Leadership in Ambiguous Contexts: Integrating Theory, Debate, and Practice

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ABSTRACT

This paper explores the concept of ambiguity leadership through an integrative review of leadership theory, critical debates, and global policy case studies. In increasingly complex and uncertain environments, traditional leadership models emphasizing clarity and decisiveness are insufficient. Drawing from adaptive, complexity, sensemaking, and ambidextrous leadership theories, we show that ambiguity is not merely a challenge but a leadership resource. Case studies including COVID-19 governance, climate adaptation, AI regulation, and geopolitical strategies demonstrate the application and limitations of ambiguity in leadership practice. We argue for a contextual, culturally sensitive understanding of how leaders navigate and strategically employ ambiguity to enable collective sensemaking, resilience, and innovation. The study concludes with implications for hybrid leadership models and future research in cross-cultural contexts.

Keywords: ambiguity leadership, adaptive leadership, sensemaking, strategic communication, complexity theory

INTRODUCTION

For over a century, leadership studies have examined what makes leaders effective, focusing largely on leaders' traits and situational behaviors. Classic trait-based approaches sought stable qualities (e.g. charisma, intelligence, decisiveness) that predict leadership success (Stogdill, 1948; Kirkpatrick & Locke, 1991). Similarly, behavior and contingency theories emphasized how leaders clarify roles and motivate followers in given situations (House, 1971; Fiedler, 1978). These traditional perspectives implicitly assume that leaders can provide clarity and direction in relatively stable or well-defined environments. However, modern organizations and governance arenas are increasingly characterized by ambiguity, uncertainty, and complexity. Rapid technological change, global crises, and multifaceted policy challenges mean leaders often face "VUCA" conditions – volatility, uncertainty, complexity, and ambiguity (Bennett & Lemoine, 2014). In such settings, traditional leadership models oriented toward stability and clear-cut solutions may falter. This recognition has spurred critical scholarly debates and new theories around ambiguity in leadership – arguing that effective leadership often lies in embracing uncertainty, sensemaking, and adaptability rather than eliminating ambiguity (Alvesson & Spicer, 2011; Uhl-Bien & Arena, 2018).

This paper revisits an earlier comparison of trait-based and ambiguity-oriented leadership perspectives and enhances it by incorporating recent scholarly debates, practical cases, and theoretical integrations. We first examine how ambiguity is addressed (or ignored) in established leadership theories – from transformational leadership's clear visions to adaptive leadership's focus on tackling ill-defined problems. Next, we explore real-world cases of ambiguity leadership in action, highlighting complex governance issues in Asia and globally (e.g. the COVID-19 pandemic, climate adaptation, AI regulation, geopolitical uncertainty) and how leaders navigated these challenges. We then integrate insights from diverse frameworks – including strategic ambiguity, emotional ambiguity, and ambidextrous leadership – to show how ambiguity functions within leadership processes. Throughout, we

incorporate relevant academic literature, both foundational and recent, to situate ambiguity leadership in the broader theoretical landscape.

By developing a comprehensive understanding of "ambiguity leadership," we aim to demonstrate that ambiguity is not merely an obstacle for leaders to overcome, but also a context and a tool that can be managed strategically. Embracing ambiguity can enhance sensemaking, innovation, and resilience in organizations – critical capacities for governance in the 21st century.

THEORETICAL PERSPECTIVES ON AMBIGUITY IN LEADERSHIP

Leadership theory has evolved along two broad streams: one focusing on traits/behaviors of leaders and another examining the contexts of complexity and ambiguity in which leadership is enacted. In this section, we contrast these perspectives and review scholarly debates on the role of ambiguity in leadership. We also highlight how newer frameworks like adaptive and sensemaking leadership explicitly incorporate ambiguity, challenging older paradigms that assumed more certainty.

Traits, Transformational Leadership, and the Assumption of Clarity

Trait-based and charismatic leadership theories traditionally emphasize clarity of vision and decisiveness. For instance, transformational leadership inspires followers with a clear, compelling mission and motivates them to transcend self-interest for a higher purpose. Transformational leaders are often portrayed as sense-givers who reduce ambiguity by articulating an appealing vision of the future (Bass, 1985; Rainey & Steinbauer, 1999). They use inspirational motivation and idealized influence to provide direction, thereby offering certainty and meaning to followers amid change (Wright & Pandey, 2010). Similarly, charismatic leadership relies on the leader's perceived extraordinary qualities and a strong, unified message. Weber (1968) noted that charismatic leaders galvanize followers' uncritical acceptance by projecting confidence and clarity of purpose. These models implicitly treat ambiguity as a threat to overcome: effective leaders are those who cast ambiguity aside by providing vision, answers, and a sense of security to followers (Kirkpatrick & Locke, 1991; Conger & Kanungo, 1987).

