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New Topographics: Man-Altered Landscapes Become Machine-Altered Landscapes: An Examination of AI Generative Images

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ABSTRACT

In 1975, the *New Topographics: Photographs of a Man Altered Landscape* exhibition depicted a built environment that is part of our accepted photographic *past*. The landscapes and architecture produced by many AI software applications are envisioned as a *possible future*. In 2022, Artist Craig Ames used AI text-to-image prompts to reinterpret the New Topographics archive, generating his 'Algorithmic Landscapes' and challenging our view of that historic world. In this paper, Ames' work shown at *Format23* Festival, UK, is evaluated using literature review, visual analysis, and author interviews. Due to the relative infancy of the software used, the 'wit' seen here simply represents a *transitory* stage viewing experience and evaluation of AI 'photographs'. Visually literate audiences discern fact from fiction, a what they *know* was there into what *could* have been there. The joke is shared, but until the point of cognition, the images are disconcerting, unsettling. In the time since Ames produced his work, communication technology has developed apace, making it more it difficult to determine the real world versus an imagined one. Lens-based and AI outputs intangibly intertwine across mainstream and social media, posing further implications for knowledge creation and understanding of photographic content as it is currently known.

KEYWORDS

AI; AI generative images; communication technology; knowledge creation; photography; text-to-image; uncanny; visual literacy

'All photographs are fictions, to a far greater extent than we are yet able or willing to acknowledge.' (Coleman, 1967, no page no's).

Photographers have been utilizing computer software and graphics packages as part of their creative workflow for over three decades. This has not simply been confined to commercial photographic outputs where one might anticipate communication technology, but in art photography too. Indeed, perhaps it is art photography which has led innovative practice - a 'safe' space where risk, experimentation and fiction may thrive, compared to the caveats and conventions for commercial practitioners who must respond to tight briefs and deadlines, and where deviation from client expectation could risk a 'no-rehire' outcome.

During 2022, as public use of AI generative software became mainstream, UK based artist and academic Craig Ames (2022) worked with Stability AI's (2022) Stable Diffusion

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to create prompt-based generative images. These were inspired by historic photographs from the iconic 'New Topographics' series of photographs. The 'New Topographics' was the name given to a group of photographers working in the mid 1970s whose images of the built environment were chosen to appear in an exhibition curated by William Jenkins (1975) at George Eastman Gallery in Rochester, New York. It ran between October 1975 and February 1976. Certain titles from this feted show: *New Topographics: Photographs of a Man Altered Landscape,* became the genesis for Ames's (2022) *New Topographies: Images of an Algorithmic Landscape*. These outputs constituted an exhibition at Deda Gallery, Derby, UK appearing as part of *Format23*, (2023) the city's biennial photography festival. The 2022 artist statement accompanying Ames's project acknowledged his concerns with copyright and ethics, not to mention creative enterprise and artistic merit, given the closeness of these new visual outcomes to their historic forbears.

There was a distinct separation between the new body of work exhibited at *Format23* (2023) and from many other architecturally focused 'photographic scenes' made at the time with programmes such as Dalle-2, Mid-Journey or Stable Diffusion. Such images often exhibited an air of 'fantasy' or 'otherworldliness' about them. This recognizable 'style' as exampled in Manas Bhatia's *Symbiotic Architecture* (Bhatia 2022) allowed the viewer satisfaction that these works were fantasy. They represented a conceptual architectural typology, a 'never have been, or will be', as opposed to Roland Barthes (1977) analysis of traditional analogue photographs with their 'here-now' or 'here-then'-ness (Figure 1).

The author of this article visited *Format23* (2023) in March that year with a group of BA Photography students and together they discussed a collective disquiet at being presented with 'photographs' which on first sight, were just that. Familiar historic scenes set against familiar practitioner names, each carrying the weight of nearly 50 years of visibility, evaluation and understanding. Except these New Topographic pictures weren't quite what they seemed on first viewing… (Figure 2(a,b))

Figure 1. Bhatia (2022) *Symbiotic Architecture*. Created with Midjourney, 2022. www.linkedin.com/in/manasbhatiadesign/. Copyright 2022 by Manas Bhatia. Reprinted with permission.

Figure 2. (a,b) Display of work by C. Ames (2022) *New Topographies: Images of an Algorithmic Landscape*, Déda, *Format23* (2023), Derby. Images property of the author.

Ames (2022) was not random in his choice of seminal works to task AI to emulate. His use of the New Topographics to prompt his twenty-seven *Possibly After* pictures was profound, succinct and coincided in the ability to place a 'time code' on this

type of visual work. The aim of this essay is to bring an understanding of the imaging capabilities of AI generative software in interpreting text prompts during Ames's period of artistic enquiry and shows why his contribution is important, marking a distinct moment in the evolution of visually generative AI. The decision to use Ames as artist and his work on this set of historic photographs is specific to the discussion of visual literacy in two ways: One; the rapid recent changes in the medium of photography via the building of vast image datasets facilitates users of software programmes to generate entropic visual responses. This means that there are now new and multiple challenges for knowledge creation and understanding of photographic discourse and dissemination:

"…many of the disciplines from which photography theory has borrowed and to which it has contributed, have themselves moved to take very seriously indeed the new technological context for production, distribution and consumption of cultural forms. If continuing proliferation, accelerated reinvention and transformation, of both dramatic and subtle kinds, are key phrases for describing contemporary photography, the range of disciplinary and conceptual frameworks available to us now needs to be joined by others." (Bate et al., 2019, 426)

Secondly: Ames himself is an educator; the deputy program leader at the UK's Northern Centre of Photography, specializing in digital imaging. His research interests encompass AI and its complex relationship to photography in the post-photographic era (University of Sunderland, 2025). Creative work with AI generative imaging software that Ames produces has been widely exhibited since January 2023. Photographic educators (the author included) who operate across degree courses worldwide have the elevation of visual literacy central to their pedagogical aims.

According to Avgerinou and Pettersson (2020), there are five pillars of visual literacy: visual communication, visual language, visual learning, visual perception and visual thinking. The creation of photograph-mimicking AI generative images and their placement in the public domain since 2022 has brought numerous challenges to audience visual cognition and by proxy, places these same challenges across all five of the stated pillars.

Method

This study employs mixed methodology, undertaking visual analysis of the historic and contemporary works together with search engine mapping via Google Images and Google Maps (2023) aligning the contemporary built environments to where 1975s New Topographics photographs were set. Qualitative interviews with both Ames (2022) and one of the student visitors accompanying the author to his exhibition at Déda Gallery, *Format23* (2023) are included, together with autoethnographic referencing to the exhibited works. Literature review, together with references to philosophies including Michel Foucault's *Heterotopia* (Foucault 1984), Ernst Jentsch's *Uncanny* (Jentsch 2008), and Masahiro Mori's (2012) *Uncanny Valley* hypothesis underpin the research.

Work on this section of the project concluded in time for the author's presentation at The Royal Photographic Society's conference on *Photography and Artificial Intelligence (AI),* (Hamilton Knight 2023) held in Bristol, UK on 9/10th October.

Continued evolvement of AI software programmes and generation in the period since this date has led the author to expand the work and re-evaluate outcomes in line with comparisons to current levels of visual literacy in the public sphere. The updated essay uses an example of visually led news reporting seen across global press which concerned catastrophic Valencia floods during the autumn of 2024. It explains how audience visual cognition, previously clear in its conclusion about AI generative images and their authenticity, is currently clouded by scepticism and confusion. The conclusion seeks widespread and immersive public education to increase visual literacy alongside robust identifiers for machine-made visual outcomes. In turn this will doubtless require the development of further sophisticated analytical software for such purposes.

