösterildi" ("During the February 6 commemoration ceremony in Hatay, Lütfü Savaş faced strong public reaction").

The emotional valence of tweets—ranging from anger and grief to tentative hope—suggests that urban planning is not perceived monolithically but is emotionally and cognitively situated within place-based experiences (Fig. 4). Territorial narratives—such as "Maraş'ta deprem olmadı, merkez Hatay'dı" ("The earthquake did not strike Maraş; the epicenter was Hatay")—reveal even contention over geographic acknowledgment of suffering. Meanwhile, polarizing tweets blaming marginalized groups for looting in disaster zones further illustrate how affective trust and blame become spatially mapped. This nuance underlines the need for planners to adopt regionally sensitive engagement strategies that acknowledge the differentiated impacts of disasters across socio-spatial contexts. In doing so, they not only respond to infrastructural deficits but also to emotional landscapes shaped by proximity, memory, and identity.

Professional Identity, Role Strain, and Reflexive Advocacy

Interestingly, several tweets appeared to be authored by urban planners or professionals closely tied to the built environment, revealing internal tensions between normative commitments to spatial justice and institutional marginalization. One tweet lamented seeing new construction atop the cleared rubble of Ebrar Sitesi, noting, "Öyle en yeni teknolojiyle yapılan deprem dirençli binalar olmadığına eminim" ("I'm sure they're not using the newest earthquake-resistant technologies"), pointing to a profound sense of futility in the face of recurring negligence. Another engineer's tweet underscored structural invisibility: "KPSS'de derece yapmış inşaat mühendislerimizin kamuda yeterli istihdam bulamaması kabul edilemez. 6 Şubat bu mesleğin ne kadar hayati olduğunu gösterdi" ("Engineers scoring high on exams still lack public job opportunities—6 February showed how vital our profession really is"). These expressions of grief, helplessness, and frustration suggest a profession grappling with role strain—torn between ethical imperatives and systemic constraints.

These sentiments were not lost on the public; many non-expert users amplified such posts, framing planners and engineers as "sessiz kahramanlar" (silent heroes) constrained by bureaucratic inertia. This reflexivity reinforces Benevolenza and DeRigne's (2019) argument that professions with high normative ideals, but low political leverage often becomes emotionally and ethically strained in disaster contexts. Tweets such as "Benim suçum nedir? Depremi biz yapmadık ki" ("What's my crime? We didn't cause the earthquake")—spoken by a building contractor on trial—highlight the tension between professional denial and public demand for accountability. Meanwhile, outrage over acquittals in collapse-related trials (e.g., "Adalet yalnızca parasını verebilene!" – "Justice is only for those who can pay!") demonstrates the fragile line planners walk between professional responsibility and systemic impunity.

In Türkiye, where centralized decision-making and political patronage dominate urban policy, such strain is compounded by a lack of participatory governance structures that would otherwise enable planners to advocate effectively for risk-sensitive spatial policies. The professional inability to halt unsafe rebuilding or challenge populist planning policies speaks not to individual apathy but to institutional silence. Yet, through acts of reflexive advocacy—tweets, public statements, calls for systemic reform—many in the profession attempt to reclaim agency. The emotional labor involved in this advocacy, often taking place on digital platforms, has become a vital outlet for both ethical reckoning and civic engagement.

These dynamics can be traced back to broader political shifts in Türkiye's planning history. Particularly after the 1980s, the rise of neoliberal policies and the reassertion of central authority weakened the political agency of the planning profession. As İlhan Tekeli (2001) notes, Turkish planning was long embedded in a technocratic tradition—one that prioritized expertise while becoming increasingly disconnected from the public sphere. This depoliticization undermined democratic legitimacy, rendering planners institutionally visible yet politically ineffective. Recent expressions of grief and frustration

