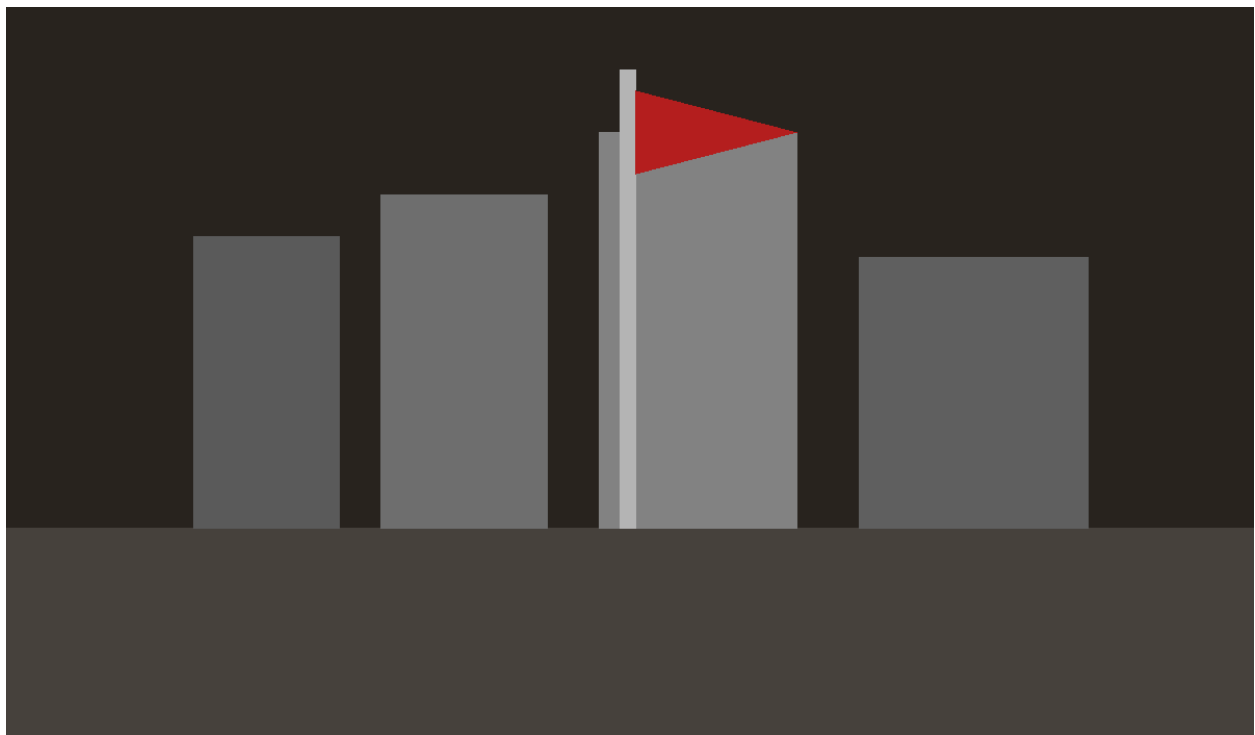


Selective Permeability, Political Affordances, and the Atmospheric Qualities of Tahrir Square

Matthew Crippen
and
Maria Almendra Sotelo



Chapter manuscript

34 Selective Permeability, Political Affordances, and the Atmospheric Qualities of Tahrir Square

Matthew Crippen (0000-0001-8410-3880) and Maria Almendra Sotelo (0009-0000-2372-8596)

Abstract

Built in the 19th century as part of Cairo's Parisian-inspired downtown and renamed from Ismailia to Tahrir Square after the 1952 Egyptian Revolution, this public space became a protest hub during and after the 2011 Arab Spring, alarming Egypt's powerbrokers. In response, Tahrir—meaning “liberation”—was outfitted in 2015 with features promoted by the Crime Prevention through Environmental Design (CPTED) model, including decorative elements that make outsiders emotionally uncomfortable. This chapter argues that CPTED adjustments created an atmosphere more threatening to Egyptians than tourists, who faced less harassment, rendering the space selectively permeable. Another claim is that this selectively hostile atmosphere was not merely a psychological projection. This aligns with Gibson's concept of “affordances” (action possibilities) as nonsubjective “values.” Just as a river is safely swimmable or not depending on a person's skills, Tahrir had different risk-values and hence use-values for Egyptians versus tourists. One might say the space was structured by “political affordances”—normative openings and closures that implicitly segregate. Though sometimes at odds with affordance theory, enactive cognitive science helps explain how behavioral dispositions—like hesitancy—selectively enact threatening atmospheres in Tahrir Square by making individuals more conspicuous to surveilling police.

Keywords

Affordances; Embodiment; Emotional Atmospheres; Enactivism; Heritage Sites; Political Protests; Tahrir Square

Introduction

The perception of heritage sites is shaped by factors like physical design, history, and the popular narratives about them. Their emotional coloring can also depend on a visitor's national identity, political leanings, religion, ethnicity, and more. Thus, whether we are discussing Al-Aqsa Mosque, the White House, or famous squares like Tahrir or Tiananmen, heritage spaces may have a welcoming or hostile atmosphere for different cohorts. This chapter explores such dynamics in depth, focusing on Cairo's Tahrir Square as a case study.

Laid down in the 19th century as a centerpiece of Cairo's Parisian-inspired downtown and originally called Ismailia Square, it was renamed *Tahrir*—Arabic for “liberation”—after the 1952 Egyptian Revolution (Mostyn 2007, Chapters 7–9; Abdelazim 2021). Even before that, it was informally called Tahrir and long served as a protest site (Gardener 2011; Abdelrahman 2015; Selem 2016; Abdelazim 2021). Tahrir's symbolism and history led to the erection of state buildings around it, such as the headquarters of President Mubarak's ruling party, making it an ideal site for dissent. As a historic hub in downtown Cairo, with major roads, a key bridge, and a central subway station, the Square was also a practical gathering point. Due to this heritage status and layered symbolism, Tahrir became emotionally vital during Egypt's Arab Spring and the January 2011 Revolution.

