Affective Politics and Technology Buy-In:
A Framework of Social, Political, and Fantasmatic *Logics*

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Abstract

We propose a socially informed explanation of technology framing by examining technology "buy-in"—actors' relative susceptibility to such framing. We draw on the field of critical social theory to introduce the "*Logics*," a new framework to the IS discipline that reveals a performative relationship between collective framing, power, and affect. The *Logics* enable us to study buy-in by revealing the differing degrees of affective self-identification that underpin and color social practices, showing their inherently political nature. We exemplify the affective as well as social politics of buy-in with an account of Unity 3D, a market-leading game engine that underwent a major repositioning from "fringe" to "mainstream" markets, and discuss four poles of affective positioning with which to conceptualize technology buy-in. We conclude by highlighting the consequent need for greater political and ethical awareness about the framing of IS and by proposing a framework for conceptualizing actors' orientations toward and thus possible buy-in or resistance to technology framing.

Keywords: Technology Buy-In, Technology Framing, Affective Politics, Discourse, Group Dynamics, Game Engine

1 Introduction

In this paper, we argue that affect plays a critical role in social processes associated with the design, conceptualization, and especially framing of new types of information technologies. In so doing, we contribute to the rich existing literature on technology framing by demonstrating how people's susceptibility to the framing, construction, and manipulation of IS discourses and meaning at the group level—already well-established in the literature—is mediated and conditioned by their own, affective buy-in to such discourses. The potential significance of our argument for IS researchers is that affect is foregrounded as an important medium through which political battles over

emerging technologies are fought. In this view, affectively mediated struggles can influence the predominance of one technology over another as affective vulnerabilities are exploited through the use of targeted discursive strategies intended to encourage or discourage buy-in to technology framing.

In drawing attention to the role of affect in technology framing, we connect our argument to existing, well-established research on the important role of power and politics in this process, especially the role of hierarchical authority, resource power (control over resources), and resistance (Markus & Pfeffer, 1983; Jasperson et al., 2002). Our own research seeks to contribute to this broad field by attending to "meaning power": a less-studied area of IS power and politics associated with the

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construction of meaning (Azad & Faraj 2011) that acknowledges the plurality of interests and positions involved in making decisions about the meaning and design of technology (Faraj et al., 2004; Winner, 1993; Glynn, Barr, & Dacin, 2000; Woolgar, Coopmans, & Neyland, 2009; Barrett, Heracleous, & Walsham, 2013).

We enrich the current, predominantly rational and cognitive understanding of "meaning power" in technology framing by focusing on how these processes may be intertwined with affect. In particular, little is known in IS research about the linkages between affect and the more traditionally studied, rational domain (Thompson, 2012), and even less is known about how and why actors consent to ideological framing (Pignot, 2016a, 2016b)—both arguably important gaps in our understanding that we seek to address. Our claim is that affective processes can render actors more, or less, receptive to certain technologies than others, leading to buy-in to one frame over other alternatives (Kaplan, 2008). Our contribution offers an alternative perspective from, for example, Barrett et al.'s (2013) discussion of framing as a struggle for "cognitive legitimacy or 'taken-for-grantedness,'" (p. 205) in which ideologically laden discourse has "an essentially cognitive nature" (p. 206), as we seek to highlight that affective and prerational, yet equally socially embedded processes are also at work in shaping which design framing will prevail (see also Avgerou & McGrath, 2005). Our paper offers an explanation of the mechanisms underlying such processes.

Our explanation builds on existing understandings of "psychosocial" dynamics (Fotaki & Kenny, 2014) defined as "collective emotions that link [individual] behavior and structure, as well as how these dynamics shape others, people and systems" (Vince, 2018, p. 15). We contribute to and deepen our understanding of these dynamics by building on Glynos and Howarth's (2007, 2008) poststructuralist theoretical framework of *Logics of Critical Explanation* (hereafter, *Logics*). In illuminating the interplay between affect and political identification with discourse, *Logics* deepens our understanding of how *unconscious* (affective) receptiveness, *personal* vocabularies of interpretation, and emotive *social* performance come to shape social reality (Gecas, 2008) by predisposing subjects to either accept or contest ideas with which they may be confronted. In so doing, *Logics* enables us to contribute to and enrich the recent conversation about performativity in IS research (Cecez-Kecmanovic, Kautz, & Abrahali, 2014) by showing how subjects' receptiveness to performances such as technology framing—and thus the replication, or contestation, of associated ideologies, practices, and structures—may be enabled or constrained by the interplay between these unconscious, biographical, and social dimensions. In particular, we extend forward the temporal "window" within which performative framing is typically studied

by showing how performances are located within and shaped by preconscious, biographical, and social dynamics that may *precede* as well as continue throughout the period of study. In exploring the psychosocial linkages between group-level ideologies and individual value-identities, we also blur the line between "within-groups" and "between-groups" that has traditionally characterized studies of technology framing.

Addressing the extensive literature on IS design (e.g., Bergman, Lyytinen, & Mark, 2005; Gregor & Jones, 2007), we have chosen to locate our contribution specifically within the subgenre of technology framing, because this is the juncture where performances of buy-in to technological design are empirically visible. For space reasons, we therefore refrain from addressing other aspects of IS design such as technology acceptance, adoption, and implementation (e.g., Zmud & Cox, 1979; Swanson, 1988; Davis, 1989; Orlikwoski & Gash, 1994; Venkatesh, 2000; Gallivan, 2001; Koufaris, 2002; Davidson, 2002; Kaplan, 2008). Our focused rather than broad approach builds on the work of those who have demonstrated the benefits of discussing these phenomena separately (Gondo & Amis, 2013; Klein & Sorra, 1996; Lauterbach & Mueller, 2014; Pierce & Welbeck, 1977); an in-depth discussion of the relationship between these phenomena and related literatures lies beyond the scope of this article.

Accordingly, we define "buy-in" as the act of identifying with and consenting to the framing that characterizes the design of technology. Figure 1 below provides a simplified map of the literature that helps to position our work and contribution within the existing debates. Of course, the relationship between the phenomena in Figure 1 is much more complex than suggested by our linear flowchart and Figure 1 should be read only as a way to clearly position our argument and contribution.

Our investigation of buy-in to performative framing of technology addresses the following core question: *How does affect condition the political dynamics of buy-in to technology framing?*

To respond to this question, we build on the *Logics* approach (Glynos & Howarth 2007), a relatively underexplored ontological contribution to political and social theory, from what is known as the "Essex School" of discourse analysis. The *Logics* approach has made some initial inroads into management studies (Cederström & Spicer, 2014; Thompson & Willmott; 2016) but, to our knowledge, it has never been used before in IS research. The *Logics* approach is particularly suitable for studying IS, as it is capable of foregrounding the affective self-identification that underpins social practices as well as disclosing their inherently contestable nature.
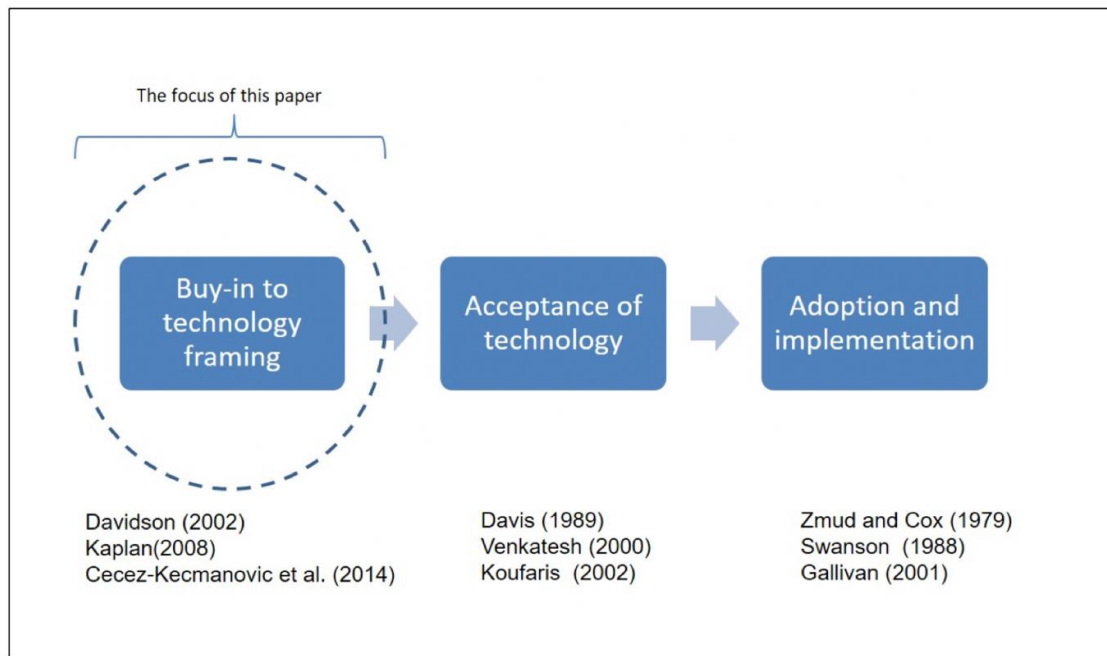
Figure 1. Positioning of the Paper in the IS Literature

The key argument underpinning the *Logics* approach and our paper is that actors attribute meaning to and thus are predisposed toward competing discourses to the extent that these framings appeal to forms of self-identification that are affectively experienced (Glynos & Howarth, 2007). In clear terms, how and why both specialists and lay users understand and jump on conflicting technological bandwagons is determined by factors that are neither exclusively rational nor exclusively individual and has much to do with socially inflected notions of who they think they are or who they want to be. The *Logics* approach both exposes and accounts for the links between actors' affective positioning, their receptiveness toward framings, and resultant social outcomes; it thus allows us to shed light on the ways in which affectivity and prevailing discourses affect competing framings of IS.

The paper proceeds as follows. We first provide an overview of where framing and politics have been addressed within the IS community and register the limited role granted to affect. We connect these perspectives to the areas of group motivations and affective politics, before introducing the *Logics* approach and examining how this framework can help us to reconsider the technology framing process. We then illustrate our theorizing with an empirical case example showing how the psychosocial dynamics of buy-in enable and constrain the technology framing process via the case of Unity 3D, a market-leading game engine that underwent a major repositioning from "fringe" to "mainstream" markets. We conclude by discussing the implications of an enhanced awareness of affective politics, such as that offered by the *Logics* approach, for enriching existing debate on the design, acceptance, and implementation of IS.

2 Framing, Group Dynamics and Affective Politics in IS

We open with an overview of *what* we know about affective politics in technology framing in order to introduce our construct of buy-in. Our main objective is to examine *why* affect has been understudied in IS so far: while studies of IT design have acknowledged the social embeddedness of framing practices, few have actually addressed linkages between technological framing, group dynamics, and affect in any systematic way (Davidson & Pai, 2004). Acknowledging this gap leads us to investigate how affect has been studied in IS by attending more specifically to the areas of sociopolitical framing of technology and group motivations and connecting these categories to our central notion of affective politics. We streamline in the main text of the literature review those theoretical routes that enhance our understanding of technology buy-in, such as the Irvine School studies on how politics is incorporated into meaning-making (Kraemer & Dutton, 1979; Danziger et al., 1982), the circuits-of-power approach (Silva & Backhouse, 2003), the technology acceptance model (Davis, 1989) and the IS literature on affects/emotions/feelings (e.g., affective response model, Zhang, 2013); we examine these in some detail in Appendix A.

2.1 Technology Framing as a Political and Performative Process

In this section, we discuss how researchers have incorporated the role of politics in the framing of IS and then show how acknowledging the socially contested nature of design has led to a performative focus on how meanings are framed and contested both within and between groups.

Frames refer to "definitions of organizational reality that serve as vehicles for understanding and action" (Gioia, 1986, p. 50). Orlikowski and Gash (1994) use the concept of "technological frame of reference" to describe the "assumptions, expectations, and knowledge that members use to understand technology in organizations" (Orlikowski & Gash, 1994, p. 178). Frames apply to a variety of domains, including the nature of technology, technology strategy, and technology in use (Orlikowski & Gash, 1994), but also the capabilities and design of technology, the business value of technology, and more (Davidson & Pai, 2004). In this paper, we focus in particular on the framing of the nature of technology that takes place when technology design is not yet black boxed and still open to debate and controversy (Bijker, Hughes, & Pinch, 1987; Faraj et al., 2004). Frames and framing are traditionally understood in sociocognitive terms (Orlikowski and Gash 1994; Davidson 2002). According to Walsh (1995), for example, framing results from the application of knowledge structures defined as "mental template(s) that individuals impose on an information environment to give it form and meaning" (p. 281).

Knowledge structures include frames of reference, interpretive schemes, scripts, and other concepts often derived from Bandura's (1986) original notion of schemas: template-like cognitive frames that actors use to reduce ambiguity in the world. Orlikowski and Gash (1994) focus particularly on the notion of "incongruence"—the idea that when groups, such as developers and users of, say, a database system, share different assumptions about information technologies, these differences might cause problems, including breakdown in communication, disinvestment or social clashes (Zuboff, 1988; Wastell, 1999). While this approach considers the conscious and unconscious priming of frames, their activation, and the speed with which they are accessed (Sherman, Mackie, & Driscoll, 1990; Epley & Gilovich, 1999), early studies fail to examine their political and affective implications.