However, critical scholars argue that leadership itself can be an ambiguous, socially constructed concept. Alvesson and Spicer (2011) suggest that the popularity of "leadership" as a term often masks its inherent fuzziness, with multiple, sometimes contradictory, meanings coexisting (leadership as heroism vs. process, etc.). This hegemonic ambiguity of leadership implies that what counts as good leadership is often negotiated and context-dependent, not a fixed trait. In practice, even visionary leaders may strategically employ ambiguity in their messages – for example, using broad slogans or values that different stakeholders can interpret in their own way. This "unified diversity" (Eisenberg, 1984) allows organizations to agree on general goals without rigidly specifying every detail. Thus, while trait and transformational theories seek clarity, ambiguity often creeps in as leaders try to appeal to diverse audiences. The debate centers on whether ambiguity is a weakness – indicating lack of direction – or a deliberate strategy to build consensus and flexibility (Eisenberg, 1984; Abdallah & Langley, 2014). Increasingly, scholars recognize that some ambiguity can be functional for leadership, allowing adaptation and creative interpretation rather than enforcing one rigid viewpoint.

Adaptive Leadership and Type III Problems

In contrast to trait theories, adaptive leadership and related models view ambiguity as an inherent feature of many leadership challenges. Heifetz (1994) distinguishes between technical problems (clear problems with known solutions) and adaptive problems, which lack a clear definition or ready solution – akin to what Heifetz & Sinder (1988) call "Type III situations". In Type III scenarios, both the problem and solution are unclear, and leaders cannot simply apply expertise or authority to resolve issues. Instead, the leader's role is to orchestrate a process of learning: involving multiple stakeholders, encouraging experimentation, and helping the group make sense of the murky situation. Here, ambiguity is not just an obstacle but the very context of leadership. Effective leadership involves embracing the uncertainty – asking tough questions, challenging assumptions, and mobilizing others to grapple with the problem (Heifetz, 1994). This perspective is a direct departure from the "leader as oracle" image; instead, leaders hold steady in the ambiguity, catalyzing collective sensemaking. As Heifetz (1994) argues, in complex crises or social challenges, people expect leaders to "provide solutions, security, and meaning", but often the most authentic response is for leaders to admit the uncertainty and engage followers in defining both the problem and the path forward.

Adaptive leadership aligns with concepts in complexity leadership theory (Marion & Uhl-Bien, 2001) and sensemaking in organizations (Weick, 1995). Both emphasize that in a fast-changing, ambiguous world, leadership is about enabling emergent solutions rather than controlling everything. Leaders become facilitators and sense-

makers who create environments where diverse participants can share knowledge and iterate towards clarity. For example, Lindblom's (1959) idea of "muddling through" policymaking acknowledges bounded rationality and favors incremental, exploratory action when goals are uncertain. Similarly, Lipsky's (1980) street-level bureaucracy concept and Weick's (1984) small wins approach celebrate incremental progress in ambiguous, complex social problems. These views have shifted scholarly debates: rather than judging leaders solely by decisiveness and certainty, researchers now examine leaders' tolerance for ambiguity and ability to navigate paradoxes (Denis, Langley & Rouleau, 2010). Yukl and Mahsud (2010) explicitly call for flexible and adaptive leadership, noting it is "especially important when there is substantial change in situation and the leadership behaviors that are relevant for it" (p.84). In sum, adaptive and complexity-oriented theories frame ambiguity as inevitable and even useful – a condition to be leveraged through learning and adaptation, not simply a gap in a leader's knowledge.

Strategic Ambiguity in Leadership Communication

While adaptive leadership deals with ambiguity in problems, strategic ambiguity refers to how leaders intentionally use ambiguous communication as a tool. Originally from organizational communication scholarship (Eisenberg, 1984), strategic ambiguity is "purposefully equivocal communication" that allows multiple interpretations. Leaders may employ vagueness or abstract language to unify diverse stakeholders (who each interpret the message to suit their interests), to facilitate organizational change, or to avoid direct conflict on controversial issues. For example, a CEO might announce a vision of "innovation and growth for all" – a slogan that is inspiring yet broadly defined, so each department can read their own meaning into it. This technique can build broad coalitions without forcing premature specifics. In the public realm, political leaders often practice strategic ambiguity. A salient case is the U.S. policy of "strategic ambiguity" toward Taiwan, where American leaders deliberately avoid clarifying whether the U.S. would defend Taiwan in a conflict. This ambiguity is meant to deter aggression from China while discouraging provocation by Taiwan, thus maintaining stability via uncertainty (dual deterrence). The debate here is whether such ambiguity truly prevents conflict or whether it sows confusion that could lead to miscalculation. Some argue strategic ambiguity on Taiwan has preserved peace for decades, while others call for clearer commitments in today's more fraught context.

In organizational settings, strategic ambiguity can similarly be double-edged. On one hand, it encourages buy-in and creativity – employees fill in the blanks and feel empowered to interpret goals in their own way (Eisenberg, 2007). It can also help leaders save face or postpone contentious decisions by keeping language flexible (Abdallah & Langley, 2014). On the other hand, excessive ambiguity might backfire if followers feel confused or manipulated. If a leader never provides clarity, it may lead to frustration, misalignment, or cynicism among followers. Thus, scholarly debate centers on finding the right balance of ambiguity: enough to allow flexibility and engagement, but not so much that it undermines trust or action. Recent studies suggest that context matters: in highly uncertain, novel domains (like disruptive innovation or foreign policy), strategic ambiguity can be invaluable, whereas in routine operations or emergencies, stakeholders may prefer more direct guidance. Leaders must judge when to open up interpretation versus when to converge on a clear message – a skill requiring social intelligence and situational awareness.

