

Image is a mirror. Since the dawn of civilization, it is by image that we have made sense of the world. It also how we have too often failed to see the world. Today, this relationship between representation and reality, this mirror is made manifest through pictorial clouds. What we see is at once a myriad of world views and a virtual screen that separates us from the physical world—the wall of the modern citadel.



An image begins and ends with a frame, departing it only to be re-framed, carrying with it a trail of references—both personal and historic. Our perceptions isolate and extract scenes from the world and the mind and combine them into representations, which can be fragmented into sub-perceptions that generate entirely new frames.

The comet's tail of accelerating technology pulls us with ever greater force into a black hole of exploding image capture, distribution, and consumption... which we can see now will proliferate endlessly.

/ Our yearning to accumulate and organize visual symbols has a long history traceable from the earliest images found in caves, to ancient Rome and now to social media. A taxonomy of imagery involves structuring pictorial clusters, which serve to annotate the evolution of knowledge—and the nature, ecology and economy to which they contribute. Doing that is one thing. Not being able to stop ourselves from doing it is something else entirely. The journey of the image has penetrated interstellar perceptions, and nothing we see will ever be the same.

/ Life today is a flow of pictorial annotations. Entangled in our self-representations we have joined Narcissus by the side of a pool that has now expanded its reflection to include the new infinity of the digital dimension.

/ The modern image is not just mechanical and set; it is also spontaneous, viral, and fluid. Through this recent process of accumulation, images are put into unimaginable combination with other images to which they may or may not bear any resemblance. Some encounters will compound the sources while other will force them into a distillation. The results of these encounters and reactions alter the very meaning of the images that set the process into motion. Suddenly, images become beatific and take on a unique and soul-like aura. How we begin to speak of images in a way that allows both their individual and collective origins to be more precisely perceived and articulated is the point of this book.



INTENT MATTERS

A deer remains a deer whether in the flesh or as an icon. It can be understood as a thing that holds its own unique place in the universe. The same can be said of the image of a deer, but the intent or meaning of the image is not always what we think we see.

In terms of **FUNCTIONS**, an image may be:

- religious and sanctified
- journalistic and informative
- commercial and persuasive
- scientific and enlightening
- artistic and subjective
- social and emotive

In terms of **TYPES**, images may come as the:

- representation of a subject, e.g. a painting
- capture of scene, e.g. a photograph
- pictogram of a subject category, e.g. "women"

FUNCTIONS

1. religious
2. journalistic
3. commercial
4. scientific
5. artistic
6. social

TYPES

- carving
- mosaic
- painting
- engraving
- drawing
- painting
- map
- photogram
- photography
- animation
- film and video
- hologram
- digital
- 3D rendering
- 3D print
- ultrasound
- sculpture
- reflection

DYNAMICS

- printed
- projected
- broadcasted
- mobile
- urban
- interactive
- duplicated
- cloned
- retouched
- restored
- copyrighted
- sanctified
- shared
- indexed
- archived
- programmed
- relational
- metabolic
- iterative
- generative
- autonomous
- fragmented
- surveillance



In the Greek, taxonomy derives from taxis (meaning 'order', 'arrangement') and nomos ('law' or 'science'). What took root in the classical canons of Ancient Greece were disseminated through subsequent historical eras. This pursuit of categorical constraints expanded art and science and put it into the service of empires that even if long dismantled, are still revered, idealized and even monumentalized in their ruins.

/ Beginning in the Pre-Renaissance, painting, sculpture and architecture became an important appendage of religion, politics, philosophy and science. By the 18th century, those original forms and CLASSIFICATIONS from antiquity had instituted themselves as a vernacular, or palette of models. These more "imperial" uses of representation were critical to defining those ideals of western civilization that we still recognize today.

/ An image supports two primary modes. In the first mode it is the seen object that references itself ... a form true unto itself. In the second mode, it is a step into all knowledge and memory that attend to our perception of that image. Much of the value of the first mode lies in the "authenticity" of the image. We want to be assured of the integrity of an image, its uniqueness and its source - who made this and when and where was it made.

