

## 1 Introduction and Overview

In late 2016, Elon Musk found himself stuck in traffic on a packed Los Angeles highway. Frustrated, he sent a series of tweets stating “Traffic is driving me nuts. Am going to build a tunnel boring machine and just start digging . . .” So began the ambitious plans for the Hyperloop, a series of underground tunnels designed to get people from Los Angeles to San Francisco, a span of about 350 miles, in 35 minutes. Such plans were happening simultaneously with efforts to develop SpaceX, the first private space travel company as well as his more well-known company Tesla that has shaken the Detroit auto industry with its focus on stylish, high-performing electric vehicles. His entrepreneurial efforts have not been limited to only these aspiring projects, nor have all of his projects resulted in resounding success. Yet, even with a consideration of this sample of projects, change and a visionary future orientation help define the Elon Musk approach to leading.

In November 2018, more than 20,000 Google employees participated in a mass walkout in protest of several issues, including the handling of sexual harassment allegations. The effort was co-led by two employees at Google including the prominent voice of Meredith Whittaker. Whittaker has been a strong advocate for focusing on core values at Google, where she has spoken out against developing artificial intelligence (AI)-based military drones as well as other issues surrounding AI and ethics. Her strong beliefs clashed with Google’s upper leadership, and she ultimately left the organization to serve as co-founder of the organization “AI Now” that centers on ethics and responsibility in the AI space. There is little denying Whittaker’s brilliance as a scientist and even less room to deny her commitment as a leader to her core beliefs and values in the technology arena.

Many of us have sent samples to a lab to learn more about our roots and trace our ancestry. We have Anne Wojcicki and her company 23andMe to thank for much of that knowledge. Wojcicki is a brilliant innovator, breaking barriers at YouTube and Google. Her approach, however, is quite different from that of Musk and Whittaker, in that she has laid problem-solving, not a future-focused vision or focus on a system of beliefs, as her leadership foundation. In an interview with *Inc.* magazine (Ryan, 2019), she notes, “When we try out new products here, I tell my employees they should assume some things will resonate with people and some things won’t . . . You should be a constant learning machine.” As described by Carter (2016) in an interview for the *Wall Street Journal*, “For this CEO . . . pragmatic solutions are a way of life.” Wojcicki has an impressive array of successes as a leader, and her approach to getting there has been through a focus on rationality and pragmatism.

These three leaders serve to illustrate contrasting approaches to leading successfully in organizations. Elon Musk with his focus on change and novelty, Meredith Whittaker with her focus on core beliefs and values, and Anne Wojcicki with her pragmatic approach to advancement through problem-solving. What is fundamental to this effort, however, is understanding that despite their differing styles, all three have proven to be highly successful leaders in a similar arena. This trend, moreover, is not unique to Silicon Valley or the technology space. In the civil rights era, three leaders took very different approaches to leading (Bedell-Avers et al., 2009). Booker T. Washington served as a pragmatist, Frederick Douglass as a charismatic visionary, and W. E. B. Du Bois as the ideologue, yet all three collectively led improvements to civil rights. The last three US presidents also contrast each other stylistically, with Barack Obama's charismatic campaign on hope; Donald Trump's focus on an idealized bygone era, seeking to make America "great again"; and Joe Biden's pragmatic focus on listening to scientists and experts as the way forward. Professional and college football coaches (Hunter et al., 2011), world leaders during COVID-19 (Crayne & Medeiros, 2020), and student samples (Hunter et al., 2009; Lovelace & Hunter, 2013) all illustrate an important but often overlooked observation about leadership: there is more than one way to successfully lead people and organizations. In this Element, we explore these three styles of charismatic leadership, ideological leadership, and pragmatic leadership, referred to as the charismatic, ideological, and pragmatic (CIP) theory of leadership.

### 1.1 Origins of the CIP Theory

Max Weber was a German scientist with expertise in sociology and economics, although interestingly he preferred to see himself as a historian (Burke, 2005; Wren & Bedeian, 2020). Weber heavily influenced a number of scientific domains, including most relevant here the study of management and leadership (1924, 1947). More specifically, he was one of the first leadership scholars to suggest that there were multiple types of forms of authority and influence. The three forms he discussed were charismatic, traditional, and rational. The charismatic influence was linked to exemplary character and heroism; traditional styles of influence were linked to timeworn tradition; and rational influence was based on respecting processes, bureaucracy, standardized approaches, and the positions held by those in those bureaucratic roles. Weber's work laid the foundation for the notion that there are multiple ways to lead and manage others.