Emotional Ambiguity and Sensemaking Challenges

An often overlooked aspect is emotional ambiguity – the ambiguity in how people feel or should feel in uncertain situations. Complex leadership challenges not only cloud facts and decisions, they also create emotional uncertainty for leaders and followers. Research during the COVID-19 pandemic noted that under high uncertainty, leaders themselves experience conflicting emotions, especially anxiety and hope. Leaders must manage their own stress and project calm optimism without denying reality. John Mattone describes great leaders as "uncertainty absorbers" who take on fear and complexity, simplifying uncertainty for their teams. In other words, effective leaders metaphorically absorb the ambiguity – filtering chaos, providing emotional steadiness, and preventing their anxiety from amplifying followers' fears. This requires high emotional intelligence and resilience. The concept of emotional ambiguity in followers is also notable: When a leader's signals or the situation is ambiguous, followers may feel ambivalence – simultaneous optimism and fear – which can be stressful. Some leadership scholars suggest that acknowledging and addressing these mixed emotions is part of the leader's job in ambiguous times (Humphrey et al., 2008). For example, a public health leader during a pandemic might say: "It's normal to feel uncertain or scared – I do too – but we will get through this together". Such honesty can resolve emotional ambiguity by legitimizing feelings and then guiding them towards hope and efficacy.

There is also a link to sensemaking leadership here. Karl Weick famously said leadership is about the "management of meaning" (Smircich & Morgan, 1982) – essentially helping people make sense of ambiguity. When a crisis or change leaves people confused about "what's really happening," leaders step in to provide narratives,

metaphors, and framing that reduce cognitive and emotional uncertainty. Sensemaking in leadership involves storytelling and framing ambiguous events in ways that give purpose (e.g., "This challenge is an opportunity to innovate"). However, if leaders themselves misinterpret events (sensemaking gone wrong), they may lead others astray. The emotional tone leaders set during sensemaking is critical: too much doom can paralyze, too much false hope can erode credibility. Thus, ambiguity has a strong emotional component, and leadership requires balancing realism and optimism. Recent research in neuroscience and psychology suggests that tolerance for ambiguity is a trait that varies among individuals – some leaders are more comfortable not having all answers, whereas others find it psychologically distressing (McLain, 2009). Building a leadership culture that prizes curiosity, learning, and "comfort with ambiguity" can help organizations stay agile when clear answers are elusive (Frates & Dam, 2020). In sum, emotional ambiguity underscores that leading in uncertainty is not just an intellectual challenge, but a psychological one of confidence, empathy, and authenticity.

Ambidextrous Leadership and Paradox Management

A final theoretical integration comes from the concept of ambidexterity in leadership. Ambidextrous leadership refers to a leader's ability to flexibly switch between contrasting behaviors to meet changing needs – essentially managing the paradox of exploration vs. exploitation (Rosing, Frese, & Bausch, 2011). In innovation management research, Rosing et al. (2011) propose that leaders must engage in opening behaviors (encouraging creativity, experimentation, risk-taking) while also engaging in closing behaviors (providing structure, efficiency, and focus) to maximize team performance. These behaviors are in tension – too much control stifles innovation, too much freedom hampers implementation. The ambidextrous leader dynamically navigates this ambiguity by alternating or combining behaviors as needed. For example, during the early brainstorming phase, the leader might deliberately keep goals ambiguous to spur divergent thinking (opening). Later, when executing a chosen idea, the same leader shifts to clarifying roles and deadlines (closing). Empirical studies find that when both opening and closing leadership behaviors are high (used appropriately), employee innovative performance is highest. This underscores a broader point: effective leadership often means embracing contradictory approaches – a form of behavioral complexity (Denison et al., 1995) that mirrors the complexity of the environment.

Ambidextrous leadership exemplifies managing ambiguity through paradox. Rather than resolving the tension by choosing one style, successful leaders accept the ambiguity inherent in their role – at times they must be visionary dreamers, at others pragmatic organizers. This idea connects to ambidexterity at the organizational level (Tushman & O'Reilly, 1996) where firms simultaneously explore new possibilities and exploit existing strengths. Leaders play a key role in setting an ambidextrous context, often by strategic separation or sequencing – e.g., setting up skunkworks teams (high ambiguity tolerance) alongside routine operations (low ambiguity tolerance), and personally interfacing between the two. Paradox theory in leadership (Lewis & Smith, 2014) further suggests that embracing such paradoxes (rather than prematurely resolving them) leads to more sustainable and creative outcomes. Scholars have extended this thinking to other paradoxes leaders manage: short-term vs long-term goals, centralization vs decentralization, stability vs change. All involve ambiguity because it's not obvious how to strike the balance. The leader's cognitive complexity – ability to understand multiple, conflicting perspectives – becomes vital. In practice, tools like scenario planning and strategic agility help leaders prepare for ambiguous futures by considering diverse possibilities rather than betting on one forecast.

