

ATTENDING [TO]  
FUTURES

MATTERS  
OF POLITICS  
IN DESIGN  
EDUCATION,  
RESEARCH &  
PRACTICE

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**adocs**

# AN OPTICAL DECOY FOR THE MACHINE



## Automatic Policing of Trademarks Online

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We waited until midnight to walk to the market. The address was not marked on our VPN-powered Google Maps, but the receptionists of our hotel told us how to get there. The reason for our visit to Putian was not surprising to them. The city's reputation as a counterfeit shoe capital is an open secret and the Anfu market was an obvious destination for travelers interested in it.

The market expands a few blocks as a network of storefronts distributed within narrow streets lit up only by the LED signage that distinguishes vendors, in many cases with names and logos recognizable as knockoffs of Western brands. Some businesses are more established and rely on glossy displays to promote their latest products. Others are informal and feel more like storage rooms with hundreds of shoe boxes piled up and no clear way to sort through them. It is a hectic environment, only intensified by riders of electric scooters moving quickly through the streets looking for better deals. Anfu is not a shopping center for consumers, but rather a source of supply for third party vendors. Nothing is labeled with prices or sold on site.

A few vendors asked for our WeChat ID, and for the remainder of our time in China we were sent promotions for wholesale shoes. But we weren't looking to purchase as much as we wanted to understand the images that had taken us there in the first place. Months before we got to China, we noticed online product shots advertising replica shoes with their logos digitally modified. The alterations were subtle enough to not confuse customers looking for specific models, yet the logos were just different enough to trick machines: The images were modified to avoid being detected by software policing the web for counterfeits. So, there we were, texting with strangers 450 miles away from our studio in Shenzhen trying to get access to the bootlegging industry in order



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Fig. 1. DHgate product photo, digitally altered product shot of a Nike Vapormax with a modification to the swoosh logo.

to explore the technical limits of images—their encoded properties that enable their tracking and prevent them from freely circulating online. As machines capable of segmenting contents within images are developed, the material nature of digital images evolves from being passive objects of representation to components of procedural operations.

In the 1980s and '90s, Putian was an official manufacturing hub for foreign shoe brands such as Nike, Adidas, and Puma. Previously, these companies' factories were concentrated in Taiwan, but after the production costs there—particularly workers' wages—rose beyond what companies were willing to pay, Putian's close proximity to Taiwan and lower cost of living made it an attractive site to relocate in order to boost profits. But as costs of living there increased along with the minimum wage, the shoe brands again relocated their manufacturing—this time to Vietnam, Cambodia, and India.

Unlike most post-industrial cities, however, when big brands decided to leave, workers in Putian were able to maintain their shoe industry by pivoting towards replica production. The know-how was there and the production infrastructure was locally preserved. Sometimes replica shoes are constructed with the same machines and in the same factories as those that were used to make “authentic” shoes years before. They are often sold explicitly as replicas—at times even under the premise of being “technically improved”—and typically at the same retail prices as their “legitimate” references, which sell out quickly and demand an inflated price on the resell market.

Anfu opens only at night and operates as showrooms with transactions to be conducted online. After the 2021 amendment to the Criminal Law of the People's Republic of China, producing counterfeits and infringing on trademarks can be sanctioned with up to ten years imprisonment. However, it isn't a “black market” per se, since authorities are well aware of it—rather the coordination among buyers and sellers is orchestrated within enough layers of opaqueness that it allows them to avoid being shut down. Considering that it was indeed the production of shoes that boosted Putian's economy years ago, regulating it for the benefit of Western companies is understandably not in the local interest.

Although the replica industry increasingly runs the risk of government seizures, as private prosecutions filed by trademark owners build pressure, generations of shoemakers sustain an important part of the city's economy. The International Consumers Union estimates that factory costs for popular shoes compose only 2% of gross profit made on sales, with only 0.4% of the total gross profit going to workers' wages. In the replica shoe market, the factory's share of the profit is far greater—up to 36% (see China Sourcing Agent 2020). With those numbers in mind, it is not hard to imagine why companies protect their logos aggressively as their brand becomes their primary resource to manufacture “value” through marketing, design, and new technologies. With increasingly distributed manufacturing processes, Western companies have to develop acute monitoring processes to secure control over their branding features.