Although other researchers have discussed the notion of varying forms of influence and styles of leading (e.g., Hackman & Wageman, 2007), it was Mumford (2006) who formally instantiated the CIP theory. Mumford and

colleagues (2020) outline the origins of the CIP theory, and their account is certainly worth a read. Their discussion points to a number of influences shaping the emergence of the framework with two standing out as most influential. The first was Mumford's initial reading of a Benjamin Franklin biography earlier in his career. This initial foray into the life of Franklin led to a qualitative analysis of ten social innovations he led (Mumford, 2002; Mumford & Van Dorn, 2001), and in that work, the seed of an idea was born. Franklin was prolific as an inventor and highly impactful as a leader but was hardly viewed as a charismatic individual. Instead, he led primarily through rational appeals, convincing others to follow through logic and reasoning. The second early influence driving the development of the CIP theory came about through Mumford's early career work with the Department of Defense and the intelligence community. When the terrorist attack occurred in the United States on 9/11, Dr. Mumford and his team set out to examine how such an event could happen drawing on his experiences in the intelligence community as well as his expertise as a researcher. Specifically, he led a group seeking to understand how followers were convinced to participate in these destructive activities. The finding from this work was that destructive leadership took on several forms including most relevant here, the realization that ideological leadership or a focus on beliefs and values was one pathway to substantial outcomes at the individual follower and organizational levels (Mumford et al., 2007).

These observations on leadership emerging from detailed examinations of leaders such as Benjamin Franklin as well as events surrounding 9/11 stood in contrast to the emerging zeitgeist at the time. Namely, leadership was largely dominated by a focus on transformational and charismatic leadership (Bass, 1985; Yukl, 1999). These perspectives emphasized creating a compelling and positively emotion-laden vision for followers. Rather than rejecting the robust findings that transformational and charismatic leadership were quite appealing, Mumford (2006) took a more novel approach. He drew on the work of Weber and suggested that there were multiple pathways to the same outcome and that the charismatic pathway was just one avenue to successful leadership. That is, it was possible for leaders to engage in differing approaches to leading yet still be successful in achieving their goals. Through a large-scale effort involving countless hours of coding more than 200 academic biographies, the foundational principles of the CIP theory of leadership were born.

## 1.2 Equifinality and Leadership

The key feature that makes the CIP unique is the premise of multiple pathways to the same or similar outcomes. This premise is known as equifinality,

a concept emerging from the fields of physics and biology (Von Bertalanffy, 1950). Interestingly, a strong case for equifinality and multiple viable pathways to achievement has been made across a variety of research domains, such as innovative performance, school achievement, and decision-making in social contexts (e.g., Baas et al., 2013; Bledow et al., 2009; Joshi & Knight, 2015; Stuurmer & Simon, 2004). Within the domains of leadership and management, however, there have only been a limited number of applications of the equifinality concept. Hackman and Wageman (2007) recently suggested that equifinality had utility in thinking about leadership but was often missed due to an overreliance on singular (i.e., one best way to lead) approaches. They express a sentiment that echoes the broader criticism of the leadership literature's overreliance on vision-based perspectives like transformational or charismatic leadership (Dinh et al., 2014; Lord et al., 2017; Van Knippenberg & Sitkin, 2013). Furthermore, Ashmos and Huber (1987) as well as Gresov and Drazin (1997) referred to equifinality in the study of organizational systems and management as one of the critical “missed opportunities” (p. 404). Although the leadership and management domains have not fully embraced the concept of equifinality, there are a few important and notable exceptions that are offered later in this Element.

In their work on organizations and systems theory, for example, Katz and Kahn (1978) suggested that equifinality occurs in organizations when “a system can reach the same final state, from different initial conditions and by a variety of different paths” (p. 30). Along similar lines in the strategy literature, Porter (1980) suggested that competitive advantage could be gained via three equally viable strategic approaches: being unique and different, being more narrowly focused on what was done previously, and solving problems across a range of pragmatic cost issues. Relatedly, Miles and colleagues (1978) suggested that organizations could be successful in adapting to change, using differing yet equivalently viable approaches or types that include *defenders* who seek stability via insulation and a narrowed focus, attempting to “achieve strict control of the organization” (p. 551); *prospectors* who emphasize change and for whom “maintaining a reputation as an innovator” (p. 552) was their key to success; and *analyzers* who keep a watchful eye on emerging trends, operating across several product domains, and shifting to solve problems as needed. Perhaps most relevant to our effort is the aforementioned work of Weber (1924, 1947), who suggested that there were three types of legitimizing authorities in the context of managing employees and followers. Thus, we can see that the notion of equifinality has percolated in leadership and organizational thinking for some time now, with the CIP theory formally incorporating the premise into its foundation.

