

Research Article

Stefan Werning*

Walk-Through Corporate Aesthetics: Design Affordances in Tech Workspaces

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Abstract: The article at hand analyses the aesthetic dimension of contemporary "tech companies," particularly how their characteristic rhetoric of creativity, collaboration and disruption is built into the aesthetics of the physical work environments. For that purpose, proceduralist reading and environmental storytelling, usually applied to analyse meaning-making in digital game spaces, are adapted to conduct a comparative spatial affordance analysis on material from Officesnapshots, one of the largest online repositories for workspace documentation. Expanding upon earlier definitions of spatial affordances as quasi-textual features, the article defines the design elements of tech offices as a continuation of verbal and (audio-)visual corporate rhetoric employed by companies like Google, Facebook or Etsy. It thereby contributes a material-semiotic dimension to current debates about the epistemic implications of these software platforms, which José van Dijck summarises using the term "platform society." Besides game and play studies, elements of architectural semiotics and cultural analyses of support spaces (e.g. Kracauer 1999 and Moran 2005) as well as broader concepts such as the politics of theming (Freitag 2017) or the embedding of digital technologies into physical spaces (Kitchin and Dodge 2011) complement the theoretical framework.

Keywords: Tech industry, corporate rhetoric, spatial affordances, environmental storytelling, procedural rhetoric

Introduction

The article at hand investigates the aesthetic dimension of contemporary (digital) technology companies, in common parlance often subsumed under the label tech industry, particularly how their characteristic rhetoric of creativity, collaboration and disruption is built into the design of the physical work environments.

Workspace design has become a key strategy for technology companies and start-ups alike to attract and motivate the most talented and dedicated employees. The most prominent recent examples such as Apple's new office complex nicknamed (with reference to Steve Jobs' original pitch before the Cupertino city council) the "space ship" demonstrate the centrality of aesthetics in many manifestations of contemporary tech companies. For instance, Stephen Levy notes that with its "flawless curves, milled aluminum, [and] endless glass"—but also being deliberately designed as a "walled garden"—the ambitious office project "sounds like an Apple product" (Levy). In his pitch, Steve Jobs himself had implied the connection between

¹ For a tentative definition of this characteristically nebulous term, which in contemporary parlance is often synonymous with startup ecosystems but also includes multi-billion dollar companies like Google, Facebook, or Uber, cf. e.g. https://www.oreilly.com/ideas/whats-a-tech-company-anyway.

^{*}Corresponding author: Stefan Werning, Utrecht University, E-mail: s.werning@uu.nl

Apple's design philosophy and its view on workspace environments, arguing that "it's curved all the way around," which "as you know if you build things [...] is not the cheapest way to build something." Indeed, as technology companies receive more and more mainstream recognition, their workspaces perform rhetorical functions vis-à-vis both external and internal audiences. For instance, as quoted in Levy's article, Apple CEO Tim Cook explained that the company could not make compromises to cut costs, because the building otherwise "wouldn't have sent the message to everybody working here every day that detail matters, that care matters."

Due to the abundance of creative and sometimes spectacular workspace designs, even different genres (for an application of genre theory to architecture cf. e.g. Medway) of offices are intuitively being distinguished. For instance, Google's "landscraper" office concept exemplifies how the principles built into the workspaces, e.g. in this case eco-awareness, an appreciation of counter-intuitive solutions and the logic of disruption (Bower and Christensen), are often in alignment with the respective company's corporate rhetoric as expressed in press releases, annual reports or image clips. Consequently, these workspaces are intuitively discussed in evocative terms (such as "sentimental" or "inspiring" but the design choices employed and the user experiences they create are not yet properly understood.

For that purpose, the article draws on selected concepts from organizational aesthetics and a) applies them to a novel corpus of workspaces, b) interprets the design of these spaces as an extension of corporate rhetoric, and c) critically places that rhetoric, particularly the central motifs of disruption and playfulness, in relation to the profound socio-cultural impact of the tech industry itself. It co-opts and adapts proceduralist reading (Treanor et al.) and environmental storytelling (Jenkins, "Game Design as Narrative Architecture"), two concepts usually applied to the analysis of meaning-making in digital game spaces, to conduct a comparative spatial affordance analysis of material from Officesnapshots,⁵ one of the largest online repositories for workspace design documentation.

Reassessing the Socio-Cultural Implications of Tech Companies **Through the Lens of Their Work Environments**

The characteristics of the tech industry, some of which will be briefly summarised to help contextualise the findings, already begin to permeate other societal domains. Most prominently, all of the companies discussed—more or less explicitly—embrace the logic of platform capitalism and the platform as a central metaphor (Gillespie) structuring their relations with other stakeholders (including customers) but also their internal operations. More specifically, the selected companies (or at least smaller groups within the company itself) often claim adherence to the Silicon Valley mantras "Move fast and break things" and "Make the world a better place" (Taneja). They advocate de-centralised, grassroots decision-making but, less visibly, usually put software tools⁶ in a central position to still be able to exercise protocological control (as defined by Alexander Galloway). Tech work is furthermore still characterised by a distinct (and sometimes systemic) lack of diversity (Connor) as well as an increasingly visible effort to combine the traditional focus on innovation with environmental as well as general social responsibility concerns (Taneja). These conflicting messages produce an epistemic ambiguity, which is reflected as well as concretised in the physical environments themselves. From that angle, the article adds a material-semiotic dimension to current debates in the Digital Humanities about software platforms and the so-called "platform society" (Dijck et al.).