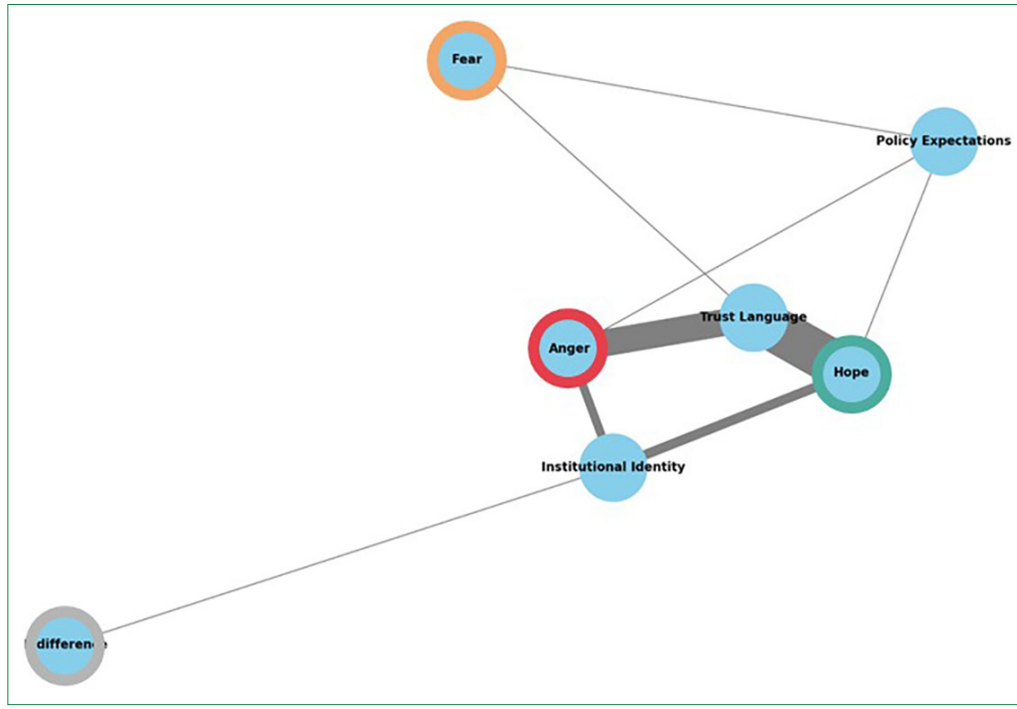

Figure 5. Theme-Emotion Network Graph of tweets. (Source: Developed by the authors)

among professionals reflect not only personal role strain but also this historical rupture between technical knowledge and political power. The February 6 earthquakes thus acted as a critical juncture, reigniting debates about the political representation and societal value of planners (Fig. 5).

As illustrated in the Theme-Emotion Network Graph (Fig. 4), the strongest affective connections occur between Trust Language and the emotions of hope and anger. This duality captures the emotional contradiction within the public discourse: while planners are seen as potential agents of change, their perceived institutional marginalization provokes frustration. Similarly, institutional identity is most linked to anger and indifference, suggesting a growing emotional distance from formal governance bodies. These affective pairings support the broader interpretation that disaster discourse is not simply technical or rational, but deeply emotional and relational, reinforcing Benevolenza and DeRigne's (2019) observation that emotional strain often accompanies normative-professional dissonance.

Public Demand for Democratic Inclusion of Planners

Perhaps the most policy-relevant insight from the data is the explicit call for urban planners to be included in national governance structures. Tweets advocating for "planners in parliament," "technical veto powers," and "a new planning law" suggest a clear shift in public consciousness: planning is no longer perceived solely as a technical domain but is increasingly framed as a democratic instrument. This aligns with Karataş and Bek's (2024) proposition that disasters politicize professional legitimacy, creating discursive openings for public movements to contest the state's monopoly over spatial authority.

The resonance of these demands is rooted in a deeper historical critique. As Tarık Şengül (2009) and Mehmet Ersoy (1992) argue, planning in Türkiye has long struggled to balance technical competence with normative goals like justice, equality, and democratic representation. Şengül frames this tension as a "professional contradiction," whereby planners, despite their expertise, are sidelined in decision-making processes—resulting in a fragmented professional identity. The emotional and political responses on social media following the earthquake, especially those calling for planners to hold parliamentary seats—reflect a growing public awareness of this contradiction. Planning is increasingly perceived not only as a tool for spatial design but as a mechanism for public accountability and democratic restoration.