This shortcoming has been addressed by a group of authors who convincingly argued that technology framing should be understood also as a sociopolitical process (Markus & Bjorn-Andersen, 1987; McLoughlin, Badham, & Couchman, 2000; Marabelli & Galliers, 2017; Simeonova et al., 2018). This group

of scholars examined, in particular, how political framings are enacted through narratives and subjective interpretations held by groups (e.g., Bartis & Mitev, 2008; Fincham, 2002). They suggest that different framings underpin and sustain different and at times conflicting values. These authors make a distinction between frame inconsistency, when the conflict of views takes place within a group of stakeholders, and frame incongruence, when the conflict is between the views of relatively homogeneous stakeholder groups. For example, Leonardi (2011) found that engineers frame the same technology in different ways in different departments, thus displaying frame incongruence.

Mazmanian (2013), on the contrary, discusses how mobile email devices were framed differently by two occupational groups. While stakeholders often resolve within-group inconsistencies through some form of consensus-building or convergence (Young, Matthiassen, & Davidson, 2016), between-group incongruence gives rise to political maneuvering and conflicts. For example, Barrett et al. (2013) observed the potential dissent that can emerge between various computerization movement entrepreneurs. Suchman (1995) argues that the normative legitimacy of a technology is often obtained at the level of a struggle for meaning between different groups of stakeholders and can be viewed as the outcome of processes of technology framing and counterframing (Azad & Faraj, 2011). The process is thus inherently political.

Studies that focus explicitly on incongruence of frames between groups (Orlikowski & Gash, 1994) still assume a distinction between frame incongruence and inconsistency, the assumption being that stakeholders understand technology designs in a certain way because they are part of a specific interest group. In contrast, in this paper, we are interested in the process through which actors' (re)positioning *within* a group can lead to contradictions *between* groups (Bernardi, Constantinides, & Nandhakumar, 2017), enabling a competing frame to contest the hegemony of the dominant one. In short, we are interested in the affective links between frame inconsistency and frame incongruency and in the way this dynamic may shape buy-in.

The foundations for a more blurred distinction between "within-" and "between-groups" have been established by IS authors investigating the idea of performative framing (Geels & Verhees, 2011; Cecez-Kecmanovic et al., 2014). Rather than focusing on the individual or occupational level, as is typical in a more cognitively oriented approach, these researchers conceptualize frames and frame-making as the active social construction and negotiation of meaning through interactive processes of communication. For example, Benford and Snow (2000) suggest that a collectively held perception of a situation is generated via

contentious framing, which is essentially a performative process, born within situated practice, and highly emergent and unpredictable. The performative approach further emphasizes that collective meaning-making takes place on public stages (e.g., public debates, media, newspapers) and might involve various stakeholders including social movements, industry associations, policy makers, and special-interest groups that engage in discursive struggles seeking to influence collective framings (Geels & Verhees, 2011). Crucially for us, Cecez-Kecmanovic et al. (2014) look at projects as actor-networks that enroll and mobilize various IT groups—managers, technologies, IS developers, methodologies, business cases, users, committees, project documents, reports, and others.

From this perspective, political performativity is instantiated in the construction and maintenance of networks comprising both human and nonhuman actors (Callon, 1986; Law, 1992): the focus is on how networks of power relations are composed, how they come into being, how they compete with other networks, and how they are made more durable over time (Latour, 1991). Further, Cecez-Kecmanovic et al. (2014) argue that a performative framing renders intelligible the meaning-making, interpretive, and political processes of technology project assessments. While partially acknowledging the persuasion that is inherent to performative framing when enrolling other actors in the network (Latour, 1996), approaches driven by actor-network theory (ANT) have been accused of downplaying criticality and thereby potentially colluding with powerful actors (e.g., Walsham, 1997; McLean & Hassard, 2004; Whittle & Spicer, 2008). ANT also has been traditionally silent on the role of affectivity and emotionality—partly as a consequence of its original project to rebalance attention across human and nonhuman actants in social affairs (Latour, 2005). Although more recently, "affective ANT" (Sage, Vitry, & Dainty, 2019) has acknowledged a certain distinctiveness to human agency by foregrounding the role of affect in enabling the diffusion of technological bodies, emotions, and human passions that are still viewed as the consequence of technologies that activate them; for Latour, to have a body is "to learn to be affected" (2004).

In this paper, we build on this important work on the politicization of framing and try to offer an explanation not only for *how*—but also for *why* a particular group's interpretation comes to command more attention: in other words, why some framings become more seductive and more powerful than others (Davidson, 2006; Kaplan, 2008; Steinberg, 1998). To respond to this question, we first need to examine what we know about the links between motivations and collective dynamics that surround buy-in to technology framing.

2.2   Group Motivations

Authors who conceptualize IS as a sociopolitical arena in which various interest groups follow their own motivations suggest that institutional, strategic, and ideological drives are typically at work (e.g., Robey & Boudreau, 1999; Berente & Yoo, 2012). Groups can be driven by institutional pressures, i.e., institutionalized values and prescriptions that sustain and legitimize their behaviors (Avgerou, 2004; Powell & Colyvas, 2008; Thornton, Ocasio, & Lounsbury, 2012). For example, authors such as Berente and Yoo (2012) used the concept of institutional logics—not to be confused with the *Logics* approach discussed here—to describe the contextual and semantic factors surrounding organization-bound activities. An institutional logic approach "emphasizes that actors do act rationally, but that this rationality is embedded in a context of goals and taken-for-granted assumptions that are situated within a particular institutional context" (Berente & Yoo, 2012, p. 378). An example is Orlikowski and Barley's exploration of the role of telecommuting and the increasing ubiquity of work-related computing in violating the institution of industrial employment that relies on the separation between work and family. These authors argue that full-time telecommuting is rare because institutional forces have constrained its spread (Orlikowski & Barley, 2001).

A main limitation of the current institutional framing approach is that it implicitly assumes group consensus—the idea that individuals *within* groups, organizations, or institutions, respond uniformly to the design of an information system—an assumption that may not be borne out in reality. The same applies to the dynamic *between* information systems stakeholders such as policy makers, activists, government agencies, and professional and membership organizations, which may harbor different interests, power, and influence and may therefore act differently (Pouloudi, Wendy, & Whiteley, 2016). The idea of institutional framing thus downplays the conditioning and agency of local actors, as well as their unique interests, personal incentives, and motivation. As a result, studies may downplay the agency of disruptive actors such as "technical champions" in delivering large-scale technology programs and acting as drivers of institutional change (Currie & Guah, 2007). They also background the presence of less institutionally legitimate aspirations derived from alternative group memberships—a phenomenon exacerbated by the boundary-less nature of online forms of organizing and their resulting overlapping memberships (Wang, Butler, & Ren, 2013).

The development of strategies for acquiring or preserving key resources has been identified as another critical motivation driving group decisions toward framing concerns. Kaplan (2008) shows how skilled social actors develop cognitive frames to persuade

others that what is proposed is in their best interests; accordingly, corporate sensemaking typically involves the skillful use of affectively charged metaphors, catchphrases, slogans, and stories (Cornelissen, Holtm, & Zundel, 2012; Fairhurst, 2010). For example, strategic and institutional actors typically use flattering idioms, images, and metaphors to mobilize political backing and rally stakeholders behind their organizing visions (Ellingsen & Monteiro, 2008). Similarly, framing tactics, skilled rhetorics, and discursive ability are often able to color the interpretations of an audience to the point of blinding them to alternative options (Maitlis & Lawrence, 2007). That said, some authors have highlighted the risk of casting organizational members as passive respondents to managers' speech and sensemaking, calling for more balanced configurations that do not privilege the act of the speaker over the listener by acknowledging cultural and possibly less conscious motivations which are not exclusively institutional or driven by strategic interests (Chreim, 2006).

Finally, groups are also driven by ideological motivations. Ideology is understood here as a set of discursive, symbolic, and material practices through which meaning about how the world is and ought to be "serves to sustain relations of domination" (Thompson, 1984, p. 146 in Constantinides & Barrett, 2014, p. 4). Boland and Tenkasi's (1995) concepts of perspective making, perspective taking, and perspective shaping illuminated the sensemaking activities of individuals situated within communities of knowing, highlighting the importance of narrative in this process (e.g., 1995 p. 357). Robey and Markus (1984) argue that system design often entails a strong ideological dimension that symbolizes rationality, regardless of the rationality of the technology itself. In this view, the use of state-of-the-art technologies and "corporate cybernetic ideology" (Meyer, 1982, p. 54) holds symbolic value beyond mere utility and signals to employees and clients that the organization favors efficient and progressive management. In other cases, technology symbolizes professionalism, a characterization that can render it more affectively desirable (e.g., a source of pride and prestige for those who have access) and exclude serious opposition by ensuring long-term commitment to it (Prasad, 1993).

For Mingers and Walsham (2010), some of the political questions around IS involve a kind of rationality that extends beyond the sole bargaining of interests and institutional relations and truly acknowledges ideological differences—the contrast between purist proponents of the "free software movement" and advocates of the "private-collective" model, i.e., collective action supported with private investment (Elliott & Scacchi, 2008), being a clear example. Building on this approach, Barrett et al. (2013) propose an ideological framing approach to

make sense of the politics that shape the development of information systems. The authors describe such framing as rhetorics that serve ideological goals: for instance, the open source movement claims that involving collective knowledge in the production of technology results in higher quality software, and a better society—such rhetorics supported technology diffusion through the widespread success of Linux.

Our argument here is that all three motivations need to be taken into consideration at the same time in order to understand peoples' buy-in to a specific technology. In our view, affectively driven ideological motivations complement and integrate institutional and strategic ones. Our aim here is to deepen these studies of ideological motivation by explaining why some frames "make it" (Sahlin & Wedlin 2008 p. 221) while others do not. Accordingly, in the next section, we suggest that a fuller understanding of the collective framing of technology requires a closer look within the IS community at the political operation of affect.

2.3 Toward an Understanding of Affective Politics in IS

In this section, we focus specifically on work to date on the relationship between affect and technology framing, a dynamic that remains largely unexplored in IS (see Appendix A). We use the term "affective politics" to encapsulate the essential contestability of technology discourse and associated framing, as well as the way in which an actor's propensity to contest or accept a particular framing is moderated by affect. In spite of increasing evidence that affect and emotions play a major role in the operation and use of digital media (Karatzogianni & Kuntsman, 2012), relatively few authors have addressed the issue of affect and framing of technology at the individual-collective level. Those authors who have attempted such a focus have adopted one of three approaches.

A first group of authors addresses the interlinkages between affect and cognitive framing from a phenomenological perspective (e.g., Boland, 1985; Zuboff, 1988; Brigham & Introna, 2006; Introna & Whittaker, 2003; Wynn, Whitley, & Myers, 2002; Ciborra, 2006; Thompson, 2012). For example, Faÿ et al. (2010) shed light on the coexistence of two distinct but intertwined modalities of perception. The first is "seeing" or perceiving objects and phenomena in an abstract, rational, and rather distant way; the second is affectivity or "embodied affectedness," which leaves no distance between us and our affective perceptions. For these authors, embodied affectedness and cognition (Mingers, 2001) work together with cognitive framing (through numbers, culture, language, etc.) to predispose us in particular ways to remain unaware of phenomena with which we are confronted, including new technologies. An example is Thompson's (2012) "biographical" affect: actors'

affective self-identification and social positioning in the present result from their unique historical exposure to forms of social framing, which in turn conditions their subconscious motivations toward information systems.

A second group explores the linkages between affect and cognitive framing using a psychodynamic approach, which addresses the dynamic relations between conscious and unconscious motivation (e.g., Hirschhorn 1988; Wastell & Newman, 1993; Wastell, 1996; 1999). In this view, social defenses and protection from anxiety typically manifest themselves through the fantasy of self-aggrandizement (users' belief in "autonomy"); they may also appear through fantasy that attributes methodology with fetishistic appeal, deriving superficial comfort from addressing "the letter" rather than "the spirit" of tackling deeper problems (Wastell, 1996). For Wastell (1999) affect is thus centrally important to understanding resistance to IS development and associated withdrawal of social engagement through the construct of emotional resistance that links the notion of affect, politics, and power.

Such a view is central also to the third approach, inspired by the Foucauldian perspective on IS (e.g., Bloomfield et al., 1997; Silva & Backhouse, 2003; Willcocks, 2004; Avgerou & McGrath, 2005; Doolin, 2004; McGrath, 2006; Avgerou & McGrath, 2007). This approach blends rationality and power through the formation of competing "regimes of truth" (Foucault, 1979) and acknowledges the authoritative character of much technical-rational framing about IS. However, it suggests that while groups seem to adopt resource-seeking strategies, power also operates unconsciously in their routine and daily actions: groups uncritically accept social control and autoregulate themselves (Coombs, Knights, & Willmott, 1992). From this perspective, power is not the capacity of an individual agent but results instead from the circulation of discourse and disciplinary techniques (Silva & Backhouse, 2003). Individuals' problematization is possible but it manifests as the rejection of the "aesthetics of their existence" rather than open resistance (Avgerou & McGrath, 2007, p. 300).

For example, Avgerou and McGrath (2005) analyze the failure of the London Ambulance Service Computer Aided Dispatch—an innovative system that automated the management of the London Ambulance Service's emergency call function and was rejected by participants (e.g., sabotaged) who discharged their frustration when using it. Central to Avgerou and McGrath's (2005) account is the technomanagerial "regime of truth" and its focus on administrative efficiency—a focus that ignored other important dimensions of IS, such as the emotionally charged behaviors of the participants. In sum, the Foucauldian

approach is helpful in addressing how peoples' receptiveness toward a certain technology requires their consent to a specific "regime of truth" (Foucault, 1991, p. 73), whose disciplinary power reaches the most intimate spaces of the subject and may trigger forms of resistance.