Thus, while the article at hand is rooted in new media and digital culture studies, it selectively draws on concepts from the scholarly tradition of organizational aesthetics (for an overview cf. e.g. Taylor and Hansen), in which the "physical space of the organization" (1212) has played an important role, and, where

² Cf. e.g. https://thescene.com/watch/wired/steve-jobs-pitches-apple-park-at-cupertino-city-council.

³ Cf. e.g. https://www.inc.com/kevin-j-ryan/is-google-landscraper-the-future-of-office-design.html.

⁴ Cf. https://www.inc.com/video/how-ancestrys-amazing-utah-office-is-both-inspiring-and-sentimental.html.

⁵ Cf. https://officesnapshots.com.

⁶ Cf. e.g. https://www.quora.com/What-are-your-top-10-software-tools-for-your-startup.

necessary, slightly adjusts them to fit the case at hand. Most importantly, (Dale and Burrell) investigated how "[corporate] buildings contribute to the ideological, political and economic structures of domination" (155), mobilising the term an-aesthetics to question claims about the pervasiveness of corporate aesthetics. The authors suggest that the "dazzle" (155) of corporate buildings desensitises those exposed to it during everyday work. Large tech workspaces are also—at least partially—designed for a dazzling effect, but more specifically blend clearly marked "work" areas (termed "second places" by Oldenburg), with spaces reminiscent of home ("first places") and communal areas ("third places"). This epistemic diffusion of the office as a concept might appear liberating, but it can easily have the opposite effect. For instance, (Fleming and Spicer) argue that, in "high commitment organization[s]" (75) such as tech companies, "a significant expression of power [...] is not only the control of space inside the organization, but also the very boundary delineating the inside from the outside" (76). That is, aiming for its dissolution might make "the office" (as an epistemic construct rather than a physical place) omnipresent, and the article focuses on how the ambiguity of tech workspaces, fostered by a rhetoric of play and exploration, propagates this development.

Second, Taylor and Hansen refer to "aesthetics as connection" (1215), arguing that if "our feeling of what it is to be part of a group is expressed through aesthetic forms, then aesthetics must be the foundational form of inquiry into social action" (1215). This applies to tech workers aesthetically appropriating their space through daily social interaction, but also to companies communicating their own ideals of social connectedness among their employees. Characteristically, Officesnapshots differentiates between nine types of meeting spaces (e.g. brainstorm rooms, breakout spaces, and assemblies) as well as ten types of support spaces (e.g. cafeterias, locker areas and libraries), which primarily facilitate informal social interaction, as opposed to only three types of actual workspaces (open offices, private offices and work lounges). These spaces, which increasingly dominate the public perception of tech offices⁷, often afford a much broader spectrum of social interactions than traditional offices but similarly strive to frame these interactions in a way that is consistent with the company's self-presentation. A second aspect that requires adaptation is the traditional notion of the "manager as an artist" (1219), both in the sense of management as an alleged art form and of managers requiring aesthetic sensibilities. While this view can still be useful, art is usually replaced by design in a contemporary setting, and its role is slightly different than in the original context. This shift is illustrated very clearly by celebrated algorithmic artist John Maeda's appointment as a design partner at venture capital firm Kleiner Perkins Caufield & Byers in 2014, a role in which Maeda vocally advocated an increasingly pervasive role of design in Silicon Valley companies.

Apart from organisational aesthetics, the logic of mediatization, particularly with reference to new media technologies (Hjarvard), is an important aspect of tech workspaces. For instance, (Ellison et al.) discuss the role of enterprise social network sites providing "organizational affordances for knowledge sharing" (103), particularly in larger, multi-national corporations that are not physically contiguous. From that angle, workspace design constitutes a seemingly mundane but—therefore—highly influential aesthetic manifestation of digital capitalism (as defined by Daniel Schiller) or, more specifically, of the cultural logic (in the sense of Fredric Jameson) of the contemporary tech industry.

Spatial Affordances of Contemporary Tech Workspaces

Previous studies on the symbolic qualities of workspaces (e.g. Vilnai-Yavetz et al.) focus primarily on employees' perceptions of and affective relationships (Brief and Weiss) towards their work environments rather than on aesthetic parameters. As such, they are primarily concerned with improving work life (e.g. Schell et al.) rather than theorising the aestheticisation of contemporary white-collar work. Compared to more hermetic, linear aesthetic manifestations of a company such as logos, advertisements and even UI design, the work environment enables and frames "performative situation[s]" (Kattenbelt 30). That is, in day-to-day work life, it contributes to producing embodied aesthetic experiences and thereby, in a Goffmanian

⁷ Cf. e.g. the most popular image compilations on the search term "offices" on Pinterest at https://nl.pinterest.com/search/pins/?q=offices.

sense, shapes the practised presentation of the professional self. This is not limited to contemporary tech offices. For instance, (Calder) points out that "in the 1920 and 1930s, small-loan lenders moved from small, cramped offices at the top of a dark flight of stairs to bright, modern office spaces as they tried to recast their public image from greedy moneylenders into friendly counsellors for the consumer" (154). However, as will be shown below, it specifically applies to this new type of work environment.