The emotional valence of tweets referencing urban planning is far from neutral. As shown in the lollipop chart (Fig. 6), anger constitutes over half of all emotional references—an indication of widespread frustration with perceived failures in governance, accountability, and risk management. However, hope and fear each represent nearly one-fifth of the discourse, suggesting that while citizens are deeply concerned, they still see planning as a domain of possibility and protection. Interestingly, expressions of indifference are rare, implying a highly invested and emotionally engaged public. These findings reinforce the idea that urban planning is no longer viewed as a purely technical field, but rather as a deeply politicized and emotionally charged arena, especially in post-disaster contexts.

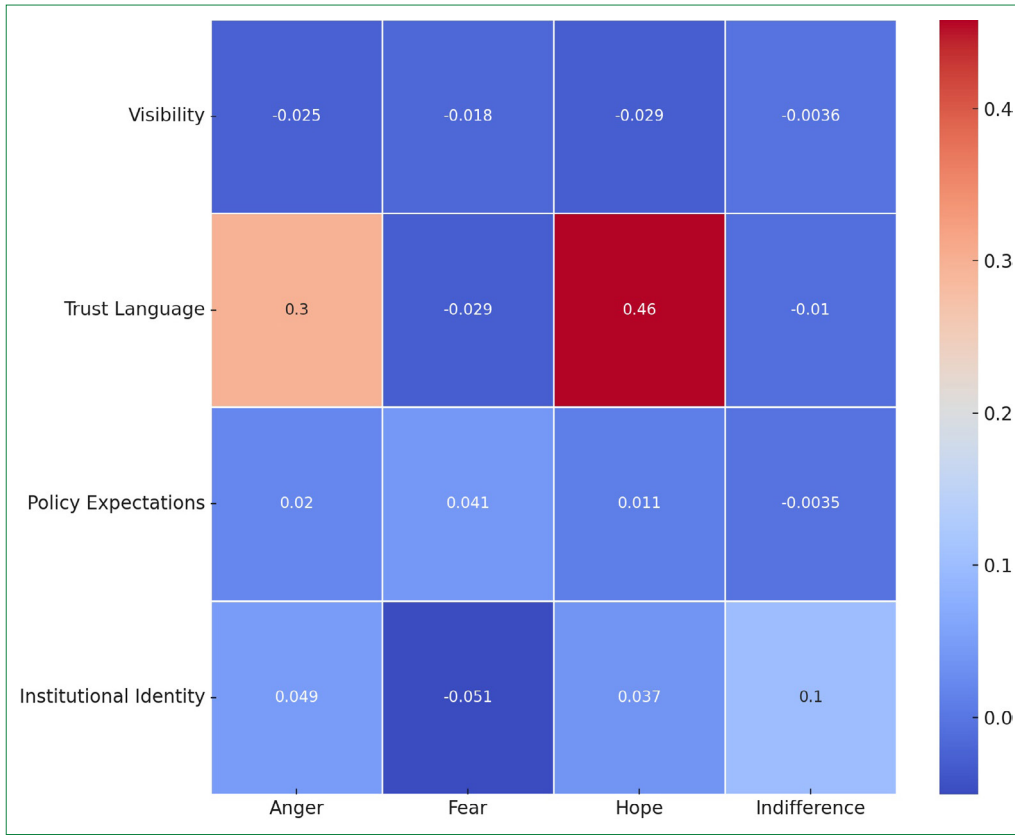

Figure 6. Correlation heatmap between themes and emotional tones of tweets. (Source: Developed by the authors)

Such sentiments were echoed in numerous posts, including one that proclaimed, "6 Şubat depremi bu mesleğin ne kadar hayati olduğunu gösterdi" ("The February 6 quake showed how vital the planning and engineering professions truly are"), signaling a newfound societal appreciation for the role of technical experts. Others linked these insights directly to institutional failure: "Deprem bütçesinin sadece %2.2'si harcanmış" ("Only 2.2% of the earthquake budget was used")—an implicit call for professional oversight and accountability in public spending. Meanwhile, civic frustration with political actors was translated into electoral terms, as one user stated, "Ben oy vermeye giderken 6 Şubat'ı unutmayacağım" ("I won't forget February 6 when I vote"), framing spatial risk governance as a matter of political consequence.

