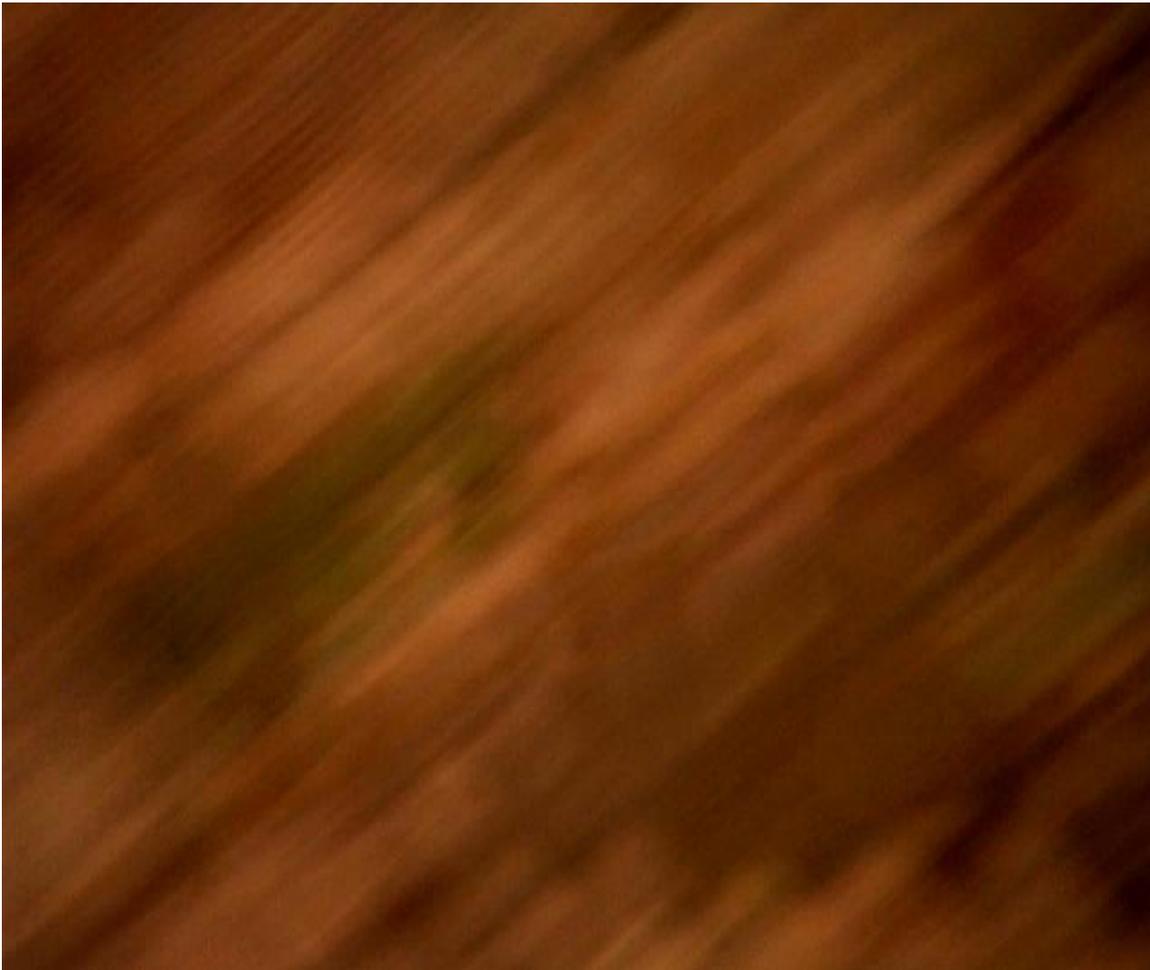


THE DOUBLE HELIX AND THE OTHER-FRAME

Malcolm Levy

Throughout the history of the camera, a main thread of discussion has been on the mechanical repetition of photography, camera usage, and how aspect can alter, reshape, and change our existing understanding of the tool itself and its usage. 'Other-frames', specifically references abstract frames that are not typically part of the normative captured sequence, offering an alternative methodology within digital photography.



Future Cities, Shanghai, 280"

"No doubt we know less and less about the nature of the image, an image, or the image."

_Raymond Bellour, The Double Helix.