The article does not directly investigate the subjective experiences of these workspace situations (for such a complementary sociological perspective, cf. e.g. Halford) but rather analyses the design strategies that afford them. For that purpose, a comparative affordance analysis of selected work environments in the tech industry will be conducted. The concept of affordance(s), going back to James Gibson's ecology of visual perception, has been interpreted differently in various research traditions and, as outlined below, only some of these definitions are suitable or can be adapted for the case at hand. First and foremost, (Wineman and Peponis) use the term "spatial affordances" (86) to investigate environmental design in museums, particularly the principle of "spatially guided movement" (87). For that purpose, they posit that the museum space exhibits quasi-textual characteristics, and consequently propose techniques for interpreting these spaces under the label "space syntax analysis." This approach is consistent with earlier studies on museums as organisational spaces, which had already established the notion of "spaces as texts" (Yanow 217). The main difference between a museum and office space is obviously that the former is more linear, i.e. visitors are supposed to follow the singular or branching narrative of the exhibition, usually moving from the entrance towards the exit with few detours or loops. These investigations of spatial affordance will be combined with a semiotic approach towards organisational aesthetics (Hancock), that acknowledges the "rhetoric" (41) of aesthetic objects used in corporate contexts. To illustrate a potential semiotic approach, Hancock investigates the cover image of a PriceWaterhouseCoopers (PWC) graduate recruitment brochure, noting e.g. the symbolic qualities of the young woman at the centre of the image, the new VW Beetle in the background with a "sunshine glint on the nearside front wing" (43), and the outdoor environment, which matches the primary tagline "Developing, naturally." More importantly, Hancock interprets these formal characteristics with Roland Barthes as part of a "mythologization" strategy. That is, disparate sign systems are combined to produce and naturalise a coherent origin story for PWC as a company, into which new graduates are invited to inscribe themselves. Compared to recruitment brochures, tech workspaces are aimed at existing rather than prospective employees, and cannot be shared as physical objects, but rather constitute the stage or "setting" (Manning 177) for the theatrics of office life in a Goffmanian sense. Yet, the underlying process of mythologization (or, as elaborated below, world-building) will be an important conceptual frame below.

Drawing on (Fayard and Weeks), the analysis will furthermore include aspects of "social affordances" (606). The authors point out how previous affordance analyses often focus on single users and individual use cases. Instead, to study how watercoolers and photocopier machines afford informal interaction in offices, they acknowledge the "social and physical characteristics that produce the propinquity, privacy, and social designation necessary for an environment to afford informal interactions" (605). This perspective is especially useful since at least iconic tech workspaces like Apple's "spaceship" building, which houses approximately 12000 employees, are continually increasing in size, thereby also exponentially increasing the potential for social interaction.

Definitions of affordances usually foreground formal design elements but also inherently consider these quasi-textual design choices in a reciprocal relationship with likely usage practices, similar to how a text produces a spectrum of expectable interpretations. In that sense, affordances are regarded as part of "socio-technical systems" (Leonardi et al. 38), i.e. as "material constraints on social action that cannot be removed through social interpretation" (222). Don Norman already hinted at the co-creative function of the user with his insistence on "perceived affordances" (Norman 39), i.e. the possible applications that users are actually aware of and prioritise. The interplay between design and user perceptions/behaviour becomes more concrete, e.g. by considering Joe Moran's look at the modern call centre through the lens of Kracauer's seminal book The Salaried Masses (Die Angestellten) (Moran). Kracauer identified growing status anxiety in white collar workers after the First World War and an increasingly influential relationship between office life and "quotidian existence experienced in modern cities" (31). These observations clearly

pertain to a unique time and place, different in many ways from the contemporary tech industry. Yet, Kracauer also points out the spatial and functional affordances of the offices themselves as an important factor of influence, e.g. the "migration of assembly-line techniques from factories to offices" (30). In his connection to call centres, Moran points to basic rhetorical functions of the workplace. While a company's main offices "function as a brand statement, flaunting the status and prestige of the company with their high-rise towers, mirror-glass walls, and imposing atria," call centres "are typically found in anonymous warehouses or sheds in out-of-town office parks surrounded by parking lots and security barriers" (33). Thus, the lack of most design affordances, in this case, reinforces the epistemic separation of a company's core business from 'supplementary' functions like call centres.

A Comparative View on Tech Workspace Design

The comparative affordance analysis below draws on *Officesnapshots* as its primary corpus, a website that describes itself as "a leading online resource for the global office design community", curating office design projects and bringing together design firms, suppliers of office design products and customer companies. The 3,272 office projects covered on the site (as of May 8th, 2018) were filtered by industry ("Technology") and further limited to the largest category (i.e. larger than 50k square feet). This yields a corpus of 152 examples across the Americas (86), Europe (21), Asia (44) and Australia (1), including household names like Microsoft, Airbnb, and Dropbox but also lesser known business-facing tech companies. Within these office projects, an additional focus is put on meeting and entrance areas, support spaces and similar environments aimed at facilitating and structuring interactions between employees and with visitors, mainly because these spaces are most influential in both internally and externally communicating company values.

In its use of photographs (rather than, e.g. first-hand experience or video footage) as a basis for reconstructing the experience of the workspace, the article draws on related work by (Warren), who describes the use of photography as a particular form of ethnographic fieldwork. This technique traditionally involves photos taken by the researcher themselves on site. However, as Warren herself points out, "own judgment and aesthetic preferences [...] were quite literally framing these images" (231), i.e. the respective bias of the photographer needs to be accounted for at any rate. For that purpose, the descriptions on the office project websites are considered as para-textual material. According to the Officesnapshots FAQ,9 projects are usually submitted by the lead design firm, which also provides the photos and writes the descriptions. The FAQ further states that descriptions are intended to "help give context to the project imagery" but that the texts are usually only "lightly edit[ed]," i.e. they essentially constitute business to business (B2B) content marketing for the design firm. By regarding them as primary sources from a rhetorical analysis perspective (Holliman and Rowley), the texts can be used to contextualise the accompanying images and can help in 'looking through' their purpose as promotional photography.