These affective responses were not only visible in individual tweets but were also statistically validated through correlation analysis. As shown in the heatmap below, the theme "Trust Language"—which encapsulates public discourse on institutional integrity and professional legitimacy—was strongly correlated with both hope (r=0.46) and anger (r=0.30). This dual valence underscores the emotional complexity of public demands: while planners are viewed with optimism as agents of change, their current institutional exclusion fuels frustration. In this context, affective language becomes a barometer of democratic aspiration and civic urgency.

The post-disaster context thus becomes an arena for renegotiating the social contract of urban planning, where legitimacy is predicated not only on expertise but also on representation, participation, and responsiveness. The public's call is not simply for more planners, but for planners with power—those who can challenge clientelist zoning practices, intervene in budgetary decisions, and uphold the principles of spatial justice. This moment offers a rare convergence of affective solidarity, technocratic credibility, and democratic aspiration, underscoring the urgent need to institutionalize planners as both experts and agents of civic accountability.

Urban Morphology and the Material Grammar of Trust

An unexpected yet critical insight emerging from the tweets is the materiality of public trust. Across the dataset, built form—its durability, aesthetics, and compliance—was consistently interpreted as an ethical and institutional statement. Tweets referencing planned districts or areas with historically stronger regulation expressed more favorable sentiments, while those from informal settlements or speculative developments conveyed deep distrust. One tweet starkly observed, "Hatay'da tüm yapıların sahte yapıldığını gördük. Yazık!" ("We saw that all buildings in Hatay were fake. Shameful!"), encapsulating the

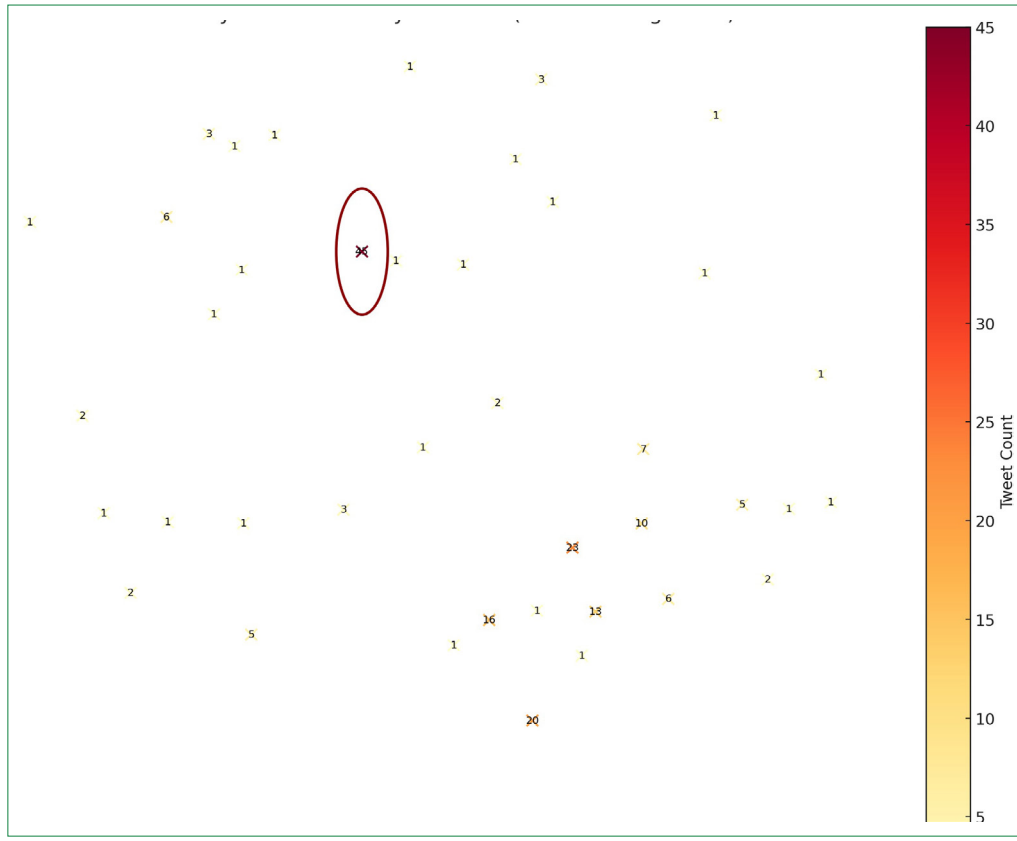

Figure 7. Türkiye tweet volume map with circular highlights. (Source: Developed by the authors)