## Image property

Logos are images with a high recognition value. As a legacy of the heraldry system during the High Middle Ages, these symbols communicate the provenance of services and products and visually organize labor groups within industrial societies. With the creation of laws in the 19th century to require registration and protect the use of simple images as a corporate identification system, logos were intended to create an ecosystem of accountability and regulated competition. Images were turned into instruments to legitimize companies and assure consumers of quality standards for their products.

Expanding outward from the single logo as identifier to a graphic system, companies now use branding both to operate internally and to communicate externally. As scientific management took hold of manufacturing in early 20th century America, standardization proved itself to the managerial and owner class. By reducing derivation in the production process, including everything from the parts used to make a good to the movements used to construct it, new levels of efficiency were unlocked. This ethos went hand-in-hand with branding, which through visual language helped businesses to deploy and replicate themselves across the globe.



Fig. 2. McDonalds, “Speedee” the anthropomorphic hamburger, the corporate mascot long before the creation of “Ronald McDonald”.

An early confluence of these strategies can be found in McDonald's “Speedee System,” which incorporated a Fordist assembly line into their food preparation. While franchising the business, their workflow reputation also became a marketing tool, and their “Speedee System” a communication gimmick adorning signs and packaging. McDonald's even had a Speedee mascot—a chef with a hamburger head in a leaping position—before adopting Ronald McDonald.

The McDonald's brand wasn't conveyed by the flavor of its hamburger but by the possibility of homogenizing it: an idea that was embedded into their visual identity. However, in a context of corporate rivalry, the ownership of recognizable visual identities has resulted in brands being inflated with manufactured social meanings. Currently, the cost of products depends less on their ability to satisfy a specific need than on their ability to communicate complex cultural codes. Maurizio Lazzarato identified this some time ago: the value of work can be understood as the production of “information and cultural content of products” (Lazzarato et al. 1996, 138). This information is coded and decipherable and, under the logic of intellectual property, marketable.

Intellectual property does not however attribute the property rights of actual images, but rather rights over their reproduction. Yet, in a quest for

efficiency, corporate symbols result in increasingly reductive compositions. Companies turn away from distinctive elements in their logos—propelled by modernist aesthetics entangled with normative principles. While designs keep evolving towards generic outcomes, trademarks continue to be litigated. Yet, our legal system does not truly protect authorship; rather, it establishes priority of a given image to those who officially register it and have the resources to protect its registration.

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Fig. 3. Wikipedia, a product bearing „Linux“ name, but not infringing the trademark owned by Linus Torvalds, because it falls into a different category.



But if images can be owned, how can we understand their visual boundaries? If the ability to enforce ownership over graphics requires establishing the limit of an idea, how can we do so with fuzzy objects such as images that seem similar? In order to register a logo in the U.S. Patent and Trademark Office, it has to be sufficiently distinct from other registered symbols within a particular business category. The new brand must be deemed “inherently distinctive” and legible enough as its own endeavor as to not confuse consumers about its possible connection with another party, purposely or accidentally. In reverse, there can be similar logos for companies that are dedicated to different things. But, as expected, companies encompass broad operating categories within their structures, covering the widest possible range of legal categories.

Ownership over images is unstable. Beyond the objective geometries of a given logo, their limits are defined by interpretive assessments of those who issue legal judgments within intellectual property courts. The ability to prevent unauthorized reproductions of a brand depends on whether or not the trademark is registered, the formal proximity between the images in question, the similarity of the type of businesses and above all the extent to which customers recognize the brand as an indicator of origin of the product or service. But what criteria is used to distinguish between symbols? Are technical processes being implemented today meant to measure formal distances among abstract shapes?

### Corporate pastiche

In the 20th century, companies embraced new production methods to efficiently expand their brands across territories—transforming the colonial project into a softer transnational business effort. The ways companies presented themselves were tied to the reproductive capacities of industries—under the ultimate premise of consistent growth fueled by productive “function” over cultural concerns. Today, as modernism’s commitment to disciplined consistency

is fracturing, branding reflects more iterative production cycles—from design to manufacture to consumption and back to design. This is not to say that design responds less to the logic of capital, on the contrary: as manufacturing becomes more agile, companies have the ability to quickly adjust to markets. This results in a less direct relationship between design intent and consumers’ feedback. While visual standardization was a given within an inflexible supply chain, more flexible approaches to design are being adopted by established brands, despite the practice potentially undermining their ability to litigate IP. Styles were previously incubated in regional subcultures before being appropriated by major corporations; now it is much more common for graphic trends to circulate widely online, through a plethora of hosts, before exhausting themselves and taking hold with specific industries.