### 1.3 The CIP Model and Mental Models: How Leader Pathways Are Formed

The macro leadership literature has established that leader decisions differ in situations that involve multiple stimuli in complex and ambiguous situations (Cyert & March, 1963; Finkelstein et al., 2009; Mischel, 1977). It is these critical decisions that are guided by the framework of the leader's sensemaking process, not some set of known optimal actions, that guides successful outcomes. Leaders perceive the same situations in different ways, identify different sets of options to deal with problems, and ultimately vary in how they implement their leadership approach (Barnard, 1938; Hambrick, 1989). We argue that these points parallel the perspective of Mumford and colleagues' conceptualization of their CIP model and fit well within an equifinality approach that requires and allows for an open, complex system with multiple pathways to the same outcome. Thus, by building off the work of Weber (1947) and Mumford (2006), we reconcile the broader leadership literature with more macro perspectives (Hambrick, 2007; Hiller et al., 2011) by explaining that all of these perspectives recognize that differences in the approach of leaders (i.e., their styles of leadership) can be attributed to foundational variance in their leader orientations. Drawing from these perspectives (Finkelstein et al., 2009; Hambrick & Mason, 1984; March & Simon, 1958), we explain that leader orientation is, broadly speaking, the mental framework that guides a leader's view of the world (descriptive mental model) and how they choose to operate within their world as leaders (prescriptive mental model). Visualized in Figure 1, leader orientation is the primary initial pathway differentiator in the model.

#### *1.3.1 Leader Orientation Formation: Descriptive Mental Models*

Before turning to the role of mental models in how leaders approach each pathway, it is important to acknowledge that the sensemaking literature is complex, and recent reviews reveal that there is no single agreed-upon definition of the phenomenon (see Brown et al., 2015). In the case of CIP, researchers have taken a mental model perspective on sensemaking whereby leaders reduce equivocality for followers by providing a framework to guide perceptions of both how the world operates (e.g., causes of outcomes) and how the world will be. Thus, leaders are not providing followers with a snapshot of a yet-to-be-discovered truth, but rather offering their "invented" (Brown et al., 2015) perspective as dictated by life experience (Weick, 1995).

Stated in the framing of mental models as sensemaking mechanisms, how a leader views their world will ultimately shape how they will attempt to