Table 1 summarizes our review of the literature on technology framing, collective motivations, and affective politics. The literature review illustrates that affect is increasingly granted an explanatory role in processes of accepting or resisting the framing of technology (see also Brave & Nass, 2003). Technology buy-in implies that affect as an agential force may lead actors to identify with some framings of technology and deidentify with others—often subconsciously and thus unacknowledged either by themselves or by researchers. Our review also exposes the insight that while existing studies acknowledge that framings are generated in technology design, few have actually connected the areas of sociopolitical framing, group motivations, and affective politics in any systematic way. This paper takes an initial step in engaging with these issues, by showing how technology designers themselves may be affectively invested in particular self-identifications that render them more, or less, susceptible to technology framing. In turn, this enables us to shed light on the affective politics underlying buy-in to particular framings of IS by demonstrating how affect may be considered both a medium and outcome of IS practices. This is important because without paying the necessary attention to the psychosocial dimension of this phenomenon, both researchers and practitioners risk approaching technology framing in ways that are at best inaccurate and at worst naively optimistic about the straightforwardness with which this may be accomplished, with serious consequences for organizations. In order to accomplish this agenda, we require a conceptual framework capable of foregrounding the connection of framing and power via the medium of affect: a lens grounded within an affect-based ontology of practice. We now introduce the *Logics* theoretical approach.

3 Affect as Medium of Practice: Introducing the *Logics*

3.1 Conceptualizing Affect, Meaning-Making, and Power

We propose an affect-based ontology of practice that captures those aspects of a practice that "make it tick," and offers an explanation of how such aspects enable a practice to reproduce or transform itself (Glynos & Howarth, 2007). Such an ontology arguably offers an important tool for uncovering and studying the politics of affect in IS.

Table 1. Literature Review of Technology Framing, Collective Motivations, and Affective Politics

Key insights	Research Gaps	Research stream	Example articles	Theoretical focus & core concepts
Sociopolitical framing: Buy-in is the outcome of a dynamic of framing and counterframing	Framings are constructed politically in the course of actions but we lack an approach that foregrounds the place of affect in this performative process.	• Sociocognitive • Sociopolitical • Actor-network	• Orlikowski & Gash (1994) • Mcloughin et al. (2000) • Cecez-Kecmanovic et al. (2014)	• Cognition and microlevel sensemaking • Political process perspective and "sociotechnical configurations" • Actor-network theory and "performative framing"
Group motivations: Symbolic motivations such as ideology and rituals are closely intertwined with the framing process	Existing views downplay noninstitutional and nonstrategic motivations. The notion of affect builds on and enriches ideological framings by surfacing their ethical dimensions.	• Strategic • Institutional • Ideological	• Kaplan (2008) • Berente & Yoo (2012) • Barrett et al. (2013)	• Strategy as practice and "framing contest" • Institutional motivations and "louse coupling" • Rhetorical approach and "Ideological framing"
Affective politics: Affect is not only the outcome but also the medium through which an ideological framing prevails over others	Actors are still described as somewhat passive containers of affects rather than co-producers of organizational power.	• Psychodynamic • Phenomenological • Foucauldian	• Wastell (1996) • Faÿ et al. (2010) • Avgerou & McGrath (2007)	• Psychodynamics and "social defenses" • Henry's phenomenology and "living praxis" • Foucault's theory of sexuality and "ethical problematization" (2007, p. 299)

This is because it provides an appreciation of how actors' affective identifications and disidentifications are immanently shaped by the symbolic ordering of the power relations in which they are (historically) immersed. Within this framework, affect (see Brief & Weiss, 2002; Fineman, 1993; Schmidt & Gibson, 2010; Simpson & Marshall, 2010; Voronov & Vince, 2012) is conceptualized as being socially embedded rather than subjective (e.g., Thrift, 2000; Chia & MacKay, 2007). Like Thompson and Willmott (2016), our concern with affect thus is more "psychosocial" than "psychological," the latter being typically concerned with extracting individual affective states (specific moods and emotions) from their social context. By "psychosocial," we mean that we seek to uncover the causal relationship between the political mobilization of affect and social outcomes. Our focus is thus on affective processes of subjectification through collective emotions that link behaviors and

structure, as well as on how these dynamics shape people and systems.

In studying the way in which affect may act as a medium as well as an outcome of meaning-making in practice, we follow the tradition of Laclau and Mouffe's Essex School of discourse analysis (Marchart, 2007). Authors in this tradition argue that our contact with reality is necessarily constituted through and mediated by a basic "grammar." This grammar, which they call discourse, "is largely unconscious … so the task of the discourse analyst is to explore the immanent grammars which underlie all kinds of meaningful intervention" (Laclau & Bhaskar, 1998, p. 9). In this school of thought, the discursive frames and power relations that we can see at the *ontic*, observable level of unfolding practice are constituted temporarily from an underlying, *ontological* universe of discursive possibilities of seeing, feeling, and doing, possibilities that are only partially visible[1] (Laclau &

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[1] Glynos and Howarth distinguish between ontic and ontological as follows: "In *Being and Time* Heidegger argues that an ontical inquiry focuses on particular types of objects and entities that are located within a particular domain or

'region' of phenomena, whereas an ontological inquiry concerns the categorical preconditions for such objects and their investigation" (2007, p. 108).

Mouffe, 1985; Thompson & Willmott, 2016; Hoefer & Green, 2016). Accordingly, our purpose here is to explore the affective operation of this unconscious, immanent grammar on IS practices and thus to further the investigation of affect's mediating action on social meaning-making and power relations. In turn, gaining a full understanding of technology framing requires some attempt to expose and comment upon these discursive possibilities, as well as on their relationships, with more empirically visible dimensions of unfolding social practice.

To assist in rendering this unconscious, immanent discourse somewhat more visible, we draw in particular on Glynos and Howarth's (2007, 2008) *Logics* approach. Developed from within the Essex School, *Logics* enables researchers to relate what happens in the sphere of concrete, specific, and visible social conduct at the ontic level with what may be taking place at the underlying, deeper and less visible ontological level where affect operates. Crucially, the approach allows researchers to comment on the dialogue between ontic and ontological (in simplified formulation, observable vs. unconscious) levels and to examine the social consequences of the relationship between the two. The *Logics* approach has been translated into management studies by Thompson and Willmott (2016) but, to our knowledge, we are the first to propose its use in IS.

Logics thus appears an ideal framework within which to understand the interplay between visible attempts to frame technology in a particular way at the discursive, ontic level with actors' ontological, invisible, and affectively located predispositions to passively reproduce or actively defend or challenge such framing. In formulating *Logics,* Glynos and Howarth are informed by Laclau, for whom the state of things, the extant power relations, and the preservation of the status quo depends in part on the extent to which actors continue to self-identify—or not—with their associated discursive practices. Accordingly, there is always a "trace of contingency within the structure" (Laclau 1993, p. 435). The notion of contingency, the idea that "the way things are is never a 'done deal' and things could be different," is crucial, as it enables us to highlight the constructed, precarious, and political character of social objectivity—such as a particular framing of technology. The ongoing and always provisional processes of affective identification with a practice, however, occur within the *ontological* (deep and unconscious) dimension of a practice—a dimension that usually remains invisible to actors and researchers but that comes to *affect* their response to discursive attempts at framing something in a particular way. Such alternative possibilities—and thus the contingency of apparently stable structures such as technology frames on our continuing acceptance of them—are usually invisible, since such

contingency is typically masked by the "status quo": the prevailing configuration of power relations in the ontic (empirically visible) dimension.

3.2 The *Logics* Framework

In setting out their *Logics* framework, Glynos and Howarth (2008) (see also Clarke, 2011; Ekman 2013; Holtzman 2013; Thompson and Willmott 2016) explain this unfolding relationship between ontic (visible/discursive) and ontological (invisible/affective) dimensions of unfolding social reality. In a nutshell, the *Logics* are threefold: *social (reproduction) logics* act to normalize and preserve the status quo. *Political logics* mitigate against social logics by questioning them, or by proposing alternative practices that challenge their taken-for-granted status. Crucially, *fantasmatic logics* mediate between these two by supplying the affective motivation through which actors are moved either to reproduce social logics (and associated discourses) or to subscribe to political logics (and associated discourses) that challenge the status quo.

Fantasmatic logics are underpinned by a psychoanalytic recognition of the importance of actors' powerful processes of self-identification, in which they may be prepared, unconsciously, to gloss over or entirely overlook alternative or contrasting possibilities that threaten idealized self-images or projections. *Fantasmatic logics* thus add a second dimension to power relations besides the social reproduction vs. contestation dimension mentioned above. This has to do with awareness of alternatives and the ways individuals experience and react to contingency. Glynos and Howarth (2008) suggest that *Fantasmatic logics* operate between two extreme poles that they name as the "ideological" (unquestioning conformity) and "ethical" (skeptical) modes of engagement.

An ideological mode of engagement refers to the tendency of subjects to be carried away by and succumb to "competing hyperintense fantasies" (Glynos, 2008, p. 291), whereas an ethical mode of engagement entails a strong skeptical orientation whereby "a subject [is] struggling with her or his tendency to fantasize at all." Closer to the ethical pole, an individual thus become more fully aware of alternatives framings, recognizes "the contingency of identifications and resists 'buying in' to them" (Thompson & Willmott, 2016, p. 489).

Together, the *Logics* provide an analytical framework with which to discuss the unfolding relationship between affect, meaning-making, and power relations that, indeed, reveals these as dimensions of a single phenomenon. The four analytical dimensions of the framework (social, political, ideological, and ethical) can be placed within a quadrant, as shown in Figure 2.
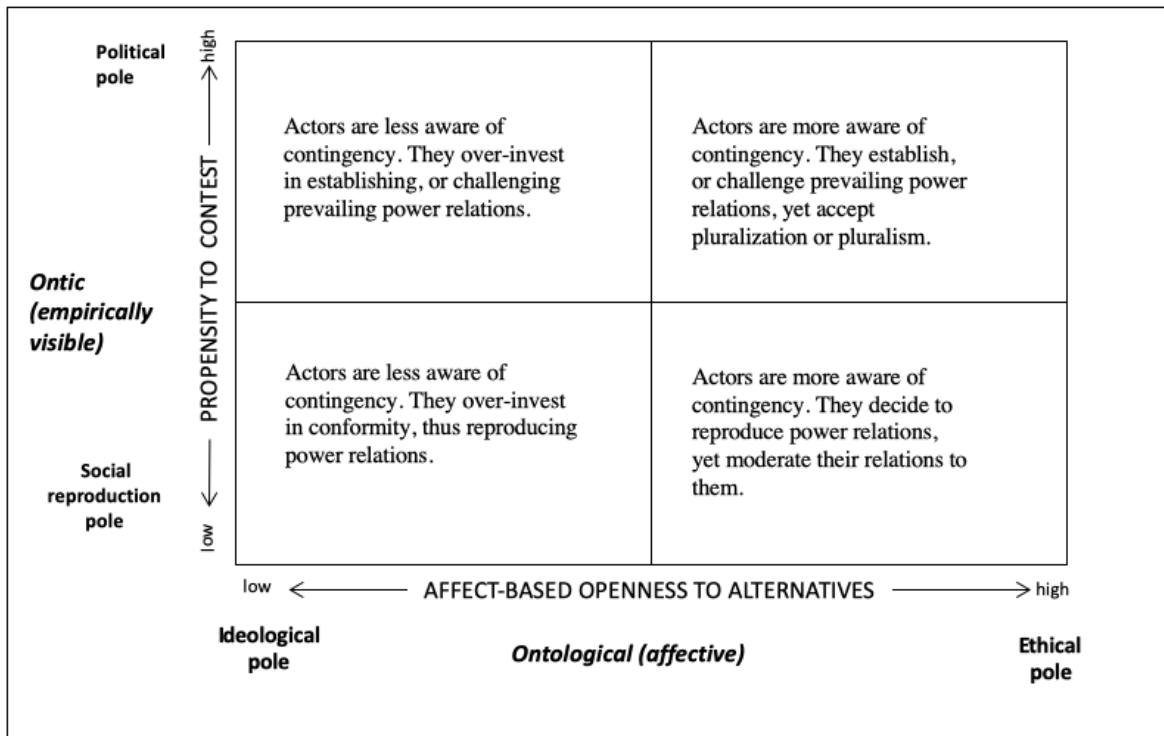
**Figure 2. Four Dimensions of Social Relations, Modified to Include Explanatory Notes
(see Glynos and Howarth, 2007, p. 112 and Thompson and Willmott, 2016, p. 488)**

Figure 2 proposes several possible configurations of affect, meaning-making, and power with associated social outcomes, aligned along two axes. The most important of these for our discussion is the horizontal axis, which charts the extent to which actors, when identifying with a particular discourse on technology, are impelled by an affective overinvestment that leads them to ignore or gloss over alternatives or, by contrast, to remain detached and open to these alternatives.