Compared to Nike, with its years-long production and research and development cycles, this new approach is best embodied by Shein, a fast-fashion company which focuses on rapid recreation of burgeoning designs in small batches to test market responses before producing larger inventories. While this model has made them one of the largest fashion retailers worldwide with a \$100 billion valuation (although it is rumored they have since lost a significant portion of their value due to stagnating growth), it has also garnered them the reputation for stealing other designers’ ideas. Shein recreates garments copying boutique designers’ social media posts and then popularizes them on social media by sending influencers “hauls” of clothing to try on and post about. Shein’s tactics exploit both the potential of new production cycles and how visual information circulates today.

These more fluid strategies behind branding and product development are not lost on consumers, who have embraced self-conscious knockoffs that gain notoriety through their antagonism of big brands. When our lives are dominated by generic signifiers (the Kleenex effect), there is an appeal in challenging those who hold control over such fragile claims.



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Fig. 4. NSS Magazine, Menthol 10’s product shot, nssmag.com, March 15, 2019, Photo: Ari Saal Forman, Drawing a comparison between Nike shoes and Newport cigarettes targeting of the African American consumer, Ari Saal Forman used the Newport Spinnaker logo on a custom-made shoe resembling Nike’s Air Force 1 as a commentary on their business practices.

In the case of sneakers, this often takes shape in smaller brands co-opting logos and silhouettes from large companies and using the modern supply chain’s increased accessibility to create bootlegs. Recent examples that brought about litigation are by designers Warren Lota, MSCHF, OMI Hellcat, Kool Kiy, and John Geiger, who have all been sued by Nike for IP infringement. But again, larger companies will also self-reference their own designs to create tiers of exclusivity within their product lines. An example of this



gone awry gained visibility when Ye (formerly known as Kanye West) promoted boycotting a design by Adidas similar to his Yeezy Foam Runners, which is also owned by Adidas. In both cases, it's questionable what "value" is being offered to consumers, yet such exercises are profitable enough that the practice persists. For instance, New York based "art collective" MSCHF, founded by former BuzzFeed employee Gabriel Whaley, has attracted at least \$11.5 million dollars in venture funding claiming a valuation of over \$200 million dollars. MSCHF's output include "drops" such as sandals made out of luxury Birkin bags called "Birkinstocks," and a shoe inspired by Gobstopper candies that was a collaboration with late night talk show host Jimmy Fallon.



Fig. 5. LOVE (@diddy), "Since the era of Run-DMC @adidas has always used Hip Hop to build its brand and make billions off of our culture. BUT WE ARE MORE THAN JUST CONSUMERS NOW, WE'RE THE OWNERS. @KanyeWest and YEEZY are the reason Adidas is relevant to culture. WE KNOW OUR VALUE! I'm done wearing Adidas products until they make this right! We have to support each other!! Everybody repost this please!!", Instagram.com, September 6, 2022, Photo: Ye (formerly known as Kanye West) accuses Adidas of copying his designs, also manufactured and funded by Adidas, sparking protests by media personalities such as Sean Combs aka Diddy.

We felt a similar sense of distortion when comparing the images with altered logos online to those in the Anfu market later. Upon arriving, we noticed that many of the strategies we encountered on e-commerce websites were also being practiced in the physical marketplaces. But beyond that there was a familiarity with such a pastiche sensibility: As if the counterfeit goods had seeped back into the "originals," their aesthetic approaches that had emerged as a way to resist intellectual property regimes in places like Putian were now being surfaced in high fashion markets, seemingly inspired by the instability of branding, sometimes a trendy cultural nod towards bootlegs, always without clarity of their origins.