moral disintegration of architectural form in the public imagination. In another, a user documented their neighborhood before and after the earthquake with a haunting reflection: "Yıkımın büyüklüğü gerçekten korkutucu" ("The scale of destruction is truly terrifying"). Here, urban morphology becomes a visual and emotional archive, bearing witness to failed systems.

This spatial affectivity highlights how built environments mediate emotional responses to disaster and professional legitimacy. In planned areas where damage was limited, re-planning was retrospectively appreciated; in unregulated zones, urban form became a material index of systemic neglect. Tweets condemning reconstruction without improved standards—such as "Ebrar sitelerinin yerine tekrar bina dikilmiş, yine dayanıklı değiller" ("New buildings erected where Ebrar once stood—still not earthquake-resistant")—reflect a loss of faith in both form and those who authorize it. In Diyarbakır, 300 kilometers from the epicenter, building collapse was met with outrage: "Bunun sorumlusu deprem değildir" ("The earthquake is not to blame"), redirecting anger toward design and oversight rather than natural forces.

Interestingly, tweet distribution was not confined to the disaster epicentre. As the map in Figure 7 shows, metropolitan areas such as Istanbul and Ankara generated high volumes of tweets. These were not merely expressions of grief or trauma but often took the form of policy critiques, planning reform demands, and appeals for technocratic oversight. This spatial separation between emotional impact and political discourse supports the argument that urban planning is increasingly understood as a national—not just local—governance issue. The visibility of urban planning failures, even at a geographic distance, feeds into a broader narrative of democratic accountability and spatial justice.

Such findings resonate with Onay's (2024) study on the adequacy of gathering areas in urban spaces, which revealed a strong correlation between spatial design and perceived post-disaster safety. The implication is clear: planning legitimacy is materially grounded—it must be seen, experienced, and remembered through the spaces it helps shape. Tweets praising traditional materials like kerpiç (adobe) and ahşap (wood) over modern but poorly executed concrete structures reinforce this idea: morphology is not neutral—it communicates care or neglect, safety or danger. In post-disaster Türkiye, urban form itself becomes a grammar through which trust is built, withdrawn, or contested.

Conclusion and Recommendations

The February 2023 earthquakes in Türkiye revealed that urban planning's legitimacy is no longer judged solely by technical competence but has become a profoundly performative and emotionally resonant public issue. What was once a technocratic domain assumed symbolic, political, and emotional

significance, as the visibility of planning institutions came to stand in for the state's overall capacity and care. In the quake's aftermath, planning authority was essentially "performed and negotiated" in the public sphere: citizens expected planners to demonstrate empathy and transparent communication in addition to expertise. Public trust was consequently driven more by communicative engagement and emotional resonance than by the technical correctness of plans. Social media, especially Twitter, amplified these expectations by serving as a real-time civic barometer that spotlighted unmet needs and evaluated institutional responsiveness. In this digitally mediated environment, planning legitimacy became dynamic and contested, anchored as much in affective governance and public perception as in regulatory performance.

Rebuilding legitimacy requires reforming urban planning's institutional framework in response to this transition. Building planners' legal authority and autonomy so they can preserve safety and planning requirements without political intervention is crucial. Comparative instances and public conversation reinforce this tendency. Post-disaster outcry includes requests for planners to have formal decision-making power (even a "planner's seat" in parliament) to limit political arbitrariness. Finland and Germany's high trust planning systems demonstrate how to implement such reform. These countries allow professional planning bodies to issue binding technical objections to unsound zoning changes and hold independent planning review boards, which increase land-use accountability. Similar measures in Türkiye would empower planners as impartial built environment guardians, directly answering public demand for more responsibility.