We now can conjecture about how these four poles (socio-ideological; socio-ethical; politico-ideological and politico-ethical) are able to inform and deepen existing analyses of the framing and conceptualization, of IS. Actors' discourse and actions are mediated by their affective predispositions and operate in the ontic (visible) dimension. Thus, on the right side of Figure 2, actors' judgment is less clouded by affective identification with existing discursive power relations; they are thus more *ethically* aware that their

identifications are contingent on their continued support and that they could challenge prevailing power relations should they so wish. Following Lacanian psychoanalysis, this kind of open stance can be qualified as *ethical* because it renders possible a different relation to the object of affective identification (fantasy), one that is not overinvested but detached. By taking some distance from objects of affective identification, subjects are more attentive to the ambivalence that may enable alternative readings. Ethical awareness thus entails a "genuine openness to contingency" (Glynos 2008, p. 16), a recognition of the fundamentally political origins of a practice. This renders subjects aware of other possibilities and they are thus likely to be more skeptical of any one particular proposition.

This definition of ethics differs from the normative (or mainstream) approach[2] in IS. Ethics is understood here as concerning the way that subjects *relate* to norms rather than the *content* of the norms governing

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[2] From our perspective, it is crucial to distinguish computer ethics from the mainstream use of the notion in IS (i.e., the rationalist prescriptions and their encapsulation in a professional codes of ethics). To us, ethics is linked to the practice of critique by revealing points of social contestation and possible reversal, which we have called openness to alternatives: "An ethical decision, in other words, is one

which is by definition impure, impossible even. An ethical decision requires that something escape its purview, requires the subjective acknowledgment that someone or something somewhere, will be adversely affected. In this view, every ethical decision is accompanied by superegoic doubts and feelings of guilt, betraying an unquenchable and infinite responsibility." (Glynos, 2000)

practices (i.e., "critical ethics"—see, e.g., Critchley, 1999; Robinson, 1999; Rainsford and Woods, 1999 for a discussion). Thus, on the left side of Figure 2, actors are less aware of the underlying contingency and contestability of discursive power relations with which they may be confronted because they are more self-invested in forms of *ideological* self-identification that cloud their judgment. In turn, the vertical axis of contestation, which operates in the empirically visible, ontic dimension, relates to the power relations themselves. At the "political" top of Figure 2, actors have a greater propensity to challenge or establish new, discursive power relations—and, at the "*social*" bottom of Figure 2, to reproduce prevailing ones. The motivation axis provides us with insight into how strong and long-lasting this propensity to contest is. However affective motivation is not visible; it is the resulting course of action that is visible and it thus belongs in the ontic dimension.

In sum, the *Logics* framework offers IS researchers a valuable analytical lens that enables a greater attentiveness to the contingent interrelationship between affect, meaning-making, and power in technology framing. In distinguishing between the empirically visible, cognitively amenable ontic dimension and the empirically invisible, affectively mediated and cognitively unavailable ontological dimension of practice, the *Logics* can help researchers theorize about actors' affectively mediated predispositions toward and thus mode of engagement with unfolding social practice in a more nuanced way that encompasses discourse and its relationship with affect. In the next section, we illustrate these theoretical developments with reference to a more detailed empirical example.

4 Applying the *Logics*: How Affect Conditioned Buy-In to Technology Framing in the Case of Unity 3D

In this section, we illustrate the analytical power and utility of the *Logics* approach with reference to the detailed empirical example of the game engine Unity 3D. The illustrative material derives from a 15-month study of Unity 3D conducted from September 2012 to December 2013. In the ethnographic study,[3] we observed multiple community events, conferences, start-ups' meetings, and online forums. We also interviewed strategic actors, read the specialized press, and carefully studied marketing documents and blogs (reference omitted to preserve anonymity). Game engines are particularly suitable to illustrate our argument, as they constitute affective technologies in the sense meant by Hudlicka (2009). Game engines are in fact designed to facilitate the development of affect-adaptive and realistic games. In our empirical illustration, we discuss a particular game engine: Unity 3D. Details about Unity are provided below. Further methodological details of the study, which is used here with the sole purpose to support our theoretical argument, are provided in Appendix B.

4.1 Background: The Game Engine Unity 3D

The technological significance of game engines derives from their role as the software intermediary that interacts with the hardware of the target platform on which a game will be played. The game engine translates digital objects, referred to by game developers as *assets*, from the format in which they were initially developed into code that can be run on the game platform (Panourgias, Nandhakumar, & Scarbrough, 2013). Unity is a platform that enables programmers and artists to work together in the same environment. The developers create the logic that runs the game by assigning script codes to the 3D models that the artists have created. The tasks of artists working with Unity consist of polishing, texturing up, and customizing the prefab assets bought and sold on the Asset Store. The Asset Store allows the developers to create their game without the usual constraints (e.g., time, communication, costs) involved in working with artists: they just need to "drag and drop" the prefab assets, which minimizes coding effort. Character models, props, materials and textures, landscape painting tools, game creation tools, audio effects/music, and visual programming solutions are all available from the Asset Store. Figure 3, taken from a tutorial presentation at Unity's "Unite: Conference 2013," illustrates an asset, in this case, an animated character for a role-playing game used for the purpose of the demonstration.

In our study, we examine both the Unity platform owners and its online community of developers, which is consistent with our claim that IT framing occurs at both levels. Indeed, recent studies shed light on the role played by participants in online gaming communities in contributing to the development of online games (Kjærsgaard & Smith, 2014, Antonopoulou, Nandhakumar, & Panourgias, 2014; Barrett, Oborn, & Orlikowski, 2016). This contribution needs to be considered in the context of a large and important industry.

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[3] Theorizing affective ethnography involves the power to act of the researcher and has been described as a style of being in the field, being with and becoming-with others (Gherardi, 2018).
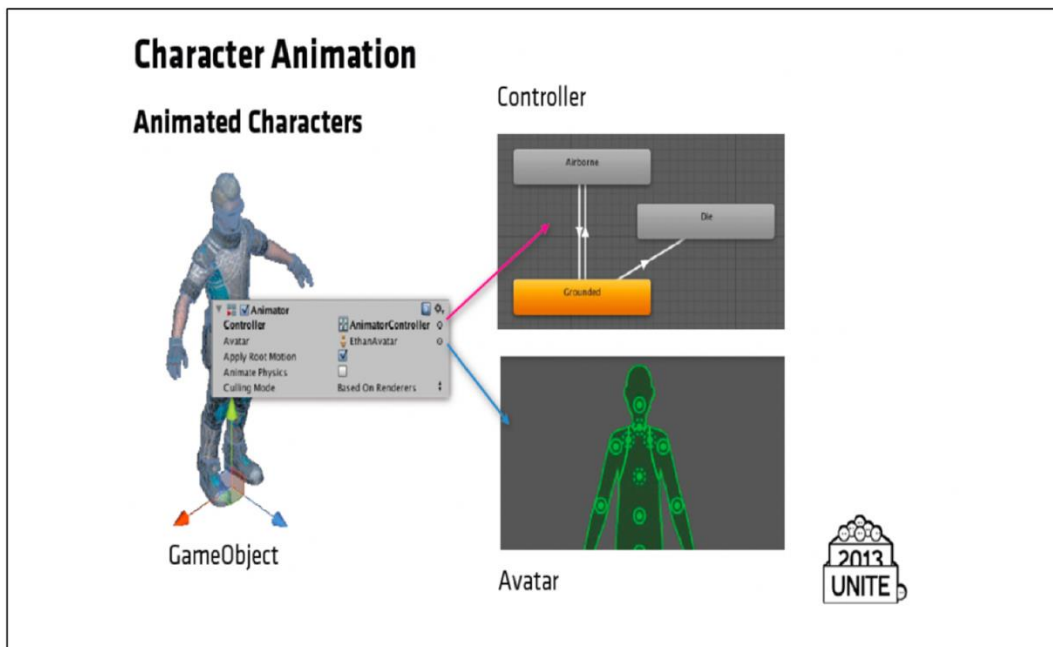
Figure 3. An Animated Avatar for the Demo of a Role-Playing Game During a Unite Tutorial

In 2018, there were nearly 2.3 billion gamers across the globe, amounting to an industry worth $137.9 billion. Mobile gaming, in particular, is in the ascendant, accounting for 91% of the market (source: Newzoo's 2018 Global Games Market Report). Computer games are indeed becoming a sport, complete with national and international competitions and tournaments, trophies and significant monetary prizes, influencers, known and celebrity players, and even ergonomic products for long gaming sessions (controllers, chairs, blue-light blocking glasses, etc.).

In our illustration, we focus on Unity specifically during a critical period of rapid growth, during which its management attempted to leverage affectively motivated discourses (e.g., the founder's slogan "Let's democratize game development!") to position the company as an alternative to proprietary game engines, which were predominant until the beginning of the 2010s. The attempt was largely successful. The market share of Unity has grown rapidly since the time of the study. In April 2012, Unity reported 1 million registered developers, 300,000 of whom used Unity on a regular monthly basis. By April 2015, the number of reported registered developers reported by the company had reached 4.5 million, with 1 million monthly active users (source: online interview with Unity's CEO on www.venturebeat.com).

Based on the above, our illustration discusses the framing generated by two powerful Unity figures: the chief executive officer and Unity's UK director. This exemplifies how different affective stances of important developers toward framing strategies condition varying degrees of buy-in to such framing and, thus, different configurations of power. We now turn to Unity's online community of users to observe the various configurations through which these framings are enrolled by game developers. We demonstrate how the characters move through different configurations, as foregrounded by our *Logics* lens. Finally, we provide a short description of what we observed, followed by a brief interpretation in each case, based on an examination of the data through the *Logics* lens.

4.2   *Logics* of the Game Engine Framing: The Case of Unity

As discussed above, normative legitimacy and buy-in can be viewed as the outcome of technology framing and counterframing (Azad & Faraj, 2011), both of which are underscored by politico-affective dynamics. Recalling the *Logics* quadrant in Figure 2, we make a key distinction between social framing (the logic of status quo) and political framing (the logic of contestation and alternative). In the case presented here, Unity adopts a political framing to present itself as an alternative to proprietary game engines.

4.2.1   Unity's Design: Promoting Buy-In Through a Political Discursive Framing

The political framing and underlying configuration of affect, power, and meaning-making are evident first in the performance of CEO David Helgason, in which he seeks to capture and fuel the energy of his audience.

The following quote is an excerpt from David Helgason's speech at the Unite conference in 2013, where he muses rhetorically about the affective appeal that drives the industry by sustaining and motivating its engineers:

> *Wherever I go anywhere where we have engineers, which is a lot of places now, you know, I find people working days and nights and really kind of [silence] ... spending all the energy they have to solve your problems ... When we look around and talk to people who have been part of the industry much longer than we have, everyone agrees that the game industry has never been this healthy and bursting with energy and vitamins, so I think it's interesting to kind of ask ourselves why all this energy, why is it that things are so, well not just great, they are competitive and crazy, but also ... really awesome.* (Excerpt from the CEO's public speech at Unite)

In this quote, the CEO reflexively engages with the affective grounding of the community in which he plays an influential role ("kind of ask ourselves why all this energy") and uses hyperbolic terms reflecting the affective appeal of Unity ("crazy," "awesome"). Figure 4 illustrates the way in which the CEO's "political" rhetoric was amplified by careful attention to theatrical performance—as was also the case with Steve Jobs for instance—and thus helped cement this "energetic," "democratizing" positioning in the minds of the audience.

Figure 4 shows the CEO describing the emergence of the mobile market, which he claims is transforming the gaming industry not only in terms of the platforms on which such games are played (e.g., iPads, mobile devices, and consoles) but also in terms of the richness of their content, the size of the teams, the product quality, and the technical expectations regarding the game engine.

Figure 4. Helgason's Speech at Unite 2013 (Photographs Taken During Fieldwork)

Thus, in the words of Unity's UK director whose rhetoric appears to mirror the discourse of what appears to be a charismatic CEO within this company, mobile game development is explicitly contrasted with designing games for consoles:

> *Well, indie games, the area of games Unity is best known for... you know you have console developers making very large, very large and very complex games that run on PlayStation 3 or Xbox, so that's pretty much the AAA end of the market ... Very small teams... two one people ... could make a game for mobile phones by themselves in the bedrooms, and become very, very successful, so that's far more sort of indie, independent game-ended market ... they are called indie because they are independent, they haven't got a publisher funding them.* (Unity's UK director)

This quote is important because it shows how the indie market is narrated via biographical success stories ("could make a game for mobile phones by themselves in the bedrooms"), which seductively mobilizes the affect of the community of Unity's users via an empowering discourse. The deployment of social logic in the above quotation refers to the established practice of game design—namely, *making games for consoles*—characterized by higher standards of professionalism involved in managing the higher risks, skilled graphics designers and the higher budgets commonly associated with designing games for consoles. Accordingly, the logic relating to console development is considered "social" (in the sense discussed above, i.e., reproducing the status quo), insofar as it is established and routinized. Indeed, creating a console game involves expectations about securing important actors in the field with "very deep pockets." Thus, a second characteristic of the social logic is the importance of institutions (for example, the console game industry is dominated by platforms such as the PC, video games consoles, and publishers of games) and that a hierarchical order of things presides over social actors.