Work Space Affordances as an Extension of Corporate Rhetoric

Contrary to most design affordance analyses that focus on individual cases, the affordances identified below will be interpreted as an extension of the verbal and visual corporate rhetoric employed by the respective company. For that purpose, the affordance analysis as defined above will be combined with two concepts developed for the analysis of meaning-making in game spaces, i.e. procedural rhetoric and environmental storytelling.

Using the term proceduralist reading, (Treanor et al.) propose a formal model of how games create meaning through a combination of audio-visual and procedural elements (i.e. game goals, rules and constraints). They argue that "any set of game mechanics carries with it a set of rhetorical affordances" (118), i.e. in-game objects are imbued with meaning through repeated use and, depending on audio-visual

⁸ Cf. https://officesnapshots.com/about/.

⁹ Cf. https://officesnapshots.com/about/frequently-asked-questions/.

cues, players interpret the interaction with these objects differently. As many current (digital) games take place in elaborate 3D environments, often modelled after or inspired by real-world architecture and interior design, these environments themselves play a key role in the context of procedural rhetoric. By guiding and constraining the player's movement, they not only ideally ensure a smooth progression through the game's narrative but also contribute to how the player interprets their interaction with and role within the game world. With regard to those two purposes, game spaces appear directly comparable to the museum spaces that (Wineman and Peponis) investigate.

To more specifically analyse the narrative purposes of (game) environments, Henry Jenkins distinguishes between four types of environmental storytelling (Jenkins, "Narrative Spaces"). In "evocative spaces" (57) such as amusement parks, players know about the narrative and use that knowledge to navigate the space and infer its functionality. With the term "enacting stories" (58), Jenkins refers to games, in which traversing a space is closely tied to narrative progression. "Embedded narratives" (58) comprise elements of back-story, i.e. hermeneutic narrative codes according to Roland Barthes (Cavazza and Pizzi 77), which enable players to infer what has happened in a given space and how to interpret it by parsing environmental cues. Finally, "emergent narratives" (59) refer to how environments provide material for players to co-create narratives, often through habitual use. Applied to tech workspaces, this last pattern, for instance, helps explain the implications of Google establishing the use of slides as a common trope in contemporary tech office design. As a still unfamiliar signifier in a professional context, the slides attract attention and, spanning multiple floors, visually organise the space. More importantly, though, employees can incorporate them into their own, emergent narratives by repeatedly using them, e.g. on specific occasions or together with specific people, thereby adding layers of signification. To further concretise environmental storytelling and make it feasible as an analytical technique (Meyer) suggests more specific formal elements, drawing on concepts by Lotman, Bakhtin and Foucault. These include, e.g. the Foucaultian "order of things" (15) that characterise a given environment, the "symbolic language of the space" (15/16) as well as "entrances and exits," including "the rituals performed to allow a character or player to exit, or enter." Together, these definitions provide a suitable framework to identify and category meaning-making strategies in tech office design.

Tech Offices as Play Spaces

In 2003, not long after the bursting of the so-called dot-com bubble, (Myerson and Ross) proposed four categories to characterise "the 21st century office." They compared examples from different industries in terms of their narrative, nodal, neighbourly and nomadic aspects, all of which "invert" parts of the 20th-century office paradigm. The analysis below elaborates primarily on the category of narrative, which holds that employees "live and breathe' the brand" at work and that "the spaces in which they work become prime platforms to communicate brand ethos all day" (11). The aspect of play will be added to that perspective to address the specificity of tech workspaces, not least since-much like tech products such as apps and mobile gadgets (Sicart)—tech workspaces often explicitly embrace playful, "postfunctional design" (20) strategies or an overall aesthetics of playfulness. 10

Theodor W. Adorno already commented on the dialectic of work and play (or: pleasure) in his eponymous essay, pointing out how the artificial discursive separation of the two spheres mimics the societal distinction of production and consumption, the "basic dichotomy of the economic life process of society [...] projected upon the individual" (Adorno 97). In his socio-cultural context, Adorno's criticism of that distinction, which, he argued, only "offer[ed] advantages in terms of economic rationalization," was much-needed. Yet, compared to the Fordist, nationally specific culture industries of the 20th century, contemporary tech work as a "global culture industry" (Lash and Lury 3) arguably shows just the opposite: work and play are epistemically linked by default—at least in how work environments present themselves—and it becomes important again to question the potentially constraining implications of that link.

Officesnapshots even features "games room[s]" as a distinct content category with 354 entries (as of May 8th, 2018), framing them as defining quasi-genre elements of tech workspaces. While the most common items are ping pong and foosball tables, the Playtech Offices in Sofia, e.g. feature a fully-fledged gambling table, 12 only superficially separated from the adjacent pantry kitchen and brainstorming area through room dividers, which is consistent with the company's focus on developing online casinos, poker rooms and bingo games. BlackLine, an accounting software developer, dedicated a small room to a virtual golfing game, displayed on a wall-covering projection screen and played with actual (or replicated) golf clubs. While here the connection to the company's value proposition is not as direct, the golf room appears plausible as BlackLine's software is aimed at larger businesses and golf is a sport commonly associated in the public perception with business leaders (Dosh).

Game rooms explicitly evoke the semantics of play, but other environmental elements—like game environments—can also exhibit a playful design approach or foster playful user behaviour. Educational psychologist J. Nina Lieberman defines playfulness as a combination of cognitive, physical, and social spontaneity as well as humour and manifest joy (Lieberman). One corresponding element in the corpus at hand is the multiplicity of surface materials and textures, which—unlike most traditional offices—foreground tactility and multisensory experience, both of which are characteristic prerequisites of physical spontaneity and manifest joy. Moreover, most offices are still designed as large open spaces but offer numerous niches and corners that invite employees to work in different places,¹³ literally (and, ideally, also figuratively) adopting new viewpoints that facilitate cognitive spontaneity and experimenting with new perspectives on the task at hand.