Context

Whilst many professional practitioners and enthusiasts integrated computer software into their workflow in the 1990s, very few engaged with it to the degree where they were making work *exclusively* as the outcome of machine renderings. In January 2021, OpenAI (2021) launched its text-to-image prompt-based programme DALL-E. This was for use by pre-registered individuals and was not an open-source model. However, from mid 2022 onwards, owing to broad release of other titles which were open-source, including a further version of DALL-E, the general public became far more aware of AI Generative software. This type of communication technology allowed the inputting of keyword descriptors into the programmes, creating fully machine-made 'photographic' files. It led to a vast explosion of not simply interpretations based on imagined *futures*, but also many iterations based on the *past*, which meant that thousands of so called 'photographs' were placed into circulation which without prior explanation, could be interpretated as real, historic documents, raising multiple legal and ethical debates.

In 1975, the New Topographic photographers depicted a built environment that is part of that accepted photographic past. Their images depicted urban environments in an objective and formalist manner and were made using traditional photographic techniques by a group of practitioners whose works collectively become synonymous with the so-named 'New Topographic' photographic style (Foster-Rice & Rohrbach, 2013). Craig Ames (2022) worked with Stability AI (2022) and its open-source platform Stable Diffusion, using text-to-image prompts to re-interpret this archive. With them, he generated his 'Algorithmic Landscapes', challenging the accepted view of that historic world. Ames' decision to work with this collection of photographs was significant. The curator of the original 1975 exhibition, William Jenkins (1975, 6) noted, '…it is precisely photography's pretence of truthfulness, its assertion of accuracy that gives it the ability to mislead so effectively.'

Indeed, in his catalogue Jenkins quotes one of the contributors Lewis Baltz (1975) who'd reviewed prior photographs by Robert Adams, saying:

> To function as documents at all they must first persuade us that they describe their subject accurately and objectively; in fact, their initial task is to convince their audience that they are truly documents, that the photographer has fully exercised his powers of observation and description and has set aside his imaginings and prejudices. The ideal

> photographic document would appear to be without author or art. (Baltz, 1975 as cited in Jenkins, 1975, 6).

Operating in a fully analogue world, Jenkins used this to speak about the aesthetics of the photographs on show in New York. In today's forum, we may use these quotes to interrogate the authenticity and provenance of authorship. Ames (2022) set out to test this premise with 27 iterations based on three photographs per 'New Topographican'. Joel Smith (2013) describes in *Take Place, the Life and death of Buildings*, that when audiences view photographs of the built environment, they understand that:

> Buildings embody durational time. Photographs are made of time. The time in a photograph is punctual, the projection of a moment…. but what sets photography apart among pictorial media is history's participation in it. Whatever a photograph represents, it represents in time; it represents a thing by representing a state of the thing. (Smith, 2013, p.13)

Images of an Algorithmic Landscape

What viewers were presented with in 2022s 'algorithmic landscapes' was an *alleged* assertion of time and place. A time and place that was unlike many 'presents' and 'futures' seen in AI work. Instead, here was the accepted *past*. America's roadside history. For initiated viewers, the impact was profound. Familiar names. Familiar sights. Familiar sites. A visitor to *Format23* (2023), student Matthew Seaman (personal communication, September 12, 2023) recalled, 'I remember walking past it for the first time, and at a glance, all seemed normal. It's only when you got in close and there was gibberish writing, funny looking buildings and unrecognizable cars, that you realized something was up.' Indeed, what were these silent places that Ames (2022) had created, with their seeming accuracies in structure, topography and light, offset by twisted vehicles and misspelt signage? (Figure 3).

Viewers were taken to a state of what philosopher Michel Foucault (1984) defines as Heterotopia; somehow 'other', disturbing, intense, incompatible, contradictory. This was first referenced in his lecture '*Of Other Spaces*' given to a group of architects in March 1967 and subsequently published in 1984.

In an essay about the *Concept of Place*, Helen Westgeet (2009) explains:

> He (Foucault, 1967) describes Heterotopias as places beyond places, even though it may be possible to indicate their location in reality. Because these places are absolutely different from all the sites they reflect and speak about, Foucault called them Heterotopias, as opposed to utopias. (Westgeet, 2009, 115)

A further philosophical analogy would be to describe Ames's (2022) images as Uncanny and more pertinently, Uncanny Valley. The 'Uncanny' as a Victorian Gothic romantic term, used by a group of philosophers and writers, tends to relate to a psychological experience of an event or individual that is mysterious, eerie or unsettling, because it is familiar, yet *weird*. In 1906, Ernst Jentsch's (2008) essay *On the Psychology of the Uncanny*, describes:

> Intellectual uncertainty: so that the uncanny would always, as it were, be something one does not know one's way about in. The better oriented in his environment a person is, the less reality will he get the impression of something uncanny in regard to the objects and events in it. (Jentsch, 2008)

Figure 3. Ames (2022). *Landscape, St. Paul (Possibly) After Frank Gohlke*. Made using the prompt "Landscape, St. Paul". Stability AI (2022). Runwayml. *Stable Diffusion Version 2* (Version Sd-2.0). https://stability.ai/news/stable-diffusion-v2-release. Copyright 2022 Craig Ames. Reprinted with permission.

The Uncanny Valley as a concept, was first introduced by roboticist Mashiro Mori (2012) and related to the *unhuman* humanness of certain entities. This term could be applied to robots designed with human-like features and mannerisms. For prompt-driven AI generative images made during the 18-month period under discussion, the uncanny had gained traction as a term, mostly applied to the look of the AI photographic simulations of non-humans. An exploration of it applied to images of the built environment included Dreith (2022) who said, "The images created by these bots including eerily real looking imaginary buildings have become an internet sensation and led to discussions about how they could impact the future of design and architecture." Diel and Lewis (2022) state 'recent evidence finds an increase in uncanniness for distorted houses (inverted windows and doors; Diel & MacDorman, 2021), indicating that configural deviations of buildings appear creepy or eerie.'

It is proposed that AI outputs made during 2022 and concerning built environments in the manner Ames's (2022) do through their overt referencing to real historic places, spaces and photographs, *also* fall into uncanny valley; the term may be broadened to encompass this particular genre of visual work. On this basis, the author was keen to understand what visual material Stability AI's (2022) image dataset might have worked with in order to return its somewhat 'confused' outputs to Ames's text-to-image prompts.

Findings

Interpreting the contemporary works

In order to analyse Ames's (2022) pictures – inspired by *three* of the ten New Topographic photographers – comparisons were made between what the original source photograph looked like compared to each AI iteration. To assist exploring where Stability AI's (2022) Stable Diffusion image datasets might have drawn its results from, the author used the 1975 picture titles with standard internet browsing tools Google Images and Google Maps (2023). She also utlised the same keyword terms. This research was conducted during summer 2023 and each outcome was insightful. In conversation with Ames at the time, the author asked him what words his own image prompts were founded on. He replied:

> I only used the titles of the images and made a point of not using the photographers' names or other terms such as 'New Topographics'…. I was interested to see what the algorithm would produce with as little information as possible to guide it; allowing it to reveal elements of its machine learning via its outputs…. In addition to the titles the AI was instructed to produce 'photographs' at the same/similar aspect ratio of the originals. Whether an image came back as colour or black and white was determined entirely by the AI. (Ames, 2023).