Authoritarians often co-opt terms like “liberty” or “democracy,” and Egypt's National Democratic Party (NDP), led by Mubarak until 2011, exemplified this, as did others who later vied for power. These military leaders would even encourage Tahrir-based protests against the elected government they sought to depose, casting the 2013 coup as a continuation of the 2011 Revolution's democratic ideals. After this, however, demonstrations became undesirable to powerbrokers, and Tahrir was restructured to deter them. The redesign added decorative walls, limited access points, elevation changes, and progressive tile alterations—all advocated by classic proponents of the Crime Prevention through Environmental Design (CPTED) model as a way of making outsiders feel uncomfortable upon entering an area (Jeffery 1971; Newman 1972). In effect, these CPTED prescriptions are psychological variants of hostile architecture that, for example, deploy spikes or bench armrests to discourage unwanted people from resting or lingering (see Rosenberger 2019).

CPTED assumes that people behave according to action-regulating social norms or values—often tied to territoriality—that are embedded in artifacts. Aspects of CPTED can thus be interpreted through Gibson's (1966, 1979) concept of “affordances,” which equates action possibilities with nonsubjective values defined as benefits or harms affecting usability. Just as a river may be safely swimmable or not depending on one's skills, Tahrir offered varying degrees of danger and usability for tourists versus Egyptians, who were more vulnerable to police harassment (Crippen 2021a). Affordance-based research shows that energy-depleting conditions—such as debt, sadness, or fatigue—can make hills look steeper or farther away (Proffitt et al. 1995; Riener et al. 2011; Liu et al. 2018). Extrapolating from these findings, this chapter argues that the CPTED features introduced to Tahrir in 2015 appeared especially severe to politically and economically exhausted Egyptians. In this sense, Tahrir

became selectively permeable. Such conditions pervade urban settings: women may face more harassment than men, or a stairway may be wheelchair inaccessible (Crippen 2025a; Crippen et al. 2025).

Gibson (1979, Chapter 8) suggests that culture modulates affordance availability by shaping embodied skills and tool use. However, he also maintains that creatures register affordance information through immediate environmental cues, and Tahrir's hostile atmosphere does not conform to this insofar as it was a product of Egypt's broader socioeconomic and political milieu. At the same time, if the Square selectively exuded hostility—much like a lake posing different risks depending on whether one can swim—then its atmosphere parallels Gibson's (1979, 142) example of a cliff being dangerous to certain agents because it objectively affords falling. A Gibsonian interpretation, however, would also allow that humans participate in generating atmospheres: while affordances are environmental properties, they exist only in relation to agents. Gibson (1966, 138) further adds that actions are “exploratory and stimulus-producing.” This characterization resonates with enactive cognitive science, which—despite its disagreements with Gibson (cf. Varela et al. 1991, Chapter 9; Heft 2020)—shares his belief that creatures actively bring forth environmental aspects. From this angle, a wearisome aura may arise as one struggles to move forward (Ratcliffe 2015, Chapter 6; Crippen 2025b). In Tahrir, a comparable dynamic may have unfolded if behavioral tendencies such as hesitancy selectively enacted a threatening atmosphere by making individuals more conspicuous to surveilling police.

Disputed Place, Contested Heritage

Though hesitant to define heritage on Wittgensteinian grounds—since any attempt to enumerate its essential features ultimately fails—Tahrir possesses that status because of its past, including its role in events that shaped Egypt's evolution and its people's national identity. This heritage made the Square an ideologically and physically contested site during and after the Arab Spring, as Egypt's leadership introduced selectively hostile features to its design. These points are inseparable from Tahrir's history, which is why the following section provides a brief overview.

The start date of Egypt's 2011 Revolution was no accident. Demonstrators assembled in Tahrir Square on January 25, a national holiday commemorating police officers who died resisting British occupiers in 1952. The Mubarak regime had officially recognized the day in 2009, likely to rehabilitate the image of its security forces. Yet, by rallying on that same date just two years later—at a site literally named for liberation—Arab Spring activists underscored the

contrast between the celebrated police of 1952 and the brutality of contemporary security forces (Nugent and Hoffman 2024). This illustrates what scholars call “contested heritage” (e.g., Olsen and Timothy 2002; Legg 2025), exemplified when statues of once-honored figures like Winston Churchill or Cecil Rhodes get critiqued or vandalized by those regarding them as colonialists. Researchers have examined contested heritage sites through the lens of affordances (see Staničić and Jelić 2022), and as this chapter will show, the dispute over Tahrir—both ideological and spatial—persisted into the postrevolutionary period. Reflecting this dynamic, Tahrir’s ideological and spatial disputes continued after the revolution, with the 2015 redesign marking its rebranding as a symbol of state authority and restricting its affordances for protest.

Yet, these struggles over meaning and control were not entirely new. The Square had been a contested space since its construction in 1869 (Salem 2016). The 1919 Revolution brought partial independence, though Britain retained a military presence and control over the Suez Canal. During this period, the Square was informally referred to as “Tahrir” and was officially given that name following the 1952 Egyptian Revolution (Gardener 2011, Chapter 1).

In 1952, therefore, Tahrir Square already embodied the characteristics of a heritage site. This status was fortified in the middle of the 20th century when major state buildings were constructed nearby, including the Mogamma government complex, the Arab League Headquarters, and the headquarters of President Nasser’s Arab Socialist Union, later used by the NDP. Though constructed earlier, the Museum of Egyptian Antiquities is within view, along with the original campus of the American University in Cairo. Thus, in the same way that Heidegger (1949/1971) says that a goblet becomes what it is by the way it gathers people and convivial moods around it, Tahrir’s centrality as a national symbol was reinforced by the way it collected these buildings around it. (See Figures 34.1 and 34.2 for recent versions of Tahrir Square and Figure 34.3 for a map and depiction of surrounding architectural structures.)

So, Tahrir Square acquired heightened mythic stature during the Arab Spring, in part because it already held that status for Egyptians. The term “mythic” follows Barthes’s (1957/1991, pp. 107–164) usage, referring to how history imbues artifacts with meaning, making them function like language. For example, photos of Adolf Hitler typically convey “evil” to those familiar with his image. In 2011, Tahrir similarly became synonymous with its namesake, “liberation,” because of the way it gathered protesters—just as it had previously gathered buildings. However, Tahrir’s history, its symbolism, and the interrelated fact that the Square was a central hub in Cairo—which all gave the Square prior mythic significance—were preconditions for this outcome.