Apart from affording a playful mindset, some offices prominently feature visual references to games and sports. For instance, the SKB Kontur office complex in Yekaterinenburg comprises very long corridors designed to resemble track and field race tracks, ¹⁴ a motif which contrasts the otherwise rather sterile, brutalist (yet colourful) interior architecture. This contrast can be interpreted with Lieberman as a humorous rhetorical gesture, and the same holds for the conference hall, which—in the official promotional photo—displays the cover image of HBO's *Silicon Valley* on the big screen, ¹⁵ a show that characteristically satirises the idiosyncrasies and ideologies of the tech industry.

Yet, the analysis also reveals a tenuous balance between unbridled (and sometimes subversive) playfulness—drawing on Sicart's reflections on "playgrounds" (Sicart 49-51)—and spaces designed to evoke specific game situations that can be more deliberately curated by the respective company. Thus, gamification (in this case of the workplace) rather than play can be regarded as a mode of governance (Whitson) and there is an inherent tension between paidic play (which Roger Caillois defines as improvisational and serendipitous rather than rule-bound) and game-like elements, with the implied goal of extending Frederick Taylor's principles of standardizing work practices from physical labour to cognitive processes and creativity. This tension can particularly be observed in the few spaces that can be personalised by employees, as—according to (Sicart)—a playful attitude is about "appropriat[ing] a context that is not created or intended for play" (27) like an office. For instance, the LinkedIn San Francisco office project description highlights that "each floor has writable surfaces, staff walls, and interactive zones, with the graphic theme setting the framework." One of these zones includes a wall poem with gaps that can be filled using lettershaped magnets.¹⁷ This setup does afford playful qualities like self-expression and cognitive spontaneity, e.g. through experimentation with different letter combinations, or even social spontaneity in the case of employees collaboratively composing a poem or trying to use existing words left by previous players as selfimposed constraints. However, the wall poem also characteristically streamlines the spectrum of potential expression, e.g. through the fixed blocks of text that provide the formal structure. Most prominently, the

¹¹ Cf. https://officesnapshots.com/photos/?fwp_supportspace=games-room.

¹² Cf. https://officesnapshots.com/photos/87399/.

¹³ For a characteristic example, cf. e.g. the wix.com office in Vilnius; https://officesnapshots.com/photos/87940/.

¹⁴ Cf. https://officesnapshots.com/wp-content/uploads/2018/01/SKB-kontur-offices-yekaterinburg-VOX-architects-3-700x467.jpg.

¹⁵ Cf. https://officesnapshots.com/wp-content/uploads/2018/01/SKB-kontur-offices-yekaterinburg-VOX-architects-13-700x467.jpg.

¹⁶ Cf. https://officesnapshots.com/2018/05/07/linkedin-offices-san-francisco/.

¹⁷ Cf. https://officesnapshots.com/wp-content/uploads/2018/05/linkedin-offices-san-francisco-9-700x525.jpg.

poem inevitably starts with the words "In San Francisco—life goes on," supporting the design firm's aim to link the company to the culture of the city it is based in, emphasizing the importance of local experience and rootedness—which stands in stark contrast to the inherently global focus and ambitions of most tech companies and their products. Similarly, the "create your avatar" room18 at the LinkedIn Offices in San Francisco encourages employees to draw their own cartoon portrait using pens and predefined paper shapes, with the term avatar explicitly referencing the player character in digital games. Yet, there is a limited spectrum of skin colours (none of which are intended to be naturalistic, though) to choose from and all avatars are displayed in a rectangular grid on the wall, thus suggesting a homogeneous, uniformly structured community by default.

Combining Symbols of Nature and Technology

A second prominent aspect of the procedural rhetoric found in the corpus is the attempt to combine aspects of nature and technology, either in the form of visual tropes or conceptual metaphors, similar to the aforementioned graduate brochure cover analysed by (Hancock). Following up on the previous section, many designs try to reconcile these two semantics in a playful manner, which appears plausible given that Sutton-Smith points out ambiguity, combining seemingly incongruous perspectives, as one defining characteristic of play. A commonly observable "playful" strategy is to break representational conventions, e.g. by re-creating and juxtaposing material surfaces through larger-than-life raindrop prints and floor covering imitating forest soil. 19 Moreover, Microsoft re-created shapes of icons symbolising nature like trees²⁰ and greenhouses²¹ but embedded them into the design language of their own space. Similarly, BlaBlaCar emulates the park bench as a spatial trope and juxtaposes it with an otherwise conventionally designed reception area.²² Going beyond these visual signifiers, the project description for Microsoft's Milan office space²³ expounds on the "creative garden" and the "Smart Flower" as two conceptual metaphors, which primarily draw on the function rather than the form of natural phenomena. Even in this context, though, natural phenomena are regarded as decorative ornaments that can be removed if necessary; for example, the description further reveals that "the plants [in the middle of the circular garden tables] can be lowered to create one single round table for meetings."