In the above extract, Unity's UK director contrasts this social logic with a political logic in which mobile game development is perceived as far easier, cheaper, and more accessible. The political framing, i.e., the framing of Unity in terms of being an alternative able to contest the status quo, questions the elitism of the game design practice and its particular recognition scheme (e.g., AAA games being the most visually appealing), and democratizes game design through tablets and mobiles: not everybody has a console, but everybody has a mobile device. Further, making small games on mobiles (e.g., puzzle or card games on an iPad) does not require significant effort and/or financial backing. Consider the following extract in which the UK director describes

with soaring rhetoric the notion of *democratization* as specified in the marketing brochure and Unity's website:

> *Democratization just means we want anybody that's got an idea to make a game, to have the tools to make the game. And then, you know the players of that game, you know the game-playing population in the world, can decide which games succeed, and which ones don't, so it's not who's got the best tool, who's got the best ideas, it's really, anybody who wants to make a game can; that's my view on the product, anybody who wants to make a game could use that tool. When we say anybody, literally anybody in the world, we mean anybody that's got some technical skills, some understanding on how games work, could make a game.* (Unity's UK director)

The director elevates the discussion of universalization by association with the notion of democratization, which contrasts with the frivolity usually associated with games. Thus, during the interview, we felt that the UK director was trying to persuade and impress us by using a hyperbolic style in the political dimension and downplaying the technical skills required: "literally anybody in the world; we mean anybody that's got some technical skills."

4.2.2 The Fantasmatic Logic(s) Behind the Political Framing: Discourses of Community and Heroism

Our discussion above illustrates the fantasmatic logic(s) through which important actors exemplified above in the examples of the CEO and the UK director mobilize discursive framings to shape the affective identification of the game designers. Fantasmatic logic(s) supply the affective motivation through which actors may be moved (or not) to subscribe to political framing and manifests itself through desire-based narratives that we label fantasies of *community* and *heroism*. Expressions such as "the game-playing population in the world" clearly position the buy-in to the game ecosystem as a form of citizenship or of belonging to a community. Metaphorically, Unity's leaders' political framing taps the fundamental identification and belonging needs of the developers (Bauman, 2013) and is akin to politicians' affective mobilization of nationalist discourse—a phenomenon well known in the field of IS (von Krogh, Spaeth, S., & Lakhani, 2003). Further, to enhance these narratives, Unity's leaders rallied strategic actors to its cause, such as historical figures and gaming gurus who had devised highly creative games from scratch.

Table 2: Summary of the Three *Logics* Applied to the Framing of Unity 3D

Logics	Platform owners' framing attempts
Social	Game design for entertainment: • Use limited to consoles (e.g., Xbox, Wii) • Design restricted to major studios (e.g., Nintendo, Microsoft) • Diffusion ruled by major publishers • Institutional accreditation scheme (AAA games)
Political	Democratized game design: • Use extended to tablets, mobiles, e-learning, serious gaming • Design transferred to small teams, service companies, indie developers • Independent-ended market (i.e., indie developers)
Fantasmatic (affectively motivated)	Desire-based narratives: • Heroism: heroic-fantasy imaginary (e.g., Ultima); successful entrepreneurial stories, freedom in regard to institutions • Community spirit: universality, metaphorical citizenship

For example, during our fieldwork at the Unite conference, we attended a keynote speech by Richard Garriott de Cayeux—widely acknowledged within this community as a charismatic artist, programmer, and creative director. Garriott is the creator of the "Ultima" series, a very successful role-playing game in the 80s, who, in 1997, coined the acronym MMORPG (massively multiplayer online role-playing game) and thereby became a very influential figure in the field. During his speech, Garriott talked about an imaginary period, reinvoked and embellished in the retelling, when indie developers were free and prosperous. Like nationalist myths (Stavrakakis, 2007), the story of the independent developer and the reminiscences about the golden age of the independent studios on the 80s were harnessed to encourage affectively driven self-identification by participants with Richard Gariott, and, by association, with the image of Unity, with the ideal of achieving freedom from the major studios and institutions.

Moreover, this heroic narrative taps into developers' vulnerability to self-identification with promising entrepreneurial discourses. In this scenario, indie developers typically buy into the beatific narrative of successful entrepreneurs, featuring one or two programmers becoming rich by developing an app in the intimacy of their "bedroom" on a very small budget. In particular, the UK director tells the story of a programmer who made some tools to help people with some 2D artwork and then supposedly made US$300,000 by selling this product on the Assets Store. Game designers systematically share success stories via blog posts or during socialization rituals, such as the company's community events and online fora. Such stories recall similar legendary narratives, such as that recounting the creation of HP, when Bill Hewlett and Dave Packard built the company's first product, an audio oscillator, in their California garage in 1939 (Poulton, 2005).

In summary, in this section we discuss the three logics underpinning Unity's discursive framing, which we summarize in Table 2 below. In the next section, we describe how Unity developers' affective reactions to such framing differ from one another and facilitate different configurations of power as a result of such differences. In so doing, we show how affect is a "missing variable" that can generate different power relations from the same discursive framing input.

5 Moving Across Quadrants: How Affect Conditions Developers' Buy-In

In what follows, we will show how the framing dynamic in the case of Unity moves through the four poles of the *Logics*. Although strategic leaders used a political framing, followers may accept and act "politically," by framing the technology in a new way, or "socially," by protecting or restoring the social framing being challenged. Developers, in turn, have the opportunity to either blindly reject the alternative framing (disregarding contingency) or to accept a coexistence between various framings and thereby acknowledge contingency.

5.1 Politico-Ideological Pole: Ideologically Entrenched Buy-In to the New Framing

Our field data from the Unity event help to illustrate that affective processes were strongly implicated in how developers reacted to the framing of the game engine. Many of the game designers off-stage strongly identified with the "heroic" figures on-stage, demonstrating an overinvestment in these narratives similar to that of sport supporters or rock fans.
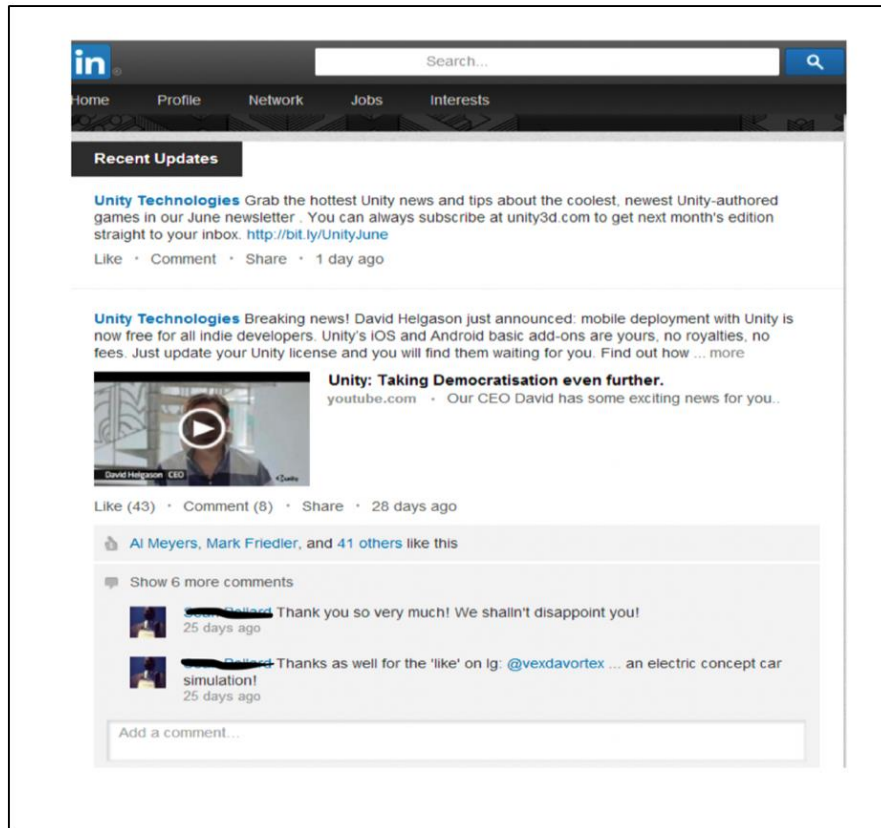
Figure 5. Taking Democratization Further

Keynote speakers received a heated ovation from the overcrowded conference room. This overinvestment, which led to an enthusiastic buy-in, was also visible in many informal discussions during coffee breaks, such as a father who endorsed Unity's democratizing culture somewhat literally by taking pride in his use of the engine to develop games in his spare time for his kids (he was not a professional developer). He had chosen and continued to use Unity because of its legendary reputation for ease of use (although he never managed to finish a game).

Crucially, affect appears as a compelling "missing variable" in explaining the ideological extent of the strong self-identification with Richard Garriott's story, which led game designers to gloss over various alternative critical explanations, including the fact that Unity was designed for mobile games and might not be the ideal engine to design complex role-playing games. For example, in Figure 5 we show a LinkedIn message where the CEO announces his new no-cost policy and "democratization strategy" in his efforts to strengthen users' allegiance to the Unity engine. In this example, the developer responds somewhat unreflexively (or with tacit complicity) to the news by using a reference to disappointment ("we shalln't disappoint you") that is somewhat filial (i.e., worrying about disappointing a

moral figure) and somewhat out of place in what should be an owner-customer relationship.

Affect also operates at a more biographical level. As illustrated below, designers' buy-in to Unity is linked to their identities—game designers identify with different professional role-models, depending on which platform they adopt. On-site discussions with game designers reveal that 3D artists self-identified strongly with the entrepreneurial biographical narrative. Several of them had quit their jobs in big game studios to focus on assets creation and, in conversation with the researcher, expressed the belief that the success of mobile apps favors the emergence of indie developers in small businesses. Typically, Unity's entrepreneurial narrative sustains the figure of the indie developer, with which game designers identify strongly. Thanks to the Asset Store, the designer-programmer is empowered, as she or he then potentially "doesn't need" a 3D artist. In the following extract from one of Unity's online fora, the mobilization of indie developers' affective vulnerability leads a game developer to take pride in using Unity by defining himself as a programmer and

by stigmatizing/demonizing the figure of the "modder."[4] Thus, in the words of John:[5]

> *JOHN: Without sources, I don't see any interest on [sic] UDK (Unreal Development Kit), you don't have the same low level of access as in Unity. Sure, Unreal modders will be happy now. But am not a modder, am a game programmer.* (Unity's online community)

UDK is here associated with modders using the Unreal engine, and thereby with the less professional and less legitimate role of the *bricoleur* (in the original exchange, modders are called "lowly"). The obvious self-identification in this example shows how Unity's framing seductively reassures and secures programmers' sense of skill and competence.

Later, in the same online thread, John makes his observation more explicit. Claiming to acknowledge the perspective of the others, he actually makes fun of it, thus confirming the ideological stance that he is adopting:

> *JOHN: UDK is just crap, I don't see any professional studio working with UDK. It brakes [sic] your workflow, you have to change your coding philosophy and cons are greater than pros ... I know is fun to play Bioshock (wish [sic] by the way was made with a heavy sourced modified version of UE3) and say wooow i can make this with UDK!!! Nope, that's not true. As someone already pointed out. Making games, sorry MODS with UDK is like reverse engineering all the way, all the way. Unity gives you the possibility to make your own editor extension/tools.* (Unity's online community)

The tone is derisory and denigrating ("crap," "any professional studio," "MODS"). By highlighting reverse engineering and mods, John undermines the professional legitimacy of designing with UDK. He typically glosses over alternative explanations ("Nope, that's not true") and is clearly not attuned to contingency. He appears affectively bound to his own discourse in a way that manifests excessive buy-in. In summary, Unity's strategic leaders mobilize "political" discourses (the idealization of the indie "free" developer), which are subsequently endorsed at a local level with different degrees of enthusiastic buy-in (e.g., the identification with the programmer and demotion of the modder; the possibility of making their own editor extension). Leaders do so in order to encourage a form of extreme identification and overinvestment on the part of developers who, being ideologically self-invested, are affectively motivated to gloss over or ignore the existence of alternatives and who overlook the corporate interests by which Unity is directed, at least in part. The effect is that users are positioned in the top left quadrant of our *Logics* framework (see Figure 6), resulting in a strong and rather unquestioning buy-in to, but also an active championing of, their leaders' framing of the Unity ecosystem—underpinned by motivations of which they may not be focally aware.

## 5.2 Socio-Ideological Pole: Ideologically Entrenched Rejection of the New Framing

Other developers may be more passive in their acceptance of the status quo, thus resisting buying into the proposed framing of Unity as a technology that could challenge the status quo and so contribute to the reproduction of prevailing power relations by continuing to enact existing processes (bottom left quadrant). Therefore, others may not feel affectively moved by the attempted framing of Unity in the manner of John, above. For example, in the same thread of the Unity online forum, Luigi, another designer, contests John's self-identification (with high standards of professionalism) and cannot hide his contempt:

> *LUIGI: That's actually quite a failure and an elitist attitude. You should realize that working with mods and UDK is game programming and there is no difference between that and modding. I've worked in the industry for quite some time now and you rarely see any high-level game code in C++ so does that mean that every single game you build is modding and not programming? Of course not!* (Unity's online community)

John, the ardent Unity supporter referred to above, appears to be (affectively) blinded to alternative perspectives, at least in this exchange. For example, he ignores that 3D artists may typically praise the aesthetic and technical demands of the old regime because of its visual quality and thus gloss over, or even contest, the relatively poor quality of graphics in the new Unity-based mobile gaming generation. John's apparent investment in Unity's framing makes no impact on peers such as Luigi, who is himself routinely (affectively) absorbed in replicating his taken-for-granted practice of game design, here working with UDK.

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[4] "Modding" refers to the creation and distribution of player-created software extensions to a game (i.e., here the first-person shooter game Unreal, from which UDK originated), widely downloaded and used by players.