Stuart Hall (1980/2005) notes that mythic symbols can be read oppositionally—as when Americans burn their flag, a conventional emblem of freedom, to protest oppressive racism. The oppositional move of Tahrir demonstrators, however, was to co-opt their flag as a symbol of dissent. This move had historical roots, as the flag—known as *Alam al-Tahrir*—originated in Egyptian liberation revolts against colonizers. But this also tied the flag to Gamal Nasser, Anwar Sadat, and Hosni Mubarak, all of whom were in the military in the 1950s and would lead successive dictatorships from 1952 to 2011. Abdel el-Sisi, the field marshal who led the 2013 coup, would take over at that point and the reappropriation of Tahrir would begin in earnest.

By 1952, Tahrir Square already embodied the characteristics of a heritage site. This status was reinforced by the construction of major administrative buildings around it just before or within the decade following the Egyptian Revolution. These included the Mogamma government complex, the Arab League Headquarters, and the headquarters of President Nasser’s Arab Socialist Union—later used by the NDP. Although built earlier, the Museum of Egyptian Antiquities also lies within view, along with the original campus of the American University in Cairo. In much the same way that Heidegger (1949/1971) suggests a goblet becomes what it is through the way it gathers people and convivial moods around it, Tahrir’s centrality as a national symbol was strengthened by the way it gathered these buildings around itself. (See Figures 34.1 and 34.2 for recent versions of Tahrir Square and Figure 34.2 for a map and depiction of surrounding architectural structures.)

Affectivity, Emotions, Atmospheres, and Moods

This chapter focuses centrally on how Tahrir’s contested heritage connects to its selectively hostile atmospheres. Yet, the term “atmosphere” itself is fraught. Before proceeding further, therefore, some definitional remarks on what is signified by “atmosphere” are warranted. Inevitably, this also entails discussing adjacent concepts—namely, “affectivity,” “emotion,” and “mood.”

To begin, while this chapter does not differentiate “emotions” and “affectivity,” nor frame them as exclusively internally felt, scholars standardly do. For psychologists, emotions designate specific states, such as being sad, frustrated, happy, or angry, whereas “affectivity” encompasses not only these but also something broader. In Colombetti’s (2014, p. 5) words, affectivity usually refers to “the conditions of being affected” and to experiencing “interest, concern, or care for one’s existence and/or world.”

Some researchers distinguish between moods and atmospheres or auras de Vasconcelos and Rolla (2024) define moods as subjective “affective states evoked by engaging with an

environment or another person,” while linking atmospheres to the possibilities a place offers—for example, the hostile, action-restricting ambience Tahrir presented to Egyptians due to the risks it posed. Dreyfus (1991, Chapter 10), by contrast, appears to equate moods and atmospheres, noting that we often speak of being in moods rather than moods being in us, as when enveloped in a restaurant’s cozy atmosphere. Böhme (1993) similarly argues that atmospheres bridge the subjective-objective divide, echoing Gibson’s (1979, p. 129) well-known claim about affordances. Koffka (1935, p. 326) suggests emotions can be externally perceived as atmospheres, though they may also be internally felt. He notes that we can see a “gloomy landscape” even when feeling cheerful—just as Egyptians might view Tahrir as hostile without feeling fear unless trying to enter it.

The view that perhaps resonates most strongly with this chapter is Dewey’s (1934). He observes that we describe situations as depressing, intolerable, threatening, or triumphant (67). In various writings, Dewey (e.g., 1908/1931, 1925, 1929, 1934) anticipates Gibson in arguing that these emotional qualities are no more subjective than anything else we register, since all properties consist of relationships within the world—relationships that include agents. This claim holds even for attributes like length, which vary with an object’s velocity relative to the observer. Dewey does not, of course, deny that settings can make us feel one way or another. Yet, the key point appropriated from him here is that affective dimensions—including emotional qualities, moods, and atmospheres, henceforth left undifferentiated—are features of environments as much as of the individuals who inhabit them. At several points, Dewey stresses that qualities of whatever sort are not in those who register them but are characteristics of interactions in the world, arising according to how individuals are embodied. This helps explain why places like Tahrir Square can take on distinctly oppressive or liberating tones depending on how people and powers relate within them.

Concrete Ideologies and the Reappropriation of Tahrir Square

After the 2011 Arab Spring, many Egyptians extolled the January Revolution. This included military officials, who sought to reclaim the narrative and reappropriate Tahrir.

They had their chance in 2013, when masses gathered in Tahrir Square to protest Mohammed Morsi and the Muslim Brotherhood. Elected only a year earlier, the Brotherhood had previously been banned, making it an underground organization in an authoritarian state. As a result, its members were habituated to operating outside legal norms and flouted democratic practices once in power, creating widespread dissatisfaction, as noted in *The Economist* (anonymous 2013, p. 11).

When anti-Morsi protests erupted, the army began ideologically reappropriating Tahrir Square, laying the groundwork for the coup that followed on July 3, 2013. Several dynamics were in play. First, unlike the police, the army enjoyed a relatively positive reputation—some of it earned—thanks to soldiers who positioned themselves between pro- and anti-Mubarak factions in 2011 rather than cracking down on the latter (Crippen 2016a). Second, Egypt’s Arab Spring had cemented Tahrir Square’s mythic identity as an anti-government site of resistance, a role it reprised in the summer of 2013 when people gathered to demonstrate against Morsi and his elected Muslim Brotherhood government. Third, the Egyptian flag still carried associations with dissent for those assembled in the Square. Capitalizing on these factors, the military sent helicopters over Tahrir draping massive flags and dropping smaller ones into the jubilant crowds below (Fisher 2013; Crippen 2021a). The symbolic spin was that the military stood with the revolution and the people—now defined as those opposing Morsi and the Brotherhood. This messaging swayed many, who embraced the coup as a continuation of the January Revolution, not realizing it marked a return to the status quo (see Vick 2013).

Now, an overthrow can, in principle, advance democracy—as seen in Portugal’s 1974 military coup. Yet, this was not so in Egypt, for the same old abuses persisted after Sisi—who had led the coup—was elected president (Safdar 2016; Shenker 2016; Guerin 2018). As dissatisfaction grew, the military leadership sought to concretize its control over what many had called the “Tahrir spirit.” An unsightly concrete monument, purporting to honor the martyrs of the January Revolution, was erected in Tahrir and then vandalized. It was replaced by a militaristic pedestal topped with a flag—around the same time the widely reviled NDP headquarters was demolished. These brick-and-mortar statements projected allegiance to the 2011 Revolution, while simultaneously distancing the regime from Mubarak’s legacy. However, beneath this stone-constructed veneer, the reality was that the new president—formerly Egypt’s top military figure—was continuing Mubarak’s repressive agenda.