In summary, across these theoretical perspectives, a common thread is emerging: ambiguity is not antithetical to leadership; it is a fundamental element of it. Whether through adaptive problem-solving, strategic communication, emotional sensemaking, or paradoxical behavior, embracing ambiguity can actually enhance leadership effectiveness in today's complex world. This represents a shift from older views that saw ambiguity purely as a deficiency to be eliminated. The next section turns to real-world policy and organizational cases that illustrate how ambiguity leadership manifests in practice, particularly in Asia and global governance contexts.

AMBIGUITY LEADERSHIP IN PRACTICE: MANAGEMENT AND GOVERNANCE

Abstract theories of ambiguity in leadership gain tangible meaning when examining real-world situations. In this section, we highlight several complex governance challenges – the COVID-19 pandemic, climate change adaptation, artificial intelligence regulation, and geopolitical uncertainty – to illustrate how leaders apply (or fail to apply) ambiguity-savvy approaches. These cases, drawn from Asia and around the world, demonstrate the practical consequences of ambiguity leadership. They show leaders sometimes using ambiguity strategically to navigate uncertainty, and other times struggling with ambiguity, yielding lessons for improvement. Each case underlines the importance of adaptability, clear communication, and context-sensitive leadership when facing wicked problems (Rittel & Webber, 1973) that defy straightforward solutions.

COVID-19 Pandemic: Navigating Uncertainty and Sensemaking

The COVID-19 crisis posed an extreme ambiguity challenge for leaders globally. In early 2020, scientific information was incomplete and shifting rapidly. Leaders had to make high-stakes decisions (lockdowns, public health measures) with profound uncertainty about the virus's behavior, transmission, and societal impact. Responses illustrate divergent approaches to ambiguity. Some leaders embraced transparent communication about uncertainty: for example, New Zealand's Prime Minister Jacinda Ardern communicated clearly about what was known and not known, and used simple metaphors ("team of five million") to rally collective action. This approach built trust and follower buy-in despite the inherently ambiguous situation. In contrast, other leaders projected false certainty or inconsistent messages – deliberate ambiguity that backfired. In the U.S., conflicting statements from political leaders and health agencies in early months (e.g. about mask efficacy) created confusion and eroded public trust. Similarly, in several Asian countries, initial downplaying of the virus's severity (to avoid panic) later forced abrupt policy shifts, highlighting the risks of ambiguous or non-transparent leadership in a crisis.

Yet ambiguity leadership was also evident in positive ways. South Korea's pandemic response could be seen as a form of adaptive leadership. Officials rapidly implemented a test-trace-isolate system without having all the answers upfront – essentially "groping along" in Behn's (1988) terms, by trying interventions, learning, and adjusting. Small wins (Weick, 1984) like quickly scaling drive-through testing gave feedback that informed larger strategies. Leaders in countries like Taiwan and Singapore took on the role of "uncertainty absorbers," buffering the public from chaos by providing regular briefings, decisive (if early) border controls, and contingency plans. These leaders acknowledged complexity but gave citizens a sense of direction and hope, illustrating John Mattone's idea that great leaders "carry an organization to success in the face of uncertainty". On the other hand, the pandemic also taught limits of consensus-based ambiguity during emergencies: prolonged deliberation and conflict (a downside of inclusive ambiguity leadership) hampered timely action in some democracies. For instance, in Japan, debates over emergency declarations and economic measures reflected a tension between seeking broad agreement and the urgent need for clarity. Research by Wright and Pandey (2010) suggests that in acute crises, more directive leadership may be necessary – a point validated by COVID-19 outcomes where decisive early movers often fared better in controlling the virus. The lesson is that effective crisis leadership balances ambiguity with decisiveness: leaders must interpret evolving data (sensemaking) and adapt policies (learning), but also know when to provide clear instructions and act despite uncertainty. COVID-19 starkly demonstrated that ambiguity tolerance is a critical leadership quality, but it must be paired with agile decision-making and honest communication to guide nations through foggy, fear-laden circumstances.

Climate Change Adaptation: Ambiguity in Long-Term Policy

Climate change presents a quintessential long-term ambiguous challenge for leaders. The exact timing and magnitude of climate impacts are uncertain, the solutions span decades, and stakeholders hold divergent values – all elements of a "wicked problem". Leaders in climate governance often grapple with ambiguity regarding policy choices (e.g., how to adapt infrastructure to uncertain future sea levels) and responsibilities (who should pay for adaptation, local vs global duties). A policy paradox emerges: while mitigation (emissions reduction) has clearer global targets (e.g., temperature goals), adaptation is inherently local and open-ended, lacking precise metrics or end-points. Scholars note that global adaptation governance remains "low in precision and obligation," partly because adaptation means different things in different contexts. This constructive ambiguity in international climate agreements – such as the Paris Agreement's loose framework for adaptation – allows broad participation (everyone agrees adaptation is important) but leaves much to interpretation and initiative.