In both painting, and more recently in photography, the conversation around abstraction, with regards to its meaning, creation and place within art, has been an animated one to say the least. Currently, with the advent of digital technology and numerous artistic practices (both digital and film) related to the debate, the discussion has taken on new meaning. One area of study that has been emerging in the conversation focuses on the location at which digital and analog practices meet.

Within this current discourse around Abstract and Concrete practices and Video / Still Image / Photography, the computer chip within the digital camera is an object of much contradiction and beauty. How this small sensor can be manipulated to reveal frames that are in between, or not really part of the actual logical frame rate pattern is both a striking and explosive phenomenon. Through practicing techniques of movement, focus and speed, there is a location where the digital chip stops working properly, where it cannot handle the workload it is being given. The implications of this are the creation of an array of visually abstract stills.

Other-Frames

Throughout the history of the camera, a main thread of discussion has been on the mechanical repetition of photography, the usage of the camera, and how these usages can alter, reshape, and change our existing understanding of the tool itself and its usage. The camera 'chip', or sensor as it is known, based on its makeup and intended action, has only certain processes and actions that it is designed for, in terms of its use. The processes create 'other-frames', specifically referencing frames that are not normally part of the sequence and capture methodology of digital photography. 'Other' in this case lies within its historical philosophical usages of the term not as oppositional, but more so as that which is unconscious or silent.

Techniques with the ability to affect the usage of a digital camera above and beyond the normative practices of commercial video and photography are varied. These techniques exist outside what is considered relevant to the specific needs or usages of the camera with its normative function of traditional documentation. Some of these, based on quick movement, speed and focus in particular, have the ability to create Abstract Expressionist-like formulations out of what could be best described as analogical methodologies within a digital landscape.

The frames live beyond what would be possible in a film reel due to the undiluted analog nature of film in comparison to the digital-analog hybrid form that exists within the digital camera/process. Within the process of slowing down imagery, frames are found that were never intended to exist, and more so, never conceived of as ever being part of the process. In using the chip of the camera, not for its original intended purpose, but for an originally unintended purpose, views beyond the human gaze begin to appear.

The "Chip" itself is an abstract notion. Much in the same way as a synthesizer, the current digital cameras run on mini micro-processors that are then amplified to create imagery. Though the common name for these devices is a chip, they are more accurately referred to as image sensors. In looking at both the CCD (charge-coupled device) or CMOS (complimentary metal oxide silicon) image sensor, what is being created is a mix of analog and digital processes, and therefore reactions and endpoints in creating imagery. The Chip, or image sensor as it is technically referred to is a device that converts an optical image to an electric signal. The purpose of the sensor is to convert light into electrical signals.

As with the sounds that can be extracted sonically from synthesizers and other sorts of outboard equipment, the reaction of the amplifiers in a chip to speed, light, noise, and other exterior factors can manipulate the chip with mystifying results. As opposed to the 'invisible', being that of the darkroom, in this case it is the chip itself, *which is the digitized duplicate of the filmic process of the filming - darkroom process*. The visible process of the camera (dominant action) is pushed aside to give precedence to the usually invisible process (submissive action) of the inner workings of the camera's chip and functionality).

In analyzing the mechanical functions of a camera recording an image, Raymond Bellour investigates the possibilities of abstractions and narratives that can pass through this process. Specifically, Bellour identifies the possibilities for frames outside of the normative process to exist: "This is what, in their way, the words passages of the image refer to. First of all, the ambiguous word *of* includes the sense of between. It is between images that passages and contaminations of beings and systems occur more and more often, and such passages are sometimes clear but sometimes hard to define, and, above all, to give a name to."

These passages and contaminations, as Bellour correctly describes, are specifically, 'Other-Frames'. The digital space within the analog chip, when exhausted beyond its capabilities and capacity for retention, lies very much in the world of the 'in between'. A newly found nature of the image comes through, in this case redefining a space where it didn't exist before. This requires us to question not only what it produces or *could* produce as art, but, above all, to evaluate what becomes of art when it is confronted with a different structure outside of semiotics, and specifically what it signifies (or de-signifies) within its abstracted result.

Bellour referred to this as the Double Helix, specifically the work that lives between the lines of what is foreseen, and unforeseen by science with regard to nature. In analyzing the apparatus, there are two forces, (arguably more) working together to create these new realities, and once the movement of video comes into play, there is the ability for loss of recognition, when the movement is diverted. With the advent of the video camera, and specifically the chip that is contained within it, the abstract nature of what can be created begins to take on a completely different context, both with regard to its final outcome, and the process associated with that outcome.

