

# Embodiment, DIY and moving image production in Haptic/Visual Identities project

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## Abstract

*Haptic/Visual Identities* project is a combination of art practice with media theories research accompanied by development of a digital prototype. Understanding our project as artistic research we follow Hito Steyerl's proposal that such projects might claim autonomy and "resistance against dominant modes of knowledge production" [16].

The design of haptic cameras prototype reveals collaborative and relational character, it is not a solipsistic device like a smartphone camera. To film performers have to move their hands with cameras attached in coordination and learn to see/touch taking macro shots of surfaces (visible closeness is the haptic – Marks [2000]). The participants become a bio-machine, a hybrid, a cyborg, performing haptic filming.

How can we put more emphasis on sense of touch challenging domination of vision? What is the role of the body, "the original prosthesis" (Hayles [9]), in moving image production? What are the affordances of design in answering these questions?

## Author Keywords

Haptic; media art; DIY; embodiment touch.

## Introduction

We have been working collaboratively on the art/research project *Haptic/Visual Identities* for almost four years now. The project is a combination of art practice with research in media art and critical theory, accompanied by development of own tools (that is do-it-yourself, DIY, technology based prototype, we call "haptic cameras"). In our approach to art as research and research as art we follow Hito Steyerl's discussion of art research practice. We can also subscribe to a popularized in digital humanities and art understanding of making as thinking and thinking as making.



Figure 1. Haptic Cameras Design (Agata Mergler – Cristian Villavicencio)

The name of the project addresses the discussion of vision as a paradigm in art, knowledge production and culture, informed by theories of Laura Marks, Jonathan Crary, and philosophy of Gilles Deleuze and Felix Guattari. With new technology a new sensibility is introduced. Walter Benjamin believed that cinema provided tactility (combined with kinaesthesia) not present in art before and that it would change our connection to technology and our sensibility [2]. Technology as an extension of our bodies (Marshal McLuhan's claim, [12]), a second prosthesis we learn how to use after the body being our original [9] influences how we perceive things, our sensibility. The latest technologies have challenged vision as the dominating sensorial paradigm by use of multiple points of view, by the expanding of the visual or by integrating other senses. In this context our initial question of the project was: How to give more importance to the sense of touch, and challenge the dominant ways of representation centered on vision? How can we film effectively in a collaborative and performative way? And finally, can changes in the filming apparatus bring a kind of art, not focused on its representational

function, but rather one, which “operates as a fissure in representation” [14]? In context of digital art it is especially important to see whether the DIY digital device we use in artistic practice can become an affective medium and can afford a form of micropolitics (in a sense of Deleuze and Guattari, that is “is the opposite of macro-politics, and even of History, in which it is a question of knowing how to win or obtain a majority” [6]).

These leading issues and interests in our project create a situation of synchronically pursued different paths of production, dissemination and presentation of our work. *Haptic/Visual Identities* project was presented, in various venues and events, like conferences NECS in Europe (Potsdam and Amsterdam), FAMU in Prague, at York University in Toronto, UArtes in Guayaquil etc., at Jihlava International Documentary Film Festival 2016 and 2017, and exhibited galleries: Bilbaoarte in Spain, in group shows at Khora in Quito, at Naw in Cuenca and in Violenta in Guayaquil, Ecuador.

For this paper we are looking into haptic moving image and embodiment in moving image production to discuss some of the mentioned ideas.

### The DIY Apparatus

First, we would like to introduce our prototype. We have been developing Haptic Cameras, using open source hardware and software, a DIY approach to technology, that is, we use whatever is useful for the artwork often discarded or obsolete digital technology. The device captures real time footage recorded, while the users are performing actions (moving system of cameras attached to hands). It is composed of 4 cameras, 3D custom designed parts to use the cameras on the hands, a Raspberry Pi running on Linux, a portable battery, an LCD screen, and sometimes goggles. Two people can take part in the experience with the device by wearing 4 cameras on their hands and additionally a pair of goggles showing in real time random sequences of footage coming from the cameras. Very often we do not use goggles or a screen, and we film ‘blind’. The cameras are designed to “touch”, scan, the object while filming, since the lenses are customized to take macro shots of surfaces. Participants in this cyborg-like situation can relate to each other and environment visually and haptically.



Figure 2. Haptic Cameras: basic operation hardware. Raspberry Pi running open source software, 4 cameras, battery, cables and LCD screen

As we have been developing our project the device has been rebuilt or adjusted (recoded, or reset), it is an expression of the reciprocal relationship between praxis, research and apparatus used. All the elements of our work influence each other; the theory and research informs our practical decisions, and how we adjust the device, in turn, how the device works influences the research, the performing, and the exhibiting.

The development of this tool and the need to understand the role of the eye and the body in cognition prompted our interest in Crary’s *Techniques of the Observer*. The question: “How is (...) the observing body, becoming a component of new machines ... whether social, libidinal or technological?” [4], became a venturing point to look into a changing relationship between digital image making devices and human body. In the work of our prototype this connects to the way the body blends with the camera, when the eye is displaced to the hands and the prototype captures images in the logic of touch instead of vision.

In all of our tests, it has been proven that filming and editing has to do a lot with the kind of device we use and the way in which the device is programmed. Not only the body blends with the camera through displacement of eye in DIY set up hardware of the prototype but also a DIY code allows for more touch-like, that is: fragmentary, not totalizing, way of representing space. The code randomly changes the recording of footage from one to the other three cameras. Our focus on haptic visuality (a term coined by Laura Marks, [10]), brings to the process

these specific ways of filming and fragmentation of output. Editing follows even more the paradigm of touch, when on spot it creates randomized filmed material. In some of our works, the output is displayed live either on a screen or in goggles worn by recording performers. Randomization and fragmentation combined with the close proximity to the object, create a deterritorializing experience for the performers. Deleuze and Guattari define deterritorialization as a “movement by which one leaves the territory” [6] as “always multiple” [6].