In some cases, we would see the intentional deformation of brand signifiers, such as the extension of a Nike swoosh where the tip of the swoosh folded back on itself to create a closed shape, or the complete removal of the Adidas three stripes "mountain" logo from the soles of Yeezy shoes. The storefronts too mimicked the disorganization of the online posts, with their level of formality seeming to have an inverse correlation between the perceived authenticity of their products. Shoes that looked like Nike Air Jordan 1s, but with intentionally deformed swooshes, were prominently displayed in what seemed like permanent showrooms, whereas authentic-looking Nike shoes were shown in unadorned, seemingly temporary spaces. We also found the purposeful misbranding of products with brands such as Nev Buylane and Panix—technically legal, but unabashedly derivative, which take their design cues from more established brands such as New Balance and Adidas.

The echoes between the distorted logos we encountered online and those we found in Anfu market were striking. In both cases, the brand

modifications appeared to not only undermine policing of these gray markets but also to embody new production and communication methods—responding more to the logics of production processes and online platforms today than they were beholden to the more rigid logics of 20th century manufacturing and communications.

### Universal Logo Detector

As consumer experiences move online, the flow of trademarks becomes a threat for companies that fear losing control over their brands. More than three million images are uploaded daily on Amazon alone, and at least one million different logos circulate within its platform. In this context, platforms have turned to machine vision technologies to monitor violations.

Computers learning to detect logos within images have recently become a powerful tool to prevent unlicensed vendors from advertising counterfeits. These programs can infer an image's contents as they compare it with large datasets of pre-labeled materials. As humans, we can intuitively detect a logo when we see it. But this distinction is strongly provided by context—we recognize logos when we see them perform as logos. However, how does the concept of a logo translate into computational space? Any system capable of identifying logos would have to account for a variety of placements, sizes, angles from which they are photographed, surfaces in which they are imprinted, and be sensitive to real life distortions, obstructions, and evolutions on a brand.

Recently, Amazon developed an internal computer vision system that has the needed sensibility to do just that. The model was engineered as a "class-agnostic universal logo detector" working from the hypothesis that there is an underlying structure of where these tend to sit within images. Given the lack of public libraries of logos, Amazon used their own catalog of images uploaded by users to train their models. After processing a million images associated with two thousand brands within different categories, they generated a library of 300,000 images classifying logo positions that were manually annotated by Amazon Mechanical Turk workers.

Following the resulting heat map of common placements, an additional system matches these regions with corresponding logos. The model is capable of processing up to 1500 images per second and can detect brands it has never seen. Given the sheer number of images that get uploaded to Amazon it wouldn't be computationally feasible to treat each new logo as a new class and re-train models for each of them. Instead, the model "learns the similarity among arbitrary groups of data" and puts together images with formal proximity within a multidimensional "latent space." Think of clouds of images that look similar to each other organized by measure of a large number of mathematical variables. The model computes the statistical distance between distinct branding features and establishes thresholds for what should be recognized as a single class.

The process is then enriched through the Amazon Brand Registry, where vendors can submit information about their brands and protect them against infringement. Users are invited to upload trademarks, symbols, names, and other branding elements to boost automated tools that scan over eight billion listings per day, as they aim to prevent fraudulent ones from going live before

they are posted. Suspected items are monitored and reported by “true” brand owners via a verification system to be later investigated by Amazon. In fact, as part of their anti-bootlegging efforts, Amazon created the Counterfeit Crimes Unit (CCU) to work directly with law enforcement, conduct investigations, and pursue litigation. While big companies develop precise tools that aim mathematically to synthesize the properties of images, logos are elusive by nature and not always an easy thing to capture.

### Branding in Reverse

These tools might help Amazon ensure trust in their platform, but it’s important to recognize their secondary uses. The permanent analysis of branding elements within uploads enhances semantic searches, personalized product recommendations, and contextual ads. This data is used not only for the protection of users’ brands but also benefits the algorithmic economy that sustains Amazon. The information collected through anti-counterfeiting programs feeds back into the operation of the platform to increase consumption.

Furthermore, Amazon owns and collects information in the same marketplace in which it competes—giving them a strong advantage. Amazon has more than 150 brands registered with the U.S. Patent and Trademark Office through which it sells hundreds of thousand items on its site. While in 2019 the company assured the U.S. Congress that it does not advantage its own brands within the platform, many sellers believe that Amazon gives itself better placement within organic search results—making it difficult for smaller vendors to position their products. This was the central claim of a letter that The National Association of Wholesaler-Distributors, representing over 30,000 distributors, sent to Congress in 2020 regarding Amazon’s “monopolistic mistreatment of its third-party sellers” (see Adami 2022).