While the digital process is happening in a video camera, it is really also an analog form, which is why the end result can be so different. This passage, as Bellour refers to it as, is the transportation of the image from the digital to analog space. It is within that space, and through the movements that occur there, that different forms of abstraction can be achieved. "The phases of movement, of false-movement, of passage from one frame to the next, which are very sudden and punctuated with a blue flash, amount to so many outburst of distortion whose effect spreads beyond their own duration; they damage the image we discover, the resemblance that is being created to the point that we are hardly surprised at what is most surprising, and look at it twice before we watch out"

These 'outbursts of distortion' are, in fact, focused on one of the main tools of photographers over time; that which is the dynamic range of a shot being photographed. This has to do with the traditional range of what can and cannot be recorded. This includes the opacity range of captured film images, as well as the reflectance range of images on paper.

The dynamic range of sensors used in digital photography is many times less than that of the human eye and generally not as wide as that of chemical photographic media. In the domain of digital imaging, algorithms have been developed to map the image differently in shadow and in highlight in order to better distribute the lighting range across the image. When images challenge the dynamic range of what can be digitally recorded, the results are in abstractions that can occur within the image.

Video in a sense is the last analog point, or more so the place where the two worlds meet. Video is comprised of analog signals and data, but it is being created and used within a digital capture source. So within video, you have a duality that has grown over time. In a technical sense, we speak of video as having analog data, analogical signals, which is opposed to digital or numerical computer technology; in effect, it is really a meeting of the two. For Olivier Richon, this becomes a matter of reinvention, not only of the tools, but the discourse its self:

New technologies necessarily change the material production and diffusion of images, but what is of interest to me remains the question of the image. The image comes first, not the technology. The binary opposition analogical/digital is intriguing. To use the term “analogical” to define a non-digital photo is now commonly accepted, yet remains paradoxical. Before the development of the digital world of imaging, nobody used the word analogical. There was just photography. There is a reversal here, we can say that at the level of discourse, the digital has invented or reinvented the analogical. The digital needs its other, the analogical, in order to define itself. In a certain way, it follows that the analogical comes after the digital after all.

The practice of generating other-frames is based on what can be foreseen or predicted. Conceptually it is rooted in imagining what is possible based on this transition/passage, of what might be created out of this transference, and the multitudes of possibilities that rest within: “there is still the eye, there are images, quasi images, what one sees, and what one foresees... the computer image is nevertheless on the boundary of an everything-analog whose limits are obviously the creative (or should I say reproductive?) capacity of human movement and the interest that inspires it, with an outcome that is uncertain and stakes that are problematic.” The camera creates an eye of its own, which can be carried out through the actions and movements of affecting it. This uncertainty is a place of limitless possibility for experimentation.

Other-Frames are part of the greater and more profound transformations of the electronic age with regard to the changing relationship of representational imagery and abstraction. Historically the advent of photography as the medium of choice for documentation, created a space for painting in some cases to prioritize formal elements over representational content, creating a vocabulary of meaning derived from colour, shape, texture, and gesture. This space eventually culminated in the movement known as Abstract Expressionism. With the usages of the camera today, this same path is now being taken by a number of photographers and video artists who are coming across the same reactions to our current state of art and documentation.

Living in a culture where cameras have become synonymous with constant daily interactions, (whether this is the news, surveillance, online, urban screens and mobile devices) recording of memory is once again facing the challenges that happened during the shift from painting to photography. As Gil Blank correctly points out around our current state of events: “If ultimately there is anything to be learned from simulacra, it is that we can never in fact separate ourselves from the world or the real.... abstraction, whether aesthetic, mnemonic, or epistemological, is never so complete that it obviates even the

least attempt at a transparent reckoning of history, nor so corrupt that its shortcoming does not in itself offer some model for understanding the human contingency of that same history.

The camera has created a time in history where the impression of analogy has been the object of such deliberate construction, that it has been able to fundamentally question normative practices and certain techniques to the extent that such techniques become the guarantee of a capacity for analogies, the problems of which are posed by the techniques themselves. Continual techniques of the camera, in the same manner as computer software, three-dimensional rendering and other means of visual rendering, are continuing to shift, grow and emerge over time. The construction of the digital-analog space, the process which is undergone in creating this, and the abstract reality that this follows, is in line with the current movements and responses to the constant debate around what can be recorded as memory, and the multiplicity of memory currently.