Although this study's conclusions are applicable to various urban planning settings, it primarily focuses on post-earthquake planning. To implement the study's recommendations, such as increasing the role of urban and regional planners in policymaking and legislation, institutional reform is necessary. Our empirical findings and their moral grounds call for two related reform measures.

The first path emphasizes strengthening the legal authority and autonomy of planners so they can act independently of political pressure, a reform direction encapsulated in the principle of Planners' Legal Autonomy and Veto Authority. Considering our findings, we recommend strengthening the legal authority of urban planners so that they can act independently of political pressure. One way to achieve this is through a new comprehensive Urban Planning and Land Use Act that would grant planners greater technical autonomy in decision-making. This recommendation is well entrenched in public opinion: our Twitter analysis revealed widespread frustration with politically driven planning outcomes and calls for greater oversight. Some posts even called for planners to be given a direct role in policy (e.g. calling for a seat in parliament), emphasizing the public's desire for planners 'with power' who can maintain accountability in land use decisions. Implementing international best practice from planning systems with high legitimacy (e.g. Finland and Germany) could operationalize this reform. For example, the following measures should be considered: Binding Technical Oversight [give professional planning bodies the right to submit binding technical objections against politically motivated zoning changes (such as blanket building amnesties or unapproved rezonings]; independent review board [establish a planning review board, made up of certified planners, legal experts and citizen representatives, to evaluate and reject ill-considered land use proposals]; and Ethics and Accountability Code [adopt a robust code of ethics and accountability for planning (modelled on the UK RTPI guidelines) to protect planners from undue political or administrative influence]. Together, these legislative reforms would empower planners as impartial guardians of the built environment, which our analysis of the post-disaster discourse suggests is pressing public expectation. Importantly, we frame this as a policy proposal based on evidence, not as a prescriptive directive.

The second pathway, articulated as Participation in All Planning Phases, focuses on embedding meaningful public participation at every stage of the planning process rather than treating it as a symbolic afterthought. We argue for institutionalizing meaningful public participation at every stage of the planning process, rather than relegating it to a superficial afterthought. Social media reports show that mistrust and alienation arise when communities feel they are excluded or only heard as an afterthought. To make planning processes more inclusive and responsive to the needs of the public participatory practices should be systematically embedded from the initial stages of risk assessment and design through to implementation; in this context, we propose the following measures: Co-design workshops [organizing co-design workshops in communities during the early planning stages to ensure that local knowledge informs decisions]; Participatory budgeting [implementing participatory budgeting processes for placing funds to address public frustration over opaque spending]; and Citizen juries [convening citizen juries to deliberate on key planning proposals before final decisions are made to ensure transparency and representation].

In sum, democratic urban and regional planning is necessary for resilience and public trust. By implementing these strategies, urban and regional planners can respond to public demands for transparency and inclusivity and close the trust gap found in our analysis. To successfully navigate this terrain, planning institutions should prioritize technical solutions, communication strategies, institutional sensitivity, and democratic engagement. These ideas, if carefully thought through, can support urban planning's development into a civic institution that builds a more resilient, inclusive, and equitable urban future.

Ethics committee approval: As this study does not involve direct human participation or data that requires ethics commitee approval, approval from the ethics commitee was not obtained.

Informed consent: All participants were informed about the purpose and scope of the study, and written informed consent was obtained in accordance with ethical principles.

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References

Habertürk. (2023, February 7). Twitter Kahramanmaraş depreminin sesi oldu! 52 milyon paylaşım... *Habertürk*. https://www.haberturk.com/twitter-deprem-bolgesinin-sesi-oldu-3564115-teknoloji

Aldamen, Y., & Hacimic, E. (2023). Positive determinism of Twitter usage development in crisis communication: Rescue and relief efforts after the 6 February 2023 earthquake in Türkiye as a case study. *Social Sciences, 12*(8), 436. https://doi.org/10.3390/socsci12080436

Ataç, M., Avcı, D., & Kaplan, A. (2025). Relationship between disaster preparedness perception, self-efficacy, and psychological capital among Turkish nurses. *International Nursing Review*. https://doi.org/10.1111/inr.13097