/ Digitization and easy replication turn notions of authenticity on its head. Once remixed, actual authenticity becomes more or less a historical footnote, which once copied and "shared" becomes something far more mutable and difficult to pin down than the historical "original." Concurrently, the ever-expanding role that images play in industry and in mass production, mean that we happily settle for replicas, when they provide us cheap and easy pictorial commodities.

/ Leaves belong to trees as trees belong to forests, as soldiers to armies, as bricks to walls. More than ever, the virtues of classification by pure qualities are combined with the forceful demands of quantification. Search technology uses all the means at its disposal to assign a complex set of "numerical" values to images. It can do little in the way of assigning purely aesthetic value to those images since such an assessment requires a human filter.

/ On a planet populated with billions of connected devices, the capacity to feed and access such gigantic live databases and massive information clusters is at any individual's fingertips.

/ Collections of images and artifacts going to the time of Ptolemy sought out images that were unique and rare. As cultures and empires evolved, images played a more prestigious and valuable role in the life of elites and their status within those cultures. Like the home theaters of today, they marked their owners as a step above others.

/ The current quantification and mass reproduction of imagery is unprecedented. Considering the exponential rates at which new images are added to online searchable databases, we can safely assume that this growth curve will continue to accelerate far into the future.

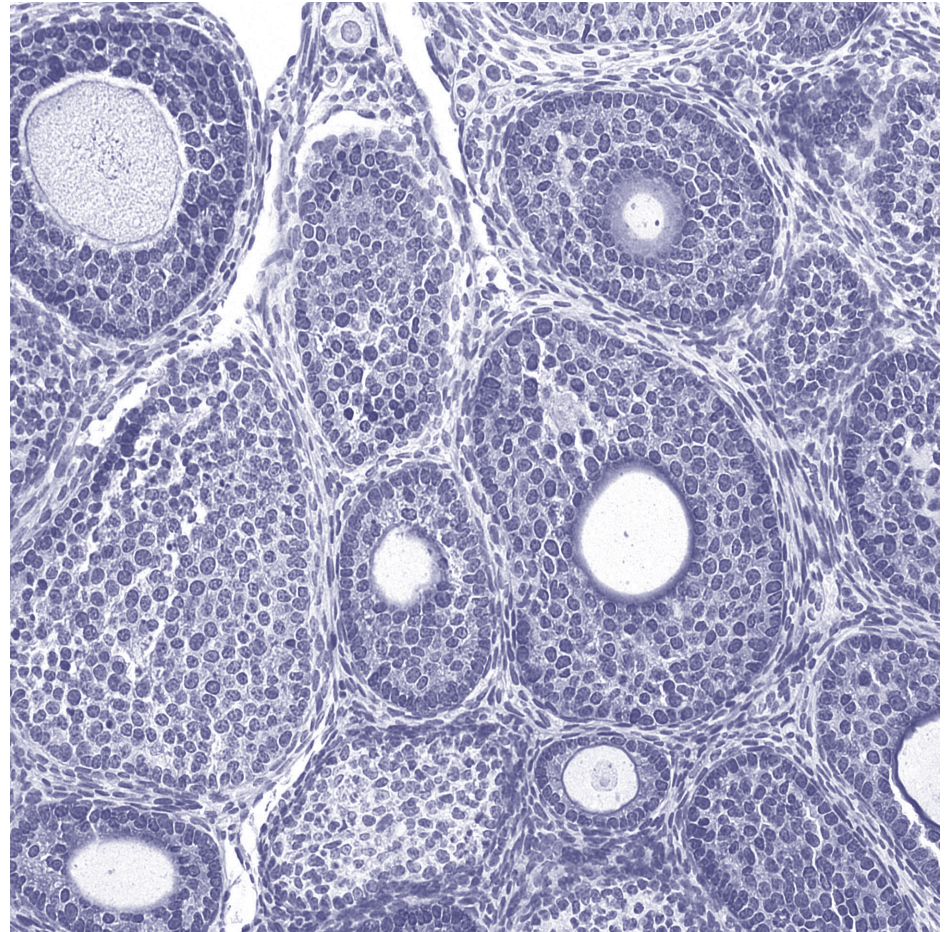
/ In such a world, **ACCUMULATION** becomes the key concept for us to consider. When we do a search for “babies,” we are instantly inundated with examples that serve the various criteria suggested by that term.