In addition, he confirmed: 'I never rerun image returns through the algorithms again, change or add additional instructional info in the prompts. There has to be consistency in the process where the AI is determining what it generates from the limited information it's given.' (Ames, 2023).

Bernd & Hilla becher's image

To test this premise in the context of possible image resources for dataset compilation, the first keywords placed into Google (2023) were for the German husband and wife team of Bernd and Hilla Becher (1974) whose monochrome work of architecture and industrial sites is associated with the Dusseldorf School. Their picture of *House near Kutztown, Pennsylvania,* comprised a panel of eight separate frames featuring a *single* timber-clad residential dwelling and was the only work to show a domestic building in the Becher's set Figure 4(a). Unlike the original, Ames's (2022) AI-prompted work delivered eight *different* houses to look at Figure 4(b). On first inspection, whilst the text-to-image prompt showed distinct and separate buildings, as a collection they were fully conversant in the visual typography which the Bechers were known for (Biro, 2019, 487–502). The viewpoint and camera to subject distance was in keeping with the analogue panel and their visual quality is largely believable, at least at the scale and with the method used for printing seen at *Format23* (2023).

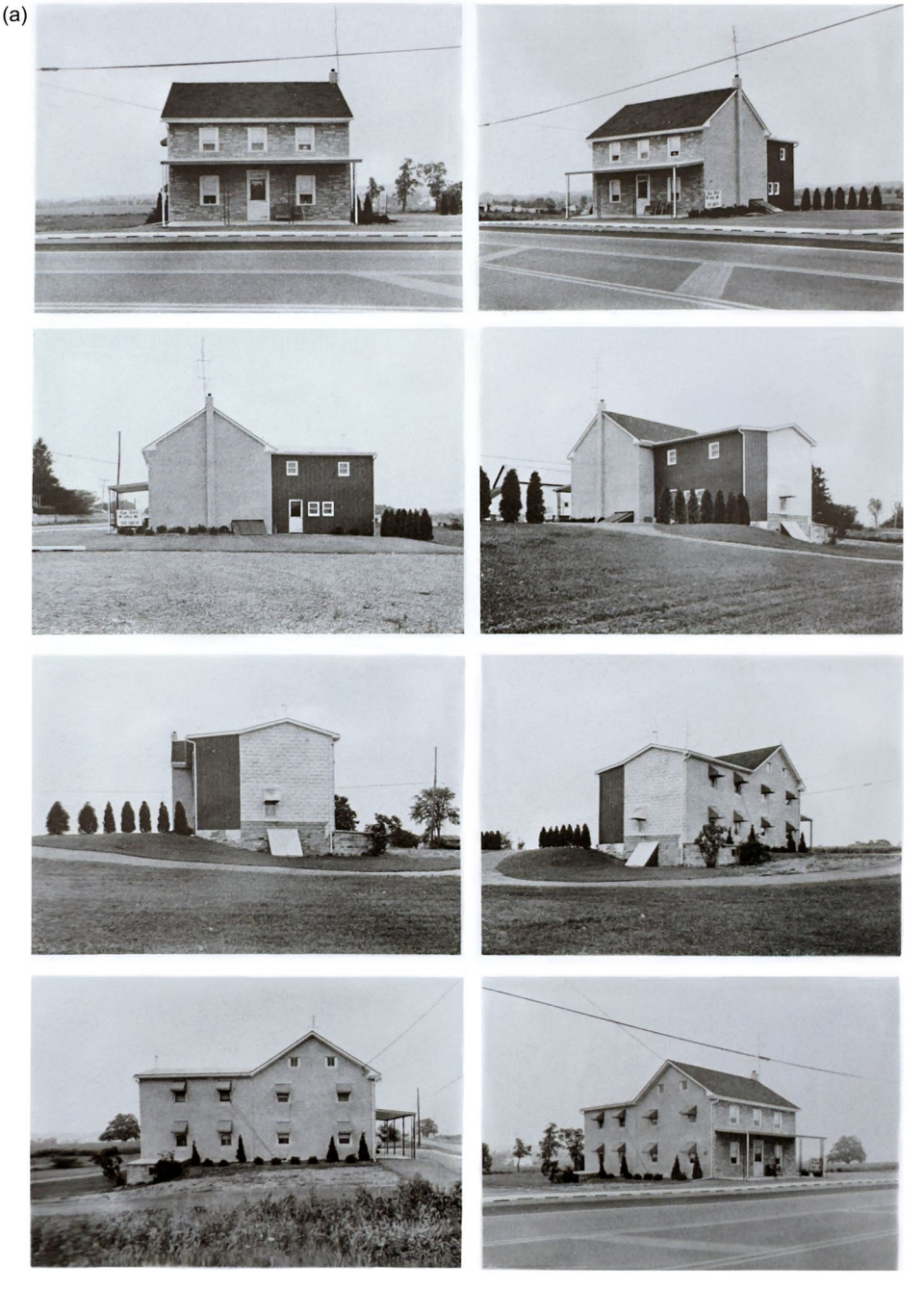

Figure 4. (a,b), (a): Becher (1974) *House near Kutztown, Pennsylvania*. Copyright 1974 Bernd & Hilla Becher. © Estate Bernd & Hilla Becher, represented by Max Becher. Reprinted with permission. (b): Ames (2022). *House near Kutztown, Pennsylvania (Possibly) After Bernd and Hilla Becher.* Made using the prompt "*House near Kutztown, Pennsylvania*". Stability AI (2022). Runwayml. *Stable Diffusion Version 2* (Version Sd-2.0). https://stability.ai/news/stable-diffusion-v2-release. Copyright Craig Ames, 2022. Reprinted with permission.

Figure 4. Continued.

An online trawl using the same search term as the image title and its date, *House near Kutztown, Pennsylvania 1974* in Google Images (2023) also revealed that this small mid-west place had changed little in its vernacular over the last five decades. There