Builes-Jaramillo, A., Winson, A., Bee, E., Quirós, N., Urán, D., Rua, J. L., Rivera Flórez, L. A., Restrepo-Estrada, C., Gómez Miranda, I. N., Dashwood, C., & Porto de Albuquerque, J. (2025). Community-driven natural hazard and physical vulnerability assessment in a disaster-prone urban neighborhood. *Natural Hazards and Earth System Sciences Discussions*. https://doi.org/10.5194/nhess-2024-221

Clifford, B. P. (2013). Rendering reform: Local authority planners and perceptions of public participation in Great Britain. *Local Environment, 18*(1), 76–95. https://doi.org/10.1080/13549839.2012.719015

Connelly, S. (2011). Constructing legitimacy in the new community governance. *Urban Studies, 48*(5), 929–946. https://doi.org/10.1177/0042098010366744

Davies, A. R. (2001). Hidden or hiding? Public perceptions of participation in the planning system. *Town Planning Review, 72*(2), 193–216. https://www.jstor.org/stable/40112447

Ersoy, M. (1992). *Kent planlaması: Kuram ve yöntem*. İmge Kitabevi.

Eshuis, J., & Edwards, A. (2013). Branding the city: The democratic legitimacy of a new mode of governance. *Urban Studies, 50*(5), 1066–1082. https://doi.org/10.1177/004209801245958

Hansson, S. (2018). The role of trust in shaping urban planning in local communities: The case of Hammarkullen, Sweden. *Bulletin of Geography. Socio-economic Series, 40*(40), 23–30. https://doi.org/10.2478/bog-2018-0016

Hirvola, A. (2022). Professional lobbying in urban planning: Publicity management and transparency discourse on a collision course? *Planning Theory & Practice, 23*(2), 283–302. https://doi.org/10.1080/14649357.2022.2034922

Ickert, J., & Stewart, I. S. (2016). Earthquake risk communication as dialogue—Insights from a workshop in Istanbul's urban renewal neighbourhoods. *Natural Hazards and Earth System Sciences, 16*(5), 1157–1173. https://doi.org/10.5194/nhess-16-1157-2016

Jackson, S. J., & Foucault Welles, B. (2015). Hijacking #myNYPD: Social media dissent and networked counterpublics. *Journal of Communication, 65*(6), 932–952. https://doi.org/10.1111/jcom.12185

Jalali, R. (2002). Civil society and the state: Turkey after the earthquake. *Disasters, 26*(2), 120–139. https://doi.org/10.1111/1467-7717.00196

Johannessen, M. R., Sæbø, Ø., & Flak, L. S. (2016). Social media as public sphere: A stakeholder perspective. *TransformingGovernment: People, Process and Policy, 10*(2), 212–238. https://doi.org/10.1108/TG-01-2015-0003

Karabay, M. (2023). Toplumda mesleki görünürlük algısı ve sosyal medya etkisi üzerine değerlendirmeler. *Kent ve Toplum Araştırmaları Dergisi, 12*(1), 33–50.

Karaman, Z. T. (2020). Persuasion capacity of public administration in disasters. *Bitlis Eren Üniversitesi Sosyal Bilimler Enstitüsü Dergisi, 9*(2), 245–263. https://doi.org/10.47130/bitlissos.761755

Karataş, D., & Bek, M. G. (2024). Digital battlegrounds: The interplay of social media, state power, and influencers in Türkiye's earthquake response. *Social Media + Society, 10*(1). https://doi.org/10.1177/20563051241233459

Keleş, R. (2012). *Kentleşme politikası*. İmge Kitabevi.