The rhetorical convergence of nature and technology is applied to different levels of scale in tech workspaces. For instance, the Sina Corporation offices in Beijing, allegedly "drawing from the Chinese architectural heritage of courtyards,"²⁴ comprise two central gardens. Yet, instead of the common natural rocks, metallic replicas have been installed, and the gardens contribute to the overall layout of the building, which mimics the shape of the infinity symbol (∞) to represent the company's belief in limitless possibilities and growth.²⁵ Moreover, some companies visibly aim to connect this pattern to their unique value proposition. For instance, the DIY marketplace Etsy uses large floral decorative ceiling ornaments, ²⁶ which evoke the visual appeal of papercraft and are juxtaposed with wall ornaments consisting of actual plants.²⁷ As these are placed in a large, open waiting area with benches, they invite both employees and visitors to interpret Etsy's product in combination with the motifs of nature and sustainability. The same principle manifests itself slightly differently in the Philips Lighting Offices in Eindhoven. As the company produces lighting solutions, their central conceptual metaphor is an "interactive light 'tree' comprised of 1500 'leaves', hanging pyramidal panels suspended from the ceiling," a design that is aimed at re-creating

¹⁸ Cf. https://officesnapshots.com/wp-content/uploads/2018/05/linkedin-offices-san-francisco-3-700x493.jpg.

¹⁹ Cf. https://officesnapshots.com/wp-content/uploads/2013/01/P1190545-700x373.jpg.

²⁰ Cf. https://officesnapshots.com/photos/90023/.

²¹ Cf. https://officesnapshots.com/photos/90037/.

²² Cf. https://officesnapshots.com/wp-content/uploads/2017/02/blablacar_hd_005-700x467.jpg.

²³ Cf. https://officesnapshots.com/2018/03/06/microsoft-house-offices-milan/.

²⁴ Cf. https://officesnapshots.com/2017/11/07/sina-corporation-beijing/.

²⁵ Cf. https://officesnapshots.com/wp-content/uploads/2017/11/sina-corporation-offices-beijing-aedas-14-700x495.jpg.

²⁶ Cf. https://officesnapshots.com/2017/01/23/etsy-offices-new-york-city/etsy_c-garrett-rowland_courtesy-of-gensler_30/.

²⁷ Cf. https://officesnapshots.com/wp-content/uploads/2017/01/Etsy_c-Garrett-Rowland_Courtesy-of-Gensler_30-700x467.jpg.

the experience of "light filtering through trees." Again, the procedural rhetoric is intended to signal a harmonious co-existence of technology and nature, in this case by designing the space to mimic a natural phenomenon that most people will be familiar with from personal, embodied experience. As the company's brand is specifically connected to smart light bulbs like the Philips Hue, the tree is not a static spatial metaphor but comprises numerous AI-powered light panels that "create daily light scenarios in an organic and non-repetitive way," thereby re-creating the experience of time passing throughout the day and year.

Affording Movement and Exploration

As a third common pattern, tech workspaces diverge from the traditional, static dispositif of the office and foreground movement. For example, according to their project description, the LinkedIn San Francisco offices "encourage movement throughout the day and help build stronger connections and relationships between teams and colleagues." The most important way to incentivise movement is by affording exploration and discovery, e.g. through the consistent use of semi-transparent walls. As with the previous two categories, the procedural rhetoric of the workspaces in that regard is in line with publicly communicated ideas that are supposed to constitute the epistemic essence of contemporary tech companies. The focus on movement, i.e. the idea of the company consisting of numerous moving parts, comes from the ideal of deriving (and harnessing) creativity through dynamic interactions within networks, informed by popular concepts like Gloor's Swarm Creativity (Gloor). Gloor compares this process to the exchange of ideas in jazz music improvisation and composition. To harness this form of creativity (i.e. for a company to use it as a resource), two things are required: establishing a common understanding (a "common sound world" in the context of jazz; 23) and facilitating connections between people and ideas, if possible, in constantly changing constellations. Therefore, workplaces are designed to support the fulfilment of both these requirements.

To do that, many office spaces embrace the logic of modular design, which is also a characteristic aspect of the product (i.e. for the most part software) they are producing (cf. e.g. Sullivan et al.). For instance, Valve Software, the largest game distribution company in the world, explained in its 2012 employee handbook³¹ why all office desks have wheels, i.e. "as a symbolic reminder [to] always be considering where you could move yourself to be more valuable" (6). Reconfiguring the workspace can be regarded as a form of paidic play that helps maintain a sense of exploration since space continually changes. Valve further supported this by providing a digital "map of where everyone is right now," which is "based on where [their] machine is plugged in." Taking this approach a step further, the 2017 Cisco Offices in San Jose were designed according to the "principles of the Agile workspace" a concept that clearly references the notion of agile project management as expressed in frameworks like Scrum or Kanban. This includes balancing assigned and free workspace, "open[ing] the core of each building" to increase the number of amenity spaces and offering "many types of workspaces to choose from," thereby encouraging employees to experiment with their physical surroundings and change them serendipitously or based on the task at hand.

Emulating the Form and Function of Third Spaces

Briefly revisiting the convergence of play and workspaces, another commonality in the design of both types of environments is the aim to foster sociability. For instance, similar to how Massively Multiplayer Online Games (MMOGs) use choke points and "virtual 'third places'" (Ducheneaut et al.) to foster and control interaction and community building among players, tech workspaces emulate both the design and functionality of traditional third places as defined by Ray Oldenburg. For example, Google allocated

²⁸ Cf. https://officesnapshots.com/2017/09/29/philips-lighting-offices-eindhoven/.

²⁹ Cf. https://officesnapshots.com/2018/05/07/linkedin-offices-san-francisco/.

³⁰ For a representative example at the CJ Blossom Park Offices in Suwon cf. https://officesnapshots.com/wp-content/up-loads/2017/10/cj-group-offices-cannon-design10-700x484.jpg.

³¹ Cf. www.valvesoftware.com/company/Valve_Handbook_LowRes.pdf.

³² Cf. https://officesnapshots.com/2018/01/30/cisco-offices-san-jose/.