[5] Names of participants in Unity's online community have been changed; they have no relationship to names in real life.
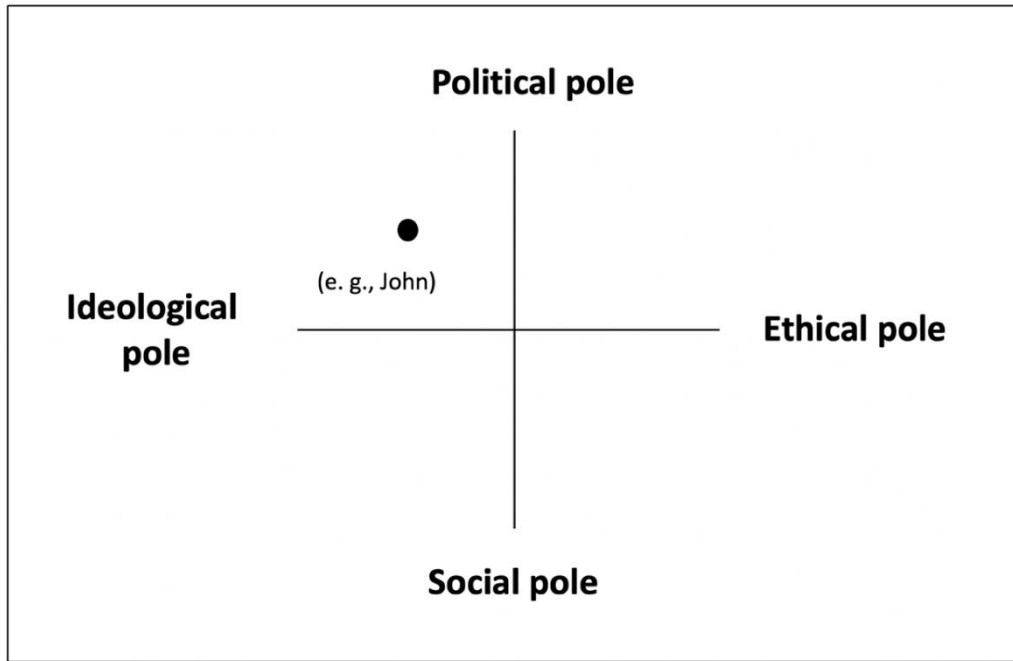
Figure 6. Overinvestment in the Political Framing as a Result of Unity's Discourse Leads to Unquestioning Buy-In
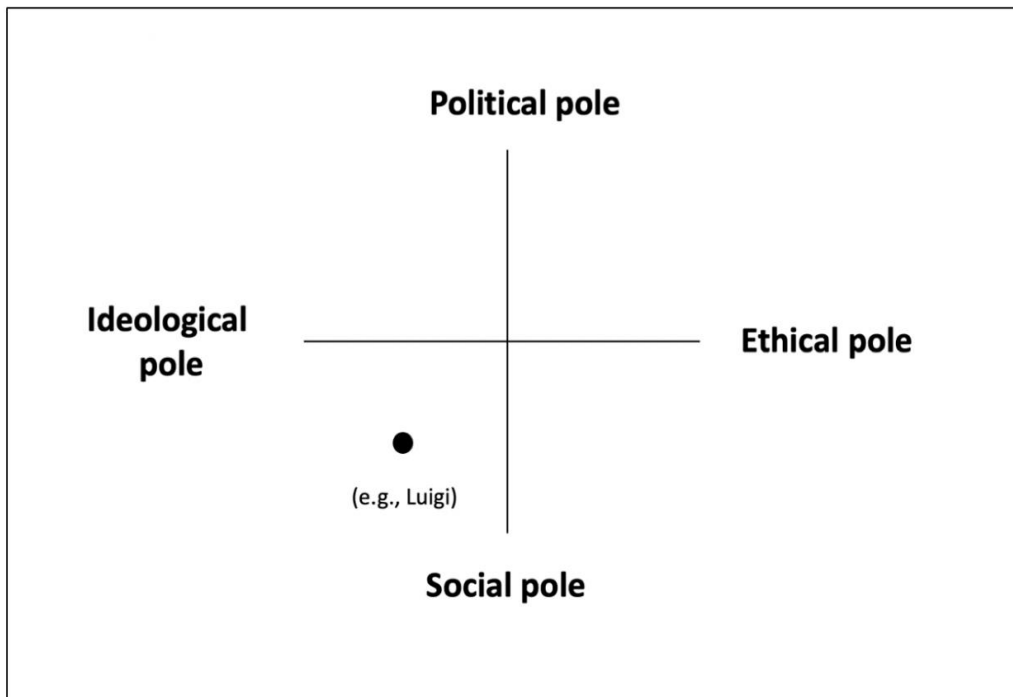
Figure 7. 3D Artist Reacts to the Political Framing of Unity by Reproducing the Status Quo, Leading to Non-Buy-In

In fact, some of the game developers keep defending UDK's suitability for designing first-person shooter-type games:

> *LUIGI: If you want to learn how to build an Unreal Tournament kind of game, then the UDK is perfect for that because it even provides the assets of the game, so you can go behind the scenes and discover the way they (Epic) did it. If you have the team (or excel at being a jack-of-trades) the UDK enables you to take advantage of the advanced features that can catapult your Indie project to AAA level.* (Unity's online community)

Users of UDK like Luigi lend credence to UDK's existing institutional accreditation scheme, thereby reproducing prevailing power relations. By using a scheme widely known and accepted by console game developers, they protect the prevailing institutional order. In contrast, Unity's discourses threaten such users' existing identification with UDK, producing a very different affective reaction. Their continued use of UDK predisposes them to reinforce the existing technical frame and to actively disregard the innovative potential of Unity. In response to Unity's discursive maneuvers, they position themselves within the ideological/social dimension (see Figure 7), emerging as a possible obstacle or "barrier" to the irresistible march of Unity (at least from Unity's perspective).

## 5.3 Socio-Ethical Pole: Open/Conditional (Temporary) Non-Buy-In to the New Framing

The analysis of Unity's online community of users reveals that the two leading game engines, Unity and its competitors Unreal/UDK, were perceived as reproducing the line of antagonism between the (challenged) social logic and the new political logic. Whereas UDK at this point had many AAA titles, was industry proven, and intended for larger, specialized teams and bigger budgets, Unity was tailored to the market of mobile apps and entrepreneurs who did not necessarily belong to major studios. In other words, the success of Unity resulted from its accessibility and "no royalties, no fees" policy.

However, not all game designers endorse Unity with the conviction demonstrated above by John. While important Unity actors "on stage" proactively offer an alternative way to follow, users "off stage" buy into the framing but continue to pay (some) attention to the contingent nature of Unity's increasing dominance. Moving to the bottom right quadrant, UDK developers might be well aware that alternative possibilities exist

that could successfully challenge the status quo on this issue within the community. For instance, Pierre, a participant in Unity's online community forum, discloses his preference for UDK, yet carefully seeks to establish a fair comparison before stating his opinion:

> *PIERRE: I am sorry but Unity isn't the best FPS Engine. I think it can look as good but UDK has the ability to look better. UDK was designed for FPS whereas Unity seems, to me anyway, to be designed for a greater variety. They are both equally as great and amazing, I just think it comes down to opinion. As I have stated mine. And don't take me for some Unity basher—I love Unity. But let's face it, UDK is a commercial-grade game engine with many AAA titles under its belt. It's industry-proven and intended for larger specialized teams and bigger budgets. Unity is primarily a casual / web game engine intended for smaller teams. Both can make fun games, but it's apples and oranges, and trying to directly compare the two feature to feature is unfair to them both.* (Unity's online community)

In this quote, the developer is concerned with fairness, maintaining a balanced judgment, and being respectful of the quality of each perspective. He relativizes his own affective stance toward UDK's engine: "it comes down to opinion." He is neither a "basher," overinvested in denigrating, nor a fanatic adopter; he defends his opinion in a manner that is attentive to contingency. His opinion is, therefore, both strong and consequential: "let's face it." By performing a comparison in balancing the positive and negative features of each, Pierre demonstrates his attention to contingency, yet decides not to "rock the boat." It seems to us that Pierre is perfectly aware of Unity's limitations, yet rationally accepts Unity for what it is: a cheap and accessible generalist engine. Using the *Logics* framework, his position can be described as socio-ethical (see Figure 8). As we explain above, "ethical" here refers to openness to contingencies and discursive conditions of possibility. In such cases, the actors reproduce prevailing power relations, but moderate their buy-in to the Unreal engine, yielding a potentially new relation to it. Unlike the two extreme positions described above, locating oneself in this affective positioning is likely to generate a possibly temporary non-buy-in or a conditional buy-in governed by a mix of affective, material, and practical considerations. Affect continues to play a critical role but does not feature as prominently as in the two previous cases.
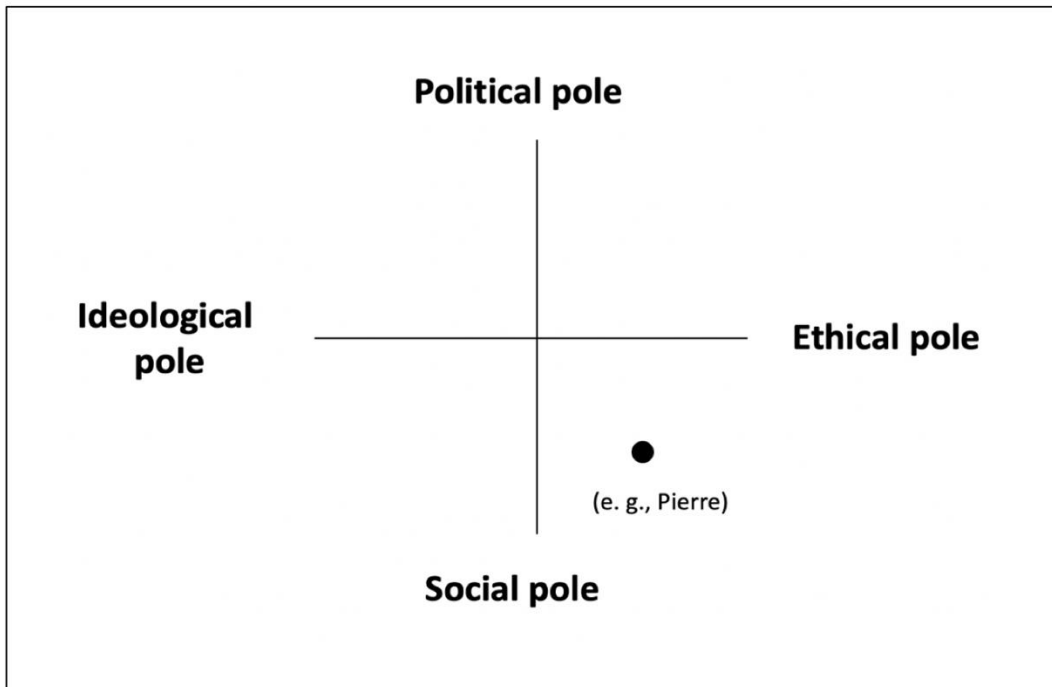
**Figure 8. Developers Are Aware of Alternatives, Leading to Temporary Non-Buy-In ("Wait And See")
or a Nonexclusive Buy-In ("Horses for Courses")**
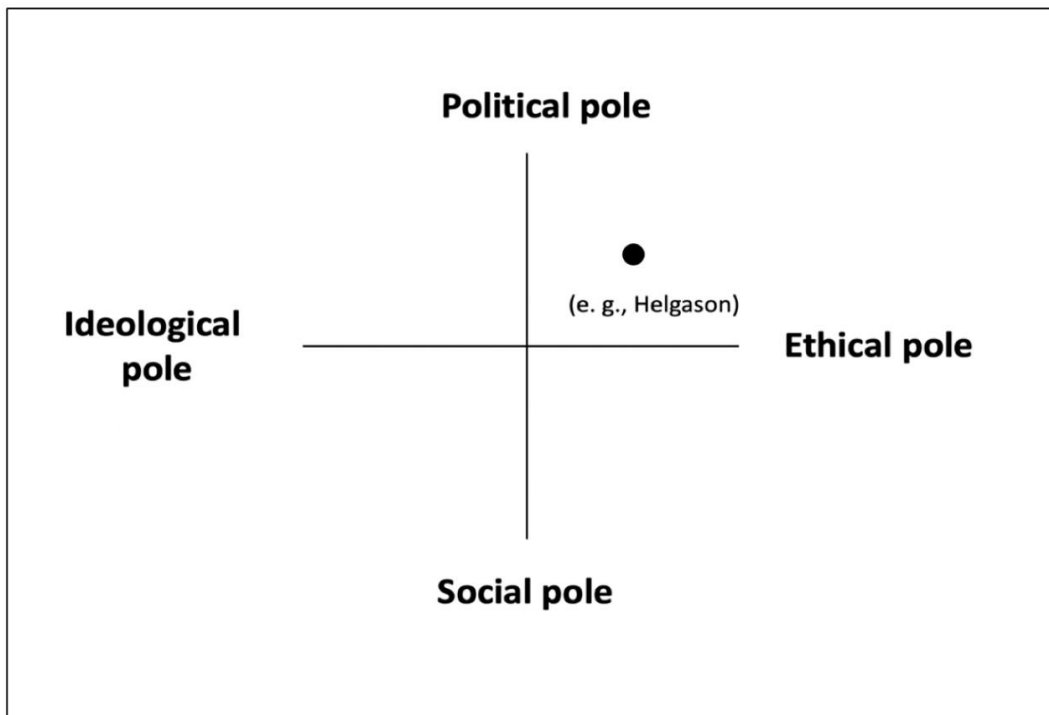
Figure 9. The Diversity of Unity Is Framed in a More Ethical Way, Promoting a Conditional Buy-In