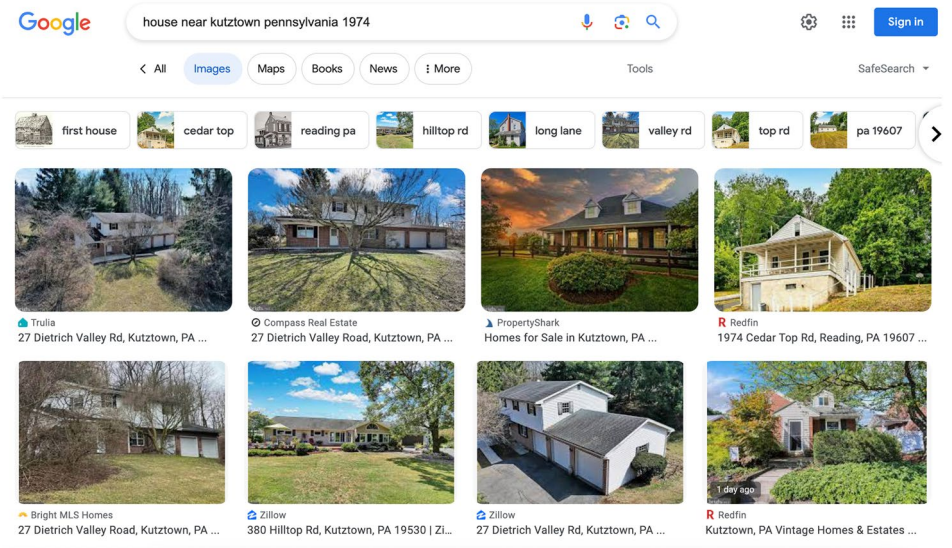

Figure 5. Google Image search – keywords: *"house near ecogniz ecognizea 1974".* (Retrieved 2023, September 8) https://www.google.com/search?sca_esv=7319a1d5414ff2b8&sxsrf=AHTn8zofXbnc9jpEtreWQfhD5slwO_DN4g:1739382364145&q=house+near+kutztown+pennsylvania&udm=2&fbs=ABzOT_CWdhQLP1FcmU5B0fn3xuWpA-dk4wpBWOGsoR7DG5zJBsjVzhkSiH4Bfm7UeMG49emzQN_MMZtZGaQGymPTAGT0w1zGAU6Gm8Lg-qQpy_2XGrr4oV2XsP6ypUntZJ4LNhrsTDRvOdfmmL1m3MX6Bf1SG1JHZbNEvVF1b_DQpZz4M0nzlyeLTAJ-9usjxljycVnZXI33&sa=X&ved=2ahUKEwje2MWf2L6LAxVDZkEAHfbiJFEQtKgLegQIKhAB&biw=1562&bih=1248&dpr=2. Google and the Google logo are trademarks of Google LLC.

were multiple homes on sale under realtor listings, any number of which bore strong resemblances to Ames's (2022) panel. The only obvious difference was that unsurprisingly, these contemporary dwellings were shown in colour Figure 5.

Ames's AI outputs were produced in monochrome, suggesting that owing to the unity in the visual typology, there were grounds for the software having referred to the Becher's (1974) material for its source. Given the generalization that most realtors make their photographs from human eye height (even though two views captured in Figure 5 appear to be made with drone cameras), this implies that a far greater number of source images may have been referenced in the AI outcome.

Frank Gohlke's image

Looking like a base for a radio transmitter, US based photographer Frank Gohlke's (1975) *Landscape, Water Tower under Construction, Wayzata, Minnesota,* showed an incomplete structure situated on the bank of what appeared to be a dried-up water course Figure 6(a). Ames's (2022) monochrome AI revealed evidence of what *might* have been a construction site. The site depicted level ground and ladders ascend what is commonly associated with American water storage facilities: large drum structures atop tapering metal legs Figure 6(b).

This version was nothing like Golhke's fifty-year old photograph which was typical of his work, 'marked by a preoccupation with framing landscape as a manmade

Figure 6. (a,b), (a): Gohlke (1975). *Landscape, Water Tower under Construction, Wayzata, Minnesota*. Copyright 1974 Frank Gohlke. Reprinted with permission. (b): Ames (2022). *Landscape, Water Tower under Construction (Possibly After) Frank Gohlke*. Copyright 2022 Craig Ames. Reprinted with permission.

construct: an artefact of the way we live, a projection of human actions, ideals and aspirations onto the horizon.' (Rosa, 2010) and instead, it is far more akin to Wayzata's modern tower as seen on Google Street View Figure 7.

Again, like its 1974 namesake, Ames's (2022) new file was monochrome. Other visual characteristics align the output strongly to Jenkins (1975) group of artists, yet given the visual incompatibility with the New Topographic print, the inference was that in this instance, Stability AI (2022) may have drawn on a broader understanding of water towers in its dataset in order to generate its result. This sense of the prompt-driven images bearing discernible traits, rather than slavish copies of the 1970s works was confirmed by Ames himself, who stated: 'Having undertaken some preliminary tests, I had some idea that there was an interesting project to develop. I wasn't expecting direct 'copies' but something much looser yet still pertaining to something that looked familiar to a New Topographics type of image and subject matter.' (Ames, 2023).

Stephen Shore's images

Finally, of all of Ames's (2022) exhibition pictures the author examined, the easiest to 'map' online for current comparison were Stephen Shore's (1974). These were street views in small towns, photographed from eye-height tripod positions, on named road junctions. Famously, Shore's were the only works from the New Topographics show made in colour. American documentary photographer Shore was known for his colour

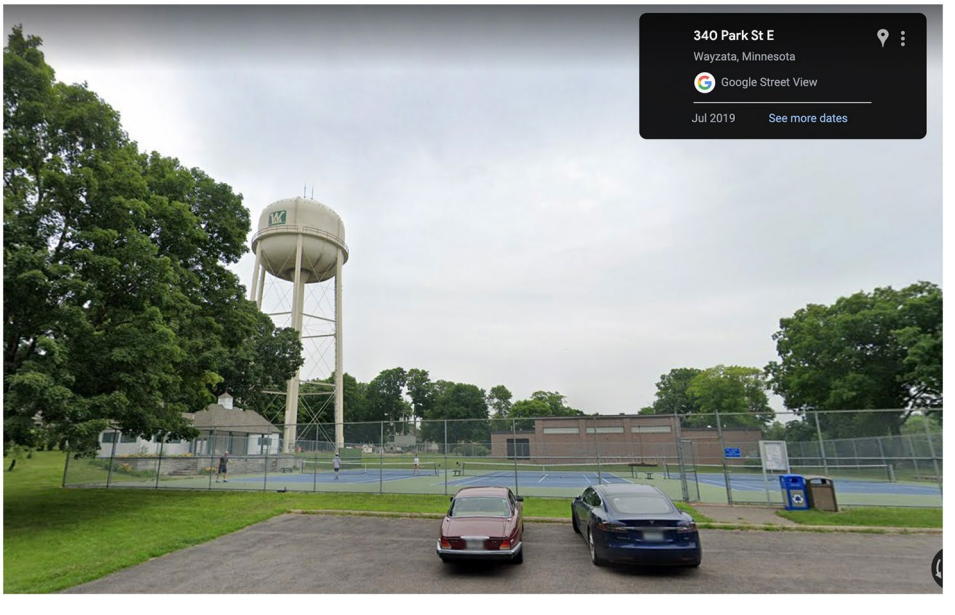

Figure 7. Shows Google Street View: *Wayzata Water Tower.* September 2023 Google Maps, https://www.google.com/maps/place/Village+of+Wayzata+Water+Tower/@44.9749297,–93.516721,17z/data=!3m1!4b1!4m6!3m5!1s0x52b34def60cefabf:0x6fc3641d837a808e!8m2!3d44.9749259!4d-93.5141407!16s%2Fg%2F11qf_s5419?entry=ttu (Retrieved 2023 September 8). Image capture Jul 2019 ©2023Google.

(a)

(b)

Figure 8. (a,b), Shore (1974) *Main Street, Gull Lake, Saskatchewan,* and *Deerfield Street, Greenfield, Massachusetts*. Copyright 1974 Stephen Shore. Reprinted with permission of Shore, S., 303 Gallery, New York and Sprüth Magers.