"nearly 50% of all areas [...] to create communication landscapes" in its 2013 Tel Aviv office. 33 According to (Oldenburg), third places like supermarkets, barber shops or arcades "host the regular, voluntary, informal, and happily anticipated gatherings of individuals beyond the realms of home and work" (16), i.e. they strengthen the social fabric in a geographically contiguous area. He further defines these real-world places as "a physical manifestation of people's desire to associate with those in an area once they get to know them" (290). While Oldenburg refers to smaller (sub)urban communities, large tech companies—which, as indicated above, can rival small towns in size and often impose a daily rhythm that blends together work and leisure time-incorporate elements of third places, e.g. bars or fitness studios, to evoke and maintain similar community structures.

These different spaces are characteristically not discretely separated by walls but often rather only indicated by different flooring materials, thereby symbolising openness (and, as suggested above, incentivising exploration) but also a conflation of work- and leisure-related spheres. For instance, a corner meeting room in Microsoft's Milan offices features the floor design of a basketball court and a conference table that doubles as a ping pong table.34 Even in offices that adhere to traditional rectangular shapes, this approach is used to subdivide the overall space while playing with design conventions of public and private spaces.35

From Theming to Worldbuilding

As contemporary workspaces—especially larger office complexes like the ones analysed in this paper obtain more and more media-like qualities, their design increasingly exhibits aspects of worldbuilding. On a more basic level, tech workspaces frequently employ theming strategies. According to (Gottdiener), themed environments have shaped American culture since the 1960s (3). The logic of theming, albeit not under that label, originated in religious contexts; for instance, a "temple or mosque is a themed environment that is an extension of the organized religious discourses" (20), but over the past decades the concept extended into other areas of society, particularly consumption (e.g. 29) and entertainment but, more recently, also work. The concept exhibits some similarities with worldbuilding but focuses on visual characteristics of spaces rather than narrative functions. Adding to the previously mentioned parallels between real-world workspaces and (virtual) game spaces, theming is also an important principle in game design (Crawford), referring to the combination of very similar gameplay mechanics with multiple, visually different environmental archetypes. By far the most prominent theming strategy identified in the corpus is colour blocking, an aesthetic pattern that is often traced back to abstract art such as the works of Mondrian but was developed further, e.g. in the context of fashion design. This epistemic connection to fashion design or, more generally, mainstream (popular) culture is particularly plausible as contemporary tech companies are dependent on cultural ecosystems around them and, for the most part, aware of that (Yanover). Within popular accounts of the "language of fashion design" (Volpintesta 6), colour blocking is intuitively linked to the metaphor of narrative; for instance, Volpintesta argues that it can "bring together a whole fabric or colour story" (23). This integrative function of colour blocking facilitates theming as it frames seemingly disparate elements as part of a perceived whole. Thus, different spatial themes within a larger office space are commonly differentiated by colours. For instance, the aforementioned SKB Kontur offices in Yektarinenburg characteristically contrast bright red, green, blue and yellow rooms with often unprocessed concrete walls to provide orientation via colour-coding. Moreover, the intense focus on only a few clearly separate colours, each with a relatively stable set of semantic connotations, also achieves a similar effect as colour grading (Flueckiger) in film, i.e. it can accentuate certain emotions during activities taking place in these rooms.

Both theming and world-building are unifying principles, yet while the former originated in a critical investigation of American urban spaces, the latter has been primarily applied to fictional spaces, first in

³³ Cf. https://officesnapshots.com/2013/01/31/google-tel-aviv-office-design/.

³⁴ Cf. https://officesnapshots.com/wp-content/uploads/2018/03/microsoft-house-offices-milan-DEGW-32-700x467,jpg.

³⁵ Cf. e.g. https://officesnapshots.com/wp-content/uploads/2018/01/cisco-offices-san-jose-NELSON-15-700x433.jpg.

literary studies and later in comparative media studies. As (Ryan) argues, the concept addresses a transition from plot to "storyworld" (32), a narrative paradigm shift that manifests itself in both the creation and consumption of media formats such as film, television or video games. Ryan defines a storyworld as a "complex spatio-temporal totality" (32), which—through a process of "narrative proliferation" (34)—can host numerous, concurrent or asynchronous stories. Henry Jenkins helps operationalise the concept of world-building (Jenkins, "Transmedia Education: The 7 Principles Revisited") by emphasising that fictional worlds are generally transmedia ensembles, going back to early proponents of the concept like L. Frank Baum. For Jenkins, its topography is a central characteristic of a transmedia world. Consequently, maps, like floor plans of large tech spaces, incentivise exploration, not just by outlining the structure of the (known) world but also through their gaps, i.e. by pointing to lesser-known areas. Jenkins links this aspect of worldbuilding to the notion of (textual) mastery among media fans. That is, by mastering the (fictional) space, fans develop social distinction within their community but also develop an affinity towards space itself through the effort it takes to master it. Applying worldbuilding to workspaces, companies implicitly aim to instil a similar sense of (quasi-fan) engagement to attract the most talented hires. Claus Pias offers a final puzzle piece to adapt the notion of worldbuilding to tech workspaces based on his investigation of historical military board games by positing the grid as an integrative symbol of a world (Pias), which defines its aesthetics, its rules, and the interplay between them. While hexgrids and rectgrids apply specifically to war games, the notion of an integrative symbol that affords a world's internal consistency can also be usefully applied to evocatively designed workspaces. One of the most comprehensive applications of worldbuilding can be observed in the Airbnb US Headquarters Expansion in San Francisco. For an integrative symbol, the designers looked at Airbnb's own product portfolio, choosing "Airbnb Trips as an organising principle," 36 and "translat[ing] this new feature into a physical space by assigning each floor to a different city." The explicitly formulated goal is to "enable employees to travel throughout their day," a mission statement that exhibits aspects of most previously investigated categories, e.g. play(fulness) and make-belief, a focus on exploration, and the idea of the workspace as a self-contained world that condenses all aspects of life, including private and public spaces, into one building.

