

Amplifying Identity:

Leveraging Lo-fi Animations in Architectural Representation

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INTRODUCTION

"...architecture, geography, and urban planning have tended to neglect or ignore temporality or to reduce it to the measurable and the calculable... It is central to the future of architecture that the question of time, change, and emergence become more integral to the processes of design and construction." (Grosz 2001:xix).

This paper makes a case for how popular media and populist formats can offer beginning design students an expanded opportunity to communicate spatial designs with position and agenda, plausibility and worldly enactment, and personality and character.

While traditional print-based pop media such as magazines, posters, yard signs, and billboards remain relevant, cultural communication increasingly relies on digital social media platforms for distribution and consumption, casting memes, image macros, and animated GIFs into starring roles. Even traditional magazines now feature animated content via their multiple platforms of digital delivery.

If we use social media as a litmus test for the contemporary popular psyche, then the memes and video loops that frequent the average newsfeed suggest that these "low-fidelity" visualization techniques are particularly well-suited for engaging the human imagination, emotion, and humor—especially within the state of digital distraction that characterizes the contemporary student workspace. This paper explores how students might co-opt these populist formats and lo-fi techniques from the domain of frivolous internet novelties into the realm of rigorous architectural representation.

The animated GIF in particular offers an instructive case study. Unlike the realism provided by more cinematic videos and sleek three-dimensional "fly-throughs," the stop-motion-like animation techniques integral to the GIF file format expand the possibilities of more traditional architectural representation by using the perception of moving content to exaggerate elements, soften boundaries, augment artifice, and assert agenda.

Lo-fi animations augment the participation of both its makers and consumers. Because the process of crafting GIFs does not require an extensive amount of technical training, beginning design students can enter the making process quickly and precisely. Vector drawings, raster image content, and physical models are equally accessible to animate as a moving sequence of precisely composed stills, making animations broadly applicable to a wide range of existing architectural media.

In contrast to the stationary condition of conventional architectural representation, the temporal quality of moving images challenges students to exercise a heightened degree of rhetorical bias and to think critically about constructing new audiences as much as new worlds. Akin to other "cool" media formats, the animated GIF's intentional resistance to realism and its low-fidelity output capacity also provides more opportunity for audience interpretation and participation.

This paper elaborates and speculates upon my students' animation work from courses that I recently piloted on this topic at the Illinois Institute of Technology and the School of the Art Institute of Chicago. The work aims to re-imagine the cultural relevance and future efficacy of architectural representation in order to render it *more timely* (i.e. engaging contemporary social and political media conditions) while *calibrating time* (i.e. exploiting the temporal and tempo-based parameters integral to frame animations). In turn, the ideas aim to guide students to produce a body of precise, well-crafted, and disciplinary-informed visualizations that are simultaneously serious and playful.

A BRIEF HISTORY OF GIFs—AND WHY THEY MATTER FOR ARCHITECTS

The Graphics Interface Format, or GIF, is an image file format that was developed in 1987 by Steve Wilhite of CompuServe. GIFs support images with up to 256 colors per frame, while retaining a compressed size that originally allowed for speedy loading on slow dial-up modems. While initially GIFs were used exclusively for still images, the compression algorithm allows for multiple frames to be strung together to create a looping sequence, like a flipbook, while consuming minimal memory. The first example of an animated GIF was a moving weather map.

As an aside, the public is contentiously divided on the pronunciation of the file format. Wilhite pronounces his creation with a soft "G", using a play on the popular peanut butter ad as a slogan: "Choosy developers choose GIF." (Eppink, 2014:301). However, a majority of users insist on the hard "G," likely due to its derivation from the word "Graphics." The Oxford Dictionary, which named GIF the 2012 Word of Year, pleads neutrality, declaring both pronunciations valid. For fairness, I recommend alternating pronunciations in your head as you continue reading this essay.

From its humble beginning, the GIF has always conveyed an ethos of fun, loaded with emotion and humor. From its early days of pixelated dancing bananas and "under construction" website banners, to its more recent usage in photographic memes and cultural identity-making, GIFs remain sincerely playful and seriously funny. It is form a visual communication that is at once informal, succinct, and communal. For all of these reasons, GIFs should matter to architects and designers—and we ought to leverage them for their own disciplinary and professional communication and aesthetics.