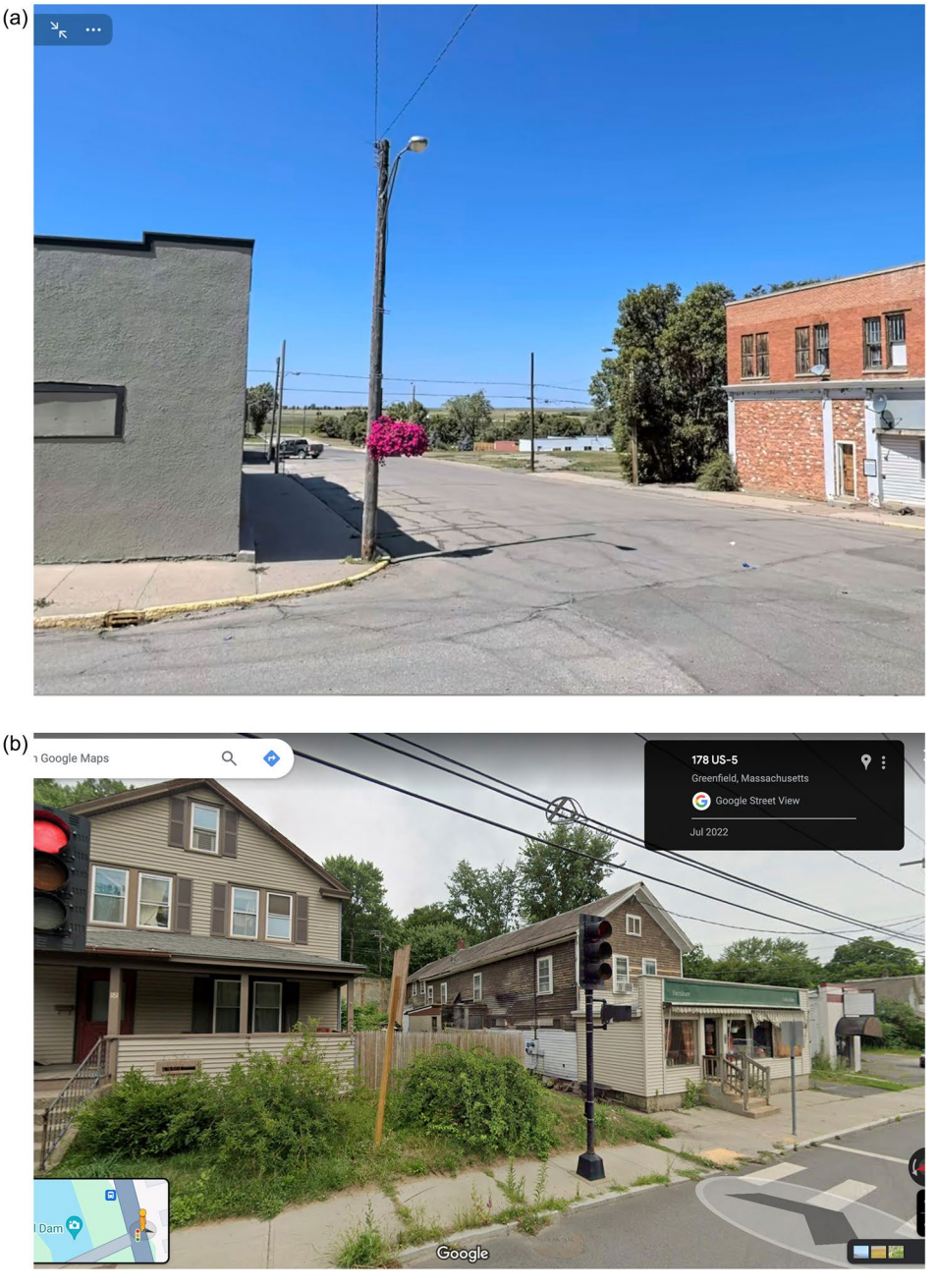

Figure 9. (a–c), (a): Google Maps Street View (Google Maps 2023) *Main St, Gull Lake*. Google Maps, Main Street, Gull Lake, Saskatchewan https://www.google.com/maps/@50.09535,−108.4847155,3a,75y,298.95h,89.4t/data=!3m6!1e1!3m4!1sFKh5ZTX9WGQWGspRs6Ml7Q!2e0!7i13312!8i6656?entry=ttu and (b and c) *Deerfield St, Greenfield,* https://www.google.com/maps/@42.5802955,−72.599103,3a,41y,39.24h,93.17t/data=!3m8!1e1!3m6!1sAF1QipOH6rb3XeffoVyYOTL5cKMklAQZdJWVYyFY6j0v!2e10!3e11!6shttps:%2F%2Flh3.googleusercontent.com%2Fp%2FAF1QipOH6rb3XeffoVyYOTL5cKMklAQZdJWVYyFY6j0v%3Dw900-h600-k-no-pi-3.1716308523461407-ya292.1639635687724-ro0-fo100!7i7680!8i3840?entry=ttu&g_ep=EgoyMDI1MDIxMC4wIKXMDSoASAFQAw%3D%3D Image Capture Jul 2022. (Retrieved 2023, September 10) ©2023 Google.

Figure 9. Continued.

work, using it to embrace landscapes and urban environments on road trips across the states. (Hacking, 2012, 396). Unlike the Becher's (1974) and Gohlke's (1975), his depicted a broader range of visual elements than simply built structures and their geographic surroundings (Figures 8(a,b)). Shore's works showed indexical features, cars, signage and telegraph wires. Such elements in architectural photographs are accepted as indicators not simply of place, but also of time (Hamilton Knight, 2022). Of Shore's 20 photographs in the 1975 show, 16 of his contained vehicles, telegraph wires, plus font and logo-based graphics; all indexes, date-stamping their era.

Returning to Google Maps (2023) again, with its Street View feature, it was possible to immediately pick up, not simply the roads where Shore (1974) worked, but to replicate his camera view almost unerringly in Gull Lake. In Greenfield it was possible to see that he positioned his tripod between a general store and the clapboard house next to it. His view over the lamp-flanked bridge is readily recognizable with its houses up the hill, only the old mill building had gone (Figure 9(a–c)).

In 1974, there were 5 neatly parked cars in the distance and two instances of text-based signs on Deerfield Street, plus 2 cars and seven signs in Gull Lake. For 2022s depictions, the AI software had gone into overdrive. *Format23's* (2023) exhibition presented around a dozen distorted (mostly green) cars randomly parked under a criss-cross of telegraph cables on Deerfield Street Figure 10 and in Gull Lake, distended hoods, trunks and misshapen car bodies almost 'littered' the road in front of twisted facades of stores. Gobble-de-gook signage hung drunkenly off buildings and from overhead cables Figure 11.

Figure 10. Ames (2022). *Deerfield Street, Massachusetts (Possibly) After Stephen Shore.* And *Main Street, Gull Lake, Saskatchewan (Possibly) After Stephen Shore.* Made using the prompts "*Deerfield Street, Massachussetts".*

These pictures were funny. Laugh-out-loud funny. They were as far removed from Shore's (1974) photographs as *House near Kutztown* was believable as the Becher's (1974). Yet, uncannily, these 'alien' images still 'looked' like Shore's style and his source work. It was the colour palette, the rendering of the light, the vernacular, the perspective…. And this, despite the hilarity, made them uncanny. They were Heterotopias which audiences would view with discomfort, feeling they 'knew' what they knew, yet here, they were navigating unfamiliar, troubling ground. In the context of simple online searches, the author posits that Stability AI (2022) had again, used a broad church for its response from images held within its own datasets. Clearly, the built vernacular for these two American towns today is largely as it was in 1974, but *minus* the cars and fonts of yesteryear. Yet, the programme's decision to mimic the light quality of the original photographs in both text-to-image prompted outputs seem telling, why did it choose high contrast light and bolt-blue skies for Gull Lake and softer lighting with a washed-out sky for Deerfield? Despite one or two changed elements (no bridge in Deerfield and slightly changed perspective on Gull Street), in order to simulate these and indeed, the works right across Ames's *Format23* (2023) exhibition, it may be argued that the software programme had plundered authentic, copyrighted, historic photographs in order to compile its imaging returns.