From World-Building Towards a Global Language of Tech Workspace Design

While—as argued above—tech workspaces across the world aspire to become self-contained worlds, they simultaneously exhibit an increasingly formalised, globally homogeneous design language largely devoid of cultural idiosyncrasies (the term "language" is used in accordance with the aforementioned notion of "spaces as text" proposed by Yanow). With its comparative approach, the analysis considered examples from 27 countries across the globe. A few offices appear to explicitly incorporate culturally distinct iconography from different parts of the world. However, instead of aiming for the rhetoric of authenticity, they usually focus on the ornamental qualities of the respective motifs, incorporating them into a common, transcultural design language. For instance, the Cisco Offices in San Jose characteristically feature various visual references to oriental iconography, including Koi carps, stylized bamboo plants and cherry blossoms, sliding doors with prints of Japanese landscapes, cartoon characters wearing kimonos and yukatas, and circular openings reminiscent of the so-called moon gates, a traditional architectural element in Chinese gardens. The combination of these visual references and micronarratives (Jenkins) constitutes a storyworld in itself but does not aim to convey anything about San Jose as the workspace's real-world location.

This approach makes sense considering that it further facilitates the mobility of tech workers across geographical and cultural borders. As established above, the contemporary development of software such as mobile apps or online platforms is dependent on cultural ecosystems to pick up on a wide variety of possible trends and social movements; for the same reason, a diverse workforce should be highly desirable

³⁶ Cf. https://officesnapshots.com/2017/10/11/airbnb-us-headquarters-expansion-san-francisco/.

³⁷ Cf. https://officesnapshots.com/2018/01/30/cisco-offices-san-jose/.

in this industry, even though—especially among start-ups (Ouimet and Zarutskie)—this is still not always the case. None of the workspaces in the corpus clearly pointed to the geographical area or even country they are based in and, yet, all were clearly identifiable as contemporary tech workspaces. Thus, regardless of their cultural background, any new employee will quickly find familiar spatial rhetoric (in the sense of Bogost) and familiar environmental storytelling tropes to ease them in and reinforce their self-description as part of the global tech industry. In that development, the interior design firms and architects obtain an increasingly important role as gatekeepers. For instance, in the corpus, 26 design companies developed more than one workspace. Also including smaller projects on Officesnapshots, six companies even designed 10 or more offices, thus exerting a notable influence on the aesthetics of tech work. Airbnb has acknowledged this influence by establishing its own Airbnb Environments Team, which was responsible for the US Headquarters expansion in 2017 in collaboration with WRNS Studio. 38 As workspace design becomes more fully developed as an extension of corporate rhetoric among tech companies, product design and the aestheticisation of the work itself become increasingly intertwined.

Conclusion

The comparative analysis has shown how tech workspaces can be regarded as a form of walk-through corporate aesthetics, a continuation of the respective company's corporate rhetoric and neoliberal ideology (for an application of the same idea to urban spaces cf. Pow). With its exploratory approach, the article produces several opportunities for follow-up research that can lead to a more holistic understanding of one of the most dynamic and socially formative industries of our time. Most importantly, as the analysis deliberately sidelined the fact that tech offices are lived spaces, it can and should be used as a conceptual prerequisite for more detailed ethnographic investigations that acknowledge the complexity of individual tech workers' day-to-day experience. This can be achieved through on-site investigations of the workspaces as quasi-stages for the self-presentation of employees in a Goffmanian sense or-from a game studies perspective—by considering indexical storytelling (Fernandez-Vara), i.e. how traces of actual use become part of the environments themselves. Such research is also suitable to validate the analytical categories proposed in this article.

The investigation of contemporary office space design has shown how the epistemic ambiguity of large, iconic tech offices simultaneously fosters the ongoing dissolution of the office as an epistemic category of tech work in the sense of (Fleming and Spicer). In earlier on-topic literature on white-collar work (e.g. Vilnai-Yavetz et al.), the office is still a central concept; yet, start-ups like Mindspace or WeWork aim to translate the logic of web applications to the world of brick-and-mortar offices by creating dynamic social networks among young entrepreneurs based on office sharing practices. To properly account for these developments, a comparative analysis using a larger corpus of smaller start-up workspaces would be a logical next step, as many elements of corporate rhetoric investigated in this study were adopted by established tech companies like Microsoft, Cisco and LinkedIn but originated in the cultural context of small-scale start-ups. In that case, a stronger ethnographic focus would be important to account for the bottom-up decision-making processes and constant change characterising these spaces. An iconic type of workplace in that context is the business incubator, a co-habitation space where 'classes' of start-ups are temporarily housed and groomed to establish themselves in the digital economy. Incubators bring together epistemic qualities of among other spaces—an artist community, a school and a consulting agency, and are often more regionally distinct than traditional office complexes.³⁹ Thus, if we want to learn more about the cultural logic and underlying value systems of start-up culture, we should start by investigating the environments that reify them.

³⁸ Cf. https://officesnapshots.com/2017/10/11/airbnb-us-headquarters-expansion-san-francisco/.

³⁹ For instance, Amsterdam propagated the use of small artist residencies as make-shift incubators, with one company even located on a house boat (Royen).

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