Kim, H., Jang, S. M., Kim, S.-H., & Wan, A. (2018). Evaluating Sampling Methods for Content Analysis of Twitter Data. *Social Media + Society, 4*(2). https://doi.org/10.1177/2056305118772836

Kwok, M., Johnson, L., & Pojani, D. (2018). Discretion and the erosion of community trust in planning: Reflections on the post—political. *Geographical Research, 56*(4), 382–392. https://doi.org/10.1111/1745-5871.12310

Laurian, L. (2009). Trust in planning: Theoretical and practical considerations for participatory and deliberative planning. *Planning Theory & Practice, 10*(3), 369–391. https://doi.org/10.1080/14649350903229810

Lehtonen, M., & De Carlo, L. (2019). Diffuse institutional trust and specific institutional mistrust in Nordic participatory planning: Experience from contested urban projects. *Planning Theory & Practice, 20*(2), 203–220. https://doi.org/10.1080/14649357.2019.1606929

Maia, R. C. M. (2009). Media visibility and the scope of accountability. *Critical Studies in Media Communication, 26*(2), 165–183. https://doi.org/10.1080/15295030903176666

McClymont, K. E. (2006). Ideology, legitimacy and values in practice: Reconceptualising professionalism in town planning [Doctoral dissertation, University of Sheffield]. *White Rose eTheses Online*. https://etheses.whiterose.ac.uk/id/eprint/21803

Ojo, C. A., & Rider, T. R. (2025). Positioning the sense of coherence (SOC) in disaster recovery planning and design. *International Journal of Environmental Research and Public Health, 22*(2), 161. https://doi.org/10.3390/ijerph22020161

Pamukçuoğlu, A. (2017). Toplumsal algı, medya ve mesleki imaj ilişkisi. *İletişim Araştırmaları Dergisi, 15*(2), 49–65.

Powell, A. B. (2024). Objectivity vs affect: How competing forms of legitimacy can polarize public debate in data-driven public consultation. *Information, Communication & Society*. https://doi.org/10.1080/1369118X.2024.xxxxxx

Scanfeld, D., Scanfeld, V., & Larson, E. L. (2010). Dissemination of health information through social networks: Twitter and antibiotics. *American Journal of Infection Control, 38*(3), 182–188. https://doi.org/10.1016/j.ajic.2009.11.004

Sengezer, B., & Koç, E. (2005). A critical analysis of earthquakes and urban planning in Turkey. *Disasters, 29*(2), 171–194. https://doi.org/10.1111/j.0361-3666.2005.00279.x

Şengül, T. (2009). *Kentsel çelişki ve siyaset*. İletişim Yayınları.

Takahashi, B., Tandoc, E. C., & Carmichael, C. (2015). Communicating on Twitter during a disaster: An analysis of tweets during Typhoon Haiyan in the Philippines. *Computers in Human Behavior, 50*, 392–398. https://doi.org/10.1016/j.chb.2015.04.020

Tasnia, T., & Growe, A. (2025). A systematic literature review of water-sensitive urban design and flood risk management in contexts of strategic urban sustainability planning. *Land, 14*(2), 224. https://doi.org/10.3390/land14020224

Taylor, Z. (2019). Pathways to legitimacy. *Planning Theory, 18*(4), 397–417. https://doi.org/10.1177/1473095218806929

Tekeli, İ. (2001). *Türkiye'de Cumhuriyet Döneminde kent planlaması*. Tarih Vakfı Yayınları.

Tekeli, İ. (1991). *Planlama politikası*. İmge Kitabevi.

Toraman, C., Kucukkaya, I., Ozcelik, O., & Sahin, U. (2023). Tweets under the rubble: Detection of messages calling for help in earthquake disaster. *arXiv*. https://doi.org/10.48550/arXiv.2302.13403

Uldam, J. (2018). Social media visibility: Challenges to activism. *Media, Culture & Society, 40*(1), 41–58.

Williamson, W., & Ruming, K. (2019). Urban renewal and public participation in Sydney: Unpacking social media strategies and use for contesting consensus. *Urban Policy and Research, 37*(3), 350–366. https://doi.org/10.1177/0163443717704999

Yılmaz, E. E., & Halman Tomaka, D. (2025). Beyond the disaster: Vulnerability of governance in the Turkey-Syria earthquake. In I. Pardo, & D. G. B. Prato (Eds.), *Forms of Inequality and the Legitimacy of Governance (Vol. II)* (pp. 139–161). Palgrave Macmillan. https://doi.org/10.1007/978-3-031-78694-5_8