/ In the 17th Century, the painter David Teniers the Younger was thought to have created 2,000 paintings. In his time, he served as a type of “emporium” for those who would seek out images. By the eighteenth century, the painter had become a leading cultural figure. The annual Salon of Painting in Paris was a hugely popular social phenomenon and a point of convergence for a wide range of social demographics. For each salon, a catalog was published, explaining the works to a new audience unfamiliar with art subjects. It is recorded that 22,000 copies of the catalog were sold in the 1787 exhibition at the Salon du Louvre.

/ In their own way, some of today’s searchable databases also seek to catalogue and deliver a comprehensive representation of the world—with all its people, places and things. But accumulation today, unlike in Teniers or the Salon’s days draws on the full complement of unseen sets of sources. Once an image is merged into that larger searchable universal database, it enters into a relationship of cross-references with every other image in that same database.

/ So, the shift is made from the integrity of the singular instance, to the distributed maintenance of an ever-expanding and plastic multiplicity. How does this multiplicity change how humans perceive and interact with these many new uses of image? That is what we are here to explore.

/ During these preceding centuries, the painter began to be established as a commodity producer. The emergent



bourgeoisie took to collecting art works for their pictorial and narrative merits. In Holland alone, where the tulip craze took individual possession of a beauty to new heights, millions of paintings were produced along with the mass distribution of engravings also aimed at this growing middle class.

/ Aby Warburg, an early 20th century art historian dedicated himself to the creation of the “Mnemosyne Atlas,” a massive constellation of images that were obsessively organized around a complex set of interests. It is a kaleidoscopic “imagescape” intended as a structured meditation on image. Warburg expressed through the Atlas his own yearning to reveal the higher order that was expressed by the arch of history: “By associating votive offerings with sacred images, the Catholic Church, in its wisdom, had left its formerly pagan flock a legitimate outlet for the inveterate impulse to associate oneself, or one’s own effigy, with the Divine as expressed in the palpable form of the human image.”

/ At the time of Warburg’s death, the Atlas comprised some 2,000 photographs set on 79 wooden panels. Warburg conceived of the art historian as a ‘necromancer,’ who conjures up the art of the past to give it an enigmatic new life as a “strange figural floating.” He saw... “Zeppelins float in the darkness beneath ancient cosmological maps; the entire anachronistic discordia dedicated to finding the most startling relationships between images that are worlds apart. The Atlas proposes an art of the “in-between,” what Warburg called the “iconology of the interval.”

/ The modern image is multiplied, pervasive, and automated. **MASS ACCESS** was introduced to the public by Google Images in July 2001. By 2010, 10 billion images were indexed. By 2013, Pinterest had reached 5 million daily pins. On an average day that year, people uploaded 300 million photos to Facebook and took 400 million Snapchats. On an average day in early 2014, 1.5 billion smartphone cameras were taking nearly one trillion photos, one billion of which were being shared online—with 55 million on Instagram alone. By 2016, the number of international mobile device users exceeded 2 billion. New image apps are being conceived every day by entrepreneurs, students and amateurs. Tools can be made in hours and images in seconds.

/ Based on the principle that humans read images better than words, many of the most popular new apps are now

focused around images. Flickr, Pinterest, Instagram and Snapchat have been among the fastest growing social platforms in history. Even Twitter reveals leaps in engagement when a tweet carries an image. The larger social networks like Facebook and Google+ have followed suit by revamping their layouts to bring images to the forefront of their communities. The tsunami of images being shared each day is affecting the way we see the world and mostly the way we must think of image.