A recent investigation conducted by The Markup confirmed this claim. Amazon prioritizes its own brands and those exclusive to the platform, even when their competitors have better ratings and more sales. In 2021, the agency studied search results on Amazon for nearly 3,500 popular queries and analyzed what the platform placed as the top listing. Around 60% of such cases were sold to advertisers as “sponsored” content. But half of the leftover 40% was reserved to Amazon’s brands and brand exclusives to the site. Only 20% ended up being open to the rest of competitors. This even when Amazon’s brands and brand exclusives to the site made up only 6% of the whole pool within the survey and the rest of the competitors made up 77% (see Jeffries and Yin 2021).

While Amazon advocates for its sellers to protect their brands’ consistency as a form of trust-building with consumers, its own market strategies differ. Instead of centralizing its products to a single recognizable brand, Amazon spreads them through a multiplicity of names, labels, and seemingly unaffiliated enterprises. By doing so, the platform disassociates itself from its own products, diluting its accountability over their quality and betting on quick adjustments and product placement at scale rather than on brand loyalty. A sort of branding in reverse, the potential success of its products is built on inconsistent labeling, on the Amazon brand going unnoticed.

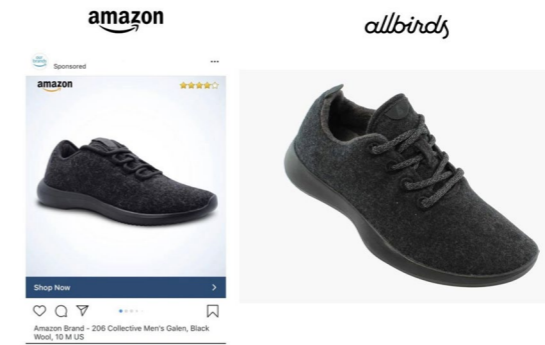


Fig. 6. Left: Our Amazon Brands (@OurAmazonBrands), Sponsored Post, instagram.com, Right: Allbirds, Men’s Wool Runner product photograph, allbirds.com. Allbirds co-CEO Joey Zwilling wrote an open letter to Jeff Bezos when Amazon’s 206 Collective brand copied his company’s wool sneaker, urging Amazon to adopt Allbirds’ sustainability practices in addition to its design, November 25, 2019.

The ultimate form of marketing camouflage is copying. Amazon has been consistently accused by multiple smaller manufacturers of knocking off their products, sneaking their house brands products suddenly into search results as such items grow in popularity. In the case of most “illegitimate” replicas, it is signaled to their audience that they are in on the ploy; whereas it would seem as the Amazon unbranded products intend to deceive their audience based on deluge and attempt to short circuit IP by preying on lack of awareness. However, compared to the bootleg resellers who operate at the fringes, Amazon’s foray into permissible copies has limitless capital and legal protections at their disposal. On the one hand, Amazon develops robust technical defenses against trademark infringement while also implementing marketing techniques that are at odds with their anti-counterfeit programs. In such an asymmetric competitive context, the development of counter policing tools, such as the altered Nike images, are meaningful examples beyond the computational limits imposed by platforms.

### Mathematical Logos

With technologies capable of inferring meaning out of visual contents, it is increasingly necessary to account for logos’ statistical dimension. We have to consider images, mathematically. The systems that monitor graphic relationships online work from precise processes of inspection and comparison. The geometry of a logo is not only an aesthetic factor but also an operational one. It is, then, necessary to ponder on whether, as the mathematics of images are overseen, the mechanisms of property attribution might also be recalibrated under new logics of computational supervision.

The possibility of ownership relies on technologies of enforcement—this has been the historical function of contracts and laws to protect property. In an online context, the policing of imagery, and by extension visual culture, has become yet another means to secure it. In addition to the shaky premises that underlie intellectual property, handing over the authority to police images online to a burgeoning regime of private corporate surveillance risks relying on the supposed objectivity of biased computational infrastructures. While the products offered by private technology companies are touted as relying on neutral data, there is an inherent conflict of interest when the companies regulating the exchange of visual information also generate profit from what visual information is circulated.