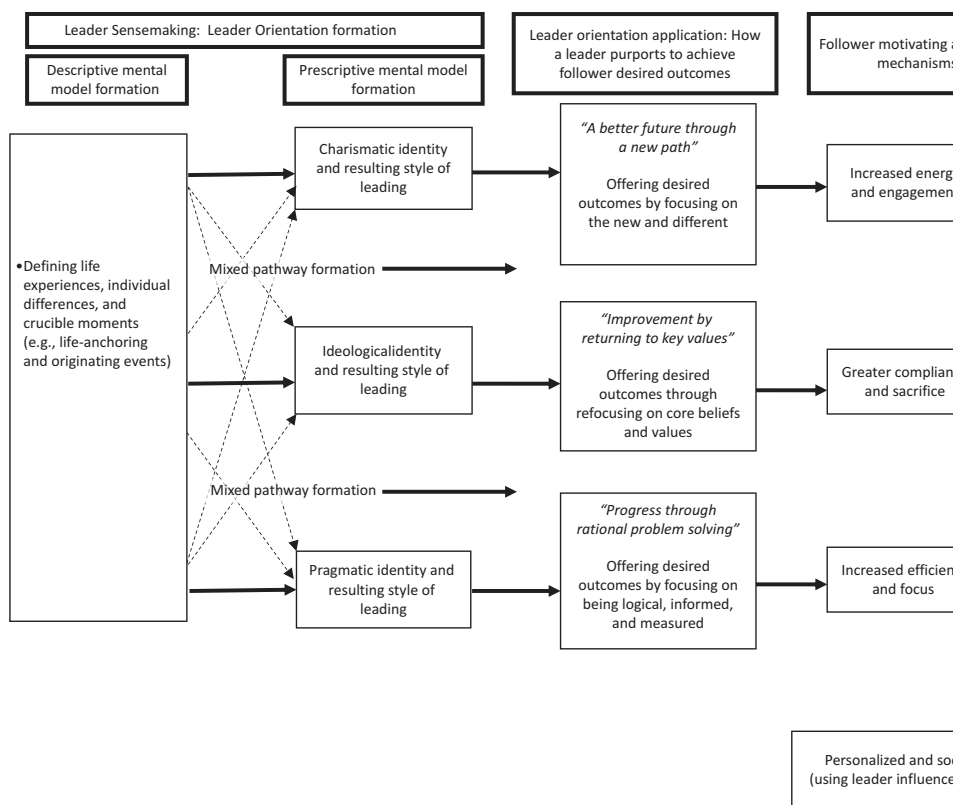


Figure 1 CIP model of leadership

operate and function as leaders within that world (Strange & Mumford, 2005). More directly, leaders are “active authors” (Brown et al., 2015, p. 267) offering their view of how and why events occur. Key or crucible life experiences have a strong impact on what a leader sees as the causes and goal linkages of outcomes (Goldvarg & Johnson-Laird, 2001; Janson, 2008) and serve to sculpt their descriptive mental model (Bennis & Thomas, 2002; Hambrick & Mason, 1984; Mumford et al., 2006e; Weick, 1995). Research indicates that a variety of specific experiences influence a leader’s cognitive orientation (e.g., Atwater et al., 1999; Day et al., 2014; Hall, 2004; Kotter, 1988). For example, a leader’s educational background, developmental experiences in specific functional areas (e.g., pilot training, military experience), and family experiences all influence how leaders vary in their identification of important information to consider and their interpretation of that key information (Finkelstein et al., 2009; Strange & Mumford, 2005; Zaccaro et al., 2018). Thus, the blending of a leader’s personal experiences and leadership experiences forms the foundation of a leader’s orientation (Gioia & Poole, 1984; Pillemer, 2001; Strange & Mumford, 2002). Central to the CIP model, however, is that each pathway is differentiated by a unique set of experiences (Fromm, 1973; McAdams, 2006; Mobley et al., 1992). That is, leaders who solely utilize a charismatic approach will experience a differing set of life-defining moments than those leaders solely following a pragmatic pathway. Moreover, leaders who have the potential to utilize multiple styles may experience a blend of crucible life events that characterize such approaches.

The case of differentiated life experiences serving as the foundation for varying leader pathways is perhaps best made via consideration of work on life narratives. Specifically, Ligon and colleagues (2008) used a life narrative framework (Anderson & Conway, 1993; Habermas & Bluck, 2000) to investigate the life experiences of 120 historical leaders, observing that each of the three leader pathways began with a series of differing life events or narratives. More specifically, they found that charismatic leaders experienced a greater number of life-redirecting events or life events that involved a fundamental change in an individual’s life direction, creating a comfort level with change and ambiguity. Ideological leaders experienced more life-anchoring events or life events that highlighted the importance and function of belief systems when making critical decisions. Pragmatic leaders experienced more analytical originating events or life events that promoted the importance of focusing on empirical information and the immediate nature of problems to find incremental success in addressing challenging situations. In each of these cases, life experiences influenced the information leaders saw as important to making sense of



critical events and laid a foundation for the interpretation of future events (Hunter et al., 2011; Lovelace et al., 2019).

Furthermore, integrating with macro strategic leadership, Hambrick and Mason's (1984) original work on upper echelons helps solidify the role that experiences play in shaping a leader's worldview and how that worldview influences important outcomes for organizations. In their paper, Hambrick and Mason (1984) propose several upper echelons characteristics (i.e., executive experience, cognition, and values) that in combination with contextual considerations predict firm strategic choice. For ease of measurement and operationalization, early upper echelons research included multiple observable characteristics (i.e., age, functional tracks, career experiences, education, socio-economic roots, etc.) as proxies that can be used to tap into differences in CEO and Top Management Team (TMT) cognition and values, which ultimately influence key outcomes for organizations (e.g., strategic choices and performance). The underlying assumption is that observable characteristics shape the upper echelon's life narrative, impacting the individual orientation of executives and the subsequent choices they make for their organizations. As such, integrating with our current framework, the importance of crucible life events for leader orientation has been considered both from a macro and micro leadership perspective.

On the whole, crucible life events and leadership events serve as the foundation for leader orientation formation. These critical life events, in particular key leadership experiences (i.e., events that trigger a reflection on or development of one's self-concept and skill as a leader), are essential to the way a leader views the world around them and subsequently makes sense of future challenges they face in organizations (Hammond et al., 2017). This perspective is also consistent with work by Zaccaro and colleagues (2018) who discuss both early life experiences and developmental experiences as key drivers of leadership capacity. Thus, as the work of Ligon and colleagues (2008) and others demonstrate, different types of key events support the adoption of differing leadership pathways.