GIFs and architecture also share a mode of communal reception. Just as architecture is experienced in the company of others, so too, GIFs are best when shared, making space for the production of multiple, simultaneous, and sometimes contradictory subjectivities. This layering of overlapping identities reveals the artificial nature of the reality constructed by architects and designers. As a deliberately reductive process of representation, the GIF might be best leveraged by architects as a form of caricature that playfully, shamelessly, and humorously asserts and amplifies the perspective of both author and subject through its selective inclusion of information and biased promotion of alternative world(s).

PHOTOGRAPHIC FICTIONS AND VECTOR CONJECTURES

Students might utilize GIFS to animate raster content such as architectural photography or vector content such as architectural drawings. The purpose of architectural animations in student work is not necessarily to propose constructing literally locomotive buildings. Rather, animations suggest the architectural representation of formal elements and fictional enhancements that conjure a capacity for coming to life. Animate architecture conveys an active attitude, emotion, and a sense of being. By endowing architectural objects with a sense of subjectivity and character, the students' work leverages the possibilities of subjecthood to suggest new ways for architecture to enact agency in the world.

For example, this assignment challenged students to project a new or alternative narrative around an existing building in Chicago by creating an animated GIF that exaggerates or otherwise articulates an animate identity for the architecture. Leveraging photographic manipulation in tandem with sequence, pacing, and rhythm, the students produced Instagram-able artifacts that communicate and amplify the existing buildings' most salient characteristics. Here are some examples:



Figure 1 Animation by student Mao Xue (IIT College of Architecture).

In this study of Studio Gang's Boathouse at Clark Park, the student capitalized on a building's modularity and vibrant part-to-whole relationships to suggest alternate arrangements and characterizations of its parts. The fact that the existing building exhibits a variety of modulating parts provided a natural jumping off point, but the success of this character study is produced by the fact that the animation renders the "starting" point of the existing building difficult to pinpoint, effectively expunging our certain memory of the status quo. By shifting, exchanging, neutralizing, and exaggerating the set of parts, a completely new architectural identity is proffered, with no particular beginning, middle, or end.



Figure 2 Animation by student Wei Wu (IIT College of Architecture).

In this study of Mies van der Rohe's Federal Center, the devil is in the details. What first appears as a defunct spandrel panel that may be falling off the building in disrepair reveals itself a performance of the building's tectonics themselves. Here, an accelerating tempo is invoked to test the aesthetic of part-to-whole relationships along the iconic facade.

In this study of Tod Williams and Billie Tsien's Logan Center for the Arts, the student deployed a more narrative approach, scripting a short animation with a beginning, middle, and end. Imagining the contrasting parts of the building as interconnected adversaries, the animation portrays an architectural squabble in which an introverted component of the building attempts to reel in the sprawling extroverted advances of the building's masonry massing. The technique uses the abstract storyline not simply to make the building move, but to suggest that the building might assume multiple personalities

and subjective qualities—characteristics that we may allow human audiences to empathize with and relate to its architecture in new and companionable ways.



Figure 3 Animation by Kamil Szydlo (School of the Art Institute of Chicago).

As a follow up exploration, the students created vector drawings of the same Chicago case study buildings to communicate and commemorate the most important architectural features as an animated Google Doodle. As temporary and animated alterations to the Google logo on the search engine's homepage, Google Doodles frequently celebrate holidays, events, and celebrities, so why not architecture? This assignment challenged students to leverage the popular format of a logo or masthead to communicate architectural ideas with a wide audience and to distill the spatial complexity of a canonical building into a succinct and compelling vector graphic.



Figure 4 Animation by student Mao Xue (IIT College of Architecture).

ANALOG ANIMATIONS

While animated GIFs operate exclusively in the digital realm, I've very recently been working with students to experiment with how the techniques and ethos integral to the animated GIF might spawn new modes of analog representation and communication. The endeavor is broadly inspired by the optical toys of the 19th century—mechanical devices such as zoetropes, that facilitated the perception of moving images before the invention of full-fledged motion pictures, as well as children's pop-up picture books. In addition to producing the effect of an animated image, these devices share a limitation of storage with the GIF that render them a useful benchmark for re-translating the GIF's low-fidelity animate qualities back into the analog realm.