Figure 11. *"Main Street, Gull Lake, Saskatchewan".* Stability AI (2022). Runwayml. *Stable Diffusion Version 2* (Version Sd-2.0). https://stability.ai/news/stable-diffusion-v2-release. Copyright Craig Ames, 2022. Reprinted with permission.

Conclusions.1 – what did this mean in 2023?

There are two main points to draw from this. Due to the relative infancy of the software used, it could be said that the unintended 'wit' seen in Ames (2022) outcomes represented a *transitory* stage for audience experience and (given a degree of visual literacy), a *human* ability to evaluate AI 'photographs'. Viewers of all the pictures discussed, especially those exposing overtly muddled visual elements, would have been able to discern fact from fiction. AI had changed 'what they really knew should be there,' into what *could* have been there – according to a machine. Thus, the joke was shared, although for the author, her students and other visitors to *Format23* (2023) the images were at first sight, heterotopias. Disconcerting, unsettling, uncanny valleys. In the two years onwards from Derby's Festival, *Format23* (2023), communication technology has developed apace, making it far more difficult now to determine the real, built world versus the imagined one. Ames (2022) summarizes what he created at the time with brevity: '…. The work is a provocation that raises issues around machine learning, authorship, ownership and copyright concerns, all of which are still being contested in one form or another.' (Ames, 2023).

As a second position, a challenge made by Getty Images (2023) against Stability AI (2022) over their alleged use of 'scraped', copyrighted images continue to travel through the legal system. Discussions surrounding legal and ethical action by AI software developers have gained as much airtime as conversations about the technology itself. Governments worldwide hold ongoing debates around the relative merits of licencing images for dataset training and continued use. This notwithstanding, the author's conclusion about Ames's (2022) *Algorithmic Landscapes* series was satisfying. In line with Maganga (2021) the author agreed with the sense that:

> The ultimate challenge with architectural rendering and the uncanny valley is that to create a photorealistic rendering, it has to be executed well enough to be indistinguishable from reality without being in the uncanny valley, something which is extremely difficult to do. (Maganga, 2021).

She spoke about her research at The Royal Photographic Society's (2023, 14) conference on *Photography and Artificial Intelligence* held in Bristol, UK. This event brought over 150 delegates together from Australia, India, Europe, North America and the UK to hear views from eighteen speakers on AI Image-to-text generative imaging technology and its implications. The gathering, presentations and subsequent discussions around this new form of (frequently contested) knowledge creation, highlighted a range of views expressing the creative potential for artistic applications of AI generative software, whilst also balancing risk and legal implications to both human agency and intellectual property.

AI 'photographic images' today

In the pace of development since, whilst viewers could sense Ames's (2022) heterotopias and their clumsy visual faux pas, that time has now passed. Today, there are significant implications for our understanding of what we recognize as 'photography'. The World Meteorological Organization (2024) reported an account on October 30th, 2024 of how in a single day, dramatic and deadly flash floods engulfed the city of

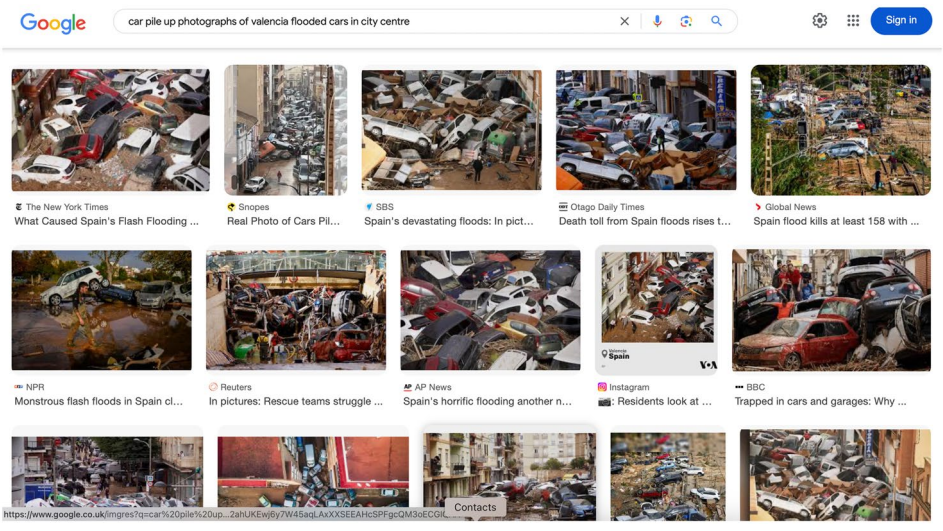

Figure 12. *Evidence of Valencia Flooding on 30th October 2024.* Google Image search return using the keywords: *Car pile-up photographs of Valencia flooded cars in city centre.* (Retrieved 2025, February, 3) https://www.google.co.uk/search?q=car+pile+up+photographs+of+valencia+flooded+cars+in+city+centre&client=safari&sca_esv=b71b87a039ad9bf1&channel=mac_bm&udm=2&biw=1309&bih=719&ei=uW-iZ5uwHPHOhbIP-4jM0QY&ved=0ahUKEwjb8J6q5aqLAxVxZ0EAHXsEM2oQ4dUDCBE&uact=5&oq=car+pile+up+photographs+of+valencia+flooded+cars+in+city+centre&gs_lp=EgNpbWciP2NhciBwaWxlIHVwIHBob3RvZ3JhcGhzIG9mIHZhbGVuY2lhIGZsb29kZWQgY2FycyBpbiBjaXR5IGNlbnRyZUivElCfBFjOCXABeACQAQCYAUOgAYkCqgEBNbgBA8gBAPgBAZgCAKACAJgDAIgGAZIHAKAH4QE&sclient=img Google and the Google logo are trademarks of Google LLC.

Valencia in Spain, as a year's worth of rain fell. One visibly shocking effect of the so-called 'rain-bomb' was to sweep countless vehicles down streets, eventually piling into surreal, muddy stacks. Scores of photographs appeared across global media from a myriad of sources in the hours that followed, documenting Spain's tragedy. Photojournalists working for international news agencies shared high resolution images in the mainstream press, coupled with Valencia's residents broadcasting across social media channels with phone cameras from adjacent balconies of their homes (Figure 12).

The pictures captured of these scenes were photographs. Real photographs, created with lens-based media. Yet to all intents and purposes, they aligned visually to Ames's (2022) Stabiltiy AI (2023) outputs of the Gull Street and Deerfield scenes. With their mangled cars and lorries enrobed in slurry, they presented as dystopian, uncanny valleys all over again. These images were no joke. However, within a week, articles were appearing in broadsheet press having to explain that the photographs were indeed, genuine. John Naughton (2024) in the UK's Guardian wrote of one shot:

> It was an astonishing image which really stopped me in my tracks. Not surprisingly, it also went viral on social media. And then came the reaction: "AI image, fake news." The photograph was so vivid, so uncannily sharp and unreal, that it looked to viewers like something that they could have faked themselves using Midjourney or Dall-E or a host of other generative AI tools. (Naughton, 2024)

Naughton's article was not in isolation in refuting claims that image coverage of this climate event was fake. It has become a widespread issue. Less than a month

prior, on 5th October 2024, writer Matt Growcoot (2024) on the imaging website Petapixel reported on AI pictures of a small girl, clutching a puppy, caught in the aftermath of Hurricane Helene. He relayed that one of the images in question was being shared by US Senator Mike Lee before later deleting it. On close inspection, inconsistencies appear in the child's hands and both the puppy. In addition, the boat she is travelling in changes colour between one version of the picture and another.