Beyond this—and as the next section explores—the military’s reclamation of the Square included a physical restructuring that discouraged Egyptians from entering. Without crowds assembling in this iconic site—once a focal point of media coverage—the likelihood of another popular revolution became remote. By 2020, with the memory of the January Revolution fading, the military leadership undertook even more drastic measures, redesigning the Square once again. The new layout is an attempt to depoliticize the space by obscuring its revolutionary significance. It incorporates a range of defensive features but, instead of honoring the martyrs of the revolution, it now centers on a Pharaonic obelisk and Sphinx statues—perhaps in part to legitimize the constant presence of security personnel who prevent public access. In a striking

act of erasure, the flag—once a central icon of the January Revolution—is now gone (see Figures 34.1 and 34.2 for various versions of the Square).

Making Tahrir Selectively Permeable

As indicated earlier, the 2015 redesign of Tahrir Square incorporated features consistent with the principles of CPTED, thereby producing what might be called action-closing affordances. A related argument developed throughout the remainder of this chapter is that, during this period, Tahrir’s atmosphere became more hostile to Egyptians than to foreign visitors in Cairo.

The CPTED additions to Tahrir Square—which transformed it from a poorly maintained roundabout into an aesthetically structured space with a decorative wall, limited access points, shrubs, and changes in tiling and elevation—serve as a textbook example of Newman’s defensible space model (1972, 1996; also see Crippen 2016b). According to this framework, such layers—while not physically barring entry—create an escalating sense of privacy that makes outsiders feel uncomfortably conspicuous (see Figure 34.4). Adapting Newman’s (1972, pp. 2–3) words to the 2015 version of Tahrir, this type of design ensures that “both inhabitant and stranger ... perceive that an area is under the undisputed influence of a particular group”—in this case, Egypt’s military government.

There are both connections and sharp contrasts between Newman’s ideas and those of Jacobs (1961), which help clarify Newman’s relevance to Tahrir. Jacobs argues that, all else being equal, safety improves in mixed-use neighborhoods where establishments such as bars, delis, and flower shops ensure “eyes on the street” at most hours. These watchful eyes, she stresses, should belong to people who care about their neighborhood and its residents. Crucially, Jacobs champions cities where strangers can comfortably coexist, warning that excessive territoriality fosters discrimination—for example, harassment based on race. Newman, by contrast, focuses primarily on residential areas. His soldierly emphasis on defense replaces “fortress apartments” and “hard walls and locks” with “a soft bunker, a network of defensible territories” (Knoblauch 2014, 337). Time-lapse photography shows that symbolic barriers of the kind Newman advocates can reduce foot traffic (Whyte 1980), and such measures have indeed been documented to lower crime in certain contexts (Cose 1994). Yet, Newman’s (1972, 60) vision verges on the dystopian when he writes approvingly of neighborhoods where “strangers to the street are greeted by questioning glances and a cacophony of barking dogs.”

The argument that CPTED additions made Tahrir Square selectively permeable rests on several observations. Research shows that exhaustion heightens the perceived difficulty of physical

obstacles. Affordance-based studies demonstrate that depleting conditions—such as illness, fatigue, bad weather, heavy loads, or low blood sugar—can make hills or stairs appear steeper or more distant (Bhalla and Proffitt 1999; Proffitt 2006; Schnall et al. 2010; Zadra et al. 2010; Ekawati et al. 2022). Similar effects are observed among individuals experiencing debt or sadness (Riener et al. 2011; Liu et al. 2018), both of which have well-documented physiological consequences (e.g., Trivedi 2004; Turunen and Hiilamo 2014; Ong et al. 2019). Hence, a setting may appear less accessible when its goals or destinations feel harder to reach.

Second, even if one chooses not to classify CPTED features as affordances, the two are functionally similar: both regulate action. Moreover, observational research indicates that CPTED's symbolic barriers are particularly effective against exhausted populations, such as unhoused individuals (Crippen 2023).

Third, many Egyptians were deeply worn down after the revolution. Economically, an already difficult situation worsened, as rampant inflation and a collapsing currency intensified daily hardships. Politically, it is reasonable to infer that many felt profound fatigue after struggling for a better future, only to find themselves once again under a repressive regime. Moreover, observational research indicates that Egyptians avoided Tahrir Square after its 2015 redesign, despite typically flocking to even small green spaces—often crossing busy roads to do so (Crippen 2021a).

Affordances not only enable but also constrain action—an inclined path, for instance, allows upward or downward movement but not horizontal travel along a flat plane. Gibson classifies affordances as “positive” when they expand action possibilities and increase access to benefits, such as a pedestrian ramp for a wheelchair user. By contrast, “negative” affordances restrict actions in problematic ways. Gibson's (1966, 146; 1979, 142) examples include a dangerous precipice or the presence of a cat from the standpoint of a mouse. The concept of selective permeability builds on this by recognizing that individuals may encounter distinct negative affordances within the same environment—for instance, when a wheelchair user confronts a stairway that a pedestrian can easily navigate (see Crippen 2024, 2025c; Crippen et al. 2025).

One objection to the claim that Tahrir's CPTED additions functioned as negative affordances for Egyptians is this: perceiving the 2015 version of the Square as dangerously closed might seem to presuppose familiarity with Egypt's broader political context. This appears to conflict with

Gibson's epistemological view that affordances are specified by immediate environmental cues. Gibson (1966, 1979) favors direct realism—for instance, he insists that ambient light reaches the eyes in spatial and temporal patterns that directly correspond to environmental layouts. However, Gibson (1966, 146) also discusses the “affordance of prey odor,” which cannot be specified in this way. Crucially, and at an ontological level, social pressures—such as the implicit prohibition against sipping a stranger's coffee in a café—exist independently of any single individual and carry tangible consequences, including bodily harm. The same holds for the meaning—which Gibson (1966, 1979) equates with affordances and values—that Tahrir manifested to Egyptians: it was real and independent of any lone observer. As with Gibson's cliff, the Square appeared ominous to certain agents precisely because it was dangerous to them, with Egyptians facing police harassment for entering it far more than tourists did (Crippen 2021a).

