

## Diffraction Photography: A Luminous Entanglement

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### Introduction

Since its inception, Photography has been widely popular as an imprint of nature. This notion of the copy of nature are cited by various authors and photographer/researchers: According to Emerling (2012), the concept of photography as an “imprint of nature” is part of the Renaissance’s fascination with “depicting the outside world by capturing the image in Camera Obscura” (25). The captured images were interpreted as an index of the outside world rather than a sign that stands on its own. Photography became a fulfilment of Enlightenment’s promise of indexicality which means, “the promise of the material connection between photography and the truth” (Kelsey & Stimson, 2008, xiv). Photographs, therefore, became the representation of reality, the golden criterion in modernist formalism photography. Acknowledging photography as a conduit of reality eventually gained strong ground in practice that helped establish rules and procedures for taking photographs. Additional studies in photography such as those of Newhouse (2013) and Bufquin et al. (2020) referred to photography as a representational truth. Photographs resulted in a “dissimulation and beautification of the modern capitalist world” (Emerling, 2012, 32) such when photographs are used to advance capitalist ideals transforming poverty into an object of enjoyment.

The 1970s gave rise to postmodern thinkers like Benjamin (1969) who said that the mechanical reproduction of photographs resulted in a loss of aura, meaning photographs are always reconfigured and are no longer accurate representations of the original. In practice, László Maholy-Nagy’s experimentation succeeded in dismantling the rules of photography using the camera’s ‘creative possibilities’ rather than photographs being reflections of nature. His photogram, *Untitled*, uses oblique angles and unusual viewpoints intended to disrupt rules of perspective inherited from Renaissance art. He questioned photography as a copy of nature and argues that the camera is an optical instrument to produce, not to reproduce art (Maholy-Nagy, 2012). The posthuman turn radically questioned the human-centred approach in photography and called for a dynamic approach to overcoming the dogmatic image of thought we have gotten used to. Following this rupture, visual studies became a fertile ground for investigating the co-constitutivity of photographs. Authors were convinced that photography is a movement of events, a dynamic relationship between humans and non-humans in creating the visuals (Ainsworth, 2014; Kind, 2013; Monea, 2012; Ulmer, 2016). But what happens in between these movements?

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**Figure 1.** Cambodia's *Ta Prohm* Temple



*Image:* Lorena R. Bañares



Responding to the posthuman turn, this project is a departure from the conventional ways of doing photography as representations of reality. It problematizes the role of the body, how it is situated, and its relations with other matters in constituting a photograph. Thus, it looks at photography as a relational assemblage, a diffractive intra-action between humans and non-humans, always reconfigured in its infinite becomings.

These photographs emerged from the researcher's experiment while conducting a dissertation that investigated how materialities in photography are constituted and the body's entanglement with the ecology, rather than focusing on the product of actualization that is detached: mediated, represented, and already formed. These layers of photographs are captured by photographers' body cameras from multiple points of view of bodily encounters while photographing Cambodia's *Angkor* temples (Fig. 1). The footage generated layers of luminous photographs that reveal the relational assemblages in photography, the out of frame before actualizing a photograph. These out of frame speak of the chaos and material agencies before humans and apparatus of capture enact agential cuts. Karen Barad (2007) refers to this method as *Diffraction*. Barad (2007) explicates this: Diffraction happens when waves combine as it encounters an obstacle. An example is when one throws a stone in a pond, waves overlap and its amplitude forms a composite. Two overlapping waves result in smaller or larger waves. The resultant wave is the sum effects of each component wave, a combination of disturbances created by each wave individually (superposition). Diffractions, therefore, are the result of intra-actions of matters and bodies that create phenomena. The following section will take you to the folds as the photographs map where the differences appear.

**Figure 2.** Intra-action in-between bodies, technology, architecture and space



*Image.* Lorena R. Bañares

### Weaving trails

Revered around the world, Cambodia's *Angkor* complex (Fig. 2) is a living trace of earlier human civilization that thrived in Southeast Asia. Located northwest of Cambodia, Angkor's complex is a home of magnificent structures built during the *Khmer* (Cambodian) empire, a sophisticated marvel of architecture: towers flanked by elaborate courtyards, richly decorated walls, and intricate carvings of *Khmer's* daily life. Humans, nature, and animals are shown in the motifs of these carvings. These sculptures are mute testimony to the co-constitutive existence of nature and humans. Today, these structures once known as the epitome of *Khmer's* kingly empire are now taken back by nature that once owns it. The remains of these temples that survived have become major tourist destinations in Cambodia. Among these include the famous *Ta Prohm*.

**Figure 3.** *Ta Prohm* temple assemblages



*Image:* Lorena R. Bañares

*Ta Prohm* is a monastic temple considered one of the largest sites at Angkor. Passing through its narrow chambers led to shrines dotted with *apsaras* (celestial dancing girls) carved in sandstone beds of floral motifs. The shrines are cloaked with a muscular embrace of root systems like cobwebs locking the structure while dismantling its edges. Fig, Banyan and Kapok trees twist and creep their roots above, under the laterite walls, pillars, and towers of the shrines that pushed the structures into disarray, creating their architecture of the field. These roots spreading across the complex, served as our navigation tool—an extension of our veins.