At national and city levels, effective climate adaptation leadership often employs an experimental, learning-by-doing approach. This is analogous to Behn's "Management by Groping Along (MBGA)", where leaders set a general goal (e.g., flood resilience) but do not presuppose the exact path. Instead, they facilitate pilot projects, community input, and iterative adjustments. For example, the Netherlands' "Room for the River" program involved trying multiple flood control innovations, monitoring outcomes, and scaling up successful measures – a process championed by leaders willing to embrace ambiguity and surprise. In many Asian cities, such as Jakarta or Dhaka, leaders face deep uncertainty about climate impacts on urban systems. Successful adaptation initiatives there have come from coalition-building and sensemaking – city officials, scientists, NGOs, and citizens jointly identifying vulnerabilities and testing responses (e.g. community-based early warning systems for floods). The leader's role becomes one of network convener and narrative builder: framing climate adaptation not as a fixed project plan, but as a continuous process of building resilience under uncertainty. This resonates with sensemaking

leadership, where the leader articulates why adaptation matters and how everyone's efforts contribute, even as plans evolve.

However, ambiguity in climate leadership can also lead to policy gridlock if not managed. In some cases, officials exploit ambiguity to avoid hard choices – for instance, vague land-use guidelines that postpone decisive action on relocating communities at risk. Alternatively, public ambiguity about climate science (amplified by mis- or disinformation) can undermine leaders' ability to mobilize support. Studies have shown that when citizens are ambiguous about the severity or cause of climate change, they may resist bold adaptation measures (e.g. zoning changes, taxes for infrastructure). Here, leaders must perform sensegiving to reduce unnecessary ambiguity: clearly communicating scientific consensus and the rationale for proactive steps. The notion of "strategic ambiguity" may apply in messaging that emphasizes hope (adaptation as opportunity) while downplaying overly precise predictions that could be disputed. Ultimately, climate adaptation demands ambidextrous leadership: leaders need long-term vision and direction (clarity) – for example, a target to reach carbon neutrality or a master plan for resilience – coupled with short-term flexibility and inclusion (ambiguity) – inviting diverse experiments and adapting policy instruments as new information emerges. Those who succeed, like some progressive mayors and environmental ministers, often embody this blend of principled direction and adaptive openness, guiding their communities through the ambiguous journey of climate resilience.

AI Regulation: Leading Amid Technological Uncertainty

The rapid rise of artificial intelligence (AI) and machine learning has created a governance puzzle: how to regulate AI in a world of uncertainty about the technology's future capabilities and risks. This is a frontier policy area rife with ambiguity, where leaders in government and industry must make decisions without clear precedents or complete information. A prime example is the current effort (as of 2025) to establish rules for generative AI (such as advanced language models). Policymakers face fundamental ambiguities: How might AI evolve in the next 5–10 years? What new risks (to privacy, jobs, safety) will emerge? Overly strict rules could stifle innovation, but too much laissez-faire could invite harm. In this context, many governments are adopting an adaptive, principle-based leadership stance. For instance, the European Union's proposed AI Act uses a risk-based framework – broadly defining high-risk AI systems and requiring safeguards, while leaving room for interpretation as technology develops. This approach acknowledges ambiguity by not hard-coding overly specific standards that might soon be outdated. Leaders behind the AI Act had to build consensus across member states with different priorities, using strategic ambiguity in wording certain provisions to maintain unity (e.g., flexible language around what constitutes "ethical AI").

In Asia, approaches vary: Singapore's government has positioned itself as a forward-looking regulator that issues guiding frameworks (like its Model AI Governance Framework) rather than strict laws, thus embracing ambiguity to allow agility. This lets regulators and companies iterate best practices together. China, by contrast, initially took a more prescriptive route (e.g., algorithm registries and AI security checks), but even there, officials have kept some policy aspects ambiguous to accommodate rapid AI advancements and regional implementation differences. The United States until recently lacked a comprehensive AI policy, arguably following a deliberate strategic ambiguity to foster tech growth – though this has led to calls for more clarity as AI's societal impacts grow. In late 2023, the Biden administration introduced an AI Executive Order with broad principles (like safety, nondiscrimination) but relied on agencies to figure out details, again reflecting a leadership choice to set direction without micromanaging a nascent domain.

The leadership challenge in AI regulation also involves multi-stakeholder sensemaking. Tech leaders, ethicists, and policymakers convene in forums (e.g., OECD AI principles, IEEE initiatives) to share knowledge and collectively make sense of AI's trajectory. No single leader or country "knows" the right answer, so effective leadership is about collaboration and adaptive learning – hallmark traits of ambiguity-capable leadership. We see here a real-world echo of Lindblom's "science of muddling through" (1959), as regulators incrementally update guidelines in response to AI developments, rather than crafting a perfect grand design from the start. Of course, ambiguity in AI policy can have downsides: businesses sometimes complain that vague regulations create uncertainty, potentially hindering investment. For example, companies worldwide are tracking the EU's iterative discussions, trying to infer how to comply, in what's been dubbed a climate of "regulatory ambiguity." Leaders must manage this by maintaining open communication with stakeholders – making implicit expectations explicit over time. In essence, leading through the fog of technological innovation requires both foresight and humility: setting ethical guardrails based on current understanding, while being prepared to revise them as new information arrives. The AI regulation case underscores that ambiguity leadership is not passive; it is an active engagement with uncertainty – shaping it, learning from it, and guiding others through it.