5.4 Politico-Ethical Pole: Open/Conditional Buy-In to the New Framing

Finally, it is important to note that the perspective of *everybody* within the Unity community was shaped by each individual's own psychosocial positioning toward discourse and associated ideology about technology—even though members were actively shaping and framing these things for others. In this example, Unity CEO Helgason assumes a more ethically aware orientation and challenges the *status quo* (what we call here "taking a political stance") in a way that is more attentive to contingency and possibilities and less affectively self-invested. This is observable, for example, in a press interview by Unity CEO Helgason, who confirms that 2006 was the moment of a shift in Unity's strategic framing:

> We didn't think about mobile until 2006 and then the Nintendo Wii came out, which we decided to go to for two reasons. We thought it would be a really open platform and it turned out to not be as open as we'd hoped. When they spoke of "indies" they weren't lying, they just had a very different definition of indies than we had. (Online interview with Unity's CEO on www.gamesindustry.biz)

The CEO is using a more ethical framing to promote the figure of the indie developers and induce (and partially seduce) this specific group within Unity's fold. In so doing, he indirectly talks to, and in the process discursively constructs, a specific occupational category: the indie developers working in small teams, whom he contrasts with established developers working in big firms. He not only targets indie developers' affective investment in a particular way of seeing themselves, but also manifests his awareness of negotiating with alternative positioning and underlying interests. He does this by imaginarily occupying the role of a trusting designer ("we thought it would be a really open platform"). However, he progressively contests this social logic by attributing an alternative meaning ("very different definition") to being indie, relabeling or reframing their work practice in a way that tends to dismiss traditional game design as a closed practice ("not be as open"), one that is open only to institutionalized developers.

In so doing, Helgason *historicizes* the strategic turn of his company and his decision to differentiate his activity from traditional institutions (Nintendo) and the established formats (Wii) of the console market. The euphemism "they were not lying" reveals his awareness of negotiating with existing power relations with major actors in the field. Therefore, the CEO challenges the prevailing power relationship, *yet* remains sensitive to the contingency of his positioning. In other terms, he carefully weighs the evidence on both sides before choosing to challenge Nintendo's view. He positions himself in the political-ethical quadrant (see Figure 9) and invites others to do the same. Ideology is still at work: the attempt to promote allegiance to Unity through affective identification with the practice of the indie developer and its association with novelty, freedom, and democracy is still in operation. However, this maneuver is tempered by Helgason's own positioning: his openness to different points of view, his acknowledgment of a plurality of options, and the implicit recognition that the position of Unity is contingent (what we call above an ethical orientation). Actors occupying this position are still likely to endorse Unity, but in a more open, realistic, and possibly conditional way.

6 Discussion

In this paper, we argue that affect is both a medium through which political battles over emerging technologies are fought, as well as a critical component in promoting buy-in to one technological framing over others. Using data from the Unity ecosystem, we suggest that organizational actors' affective buy-in to specific ideological framing of technology has had a strong influence on their relative propensity to jump on the bandwagon of a new emerging technology (reciprocally, previous engagements with gaming platforms are also likely to inform such ideological framing). In short, the framing of and buy-in to Unity 3D were both affectively conditioned and promoted through the strategic mobilization of specific ideological discourses as well as the intentional and unintentional exploitation of affective vulnerabilities on the part of developers. We say "intentionally" and "unintentionally" because, based on our field work, we exemplify how, for example, Unity's CEO, an ex-developer himself, was infused with the same ideals and entangled in the same web of affective identification within which he sought to enroll others.

We argue in particular that the rational institutional discourse surrounding the shift of Unity 3D from "fringe" to "mainstream" technology was animated and underpinned by Unity developers' differing affective identifications with the technical possibilities of the newly positioned engine and its association with the affectively laden notion of freedom and nonconformity. Such an acknowledgment holds the clear methodological implication that accounts by respondents of institutional dynamics are not to be trusted at face value by researchers, as they are likely to include unacknowledged semi/unconscious motivations and fantasmatic narratives. Having said that, platform economics and dynamics are much more complicated, and reducing such a positive market effect to the power of marketing buzzwords or

organizing visions would be oversimplistic. It is clear that the dynamics of digital platform operations go well beyond the rhetorical framing; not all of the answer lies in the affective contagion and collective dynamics of buy-in that trigger the diffusion of technology within a two-sided market.

As illustrated by the Unity 3D case, the construct of buy-in is especially promising in the context of the growth of new, online forms of organizing (Winter et al., 2014), whose communities of actors play a pivotal role in helping to determine whether such ecosystems "go mainstream" or not. Furthermore, our framework is especially useful because it problematizes more traditional accounts of framing as primarily sociocognitive and sociopolitical by showing very explicitly how making the assumption of preexisting group memberships comprised of more, or less, rational actors might lead to errors in our thinking. In contrast, the Unity case shows that group dynamics are the locus of a dialectical and performative movement between contingent framings, on the one hand, and collective acts of affective buy-in that reinforce or transform those contingent framings, on the other. Our "affective politics" approach highlights the affective dimension that operates behind the institutional (Berente & Yoo, 2012), strategic (Kaplan, 2008) or ideological motivations (Barrett et al., 2013). Attentiveness to affective politics in technology framing helps to avoid granting too much importance to the role of personal agency (i.e., the influence of strategists over their audience) or institutional rationality (i.e., where motivation is linked to institutional pressure rather than more informal motivations). While framings may be in opposition, (Robey & Boudreau, 1999) fantasmatic logic provides them with the necessary force to prevail and to potentially have long-lasting impact.

Through four configurations of the *Logics*, we thus demonstrate how stakeholders involved in a particular technology may differentially respond to and position themselves relative to technological buy-in on the basis of more than just traditionally recognized cognitive analysis. Affect is thus seen to be involved in identification with or rejection of new technological framings, as actors' orientation toward technology and resulting power relations emerge from the dialogue between ontic and ontological dimensions—a dialogue that may be informed by other factors, including the attraction of alternative framings, previous experience, present historical conditions, and many other factors. Indeed, each of our quadrants admits a number of different positions and degrees within them, thus suggesting that different ways to solve the tension between alternative logics and different personal affective compromises are available to actors. Moreover, the framework suggests that the positioning of the actors in the quadrants is likely to change over time: "conversions" represent a clear example of how

framings can suddenly be reversed, based on part-affective rather than purely cognitive motivations.

Although the above discussion prevents us from establishing a normative relationship between positions in the quadrant and any predictive propensity toward buy-in to a new technology, we can hypothesize that different solutions to the ontic-ontological dialogue and the varying degrees of hold that fantasmatic logic has on actors' resulting self-identifications can result in them experiencing different orientations toward the new technology (following Glynos and Howarth, we have termed "fantasmatic" the logic that supplies the affective motivation to reproduce social logics or to challenge these through political orientation). We summarize these various configurations of *Logics* in Figure 10 below.

Actors who find themselves affectively located toward the politico-ideological pole, for example, are likely to enthusiastically and unreservedly buy into the new framing. Indeed, they are likely to become fervent supporters and die-hard promoters of what they perceive as a just cause, not unlike John in our discussion above. They are also likely to persevere in using the technology, which, in time, will become intimately associated with how they see themselves. The strong ideological nature of this position means that these users are likely to be locked into this position by all manner of confirmation biases (Klayman, 1995). This, in turn, will make their position affectively entrenched, with the result that change may become difficult and unlikely. As sudden and powerfully motivated as such buy-in may be, this kind of early acceptance (or adhesion to the hype) also carries with it its own dangers of challenge (as illustrated by Luigi in our data), disillusionment, and frustration (Glynos, 2008).

A similar but symmetrically opposite situation is likely to occur for actors who unconsciously reject and resist efforts of affective identification and who end up occupying different positions in the socio-ideological pole. As is the case with those who ideologically embrace the new framing, this group is likely to be impermeable to rational argument and slow to change position. As we have explained above, we do not regard the quadrants in Figure 10 as immutable orientations associated with personality traits of individuals, but rather as positions that actors find themselves occupying in the dynamics between investment and detachment. Accordingly, the framework envisages that, in time, actors may and will move within and between quadrants or shift to another technology altogether when new options and discourses become available. Analogously, we do not exclude the possibility of sudden shifts between quadrants through radical conversion (Moscovici, 1980).
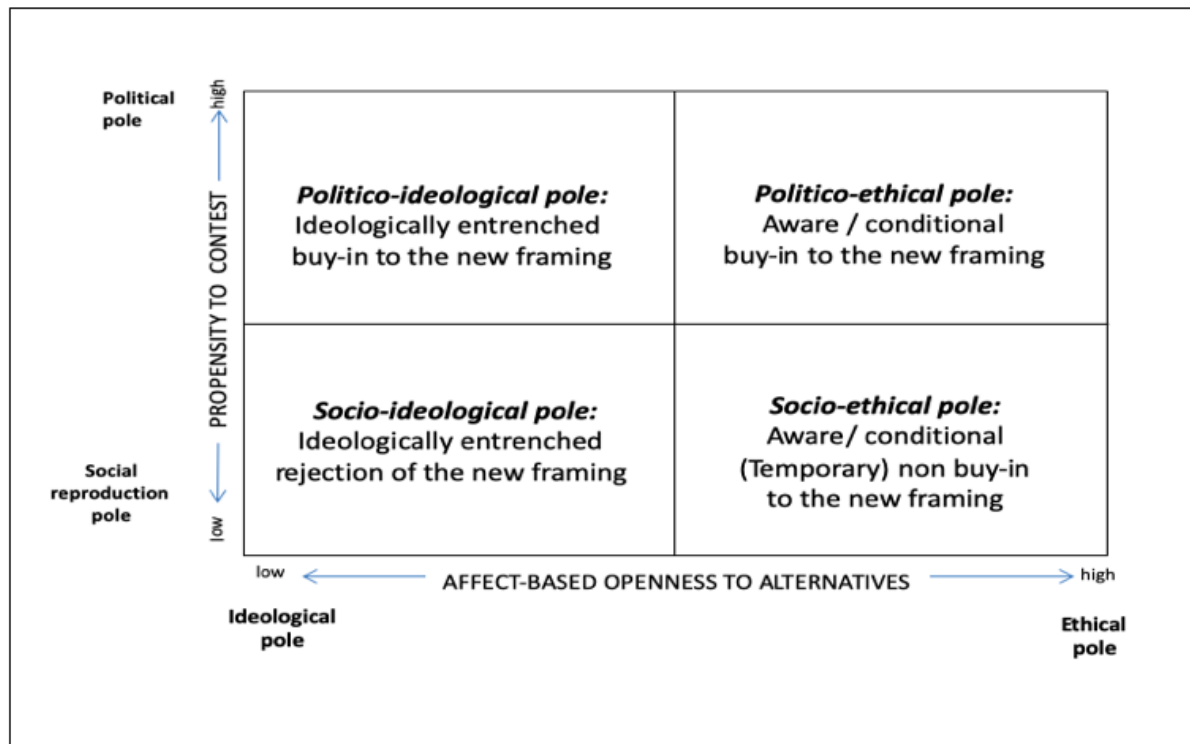
Figure 10. Configurations of *Logics* and Associated Orientation Toward Buy-In

Actors who occupy the socio-ethical or politico-ethical poles are likely to be more open to alternatives and therefore may identify with (or refrain from using) the technology in a more conditional way. Thus, we use the term "conditional buy-in" to signal that such adhesion will be subject to conditions, deliberation, and material calculations. One may formulate the hypothesis, which will need to be empirically corroborated, that ethically oriented identification (Quadrant 4) is more likely to lead to a sustainable, dynamic and innovative transformation that may be less ideologically self-invested. By contrast, we conjecture that ideologically invested identifications are more likely to lead to frustration and disappointment in regard to their fantasmatic expectations. We must emphasize, however, that these two positions are not affect free. For one thing, as we have seen, promoters of new technologies circulate specific discourses aimed at enrolling (or seducing) the occupants of these more ethically oriented positions. Simultaneously, in both cases, actors accept being identified by the categories and grammar proposed by the new technology (programmer, modder, developer, indie, open person, etc.) This means that the working of fantasmatic logic mediates but does not eliminate the dialogue between the ontic and ontological dimensions, so affect continues to play a central role in this process.

Our tentative framework is of potentially real value not only for addressing affective motivations for embracing one technological framing over another but also for understanding actors' various degrees of engagement toward such framings. A more effective integration of affective dynamics into the buy-in process enhances the level of achievable granularity, enabling a better appreciation of the phenomenon.

This paper also advances conversations with, as well as within, other approaches to the study of affective politics in IS, including phenomenological, psychodynamic, and Foucauldian orientations (Hirschhorn, 1988; Avgerou & McGrath, 2005; Brigham & Introna, 2006). We have suggested, in fact, that affect cannot be treated in isolation and studied as a mode of being or a mental state of IS stakeholders. Rather, as outlined above, much is to be gained if we adopt a politically informed stance; accordingly, we consider affect as both the arena in which ideological conflicts between alternative paradigms are conducted as well as the medium through which such conflicts are fought and temporarily resolved. As a result, our core focus on affective politics contributes to earlier discussions on why "social defenses" (Wastell, 1996, 1999) emerge (the "barrier" of IS design and framing) or, contrastingly, why disruptive innovation happens to thrive so suddenly.