Conclusion

AI generative images increase in their sophistication with each new software version release, becoming truly believable. This questions human cognition to a point of disbelief. At all levels, as image datasets continue to grow in their scale and outputs increase in their veracity, it doesn't matter whether 'photographic' works are mimicking *known* historical events or today's news from the front line, viewing audiences are overwhelmingly challenged. They appear to be caught between a world where on any given topic, human agency is outputting lens-based media at the same moment as those same humans are inputting prompts into software. However, the ensuing image returns can bamboozle at best and defraud viewers at worst. As well as long-standing lens-based image makers and educators who perceive risk in certain applications and uses of AI imaging, experts in environmental science are also very aware of these threats to misinformation, interpretation and understanding. A report in *Environmental Scientist* (Humphrey et al., 2024, 22) spoke of concern about deep fake imagery and its potential to skew debates in that realm too.

Globally, a broad sector of communities dealing with artificial intelligence and its various forms are urging caution as well as exploration and to *all* those in the creative industries, this author makes a recommendation. Worldwide, small groups are lobbying their governments, indeed, throughout winter 2024/2025, the UK's creative sector argued strenuously at parliament level for attention to outdated copyright laws (Scott, 2025). However, in the context of data mining and continued growth in imaging datasets for AI use, the topic is far bigger than those currently doing the talking. As we continue to navigate the unchartered waters of new communication technology, we would do well to work together as linked individuals, teams and institutions and bodies, across a wealth of sectors *outside* our own. This needs to include experts on policy and economics, cognitive scientists, digital technologists and global educators. Everyone has a vested interest in nurturing visual literacy for *all* audiences in *every* context. Happily, a new wave of pedagogical texts around these forms of knowledge creation is emerging. For example, Lindgren and Krutrök's (2024) *Researching Digital Media and Society* offers a broad set of approaches for those instructing and learning in the field of visual literacy. In a similar manner to the myriad of platforms by which our mediated society is disseminated and experienced, the writers offer a mixed method approach for investigation. They propose that when it comes to evaluating images (and with the complexities of AI art in mind), that:

"Representations have different potential meanings. That is true of all qualitative readings of texts, images and concepts. In Machin and Mayr's (2021) multi-modal analysis, they have proposed the use of the concept of 'meaning potential' rather than 'connotations', as it suggests that meanings are not fixed, but instead present a

possibility of meaning, and it encourages us to consider specifically how any visual element or feature is connected to and used with other visual elements, which may serve to modify its meaning." (Lindgren and Krutrök, 2024,186).

Taking this on board, it implies that an audience's analytical prowess must encompass a full skill set of the five visual literacy pillars (Avgerinou and Pettersson, 2020) to navigate the challenges posed when encountering potential 'fake-news' journalism as seen in the Valencia case study. If viewers *understand* the provenance of images (and therefore context will come into play in every viewing), they 'must look beyond the surface-level image, and consider more deeply and broadly the various modalities that may be at play on the meaning-making process.' (Lindgren and Krutrök, 2024, 189).

This author would posit that in our ever-online, screen-based device society, skills in visual enquiry and literacy need to be built at the very start of elementary education. We cannot simply assume that training degree-level students in such competences will suffice in equipping society for what AI technologies are bringing to us all. Within the smaller forum of 'fine art' however, it is fitting that art photography and the exploration of AI generative image making software – the previously defined 'safe' space where risk, experimentation and fiction can thrive – continues to push innovative practice. The ability of practitioners to harness this technology and inspire artistic endeavours is measured as doubling the volume of creative artefacts made, (Zhou & Lee, 2024). However, as BA (Hons) Photography student Matthew Seaman concluded about *Format23* (2023) show and Ames's (2022) revealing body of work; 'It didn't surprise me in the end, but I definitely hope that in the future people still prefer real photography to fake images. Otherwise, photography may really be a dying art form.' (Personal communication, September 12, 2023).

Fifty years ago. William Jenkins (1975) set out to show that documentary photographs had a capacity to mislead through their accuracy to what was being depicted. With his *New Topographies*, Craig Ames (2022) demonstrated that a photographer's own eye and hand was barely required in order to attempt this. Now, in 2025, many might argue it has *gone*. The implication of this shift and the resulting visual re-evaluation of our built environment by a non-human who has never actually 'lived it' is fraught with danger at every turn. Now that's uncanny.

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References

Ames, C. (2022). *New topographies, images of an algorithmic landscape*. Craig Ames Studio.
Ames, C. (2023). *Interview with the Artist.* https://doi.org/10.5281/zenodo.15296338
Avgerinou, M., & Pettersson, R. (2020). *Visual literacy theory*. https://doi.org/10.13140/RG.2.2.32374.22085

Baltz, L. (1975). [Review of the book The New West by R. Adams]. *Art in America*, *63*(2), 41.
Barthes, R. (1977). The Rhetoric of the Image. In S. Heath, (Trans.), *Image-Music-Text*. Fontana Press.
Bate, D., Kember, S., Lister, M., & Wells, L. (2019). *Editorial Statement in The Photography Reader: History and Theory* (2nd ed.). Routledge.
Becher, B. H. (1974). House near Kutztown, Pennsylvania. Copyright 1974 Estate Bernd & Hilla Becher, represented by Max Becher. Reprinted with Permission.
Bhatia, M. (2022). *Symbiotic architecture*. www.linkedin.com/in/manasbhatiadesign/ Copyright 2022 by Manu Bhatia, reprinted with permission.
Biro, M. (2019). From Analogue to Digital Photography – Bernd and Hilla Becher and Andreas Gursky. In Wells, Liz (Ed.), *The Photography Reader, History and Theory* (2nd ed.). Routledge.
Coleman, A. D. (1967). *Arthur tress, theater of the mind*. Morgan & Morgan.
Diel, A., & Lewis, M. (2022). Structural deviations drive an uncanny valley of physical places. *Journal of Environmental Psychology*, *82*, 101844. https://doi.org/10.1016/j.jenvp.2022.101844
Diel, A., & MacDorman, K. F. (2021). Creepy cats and strange high houses: Support for configural processing in testing predictions of nine uncanny valley theories. *Journal of Vision*, *21*(4), 1. https://doi.org/10.1167/jov.21.4.1
Dreith, B. (2022). How AI Software will change Architecture and Design. Dezeen, November 16. https://www.dezeen.com/2022/11/16/ai-design-architecture-product/
Format23 Festival. (2023). https://formatfestival.com/event/format23-open-call/
Foster-Rice, G., & Rohrbach, J. (2013). *Reframing the New Topographics*. University of Chicago Press.
Foucault, M. (1967). (2009). Westgeet.
Foucault, M. (1984). Of Other Spaces, Heterotopias (Des Espace Autres), Translated from Architecture, Mouvement, Continuité no. 5 (1984): 46-49. Foucault, Info. https://foucault.info/documents/heterotopia/foucault.heteroTopia.en/
Getty Images. (2023). *Getty images statement*. Retrieved 2025 February 12 from https://newsroom.gettyimages.com/en/getty-images/getty-images-statement
Gohlke, F. (1975). *Landscape, water tower under construction, Wayzata.* Minnesota. Copyright 1975 by Frank Gohkle, reprinted with permission.
Google Maps. (2023). *Water Tower, Wayzata*, *Minnesota*. Retrieved 2023 September 8 from https://www.google.com/maps/place/Village+of+Wayzata+Water+Tower/@44.9749297,−93.516721,17z/data=!3m1!4b1!4m6!3m5!1s0x52b34def60cefabf:0x6fc3641d837a808e!8m2!3d44.9749259!4d-93.5141407!16s/g/11qf_s5419?entry=ttu and *Main Street, Gull Lake, Saskatchewan*. Retrieved 2023 September 8 from https://www.google.com/maps/@50.09535,−108.4847155,3a,75y,298.95h,89.4t/data=!3m6!1e1!3m4!1sFKh5ZTX9WGQWGspRs6Ml7Q!2e0!7i13312!8i6656?entry=ttu and *Deerfield Street, Greenfield, Massachusetts.* Retrieved 2023, September 8 https://www.google.com/maps/@42.5802955,-72.599103,3a,41y,39.24h,93.17t/data=!3m8!1e1!3m6!1sAF1QipOH6rb3XeffoVyYOTL5cKMkIAQZdJWVYyFY6j0v!2e10!3e11!6shttps:%2F%2Flh3.googleusercontent.com%2Fp%2FAF1QipOH6rb3XeffoVyYOTL5cKMkIAQZdJWVYyFY6j0v%3Dw900-h600-k-no-pi-3.1716308523461407-ya292.1639635687724-ro0-fo100!7i7680!8i3840?entry=ttu&g_ep=EgoyMDI1MDIxMC4wIKXMDSoASAFQAw%3D%3D ©2023 Google