Geopolitical Uncertainty and Strategic Ambiguity

Geopolitics has long been a theater where leadership through ambiguity is practiced, sometimes intentionally, other times by necessity. We already touched on the U.S. strategic ambiguity toward Taiwan, a conscious policy stance to maintain an uncertain status quo in cross-strait relations. This is a classic case where ambiguity is wielded as a tool of statecraft. Leaders from Washington to Taipei to Beijing must interpret signals and make decisions under this cloak of uncertainty. Notably, ambiguity here can prevent rash actions: neither side can be sure of the U.S. response, which ideally deters both invasion and a declaration of independence. However, strategic ambiguity can also induce anxiety – Taiwan's leaders often express unease about whether help would really come (Matsuda, 2020) – and misinterpretation could be perilous. The debate over maintaining vs. clarifying the U.S. stance is essentially a debate about the efficacy and risk of ambiguity in leadership: does not knowing force caution, or invite gambling? This example underscores that ambiguity leadership at the international level requires credibility and deft communication. A slight mis-signal (accidental strategic clarity, or mixed messages from different officials) can upset the delicate balance, as seen when ambiguous remarks by U.S. presidents have occasionally caused diplomatic ripples requiring quick reassurance.

Another geopolitical scenario is the handling of North Korea's nuclear issue. Here, North Korea's leadership itself employs ambiguity – secretive programs, vague commitments in negotiations – as a strategy to keep adversaries uncertain. South Korean and U.S. leaders, conversely, have oscillated between demands for clarity (verification of denuclearization) and acceptance of interim ambiguity (settling for moratoria or ambiguous phrasing like "work toward denuclearization"). The 2018 Singapore Summit between the U.S. and North Korea produced a statement criticized as "productive ambiguity" – lofty goals without concrete steps – which leaders defended as a starting point for relationship building. Critics argued it allowed diverging interpretations (each side touted different takeaways to their public), reflecting again the two sides of ambiguity. In a positive light, such ambiguity kept talks alive; negatively, it left key issues unresolved.

Leaders in regions like South Asia also grapple with ambiguity, for instance in the India-Pakistan deterrence relationship where signaling intent (or deliberately hiding it) is a security strategy. The concept of "ambiguity aversion" comes into play: some leaders, when faced with uncertainty in opponents' intentions, may react aggressively to avoid worst-case outcomes, which can be dangerous. Thus, ambiguity leadership in geopolitics must be paired with confidence-building measures and backchannel communications to prevent miscalculation. Scholars of international relations note that successful ambiguity often relies on shared tacit understandings – essentially, leaders on different sides both grasp the "rules of the ambiguous game." Without that, ambiguity might escalate distrust.

From these cases, a pattern emerges: ambiguity can be a powerful leadership instrument in policy and diplomacy to buy time, maintain flexibility, and accommodate differing interests. However, it requires skilled management, because ambiguity in high-stakes arenas (pandemics, climate, AI, geopolitics) can just as easily breed confusion or conflict if left unchecked. The best practitioners of ambiguity leadership mix ambiguity with clarity in clever ways – for example, clarity of core principles and goals, ambiguity in tactics and interim steps. Leaders like Winston Churchill exemplified this during WWII by being very clear about the ultimate aim ("victory at all costs") while often ambiguous or deceptive about operational details to mislead the enemy. In contemporary governance, this might translate to, say, clear commitment to democratic values, but strategic ambiguity in how far a nation will go to support them in foreign conflicts. The key for scholars and practitioners is understanding when ambiguity serves constructive ends and when it must give way to clarity. This nuanced understanding leads us to integrate these lessons back into leadership theory – showing how ambiguity operates across different leadership frameworks.

Integrating Ambiguity into Leadership Frameworks

The exploration of theory and cases reveals that ambiguity is a multifaceted phenomenon in leadership. It appears in leader traits (tolerance for ambiguity), in leader behaviors (sensemaking, adapting, balancing), in communication strategies (strategic ambiguity), and in emotional dynamics (managing anxiety and hope). This section synthesizes how ambiguity functions within various leadership frameworks and what this implies for a unified understanding of leadership in complex environments.

• Transformational and Transactional Leadership: Traditionally, transformational leadership is about providing a clear vision and reducing ambiguity for followers through inspiration. However, the ambiguity leadership perspective suggests even transformational leaders may need to allow some flexibility in interpretation of the vision to empower followers' creativity. For example, a transformational public leader might set an inspiring goal (e.g., a "Green City") but invite citizens and employees to define what that means for them, thus marrying a clear overarching purpose with local ambiguity for innovation. Transactional leadership, with its focus on clear exchanges (rewards for performance), might seem the opposite of ambiguity. Yet even in transactional settings, ambiguity can arise in complex reward systems or role definitions, and good managers address this by setting expectations clearly. In sum, high ambiguity contexts challenge transformational leaders to broaden their

sensegiving (to incorporate others' sensemaking) and push transactional leaders to adapt standard operating procedures creatively. Recent scholarship is exploring "ambiguous transformational leadership," where leaders articulate values and vision that are purposefully broad, enabling a wide coalition – a technique observed in some political leaders who unite diverse groups under abstract ideals (e.g., "change," "freedom") and then work out specifics through participatory leadership. This hybrid illustrates integration: using ambiguity to achieve transformational ends.