Key to Tahrir's 2015 redesign was the introduction of the national flag atop an austere pedestal. The messaging here was ambivalent. On the one hand, it ostensibly aligned the people's revolutionary victory with the military's agenda, since the flag was erected over a memorial for those who died in the Square. On the other hand, by implying that the January Revolution had been completed, the flag signaled that the time for protest was over. The underlying message was that severe consequences would follow for those who refused to retreat from Tahrir—understood as both a physical space and an ideology. To many Cairenes, therefore, the flag took on a threatening expressive force, akin to a raised middle finger. And just as a mouse's survival depends on recognizing a cat as a negative affordance, so too did Egyptian safety depend on registering the Square—and its flag—as dangerous.

Atmospheres and Political Affordances

Gibson (1979, Chapter 8) suggests that cultural training and artifacts—such as sitting styles and tools—shape the affordances available to individuals. Later, scholars explicitly introduced the notion of social or cultural affordances (e.g., Krueger 2011; Rietveld et al. 2013; Solymosi 2013), arguing that human arrangements influence both actions and meanings. For instance, we recognize cups as utensils because of their customary use within our culture, just as Egyptians perceived Tahrir as hostile because it embodied exclusionary dangers within theirs. Recent studies (e.g., Michels 2015; Jelić et al. 2016) reinforce this perspective, linking action possibilities to the atmospheric charge of architectural structures—a connection examined here in the case of Tahrir.

The selective permeability model suggests that Tahrir was structured by *political affordances*—normative openings and closures that subtly segregate people along demographic lines (Crippen 2022, 2024, 2025c). Recall that Gibson equates affordances with values, which later scholars interpret as being embedded in artifacts. For instance, a bank’s polished wood, marble, and high ceilings may convey wealth and authority, welcoming the affluent more than the poor and empowering staff over loan applicants (Shah and Kesan 2007; Griffero 2019; Crippen and Klement 2020). Similarly, Tahrir’s redesign imposed negatively charged political affordances on Cairenes.

When considering Tahrir’s selectively present atmosphere, it is worth remembering that it held mythic and emotional sway because of its revolutionary history even before the Arab Spring. It also was—and remains—a hub in Cairo. Located downtown, it is in an area known for its 19th-century architecture, its vintage hotels, and its many shops and restaurants, including iconic spots like Café Riche, once frequented by artists and dissidents. From Tahrir, it is a short stroll to Zamalek Island, a fashionable area. A slightly longer walk takes one to the main train station and to Islamic and Coptic Cairo as well, both dating to the Middle Ages. At the heart of Cairo, the Tahrir district exudes an atmosphere in Canepa and colleagues’ (2019) sense of fostering an empathic connection between individuals and their architectural environment.

A caveat, however, is that while Cairenes may have felt emotionally connected to Tahrir due to its history and location, “empathy” does not capture their typical relation to the 2015 version, which had become a site of alienation. One might say that Tahrir was multistable: like a Necker cube appearing differently depending on one’s focus (see Figure 34.4), the 2015 design of Tahrir customarily had a negative aura for those habituated to Egypt’s sociopolitical realities.

Although Gibson’s views are not entirely consistent with this account, he does suggest something like multistability when he notes that a stone may appear as a paperweight or a bookend depending on one’s relation to it (Gibson 1979, 134). The previously discussed findings that a person’s energy level affects perceived distances and steepness underscore a similar point. Other research indicates that anxious climbers perceive walls as more challenging because they explore handholds tentatively (Pijpers et al. 2006; Graydon et al. 2012).

Some investigators (Pijpers et al. 2006) further propose that felt emotions can realize certain affordances—that is, bring them forth. When combined with Gibson’s (1966, 138) earlier claim that actions are “exploratory and stimulus-producing,” affordance theory here approaches enactive cognitive science. Enactivism, in its various forms, maintains that cognition is not a mere representation of a preexisting world but an enactment or bringing forth of attributes

shaped by an individual's history of actions (see Varela et al. 1991, 9). The just-mentioned experiments, which are affordance-inspired, can thus be interpreted through an enactivist lens: diminished action capacity brings out a world that appears strenuous precisely because it is difficult to negotiate.

On similar grounds, we might assert that Egyptians behaving hesitantly around the 2015 variant of Tahrir amplified its hostile atmosphere. Enactivists would regard the Square's atmosphere as constructed and having "no non-experiential, physical counterparts" (Varela et al. 1991, 166). Yet here, Gibsonian realism and enactive constructivism are not at odds. After all, constructed environmental configurations—including relations among things within settings, together with agents contending with them—really are there once new arrangements are introduced (e.g., Crippen 2020, 2025c, 2025d; Crippen and Lindemann 2024). Just as a stairway can be objectively inaccessible to a wheelchair user and an environment genuinely wearisome to a depression-depleted person, Tahrir really was more threatening to Egyptians, who faced greater police harassment upon entering (see Crippen 2021a, 2021b). For this reason, an ominous aura was selectively there for many Egyptians.

To recapitulate, the tentative and hesitant behavior around the 2015 version of Tahrir Square contributed to its hostile atmosphere for Egyptians, especially when CPTED features were registered through the sociopolitical situation. Newman (1972) suggests that acting apprehensively—appearing as if one does not belong—makes individuals more conspicuous to those who control a space. If so, Egyptians entering Tahrir may have stood out to police, who were observed questioning them more frequently than tourists (Crippen 2021a). This implies that the targeted individuals contributed to their own perception of the hostile atmosphere, aligning with enactive constructivism. The enacted perceptual outcomes, however, were in the socially constructed threats that *really* were there in the environment, so the position also aligns with Gibson's ecological realism. If this is right, then Tahrir's hostile atmosphere might be conceived as a negatively valenced political affordance that targeted Egyptians.

Conclusion: Tahrir and Atmospheric Sites

Earlier, Tahrir's flag was likened to a middle finger, aligning with literature on the gestural qualities of architecture (e.g., Andrews 2015; Psilopoulos 2024), where buildings appear stern, welcoming, and so on. Urban structures, in this view, express themselves like body language—a notion sometimes linked to affordances (Hvejsel 2022). This concluding section

identifies several implications of this idea with the summative aim of reinforcing the claim that Tahrir's atmosphere was not merely subjective.