Google images

An electronic search was performed in Google Images. (2023). Retrieved September 8 using the. search terms: house near kutztown pennsylvania 1974. https://www.google.com/search?q=house+near+kutztown+pennsylvania+1974&sca_esv=7319a1d5414ff2b8&udm=2&biw=1562&bih=1248&sxsrf=AHTn8zonAskveAdGnhJ-3M15Km9OeCVBTA%3A1739382450434&ei=st6sZ_abGtmwhbIP5PDO4AU&ved=0ahUKEwj2vNjI2L6LAxVZWEEAHWS4E1wQ4dUDCBQ&uact=5&oq=house+near+kutztown+pennsylvania+1974&gs_lp=EgNpbWciJWhvdXNlIG5lYXIga3V0enRvd24gcGVubnN5bHZhbmlhIDE5NzRI2BtQ-wNYIhhwAXgAkAEAmAE_oAGBAqoBATW4AQPIAQD4AQGYAgGgAgHCAgQQIxgnmAMAiAYBkgcBMaAH4QE&sclient=img and an electronic search was performed in Google Images Retrieved 2025, February

3 using the search terms: Car pile up photographs of valencia flooded cars in city centre. https://www.google.co.uk/search?q=car+pile+up+photographs+of+valencia+flooded+cars+in+city+centre&client=safari&sca_esv=b71b87a039ad9bf1&channel=mac_bm&udm=2&biw=1309&bih=719&ei=uW-iZ5uwHPHOhbIP-4jM0QY&ved=0ahUKEwjb8J6q5aqLAxVxZ0EAHXsEM2oQ4dUDCBE&uact=5&oq=car+pile+up+photographs+of+valencia+flooded+cars+in+city+centre&gs_lp=EgNpbWciP2NhciBwaWxlIHVwIHBob3RvZ3JhcGhzIG9mIHZhbGVuY2lhIGZsb29kZWQgY2FycyBpbiBjaXR5IGNlbnRyZUivElCfBFjOCXABeACQAQCYAUOgAYkCqgEBNbgBA8gBAPgBAZgCAKACAJgDAIgGAZIHAKAH4QE&sclient=img Google and the Google logo are trademarks of Google LLC.

Growcoot, M. (2024). AI Images are Causing Havoc for People Affected by Hurricane Helene. *Petapixel*, October 7. Retrieved 2025 February 4 from https://petapixel.com/2024/10/07/ai-images-are-causing-havoc-for-people-affected-by-hurricane-helene/

Hacking, J. (2012). *Colour Photography in Photography – The Whole Story* (pp. 396–397). Thames & Hudson.

Hamilton Knight, M. (2022). The Pevsner way of Seeing. *Quart*, *63*(1), 82–101. https://doi.org/10.11588/quart.2022.1.90758

Hamilton Knight, M. (2023). *New Topographics: Man-Altered Landscapes become Machine-Altered Landscapes.* Photography and Artificial Intelligence (AI), Royal Photographic Society. https://rps.org/media/od3m5hmm/photography-and-ai-conference-programme-v5.pdf

Humphrey, P., Kass, G., & Wood, V. (2024). Artificial Intelligence and the Environmental Professions. *Environmental Scientist*, *34*(2), 20–27.

Jenkins, W. (1975). *New Topographics - Photographs of a Man Altered landscape*. International Museum of Photography.

Jentsch, E. (2008). On the Psychology of the Uncanny (1906). *Journal of the Theoretical Humanities*, *2*(1), 7–16. https://doi.org/10.1080/09697259708571910

Lindgren, S., & Krutrök, M. E. (2024). *Researching Digital Media and Society*. Sage.

Maganga, M. (2021). *Architectural Rendering and the Slippery Slope of the Uncanny Valley.* Archdaily. Retrieved 2023, July 19 from https://www.archdaily.com/959563/architectural-rendering-and-the-slippery-slope-of-the-uncanny-valley

Mori, M. (2012). The Uncanny Valley (K. F. MacDorman & N. Kageki, Trans.). *IEEE Robotics and Automation*, *19*(2), 98–100. https://doi.org/10.1109/MRA.2012.2192811

Naughton, J. (2024). The Images of Spain's Floods Weren't Created by AI. The Trouble is, People Think They Were. *The Guardian Online*, November 9. Retrieved 2025 February 4 from https://www.theguardian.com/commentisfree/2024/nov/09/the-images-of-spains-floods-werent-created-by-ai-the-trouble-is-people-think-they-were

OpenAI. (2021). *ChatGPT* (DALL-E). https://openai.com/index/dall-e/

Rosa, B. (2010). Frank Gohlke: Thoughts on landscape. *Places Journal*. Retrieved September 10, 2023 from https://placesjournal.org/article/frank-gohlke-thoughts-on-landscape/

Royal Photographic Society. (2023). *Annual Report 2023.*

Scott, E. (2025). *Copyright and Artificial Intelligence: Impact on Creative Industries*. https://lordslibrary.parliament.uk/copyright-and-artificial-intelligence-impact-on-creative-industries/

Shore, S. (1974). Main Street, Gull Lake, Saskatchewan, and Deerfield St, Greenfield, Massachusetts. Copyright 1974 Stephen Shore. Reprinted with permission of Shore, S., 303 Gallery., New York and Sprüth Magers.

Smith, J. (2013). *The Life and Death of Buildings*. Princeton University Art Museum.

Stability AI. (2022). Runwayml. *Stable Diffusion Version 2* (Version Sd-2.0). https://stability.ai/news/stable-diffusion-v2-release

University of Sunderland. (2025). *Craig Ames: Senior Lecturer in Photography*. https://www.sunderland.ac.uk/about/staff/media/craigames/

Westgeet, H. (2009). The Concept of Place in Multimedia Artworks. In H. Westgeet (Ed.), *Take Place - Photography and Place from Multiple Perspectives* (pp. 98–131). Antennae.

World Meteorological Organization. (2024). *Devastating rainfall hits Spain in yet another flood-related disaster*. Retrieved 2025 February 3 from https://wmo.int/media/news/devastating-rainfall-hits-spain-yet-another-flood-related-disaster

Zhou, E., & Lee, D. (2024). *PNAS Nexus*. https://doi.org/10.1093/pnasnexus/pgae052