I piloted a workshop this spring that explores the material possibilities of pop-up as it relates to children's picture books that transform two-dimensional illustrations into three-dimensional cutouts, often by pulling a paper tab. While commonly regarded as a frivolous special effect for children, the mechanical possibilities of physically transforming visual fragments from two- to three-dimensions provide serious communicative potential for architectural representation in general, and for expanding

audience participation in architectural storytelling specifically. If all architectural representation engages a liminal state in two-and-half-dimensions where three dimensional ideas are projected upon a two-dimensional picture plane, then pop-up optics makes this default condition physically palpable and heightens the theatrical performance of representation in the process.

As a case study for the workshop, we invited students to contribute to our ongoing design research that responds to a contemporary debate about the future of Midwestern bungalows. Preservationists launched the #StopThePop social media campaign to curtail “bad” home additions that allegedly destroy the historic character of the building type. However, developers engaged in renovating bungalows by adding “pop tops” rebut that they are simply satisfying the expanded space and lifestyle needs of their clients. Our research argues that the character of the bungalow might be preserved even if the typology evolves and mutates with the addition of second stories.



Figure 5 Pop-up by students Taylor Douglas, Hadeel Jaber, and Bart Strozik (University of Wisconsin-Milwaukee).

We used analog pop-up collages and drawings to envision pop tops for existing buildings that amplify the distinct character traits of bungalow identity in order to build new audiences of future bungalow lovers. The pop-up drawings operate as analog animations. Like a digital animated GIF, these physical artifacts are low-fidelity but precise, leveraging distortion, exaggeration, and humor to render the architectural speculations more engaging, participatory, and entertaining to a broader public.

TOWARD AN ANIMATE FUTURE

While this collection of student work and experiments points to a number of qualities latent in low-fidelity animations, there is still much potential yet to be explored. The following six tactics provide a framework for how beginning design and architecture students might leverage the communicative potential of the animated GIF moving forward:

1. Cast the built environment into character.

Architecture is historically conceptualized as fixed, stationary, and inert. Alongside discussions that restrict subjectivity to humans, architectural discourse often positions buildings and cities as inanimate objects that might be operated on by exclusively human actors. However, in today’s world, houses speak in first person via social media, caricatures of buildings stand in for complex forces of gentrification, and components of the built environment play the role of lead and supporting actors in films, theatre, and literature. Animated GIFs amplify architecture’s position as an animate actor—a companion to humans and nonhumans with its own character and ontological agency in the world.

2. Exaggerate and/or undermine.

The two most expedient ways to engage an existing building or environment’s character is to either celebrate its identity by exaggerating its latent qualities or by challenging its identity by undermining,

mitigating, or exacerbating its latent qualities. How might we leverage animation to render a building an even more intense version of itself?

3. *Execute precision and craft.*

Precision and craft are required to make any story or character study convincing. Even if animated GIFs capitalize on being lower-fidelity than other forms of traditional representation, they cannot be sloppy. Because a typical animated GIF is short in duration and choppy and more fragmented in playback than a conventional video, it requires all the more precision and succinctness in its delivery.

4. *Privilege plausibility over realism.*

While much of the student work demonstrate less-than-conventional realism in how their scenarios play out, the more convincing examples nevertheless insist upon surprising plausibility. It tends to be effective to select exactly one attribute the design to resist the rules of how our existing world works, while all other attributes conform to the technical workings of our world to prompt us to suspend our disbelief and enter a new world of our desires.

5. *Graft a narrative arc along a loop.*

Animated GIFs typically are exhibited as perpetually looping sequences, but they still offer the opportunity to articulate a narrative with a loose beginning, middle, and end. While a strict start and finish point need not be established, some of the more convincing examples nevertheless set up an open-ended storyline in which sequence matters. Along these lines, careful sequencing can confound our expectations for the trajectory of action and deliver an unexpected punchline or a subtle surprise.

6. *Tickle laughter as much as understanding.*

GIFs often present themselves as frivolous digital ephemera, but that ostensible frivolity executes its own representational power. The most convincing animations are serious in their ambition to not take themselves too seriously. The format champions the strange and goofy outputs that elicit comedy as much as projective meaning.

References

1. Grosz, E., 2001, 'Introduction', in *Architecture from the Outside*, pp. xv–xxi, MIT Press, Cambridge.
2. Eppink, J., 2014, 'A brief history of the GIF (so far)', *Journal of Visual Culture*, Volume 13(3) , 298–306.