First, person's expressive habits create a kind of aura, and when someone has an angry or friendly demeanor, it can influence the mood or atmosphere of a room. Similarly, the assemblage of CPTED features in Tahrir's 2015 version, combined with the flag on its austere pedestal, worked together to create a hostile atmosphere for many Egyptians.

Second, the same hand gesture can have benign or abrasive meanings in different regions (Li 2015), selectively shaping avenues for social engagement depending on cultural context. Tahrir was similar. To Egyptians, it was belligerent in ways that temporary visitors to the country might not register.

Third, just as we perceive red without becoming it, we can observe troubling expressive demeanors without feeling a corresponding emotion or a sense of threat, as when witnessing two people arguing aggressively from a distance. Similarly, people could recognize the hostile ambiance of the 2015 variant of Tahrir without necessarily being afraid—for example, when walking on a sidewalk across the street. This would nonetheless dissuade entry, paralleling how cliffs or ominous cloud formations often function as negative affordances, prompting people to retreat or seek shelter. These observations support the idea that Tahrir's atmosphere was a perceptual property, though selectively present.

Fourth, the atmospheric effects of Tahrir's 2015 redesign were shaped by Egyptians' political and economic struggles and by their heightened caution around the Square—all of which intensified its hostile ambiance. Yet, this does not undermine the reality of Tahrir's aura. After all, a pub district filled with jovial revelers can generate a threatening atmosphere at night, particularly for a woman who faces greater risks than a man in the same setting. Still, this does not reduce the concern to an imaginary realm. The properties that produce both the danger and the atmosphere permeate the environment and its broader social milieu, even when the woman is absent. This, incidentally, is consistent with what ecological psychologists say about affordances (Heft 2020).

It may still be objected that emotional atmospheres cannot exist in environments because they are not tied to any single object or occurrence. However, many properties depend on overall configurations. This applies to an object's length, as previously mentioned. The same holds true for facial expressions—joyful tears might be mistaken for sadness if viewed in isolation. Merleau-Ponty (1947/1964) also discusses color constancy, where the perception of hues relies

on the broader context, leading to misperception when viewing a small color patch through a narrow aperture.

Together, this reaffirms that accurate perception often involves recognizing what is not confined to isolated elements of the world. This principle applies strongly to the selectively present ominous atmosphere of Tahrir Square's redesigned version. The mood was not inherent in any single component but emerged from the overall configuration as perceived through a particular cultural lens. None of its individual features—whether CPTED elements, the flag, or other aspects—were sufficient on their own. However, when considered as a gestalt and interpreted within a specific cultural context and historical narrative, Tahrir possessed an ominous aura that, in Gibsonian terms, was genuinely present in the environment.

<COMP: Place Figure 34.1 Here>

<COMP: Place Figure 34.2 Here>

<COMP: Place Figure 34.3 Here>

<COMP: Place Figure 34.4 Here>

Figure 34.1 Tahrir Square c. 2011 (left) and Tahrir Square c. 2015 (right). Courtesy of the authors.

Figure 34.2 Tahrir Square c. 2020. Courtesy of the authors.

Figure 34.3 Map and depictions of structures surrounding Tahrir Square: (1) Tahrir Square. (2) The Mogamma. (3) The Arab League Headquarters. (4) Entrance to the Qasr el Nil Bridge. (5) NDP Headquarters. (6) The Museum of Egyptian Antiquities. (7) American University in Cairo, downtown campus. Courtesy of the authors.

Figure 34.4 Latent territory markers. Drawing by Mareike Joleen Timm, courtesy of the authors.

References

- Abdelazim, Mariam. 2021. *From Roundabout Roundabout to Round About: Tahrir Square (1869-2021)*. PhD diss., New Jersey Institute of Technology.
- Abdelrahman, Maha. 2015. *Egypt's Long Revolution*. London: Routledge.
- Andrews, Noam. 2015. "The Architectural Gesture." *Log* 33: 137–155.

Anonymous. 2013. "The Arab Spring: Has It Failed?" *The Economist* 408: 11.

Barthes, Roland. 1957/1991. *Mythologies*. Translated by A. Lavers. New York: Noonday Press.

Bhalla, Mukul, and Dennis R. Proffitt. 1999. "Visual-Motor Recalibration in Geographical Slant Perception." *Journal of Experimental Psychology: Human Perception and Performance* 25(4): 1076–1096.

Canepa, Elisabetta, Valter Scelsi, Anna Fassio, Laura Avanzino, Giovanna Lagravinese, and Carlo Chiorri. 2019. "Atmospheres: Feeling Architecture by Emotions." *Ambiances. Environnement Sensible, Architecture et Espace Urbain* 5: 1–29.

Colombetti, Giovanna. 2014. *The Feeling Body: Affective Science Meets the Enactive Mind*. Cambridge: MIT Press.

Cose, Ellis. 1994. "Drawing Up Safer Cities." *Newsweek*, July 11 [accessed on microfiche].

Crippen, Matthew. 2016a. "Egypt and the Middle East: Democracy, Anti-Democracy and Pragmatic Faith." *Saint Louis University Public Law Review* 35(2): 281–302.

- Crippen, Matthew. 2016b. "Intuitive Cities: Pre-Reflective, Aesthetic and Political Aspects of Urban Design." *Journal of Aesthetics and Phenomenology* 3(2): 125–145.
- Crippen, Matthew. 2020. "Enactive Pragmatism and Ecological Psychology." *Frontiers in Psychology* 11: 538644. <https://doi.org/10.3389/fpsyg.2020.538644>.
- Crippen, Matthew. 2021a. "Contours of Cairo Revolt: Street Semiology, Values and Political Affordances." *Topoi* 40(2): 451–460.
- Crippen, Matthew. 2021b. "Aesthetics and Action: Situations, Emotional Perception and the Kuleshov Effect." *Synthese* 198(Suppl 9): 2345–2363.
- Crippen, Matthew. 2022. "Emotional Environments: Selective Permeability, Political Affordances and Normative Settings." *Topoi* 41(5): 917–929.
- Crippen, Matthew. 2023. "Bodies under the Weather: Selective Permeability, Political Affordances and Architectural Hostility." In *Somaesthetics and Design Culture*, edited by B. Veres and R. Shusterman, 154–182. Boston: Brill.
- Crippen, Matthew. 2024. "Selective Permeability, Social Media, and Epistemic Fragmentation." *Topoi* 43(4): 1451–1465.
- Crippen, Matthew. 2025a. "Selective Permeability, Political Affordances and the Gendering of Cities." *Societies* 15 (7): 188. <https://doi.org/10.3390/soc15070188>.