• Adaptive and Complexity Leadership: These frameworks place ambiguity at the center – as something to lean into. Heifetz's adaptive leadership explicitly deals with ambiguous, ill-defined challenges (Type III problems) and calls for collaborative learning and flexibility. Our cases like COVID-19 and climate adaptation confirmed that leaders often cannot provide technical answers alone; they must create conditions for collective problem-solving. The integration point here is that ambiguity is reframed as a resource: it signals the need for innovation and learning. Adaptive leadership blends into complexity leadership theory (Uhl-Bien & Marion, 2009) which argues leaders must enable emergent, self-organizing processes in complex adaptive systems. For example, in a multinational corporation facing disruptive technology, a complexity-oriented leader might establish cross-functional teams with freedom (i.e., some ambiguity in goals and methods) to explore new strategies. Such leaders oscillate between letting patterns emerge (embracing ambiguity) and stabilizing successes (imposing clarity) – much like ambidextrous leadership's opening and closing behaviors. This integration underscores that ambiguity and clarity are not opposites in leadership, but complementary phases in tackling adaptive challenges.

• Sensemaking and Strategic Communication: Karl Weick's idea that leadership is about "managing meaning" implies that ambiguity is the backdrop against which leaders operate (if everything made sense, followers wouldn't need leaders to interpret). Leaders often come to the fore when a situation is ambiguous – they then provide frames or stories that help others make sense of it. Effective sensemaking does not always mean providing the answer; sometimes it means providing a process or language for understanding. For instance, after a organizational shock (like a sudden merger), a leader might say, "We're in uncharted territory, but here's how we can understand what's happening...", thereby acknowledging ambiguity while scaffolding a sensemaking process. Strategic ambiguity in communication ties in: leaders might intentionally keep their message at a level that provides meaning but not detailed instruction, leaving space for local interpretation. The integration here is recognizing when to use ambiguity vs. when to eliminate it. In early stages of change, some ambiguity can empower creativity (everyone feels their interpretation is valid); later in implementation, too much ambiguity can cause chaos, so leaders progressively narrow the ambiguity as consensus forms. This dynamic use of ambiguity is a sophisticated communication skill. It connects to visionary leadership as well – e.g., Martin Luther King Jr.'s "I have a dream" speech painted an ambiguous but powerful vision (a dream open to all to imagine) which galvanized action, followed by specific legislative goals (Civil Rights Act) that brought clarity. Thus, ambiguity can first unite and inspire, then give way to clarity for execution – a temporal integration in leadership practice.

• Emotion and Authentic Leadership: Integrating ambiguity into leadership also means understanding how ambiguous contexts affect leader and follower emotions. Authentic leadership theory emphasizes transparency and authenticity, which might seem to demand maximum clarity. However, being authentic in an ambiguous crisis might mean admitting fears and uncertainties, not hiding them – as long as the leader still provides hope and direction. This builds trust. The integration point is that emotional ambiguity, if addressed openly, can strengthen the human bond in leadership. Consider Jacinda Ardern's approach again: she acknowledged the difficulty and anxiety of the pandemic, which made her reassurances more credible. Emotional intelligence models of leadership (Goleman, 1998) also integrate here: a leader high in EI will sense follower confusion or ambivalence and will respond with empathy and clarification as needed. Tolerance for ambiguity could even be seen as an emotional competency, involving managing the stress of not knowing and helping others cope (Furnham & Marks, 2013). Leaders who cultivate a climate where "it's okay not to have all the answers" often encourage innovation and candor, hallmarks of psychologically safe teams (Edmondson, 1999). This integration suggests training and development for leaders should include scenarios that build ambiguity resilience – exposing leaders to uncertain situations and coaching them in sensemaking and communication under stress.

• Strategic Ambidexterity and Hybrid Models: Finally, we consider integrating ambiguity perspective with trait/skills models in hybrid leadership frameworks. One emerging idea is that the best leaders combine strong personal qualities (traits/skills) with an adaptive approach to ambiguity. For instance, a leader might have the trait of decisiveness, but in an ambiguous context, their decisiveness manifests not as rigid certainty but as deciding how to experiment or deciding to gather input – essentially, decisiveness about process rather than outcome. Likewise, a leader high in charisma could use that charisma not only to inspire confidence in a clear vision, but to inspire confidence that even though the path is unclear, we will find it together. Here, the ambiguity perspective broadens the application of classic leadership traits. It also suggests that selection and evaluation of leaders in organizations should include criteria like ambiguity tolerance, learning orientation, and integrative thinking. There are calls in leadership research for measuring such competencies alongside traditional measures of intelligence or

extraversion. The concept of "eclectic leadership" (which combines multiple styles) aligns with this – leaders might fluidly shift from coach to commander to facilitator as the situation demands. In practice, some organizations are now training leaders to consciously operate in both "exploit" mode and "explore" mode (similar to ambidexterity), essentially teaching when to inject ambiguity (open up options) and when to drive closure.