### *1.3.2 Leader Orientation Formation: Prescriptive Mental Models*

In contrast to a descriptive mental model that depicts how the world operates, a leader's prescriptive mental model represents how the leader believes the world *could be* and is derived largely from reflection on their descriptive mental model (Hunter et al., 2011; Mumford, 2006). In other words, a leader's prescriptive mental model represents the formation of the leader's orientation or approach to leading and, as noted by Brown and colleagues (2015), is most



often manifest in sensemaking through discourse or how a leader tells others the world can be. A leader’s orientation is the core of a leader’s cognitive lens as it drives how they analyze and make decisions in uncertain conditions (Bedell-Avers et al., 2009; Gioia & Chittipeddi, 1991; Maitlis & Lawrence, 2007), and it is of note that for equifinality to occur, uncertainty and ambiguity characterizing an open system are necessary (Katz & Kahn, 1978). Aspects of a prescriptive mental model include *time frame orientation*, *type of experience used*, *nature of outcomes sought*, *number of outcomes sought*, *focus on model construction*, *locus of causation*, *general controllability of causation*, *crisis conditions*, *use of emotions*, and *targets of influence*. See Table 1 for a summary of the key differentiating Dimensions of CIP leaders’ mental models (see Allen et al., 2020; Hunter et al., 2011 for thorough explanations of each dimension).

**Table 1** Summary of the dimensions of the CIP model of leadership

Dimension	Definition
1. Time frame orientation	<ul style="list-style-type: none"><li>• The temporal reference point used to steer the construction of a prescriptive mental model, guiding the selection and organization of key causes and goals (i.e., future, present, or the past)</li></ul>
2. Type of experience used	<ul style="list-style-type: none"><li>• The use of positive or negative examples to influence the construction of mental models (i.e., positive examples of successful change, failure of the current system, or combination)</li></ul>
3. Nature of outcomes sought	<ul style="list-style-type: none"><li>• The type of goals or outcomes highlighted to frame mental model construction (i.e., positive, transcendent, or malleable)</li></ul>
4. Number of outcomes sought	<ul style="list-style-type: none"><li>• The focus on a number of goals or outcomes in accordance with a prescriptive mental model (i.e., multiple, selected few, or variable)</li></ul>
5. Focus on model construction	<ul style="list-style-type: none"><li>• The orientation toward internal or external demands as a guide to the construction of a prescriptive mental model (i.e., internal vs. external)</li></ul>
6. Locus of causation	<ul style="list-style-type: none"><li>• The beliefs that govern how one sees the key causal forces that should be considered in the construction of a prescriptive mental model (i.e., people, the situation, or an interaction)</li></ul>
7. Controllability of causation	<ul style="list-style-type: none"><li>• The beliefs one holds about an individual’s ability to control the emphasized locus of causation (i.e., high, low, or variable)</li></ul>

Table 1 (cont.)

Dimension	Definition
8. Targets of influence	• The follower(s) that a leader intends to direct their message or appeal toward (i.e., mass groups, those with similar beliefs, or select elites)
9. Crisis conditions	• The contexts in which leader differences are most likely to emerge (i.e., ordered, chaotic, or localized)
10. Use of emotions	• The use (or lack) of emotion as an influence tactic to communicate important information to followers to motivate action (i.e., positive, negative, or rational)

This work on leader experiences reveals that individuals are unlikely to experience events that position them solely into one specific leader orientation. Instead, it is probable that key life events will result in some combination of experiences that provide foundational elements that lead to the development of various leader orientations (three of which we present in our model). Thus, although a *primary* style may exist for a given leader, by taking a profile perspective, mixed orientations are likely more prevalent than early work on historical leaders might have specified (Hunter & Lovelace, 2020). To facilitate a discussion of how leaders may (or may not) navigate their mixed-orientation profile, it is important to first acknowledge the existence of this more nuanced approach to understanding a leader’s baseline mental model.

1.3.3 Navigating Mixed Orientations

Acknowledging the existence of mixed-leader-orientation profiles raises several questions: How do leaders navigate between different aspects of their profiles to utilize different leadership pathways? Can all leaders navigate between different profiles? Are the most successful leaders those that can adopt different types of orientations to utilize varying leadership pathways? Before detailing the key variables that dictate a leader’s ability to utilize multiple pathways successfully, we want to make it clear that at this point, we are not arguing that the most effective leaders are those that navigate between various pathways. Instead, we are simply highlighting that leaders have the potential to possess characteristics of various recognized leader orientations as a part of a broader orientation profile. We come back to the discussion of leader effectiveness after outlining our proposed process model of leadership.