- Crippen, Matthew. 2025b. "Anticipating and Enacting Worlds: Moods, Illness, and Psychobehavioral Adaptation." *Phenomenology and the Cognitive Sciences* 24(4): 1079–1103.
- Crippen, Matthew. 2025c. "Selective Permeability and Situated Cognitive Harm in Multicultural Classrooms." *Topoi* 44(2): 457–475.
- Crippen, Matthew. 2025d. "Enactivism: A Newish Name for Mostly Old Ideas?" *Phenomenology and the Cognitive Sciences* 24(1): 103–127.
- Crippen, Matthew, and Vladen Klement. 2020. "Architectural Values, Political Affordances and Selective Permeability." *Open Philosophy* 3(1): 462–477.
- Crippen, Matthew, and Dag Munk Lindemann. 2024. "Selective Permeability, Multiculturalism and Affordances in Education." *Philosophical Psychology* 37(7): 1924–1947.
- Crippen, M., Maria Almendra Sotelo, and Dana Jang. 2025. "Should I Stay or Should I Go? An Analysis of the Selective Permeability of Busan." *Kritike* 18(1): 5–36.
- de Vasconcelos, Guilherme Nunes, and Giovanni Rolla. 2024. "Perceiving and Creating Atmospheres: How Ecological-Enactive Cognition Can Explain and Inform Architectural Practice." *Adaptive Behavior* 32(2): 103–115.

Dewey, John. 1908/1931. "The Practical Character of Reality." In *Philosophy and Civilization*, 35–56. New York: Minton, Balch and Company.

Dewey, John. 1925. *Experience and Nature*. Chicago, IL: Open Court Publishing Company.

Dewey, John. 1929. *The Quest for Certainty*. New York: Minton, Balch and Company.

Dewey, John. 1934. *Art as Experience*. New York: Minton, Balch and Company.

Dreyfus, Hubert. 1991. *Being-in-the-World: A Commentary on Heidegger's Being and Time, Division I*. Cambridge: MIT Press.

Ekawati, Febriani, Michael White, and Frank F. Eves. 2022. "Interrupting Pedestrians in Indonesia: Effect of Climate on Perceived Steepness and Stair Climbing Behaviour." *International Journal of Environmental Research and Public Health* 20(1): 338.

Fisher, Max. 2013. "Video: Egyptian Army Helicopter Drops Flags over Anti-Government Protests." *The Washington Post*, July 1.

<https://www.washingtonpost.com/news/worldviews/wp/2013/07/01/video-egyptian-army-helicopter-drops-flags-over-anti-government-protests/>.

Gardener, Lloyd. 2011. *The Road to Tahrir Square: Egypt and the United States from the Rise of Nasser to the Fall of Mubarak*. New York: Saqi.

Ghonim, Wael. 2012. *Revolution 2.0: The Power of the People Is Greater Than the People in Power: A Memoir*. New York: Houghton Mifflin Harcourt.

Gibson, James. 1966. *The Senses Considered as Perceptual Systems*. Boston: Houghton Mifflin.

Gibson, James. 1979. *The Ecological Approach to Visual Perception*. Boston: Houghton Mifflin.

Graydon, Meagan, Sally Linkenauer, Bethany Teachman, and Dennis Proffitt. 2012. "Scared Stiff: The Influence of Anxiety on the Perception of Action Capabilities." *Cognition and Emotion* 26(7): 1301–1315.

Griffero, Tonino, and Marco Tedeschini. 2019. "Introduction." In *Atmosphere and Aesthetics: A Plural Perspective*, edited by T. Griffero and M. Tedeschini, 1–7. New York: Palgrave Macmillan.

Guerin, Orla. 2018. "The Shadow over Egypt." *BBC News*, February 23. https://www.bbc.co.uk/news/resources/idt-sh/shadow_over_egypt. Accessed January 23, 2025.

Hall, Stuart. (1980/2005). "Encoding/Decoding." In *Culture, Media, Language*, edited by S. Hall, D. Hobson, A. Lowe, and P. Willis, 117–127. London: Routledge.

Heft, Harry. 2020. "Ecological Psychology and Enaction Theory: Divergent Groundings." *Frontiers in Psychology* 11. <https://doi.org/10.3389/fpsyg.2020.00991>.

- Heidegger, Martin. 1949/1971. "The Thing." In *Poetry, Language, Thought*, translated by Albert Hofstadter, 163–180. New York: Harper and Row.
- Hvejsel, Marie Frier. 2022. "What Gestures (Can We) Afford? On the Resourcefulness of Tectonics in Architecture and Engineering." In *Affordances in Everyday Life: A Multidisciplinary Collection of Essays*, 75–83. Cham: Springer.
- Jacobs, Jane. 1961. *The Death and Life of Great American Cities*. New York: Vintage.
- Jeffery, Ray. 1971. *Crime Prevention through Environmental Design*. Beverly Hills: Sage.
- Jelić, Andrea, Gaetano Tieri, Federico De Matteis, Fabio Babiloni, and Giovanni Vecchiato. 2016. "The Enactive Approach to Architectural Experience: A Neurophysiological Perspective on Embodiment, Motivation, and Affordances." *Frontiers in Psychology* 7: 481.
- Khalil, Ashraf. 2012. *Liberation Square: Inside the Egyptian Revolution and the Rebirth of a Nation*. New York: St. Martin's Press.
- Knoblauch, Joy. 2014. "The Economy of Fear: Oscar Newman Launches Crime Prevention Through Urban Design (1969–197x)." *Architectural Theory Review* 19(3): 336–354.

Koffka, Kurt. 1935. *Principles of Gestalt Psychology*. New York: Harcourt.

Krueger, Joel. 2011. "Extended Cognition and the Space of Social Interaction." *Consciousness and Cognition* 20(3): 643–665.