This almost perfect intra-action of nature's ecology hailed our bodies: constantly communicating its sensation which is hard to resist. Lured by these vital matters, our bodies were bending, climbing, adjusting to the positions of meters-high trees and chasing rays of light while being seduced by the sound of critters, birds, and other co-inhabitants of the place. We tightened the harness of our body camera, as it blends and unfolds along with other bodies while carefully securing the DSLR cameras



in our hands. In photographing the site, our bodies and objects were mutually implicated. “The object can be considered prostheses of the body, provided it is remembered that the body is equally a prosthesis of the thing” (Massumi, 2002, 95). Don Ihde, as quoted by Donna Haraway (2008) puts it: “Insofar as I use or employ a technology, I am used by and employed by that technology as well [...] We are bodies in technologies” (249). Human bodies and technologies cohabit with each other in creating lifeworlds. Such intra-action(s) produced entangled relationships between the camera, structures, stones, flesh, and our clothes while the body cameras attached captured the mundane, a diffractive intra-action (Fig. 3). “It makes attachments and detachments, cuts and knots, weaves paths and makes a difference” (Haraway, 2008, 31). As it weaves a trail, the cameras, like other organisms, are wayfarers.

We took several movements and positions to constantly experiment with the different lenses of the camera to get the best angle. Settled, one of us propped his entire body’s strength at the walls for support, one leg resting on the base of the shrine, bending down while tilting the camera in a diagonal position. The body, camera lens, sculptures, structures, and rays of light constitute overlapping, diffracted patterns of assemblages (Fig. 4). We were poised to capture anything but, what we realized was that we were the ones captured by it. The body became submissive to ecology’s infrastructure! In this assemblage, the body and camera enacted agential cuts in curating the best angle to frame the visual. These overlapping and apparent bending of matters within an ecology happened when bodies or matters encountered an obstacle (Barad, 2007), a diffractive phenomenon.

**Figure 4.** Diffractive Entanglement



Image: Lorena R. Bañares

Posthumanism and new materialism offer a lens to examine the affective intra-actions of aesthetics’ ecology in photographing *Ta Prohm*, and to think differently about the bodies’ relations with the world as we ascribe to Barad’s (2003, 2007) notion of process, whereby “reality is composed not of things-in-themselves or things-behind-phenomena but things-in-phenomena [...] Phenomena are

differential patterns of mattering produced through complex agential intra-actions of multiple material-discursive practices or apparatuses of bodily production” Barad (2007, 140). Because of the presence of obstruction created by a diffraction apparatus, it brings to light the notion that the camera and photographer are not separated from the object being photographed; rather, part of the phenomenon in its constant state of becomings. We are part of nature that we are trying to photograph (Fig. 5). This is elucidated by Donna Haraway (2016) who stated, “it inhabits the multispecies crowd” (178) as heterogeneous elements constituting an assemblage (Deleuze, 1987), intra-acts (Barad, 2012), creating diffracted patterns, a luminous entanglement.

**Figure 5.** Decentering the human “I” in photography practices



*Image.* Lorena R. Bañares

A closer look at diffractive patterns in photographic practices revealed the differences between movements. As an event, matters within the immanent plane that are unformed, unorganized, and not yet signified encountered bodies. The sensation works within these bodies. Sensations make us act. To render the sensation according to Deleuze (2003) is “to record the fact” (35). The “fact” is the sensation being rendered in a photograph. Elements therefore in a photograph are assemblages of sensation. Since the sensation is a “movement in-place,” this is felt by the bodies and is transformed by the bodies and camera apparatuses into another image, an intra-acting diffractive phenomenon forming new assemblages. It deterritorialises from its old meaning and reterritorialises to new meanings *and and and...* It ruptured from the normalized practice of taking photographs expected of *Ta Prohm* emphasizing its grandeur and power. This disjunction can be considered as a breakdown of the institutional practice of mimicking power in photography. This interference, for Deleuze and Guattari (1987), involves the scrambling of existing codes. The dogmatic rules of photography establishing hierarchical position placing humans as dominant subjects, the use of low angle shots to emphasize power, and the rule of thirds that stabilizes the human subject’s dominance in the pictorial frame, are dismantled. Overturning these dogmatic rules of photography can act as a blockage to globalized coding machines.



Photographing *Ta Prohm* is a sheer reminder that our subjectivity and “being” only arises from the intra-action of humans and non-humans. There is no doer before the deed instead, there were assemblages in its constant becomings before signifying ourselves as photographers and assigning meaning to the monument as *Ta Prohm*. So, the subject is only produced by the phenomena where existence means coexistence. From this performative experiment, photography was no longer a representation rather, it consists of “iterative (re)configuring of patterns of differentiating-entangling” (Barad, 2014, 168). The images generated are never the same and will never be the same as content and expression are always in constant motion; they intermingle (Deleuze and Guattari, 1987), always reterritorialising and deterritorialising.

### Entangled response-ability

In this sense, the imbricated assemblages composed of apparatuses, bodies, and objects co-constitute photographs.

**Figure 6.** Photographing *Ta Prohm*. A luminous entanglement



*Image.* Lorena R. Bañares

These photographs remind us of our entangled relation with other than humans and call for response-able actions in acknowledging the constitutive materialities of the ecology of which we are only a part (Fig. 6). It would be worthy to emphasize the lively relationalities of becoming-with the photographs, to “see photography as a process of collaborating and moving with the world, an in-between space, rather than a view from either the outside or inside” (Kind, 2013, 429). Being response-able involves responsibility or accountability to what is and what is not being expressed while being affected and affecting other bodies and matters. Being response-able is developing sensitivity to the details, those that are excluded from the frame, and the other life forms that constitute our practice, our being humans. As Ulmer (2021) rightly puts it: “Perhaps photography can help us perceive ourselves from the perspective of the earth, in which we are smaller parts of a

larger, interconnected whole” (242). Instead of focusing on ourselves as subjects of photography and discourse, we can look beyond what puts us within the frame that makes us humans “to help awaken, to breathe life into ever new possibilities of living justly” (Barad, 2007, x).

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