The relationship between the policing of information and who benefits from said policing is further complicated, as the expertise and resources needed to enforce images' boundaries is dropping rapidly. For instance, as part of a 2018 #100DaysOfMLCode challenge, now research scientist and then student Conner Shorten built an image classifier to detect the difference between Adidas and Nike shoes. With a very small, low-resolution dataset—140 images which were distorted to fit into a square format—resulted in image detection with 99.7% accuracy (see Shorten 2018). Considering the contrast between a one-day student experiment and the resources of technology companies like Amazon and Google (who distribute a “Nike Swoosh Compilation” through their machine learning community website Kaggle), it is safe to say that the “intellectual property” of logos can be heavily monitored.

With these systems in place, we can no longer consider images, or logos, only as content and form relationships. Rather these compositions are now indivisible from their programmatic dimension. As researchers Ingrid Hoelzl and Remi Marie elaborate on the evolution of images: “With digitalization, the mathematics underlying the image is no longer merely geometric but increasingly algorithmic: protocols that regulate when/how an image (or image element) is displayed on screen, when/where/how it is being sent to/how it changes if a user clicks on it (an ad for instance) or what is considered a suspicious visual pattern and how it is detected etc.” (Hoelzl and Marie 2021, 236)

There is an active feedback loop between what we see and the infrastructures set in place to make our seeing possible. Images today are no longer objects of representation but rather are tools that interface human and machine interactions. A logo today might not just serve to signal to possible consumers the provenance of a product and secure proper brand attribution, but rather it be an artifact meant to be processed computationally in order to execute tasks—such as making it easier for automatic IP infringement bots to detect it, trigger contextual ads as it gets scanned, or embedding within its form alternative text solutions in case it finds its way into a social media post. Therefore, beyond focusing on their graphic qualities, an in-depth analysis of the ways in which logos perform has to account for the ways in which they compute.



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Fig. 7. A McDonald's filter pops up on Snapchat as users scan one of their golden arches, 2015.

It's worthwhile to insist on the shifting nature of images' value within this framework too. While the story of Carolyn Davidson, who as a student designed one of the most impactful logos in history—the Nike swoosh—for \$35, is well documented (Davidson was later awarded shares in the company now speculated to be worth over 5 million dollars), how does the value of a logo evolve when it becomes data? In the mindset of scientific management and branding as a step towards standardization to increase market reach, a logo is a key piece in disseminating products and services. When we consider a logo's technical potential, however, it takes on new scales. Within this context, a logo expands its usefulness to become an instrument to police misuse of IP as well or serve as an input in predictive design software. Although designers understand their clients will continue to use their work far into the future, it is hard to believe any designer could have predicted these outcomes.

While computers have long been able to process images, the possibility for code to detect an image within another image—to segment a logo within a photo—requires precise semantic training, augmenting the authority of computers in processes that have been historically social. Machine vision technologies are used in products that scrape the web looking for counterfeits, in security cameras that read license plates and recognize peoples' identities in crowds, among many other applications. Not only do the images we exchange online nurture private surveillance products without our knowledge or explicit consent, but such systems retrofit back into our consuming, social, and political lives. Online platforms are increasingly opaque infrastructures that capitalize on our attention and digital behaviors—designed as personalized experiences catered through robust extraction of collective and personal data.

### Optical Decoys

An optical decoy for the machine, the altered logos escape the codified order of property algorithmically protected online. However, just as companies expand their trademarks, bots policing them have become more precise.

When we first found these images on e-commerce platforms like dhgate.com, Taobao, and Wanelo, the Nike swooshes were graphically diverse—often doubled up upon themselves or with portions elongated to produce doppelganger logos that made the shoes look like bizarre versions of the “original” products they referenced. Today the same products can be found, but in their promotional images their logos are almost entirely removed—instead of the more boisterous graphics, we can find small remnants of the logos within the images with swooshes abruptly cut off at their stems, or covered by thoughtfully placed hang tags. Any presence of the logo's recognizable geometry is at risk of detection.