Legg, Stephen. 2025. "Contesting Monuments: Heritage and Historical Geographies of Inequality, an Introduction." *Journal of Historical Geography* 87: 1–12.

Li, Meijing. 2015. "Cultivation of Cross-Cultural Awareness in College English Teaching." In *2015 International Conference on Social Science and Higher Education*, 493–495. Atlantis Press.

Liu, Hao-Zhi, Sheng Li, and Li-Lin Rao. 2018. "Out of Debt, Out of Burden: The Physical Burdens of Debt." *Journal of Experimental Social Psychology* 76(5): 155–160.

Merleau-Ponty, Maurice. 1947/1964. "Film and the New Psychology." In *Sense and Non-Sense*, translated by H. Dreyfus and P. Dreyfus, 43–59. Evanston: Northwestern University Press.

Michels, Christoph. 2015. "Researching Affective Atmospheres." *Geographica Helvetica* 70(4): 255–263.

Mostyn, Trevor. 2007. *Egypt's Belle Époque: Cairo and the Age of the Hedonists*. New York: Tauris Parke.

Newman, Oscar. 1972. *Defensible Space: Crime Prevention through Urban Design*. New York: Macmillan.

Newman, Oscar. 1996. *Creating Defensible Space*. Washington, DC: Department of Housing and Urban Development, Office of Policy Development and Research.

Nugent, Elizabeth, and Michael Hoffman. 2024. "Remembering the Counterrevolution: Disappointment, Denial, and Demobilization." *Democratization*, online first, <https://doi.org/10.1080/13510347.2024.2362256>.

Olsen, Daniel, and Dallen Timothy. 2002. "Contested Religious Heritage: Differing Views on Mormon Heritage." *Tourism Recreation Research* 27(2): 7–15.

Ong, Qiyang, Walter Theseira, and Irene Ng. 2019. "Reducing Debt Improves Psychological Functioning and Changes Decision-Making in the Poor." *Proceedings of the National Academy of Sciences* 116(15): 7244–7249.

Pijpers, Jan Robert, Raoul Oudejans, Frank Bakker, and Peter Beek. 2006. "The Role of Anxiety in Perceiving and Realizing Affordances." *Ecological Psychology* 18(3): 131–161.

Proffitt, Dennis R., Mukul Bhalla, Rich Gossweiler, and Jonathan Midgett. 1995. "Perceiving Geographical Slant." *Psychonomic Bulletin & Review* 2(4): 409–428.

Proffitt, Dennis. 2006. "Embodied Perception and the Economy of Action."

Perspectives on Psychological Science 1(2): 110–122.

Psilopoulos, Angelos. 2024. "'Gesture' as a Subject of Doctoral Research in

Architecture: Evidence-Based Intuitions on a Complex Relationship."

archiDOCT 12(1): 1–9.

Ratcliffe, Matthew. 2015. *Experiences of Depression: A Study in Phenomenology*.

Oxford: Oxford University Press.

Riener, Cedar, Jeanine Stefanucci, Dennis Proffitt, and Gerald Clore. 2011. "An Effect

of Mood on the Perception of Geographical Slant." *Cognition and Emotion*

25(1): 174–182.

Rietveld, Erik, Sanneke de Haan, and Damiaan Denys. 2013. "Social Affordances in

Context: What Is It That We Are Bodily Responsive To?" *Behavioral and*

Brain Sciences 36(4): 436.

Rosenberger, Robert. 2019. "On Hostile Design: Theoretical and Empirical

Prospects." *Urban Studies* 57(4): 883–893.

Safdar, Anealla. 2016. "Egyptian Jailed as a Teen 'Freed' After 787 Days." *Al*

Jazeera, March 22. [https://www.aljazeera.com/news/2016/03/egyptian-jailed-teen-](https://www.aljazeera.com/news/2016/03/egyptian-jailed-teen-freed-787-days-160322185544726.html)

[freed-787-days-160322185544726.html](https://www.aljazeera.com/news/2016/03/egyptian-jailed-teen-freed-787-days-160322185544726.html). Accessed April 23, 2025.

- Schnall, Simone, Jonathan Zadra, and Dennis Proffitt. 2010. "Direct Evidence for the Economy of Actions: Glucose and the Perception of Geographical Slant." *Perception* 39(4): 464–482.
- Selem, Gehan. 2016. "Between Order and Modernity: Resurgence Planning in Revolutionary Egypt." *Journal of Urban History* 42(1): 180–200.
- Shah, Rajiv, and Jay Kesan. 2007. "How Architecture Regulates." *Journal of Architectural and Planning Research* 24(4): 350–359.
- Shenker, Jack. 2016. *The Egyptians: A Radical Story*. New York: The New Press.
- Solymosi, Tibor. 2013. "Against Representation: A Brief Introduction to Cultural Affordances." *Human Affairs* 23(4): 594–605.
- Staničić, Aleksandar, and Andrea Jelić. 2022. "Designing Affordances of Future Heritage: A Conversation with Ronald and Erik Rietveld of Raaaf." *The Journal of Architecture* 27(4): 594–614.
- Trivedi, Madhukar. 2004. "The Link between Depression and Physical Symptoms." *Primary Care Companion to the Journal of Clinical Psychiatry* 6(suppl 1): 12.
- Turunen, Elina, and Heikki Hiilamo. 2014. "Health Effects of Indebtedness: A Systematic Review." *BMC Public Health* 14: 1–8. <https://doi.org/10.1186/1471-2458-14-489>.

Varela, Francisco, Evan Thompson, and Eleanor Rosch. 1991. *The Embodied Mind: Cognitive Science and Human Experience*. Cambridge: MIT Press.

Vick, Karl. 2013. "Continuing Chaos in Tahrir Square: Photographs by Yuri Kozyrev." *Time*, July 11. <https://time.com/3800881/continuing-chaos-in-tahrir-square-photographs-by-yuri-kozyrev/>.

Whyte, William. 1980. *The Social Life of Small Urban Spaces*. Washington, DC: The Conservation Foundation.

Zadra, Jonathan, Simone Schnall, Arthur Weltman, and Dennis Proffitt. 2010. "Direct Physiological Evidence for the Economy of Action: Bioenergetics and the Perception of Spatial Layout." *Journal of Vision* 10(7): 54–54.