/ In chaos theory, the butterfly effect is the sensitive dependence on initial conditions, where a small change at one place in a deterministic nonlinear system can result in large differences to a later state. The name is derived from the theoretical example of a hurricane’s formation being contingent on whether or not a distant butterfly had flapped its wings several weeks before.

/ A “quantum butterfly effect,” has been demonstrated experimentally, therefore we can consider the feasibility of a “quantum image effect”, where one image seen by one person in Japan could provoke a global change.

/ The quantum image is produced by and produces a world of pervasive interactions between humans, systems, icons, pictures, filters, algorithms, and network events all related and affected by each other’s behaviors.

/ Images burst upon our peripheral vision from countless sources that are affecting and being affected by each other. Once arrived in the field, variables explode into an ebullient iconography where images speak in tongues—in a language at once understood by both men and machines.



*The world's largest
Distributed Denial of Service
mitigation provider, Prolexic,
tracks more than 50 Million
DDoS attack bots Worldwide
(a tiny fraction of the actual
amounts)*

*A bot-terfly effect starts
with an image.*

TODAY are billions of new images each day augmenting our collective thought processes as well as the media sphere? As the world grows increasingly circumscribed by digital information, self-generating algorithmic efforts are being used to push us closer to a unified field of image, thought and experience. Are these processes taking the words right out of our heads and leaving us psychologically vulnerable in ways that we do not have the insight to understand? What shape will our humanity need to assume if it is to defend itself against complete capitulation to such persistent effects? Or is resistance futile? Has the great leap already happened and are we only now getting the news?

/ It is said the average American child can recognize 1,000 corporate logos but can't identify 10 plants or animals native to their own region. Even if you were to halve those numbers, they would still be revelatory. We are increasingly being "shaped" by the imagery that is directed at us 24/7 by the cultural machinery of entertainment, advertising and social media. They and we coalesce into an environment, an ecology, and even an atmosphere that we reinforce every time we pick up our smartphones. Is it any wonder that we have become evermore susceptible to being "triggered" by "events" which "shock" us into taking chaotic but eerily similar actions.

/ For 500 years, imagery served to hold the mirror up to the human experience. Are we seeing that definition change today to include the machine experience? Is the machine a subset of the human, or have we in fact become a subset of the machine?

/ The recent alerts of an incoming missile attack on Hawaii, followed the next day by a similar false alert in Japan should give us pause to consider just how "bundled" together we have become. The gaps are closing between us. We can see this in action as we serve less as "receivers" of information and more as synaptic relay switches that amplify signals before we even have time to process their content. Never before has more of our life been "re-approved" for rapid response.

/ When McLuhan said in the late 1960s that "The Medium is the Message." ... was this what he was referring to - a fusion of machines and minds with a purpose to propagate information faster and with next to no friction? is there some meditative advantage to be gained along this yielding path, or do we need to abandon progress and throw ourselves off the train before it jumps the tracks?

/ We are familiar with cognitive bias as it relates to our beliefs, but images are less about beliefs than they are about impacts. We are "hit" even before we know what hit us.

/ Our aim is to focus in on what underlies such a phenomenon, and how new ways of creating, replicating and transmitting imagery is changing who we are and how we interact with our world at core levels. As the speed of our graphics processing increases, more and more of what calls for our attention becomes converted into background patterns. When we are seeing things as patterns, we are no longer seeing them so much for what they are, as for what we are. And what does that suggest about the nature of our relationships? What are the component parts of viral images, and how are each of us enabled to defend ourselves against them? Where do we look to uncover the DNA of an image? By considering a set of TEN iconic and archetypal images sets, can we come to better understand how the similar principles apply to other sets in other domains?

..2018/ERIK ADIGARD+MARK PETRAKIS