The visual approach found in the product listing's logo manipulation are also present in their product descriptions. Generic keywords that describe the shoes in question identify the products: “casual,” “low top,” “sports.” As well as misspelling or abbreviations of popular model names or brand collaborators: “dunkes” for Nike “dunks” and “OW” for popular fashion brand “Off-White.” However, what was not present were direct references to the brands the products seemed to implicitly evoke such as “Nike,” “Adidas,” or “New Balance.” It seems that the textual brand signifier cannot be evoked either.

As the technologies that protect IP become more granular, so does the possibility to assert ownership over images. Control over things depends on the possibility to describe and delimit them. If it is possible to measure the thresholds of logos circulating online, what will stop companies from designing towards determining their IP based on increasingly expanded visual codes? Can the image of a whole shoe become an algorithmic trademark? Identifying the formal distance between similar images for legal reasons had been an interpretative exercise so far. Logos, likewise, have been sufficiently subjective concepts. In the end, it may not really be as clear, for the human eye, to recognize the boundaries between the elements that compose an image... but it is safe to say that the machine will always find them.

The day after our visit to Anfu, we arranged to meet up with a replica shoe maker that had become popular on Reddit. We sat down in a nondescript apartment and were offered tea and cigarettes while they shared sample materials and breakdowns of popular shoe silhouettes with their component pieces deconstructed. Indeed, to our untrained eye, the difference between their offerings and their “references” was indistinguishable. When we asked about the images we had found online, they claimed to never have seen them. Instead, they had carved out a seemingly thriving business using other evasive tactics such as an ever-changing website URL, occasional passwords, semi-coded language, informal payment structures, and direct communication on WeChat.

The seller apologized that their factory was closed that day, but offered us some shoe models they had on hand. We left Putian wearing replicas of NikeCraft Mars Yard Shoe 1.0, a collaboration with Tom Sachs. The swooshes were intact.

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## IMAGES AND ILLUSTRATIONS

Figure 1: DHgate, product photo, dhgate.com, c. 2016.

Figure 2: McDonald’s, Burger Head, Gentilly section of New Orleans, Chris Hamamoto and Federico Pérez Villoro, June 2011.

Figure 3: Photo: StromBer, LinuxWasch3, March 22, 2008. Accessed May 2023. <https://commons.wikimedia.org/wiki/File:LinuxWasch3.jpg>.

Figure 4: Ari Saal Forman, Ari Menthol 10s, 2006, in: *NSS Magazine*, “Menthol 10’s product shot”, March 15, 2019.

Figure 5: Diddy (@diddy) 2022. “Since the era of Run-DMC @adidas has always used Hip Hop to build its brand and make billions off of our culture. BUT WE ARE MORE THAN JUST CONSUMERS NOW, WE’RE THE OWNERS. @KanyeWest and YEEZY are the reason Adidas is relevant to culture. WE KNOW OUR VALUE! I’m done wearing Adidas products until they make this right! We have to support each other!! Everybody repost this please!!” *Instagram*, September 6, 2022.

Figure 6: Left: Our Amazon Brands, Sponsored Post, [instagram.com/OurAmazonBrands](https://www.instagram.com/OurAmazonBrands), Right: Allbirds, Men’s Wool Runner product photograph, [allbirds.com](https://www.allbirds.com), Photographer Unknown, November 25, 2019. Accessed May 2023.

Figure 7: Khushbu Shah/Eater, 2015. Accessed May 2023. <https://www.eater.com/2015/6/18/8806759/mcdonalds-snapchat-filters>



If “design” is the lens through which we glimpse into possible futures, this volume asks: What are the futures we are capable of imagining? As a subject of study, design is enabled and constrained by educational institutions and academic traditions. As a profession it is conditioned by systems of labor. As a creative activity it is shaped by what tools are programmed to do. Authors in this book challenge common ways of knowing, being, and doing in design with regard to the futures they facilitate and interrogate the role, responsibility, and potential of a plurality of design practices in confrontation with social and environmental crises. In this way, this volume does not only ask about designed futures, but also the futures of design: What are the consequences drawn from a critical examination of the histories and politics underlying normative renderings of design? How can we disrupt the perpetuation of biases and reification of social injustices? Self-reflexively engaging their own experiences and work, authors in this volume interrogate design in all its convoluted modalities: as activism, practice, discipline, way of knowing, field of study and set of objects.

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