In summary, integrating ambiguity into leadership frameworks leads to a more contingent, flexible view of leadership effectiveness. It suggests that no single style is sufficient; rather, leaders must develop a repertoire that includes both providing clarity and leveraging ambiguity. The ambiguity perspective complements traditional theories by focusing on how leaders interpret and shape uncertain environments, not just how they perform in stable settings. This holistic understanding is increasingly important for contemporary organizations. It encourages further research into questions like: How do cultural differences impact ambiguity leadership (e.g., societies with high vs. low uncertainty avoidance)? How can organizations institutionalize constructive ambiguity (for innovation) while maintaining accountability? How do digital tools and AI (which can reduce some uncertainties through data) change the role of human judgment and ambiguity in leadership? These questions point to rich avenues for future scholarly work.

CONCLUSION

Leadership in ambiguous, complex environments is a balancing act that requires both new mindsets and time-tested skills. This paper has examined ambiguity from multiple angles – theoretical debates, real-world cases, and integration across frameworks – to articulate a comprehensive view of "ambiguity leadership." We find that ambiguity is not merely a challenge for leaders to overcome, but also a context to navigate, a tool to strategically employ, and at times an ally in achieving adaptability and inclusivity.

From the trait and transformational perspective, ambiguity leadership challenges the notion that leaders must always project absolute clarity and confidence. Instead, effective leaders are honest about uncertainties when they exist, leveraging their credibility to maintain trust while guiding others through the unknown. The ambiguity perspective, grounded in adaptive and complexity leadership theories, contributes a critical insight: in many 21st-century problems, defining the problem is part of the problem. Thus, leaders serve as convener, facilitator, and sensemaker, not just decision-maker or oracle. We saw this with COVID-19 and climate adaptation, where leaders who sought input and experimented were more successful than those offering oversimplified certainty.

The utilities of embracing ambiguity in leadership are evident. Organizations and communities can become more resilient and innovative when leaders foster an environment that tolerates ambiguity and encourages learning. We discussed how an ambiguity-friendly approach (reducing strict hierarchies, inviting diverse voices) correlates with higher employee engagement and commitment. When people feel included in sensemaking, they develop ownership – as reflected in studies showing participatory leadership enhances job satisfaction and performance (Vance, 2006; Eisenberger et al., 1986). Additionally, ambiguity leadership aligns with democratic values by distributing problem-solving and acknowledging that no single authority has all the answers. This is particularly relevant in public governance, where legitimacy is bolstered by transparency and involvement. Leaders who practice ambiguity leadership tend to emphasize persuasion and shared understanding over command and control, cultivating a culture of collective responsibility (Heifetz & Sinder, 1988). Our cases also indicated that such an approach can yield policies better tailored to complex realities – for instance, adaptive regulations for AI that can evolve, or climate strategies that incorporate local knowledge.

However, we have also underscored the limits and risks of ambiguity. It is not a panacea; context matters greatly. In crises demanding quick action (natural disasters, financial crashes), extensive consultation and ambiguity can delay life-saving decisions. In such moments, directive leadership – a more trait-based, authoritative stance – may temporarily take precedence. The challenge is for leaders to read the context and pivot: know when to open up vs. when to narrow down. Over-reliance on ambiguity can lead to paralysis or conflict (too many cooks debating different interpretations). Therefore, the art of ambiguity leadership is in modulation – much like an ambidextrous leader adjusts opening and closing behaviors. Leaders must cultivate the agility to provide clarity when needed and ambiguity when useful. This nuanced skill set is what will distinguish highly effective leaders in volatile environments.

Going forward, hybrid leadership models merit further exploration. These would integrate the strengths of traits leadership (decisiveness, vision, charisma) with those of ambiguity leadership (adaptability, participatory sensemaking). For example, a "visionary adaptive leader" might set a compelling vision (trait approach) but explicitly leave room for the team to debate and refine how to get there (ambiguity approach). Research could examine how such hybrid leaders perform and how they can be developed. Technological advancements also play a role: as mentioned, AI and big data can provide decision support, potentially reducing some uncertainties. Leaders could use data-driven tools to inform their intuition without becoming overconfident in predictive models. In essence, technology might handle complicated parts of problems, freeing human leaders to focus on complex

(ambiguous) aspects – like ethical considerations, motivating people, and improvisation. Studies on how leaders can effectively partner with AI in decision-making under uncertainty are an exciting frontier (e.g., "augmented leadership").

Finally, we stress the importance of contextual and cross-cultural understanding in ambiguity leadership. What works in one cultural or organizational context might not directly translate to another. Cultural values around uncertainty avoidance (Hofstede, 2001) could influence how ambiguity in leadership is perceived. For instance, some East Asian contexts might expect more indirect communication (high-context cultures) where strategic ambiguity is a norm, whereas Western cultures might favor more explicit communication – though the global nature of our case studies shows these are not strict divisions. Further research, perhaps through comparative case studies or international surveys, can shed light on how leaders in different cultures effectively manage ambiguity, and what followers in those cultures expect or tolerate.

In conclusion, ambiguity is an unavoidable facet of modern leadership. Rather than denying or suppressing it, leaders and scholars are learning to embrace ambiguity as a fundamental leadership dimension – akin to the way we accept that leadership involves power dynamics, emotional labor, and ethical choices. By integrating ambiguity into the core of leadership theory and practice, we equip current and future leaders to better navigate the unpredictable challenges of our time. The ability to lead when the path is not clear – to inspire confidence not only in what is known but in how we will confront the unknown – is what will define exemplary leadership in the years ahead.

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