Perhaps more fundamentally, we have also made the case that a *Logics* approach provides a useful analytical framework to connect the areas of affect, meaning-making, and power relations. While earlier studies on performative framing and power have drawn on actor-network theory (Walsham, 1997; Monteiro, 2000; Cecez-Kecmanovic et al., 2014), the *Logics* framework allows us to reach beyond the empirically visible ontic dimension, where power relations can be described as resulting from decisions and deliberation, in order to give explicit consideration to the less immediately visible, affectively mediated ontological dimension of practice. As we have seen above, this is the dimension in which a platform's owners and developers simply find themselves having a strong feeling for one technology over another, a feeling that they often verbalize with strong words and passionate expressions. Our main contribution to the literature addressing narratives and subjective interpretations (e.g., Bartis and Mitev 2008; Fincham 2002) is thus to engage with fantasmatic logic, which explains why certain framings become suddenly excitable, gripping, or repellent within a group.

The *Logics* approach and the four quadrants framework are also useful in understanding and depicting the power relations that may potentially be obtained by mobilizing different forms of affective buy-in. Thus, this approach can help to make sense of the varying degrees of power exerted by stakeholders or promoters when implementing an information system (Boonstra, Boddy, & Bell, 2008; Pouloudi et al. 2016). While our framework holds similarities with the Foucauldian tradition (Silva & Backhouse, 2003; Avgerou & McGrath, 2007), attending to the fantasmatic dimension enables us to move beyond regulatory power by capturing and commenting upon power's emergent, prediscursive, and affective dynamics. Deployment of the *Logics,* in particular, suggests that the relationship between affect and technology framing cannot simply be reduced to a linear cause-effect matter. For one thing, as we have seen, attempts to promote affective identification with a specific practice can have different and potentially opposing outcomes.

7 Conclusion

Our paper engages not only theoretically but also epistemologically and empirically with the notion of affective politics in the context of technology framing and buy-in. Acknowledging that the process through which people consent to the framing of (the nature) of technology has been little understood, our core contribution is thus to introduce social, political, and fantasmatic logics to the IS literature in order to develop a more granular understanding of technology framing and buy-in. We contribute specifically to the technology framing literature—especially the

sociocognitive and sociopolitical areas—by showing that collective meaning-making always emerges out of an antagonism that impels social actors and interest groups to position themselves according to four poles: this process is inescapably political and, relatedly, fundamentally intersubjective and collective. In this paper, we offer a framework that helps to identify four ideal positions that result from the dynamic between these poles and exemplify them systematically using examples from our empirical study of Unity 3D.

We contribute to the existing literature on technology framing in a number of ways. First, we propose a politico-affective understanding of framing incongruence that complements and integrates with the prevailing sociocognitive view. Our argument is that affective politics is constitutively involved in the construction of, negotiation of, and buy-in to such framing. At the same time, conflict and incongruence between framing are experienced affectively as a threat to self-identification and leads to responses that are partially emotionally driven (and so apparently "irrational"). Second, our paper integrates the performative view of framing, suggesting that the politicization of "meaning power" is often and possibly always underpinned by the attempt to mobilize both reason and affect. While interests, pursuit of legitimation, and the search for material returns remain central motivators in the framing of technology, one should not discount the power of seduction and enrollment through the invocation of affective associations with specific discourses (in our case, discourse of community, heroism, and antiestablishment). Third, our framework problematizes the tacit assumption of uniformity and consensus that underpins much of the existing discussion of framing as group- or occupational-related phenomena.

Our approach and framework, as exemplified in Figure 10, suggests that a plurality of positions exist within what authors have often characterized as homogenous groups. The framework also makes room for movement, transitions, and compromises, providing a much more nuanced and realistic vista on the political dynamics of technology framing. One of the strengths of our framework is that the focus is not on psychological individuals: the framework identifies modes of engagement and positions rather than individual emotional reactions. The framework thus operates at a psychosocial rather than psychological level. At this level, technological frames are not "done deals" and their grip depends in part on the extent to which actors continue to self-identify with them. In line with the Essex School (Laclau, 1993), the framework shows that "agency" is always a possibility that can emerge at the intersection between old and new discourses: in a few years, for example, John may find that people call him a "conservative" for using

Unity, which in turn may affect his allegiance to the whole ecosystem.

Being speculative in character, our theory-building paper opens up a number of opportunities for future research. For reasons of space, we confine ourselves to listing the three more apparent routes. First, to our knowledge, this is the first attempt to use and develop the *Logics* approach in the IS discipline—in this case, by focusing illustratively on design framing processes. However, more work is necessary to fully exploit the affordances of this approach. For example, we have mobilized our Unity case alongside our theoretical exposition for explicitly explicatory purposes; much could be learned by conducting further empirical studies in different contexts and cases to shed light on the discursive maneuvers—be they conscious or semiconscious—used by technology designers and leaders and the responses of those targeted. Future studies could also explore in more detail the types of discourse used and their effectiveness in inducing buy-in to the emerging technology. Second, our framework explicitly hypothesizes that positions will change over time and more work is necessary to examine this variation; in particular, longitudinal and historical case studies would enable us to deepen our understanding of the temporal dynamics of the *Logics*.

Third, in the discussion part of the paper, we propose a quadrant for conceptualizing actors' orientations toward technological framing, a framework that requires further elaboration and needs to be corroborated. We suggest that our framework may offer a useful complement to emerging performative approaches within IS (Cecez-Kecmanovic et al., 2014) that seek to highlight the inherent indeterminacy of technology success and failure and address the "agencies of assessment" that perform IS realities over time. While, for example, we welcome these authors' efforts to expose the "ontological politics" entailed in attempts to promote competing assessments of IS, such studies to date have largely omitted the affective dimension through which such narratives are filtered before they can be performed in practice. Thus, recalling Kaplan (2008), a more sophisticated account of the mediating role of affect in the framing-adhesion process offers real promise in enhancing existing performative accounts to explain why certain ideologies may be inherently more seductive and powerful for some people than for others and why one frame may come to predominate over others. Finally, and crucially, we hope that others may take and use the *Logics* framework to enrich this and other practice-based perspectives on the framing, acceptance, and implementation/adoption of IS.

Acknowledgments

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Appendix A. Details About Secondary Streams of the Literature Review

Relevant sections of the review	Research streams (and explanations)	References
The sociopolitics of framing	**The Irvine School of social informatics**	
	The incorporation of politics in the context of meaning-making has a long tradition within the IS literature and dates back more than 40 years to, at least, the Irvine School in the late 70s and 80s. This pioneering work brought to the fore the social dimensions of informatics. For instance, the Irvine School was concerned with the appropriation of IT by nonspecialists, highlighting ideological assumptions and biases within the computer science community itself. Information and communication technology itself has been considered as an institutional actor and IS implementation as a process of design and institutionalization, which captures the value-laden process through which struggles between various interest groups become embedded in the way things are done—often with lasting impact.	Kraemer & Dutton, 1979 Danziger et al., 1982 Kling & Iacono, 1989 Kling, 1996 Kling, 2004
	The circuits-of-power framework	
The sociopolitics of framing Group motivations Affective politics	Institutionalization of IS is achieved when the system is no longer contested and therefore becomes routinized in the organization. From this perspective, power is not the capacity of an individual agent but results instead from the circulation of discourse and disciplinary techniques; it is fundamentally strategic, intentional, and central in sustaining and conferring stability within social systems. For an information system to be institutionalized, it has to be integrated into three circuits of power: episodic (the "power over," foregrounding the relations between those who promote the systems and those who resist), social (dispositional power including rules and norms, and their relationship to technology) and systemic (facilitative power: techniques used to ensure discipline and hegemony).	Clegg, 1989 Silva & Backhouse, 2003
	The IS literature on affect/feelings/emotions	
Affective politics	While affect is arguably central to human motivation, it is still poorly understood theoretically. Its analysis is often complicated by the numerous synonyms of the notion in psychology and social sciences. The *Logics* framework explains the unfolding interplay between three key dimensions of psychosociality: "affect"—subjects' unconscious, prelinguistic positioning and associated receptiveness to feelings (Massumi, 1987); "feelings"—sensations resulting from subjects' affectively shaped interpreting and labeling of phenomena based on their own biographically derived understandings of their situation; and collective "emotions"—socially embedded, and socially experienced, displays of feelings. A common example of the social embeddedness of emotions would be the experience of shame. To recap, "affect" relates to our unconscious and prelinguistic receptiveness, and thus predispositions toward ideas or experiences; "feelings" are biographically derived interpretations of our positioning in relation to these ideas/experiences; and "emotions" are social performances that are collectively experienced.	Beaudry & Pinsonneault, 2005 Ortiz de Guinea & Markus, 2009 Zhang, 2013 Stein et al., 2015 Ashkanasy, Humphrey, & Huy, 2017
	The technology acceptance model (TAM)	
	Most of the published work in IS on emotions, including the vast TAM-related literature, relies on questionnaires and focuses on the individual level and generally raises questions that are different from those we address in this paper.	Davis, 1989 Davis, Bagozzi, & Warshaw, 1989 Davis, Bagozzi, & Warshaw, 1992 Agarwal & Karahanna, 2000 Venkatesh, Thong, & Xu, 2012, etc.

Appendix B. Details About the Study on Unity 3D (Generated September 2012-December 2013)

Methods	Source of data and activities
Ethnography of Unity's annual developer conference, Unite 2013, at the Vancouver Convention Center. Sensitization to peoples' affect and feelings was achieved via participant observation of speeches, parties, and celebrations, as well as through speaking with developers. Participant observation of numerous events, including game design meetings in two start-ups, a specialized research conference in the field of game design research in Bournemouth in the United Kingdom in 2013	15 conferences, tutorials and workshops were attended, which included: "Unity Serious Games' Showcase," "Console to Mobile: Bringing AAA to mobile," "Scripting behind the Scene," "Connect Gamers Cross Platforms with Facebook," and "Architectural Visualization with Unity: From Revit to Unity to Rift" The observations were written up as ethnographic field notes and ethnographic memos.
Netography of Unity's online community of users, reflecting prior research on online communities in IS (Koh, et al., 2007; Wilson & Peterson, 2002; Zhang & Storck, 2001; Vaast & Levina, 2015).	To collect threads, the field researcher relied upon the search functions of the online fora for certain keywords, such as "UDK" (Unreal development kit), "Unreal," "Unity," "First-person shooter," and "RPG" (Role-playing game). The following conversation was examined in depth: "Is Unity any easier than UDK?" We chose this (heated) exchange as it compares Unity's framing with that of a competitor (UDK-Unreal), and illustrates how developers position themselves in relation to two market-leading game engines. Through Unity's online community, participants obtain help and discuss solutions with experienced users of Unity. They share their knowledge of, and passion for, the topic. The online community's sections encompass fora, answers, feedback, an issues tracker, and documentation, Unify Script, Tips Wiki and Unity Chat. These fora are the central hub of the community discussions. Game designers are invited to voice their opinions, display what they are working on and to evaluate the work others are doing. The fora are also an opportunity to network with other Unity developers if members need to build or expand their teams. Interviewees as well as fora participants were anonymized.
A three-hour in-depth interview with Unity 3D's director of its UK branch and the director of support and communication was conducted at Unity's office in Brighton in 2013.	Unity's support team aims at understanding the problems that customers have and ensuring that they receive technical solutions and attention from Unity's developers if they find bugs.
Documentary research on Unity 3D	Recorded speeches, press, and online interviews of the CEO David Helgason were analyzed, and documents as well as archival analysis were conducted (e.g., blog posts, white papers, websites and Unity's marketing materials). We also followed the LinkedIn activities and announcements of the company.

About the Authors

Edouard Pignot is a postdoctoral researcher within the European Research Center for Information Systems at The University of Münster, Germany. He combines educational backgrounds in French literature (Paris Sorbonne University) and social psychology (London School of Economics) and holds a PhD in information and organization studies from The University of Warwick, UK. Edouard is generally interested in exploring the critical and affective turn in practice-oriented, processual, and performative epistemologies. His current empirical research investigates the digital space, and specifically the place of affect, subjectivity, and materiality in the design of information systems.

Davide Nicolini is a professor of organization studies at Warwick Business School where he codirects the IKON Research Centre and coordinates the Practice, Process and Institution Research Programme. In the past, he has held positions and visiting appointments at the University of Oslo, The Tavistock Institute in London, ESADE in Barcelona, the Universities of Trento and Bergamo in Italy. He has a long-standing interest in the relationship between artifacts, technologies, and organizations. His current research focuses on the development of the practice-based approach and its application to phenomena such as expertise, managerial knowing and attention, and affect and technological innovation in organizations. He is also interested in the refinement and promotion of processual, relational, and materialist research methods.

Mark Thompson is a professor of digital economy within the Initiative for the Digital Economy in Exeter (INDEX), part of Exeter Business School. His research interests include digital platforms and the public sector, and the affective dimension within organizational practice. Mark has undertaken technology policy development roles on a pro bono basis for a range of organizations such as the UK National Audit Office, Cabinet Office, and the Scottish government, and is a board member of the technology trade association TechUK. Mark combines his academic work with running the London-based digital transformation organization Methods Group.