Figure 3. Haptic Cameras used by two performers simultaneously.

### Haptics and gesturality

As we try to evoke touch, as Marks claims “the unrepresentable sense” [10], through moving image means, we expand the simply tactile sense of touch into more general haptics. The word haptics comes from *haptein*, literally meaning “to grasp”, “to fasten”. By haptics we mean “combination of tactile, kinaesthetic, and proprioceptive functions” [10].

*Haptic/Visual Identities* project comes from the need to question visual hegemony. It is the privileged visual, which removes all the contradictions from the surface of perception [13] and makes it a non-pluralist experience. The visual makes embodied experience of perception entirely hidden, whereas the haptic, as a ‘filmed experience’, allows for reestablishing body’s role in filming. We follow the Marks’s metaphor of haptic visuality as “visuality that functions like a touch” [10]. She connects haptic visuality mostly with intercultural and experimental cinema. But we believe that maybe it is possible to

expand this contact between the perceiver and the filmed object in a more performative act of filming. We understand haptic visuality as happening when one touches filmed objects with the ‘eye of the camera’ as if there was a direct contact between the perceiver and the object, and the distance was gone. Thus the materiality of the filmed objects would come to the fore. In a comparison to optical, connected to perception through distance, haptic visuality is focused on a surface and not on a form as it rather follows the texture [10]. In general, haptics evokes more intimacy and is connected to a graze or scan, while vision addresses control and is more a gaze [10].

Why attempt haptic visuality and propose own medium? We believe it has an affective and micropolitical potential. We are not the only ones with such an approach. Marks discusses filmmakers of intercultural cinema. O’Sullivan advocating affective turn in art (following Deleuze and Guattari) mentions thinkers like Lyotard, Bataille and Badiou as predecessors of this affective call [14]. Flusser discussed affectivity as connected to gesturality. Using a phenomenological approach he starts with a definition: “Gestures are movements of the body that express an intention.” [7] However, with intention a ‘trap’ of subjectivity arises, and the meaning of the gesture (which would be the effect of the gesture) as its cause. In digital, reproducible and algorithmic art, these problems connect to the presence of an artistic gesture in all of this kind of art. By “artistic gesture” we mean a combined effort of the artist and their tools to convey their art’s meaning. Therefore, in context of haptic visuality and affectivity of our project, a digital gesture discussion might be needed. With Flusser’s approach to gesture as “symbolic movement” and also as connected to making, one could see the affectivity and gesture as part of digital art making. “Affect releases states of mind from their original contexts and allows them to become formal (aesthetic)—to take the form of gestures. They become ‘artificial.’” [7]. A curator, Kristin Tretthewey discussing an exhibition titled *A Digital Gesture*, makes a point, that digital art projects which “align digital imagery and tools within the broader and somewhat distant world of art and its history, [they] make digital gestures towards a more complete and current notion of art.” [15] This approach might reconnect contemporary art with digital art.



Figure 4. Still image from the film “Portbou” recorded with Haptic Cameras.

Although we do not have such grand intentions, we would like to situate our work also in an art historical context, specifically of “do-it-yourself” artworks created by Brazilian artist Lygia Clark that consisted in a series of “relational objects” the purpose of which was to connect participants with each other to generate different performative situations. As Lygia Clarke wrote: “Here, it is not participation for participation’s sake... but that the participant gives a meaning to his gesture.” [3] The relevance of Lygia Clark for our project is as significant as is of Valie Export and Dan Graham. Haptic cameras afforded us similar experiments with transcending representational character of art objects and their prescribed in performative situations.

### Haptic or affective moving image

The haptic moving images are often quite abstract images of either close-ups or movement. The term “affection-image” derived from Deleuze’s *Cinema 1* book, can be used to describe images produced by our cameras. There are three types of images in Deleuze’s theory: the perception-image, the subjective perception framing of reality; the action-image, relating to the actions themselves; and the affection-image positioned between the other two. The affection-image is for narrative cinema “the way the subject experiences itself from the inside” [5]. The affection-images are in most cases close-ups, and these are of the face. Deleuze makes the face into an ultimate close-up of an affective value. There are always two sides of the facial spectrum: power and quality [5]. He writes: “Each time we discover these two poles in something - reflecting surface and intensive

micro-movements - we can say that this thing has been treated as a face: it has been ... ‘faceified’ [visagified], and in turn it stares at us” [5]. The close ups of objects, parts of face or body, are characterized by faceity. It happens through scale (a close-up) but also because of affectivity. These filmed objects are removed from any determinates of space-time, their power and quality is not yet expressed in action or a feeling but they are only expressed for themselves [5]. The affect is what transpires with some of our haptic images, as in stills from “Berlin” installation - parts of the body have the value of faceity, abstract and removed from any context.



Figure 5. Still images from the video installation “Berlin”, recorded with Haptic Cameras

Filming with our prototype is connected to the attempt at creating non-representationalist modes of art objects. These objects can be described as caught in the mode of an organized manifestation. It seems that on the level of production of moving images the haptic cameras afford to give an expression to affectivity. We are more interested in how the objects manifest themselves through the lens of our haptic cameras, then in achieving a certain representation of the objects we film. The haptic moving images are just one of the effects and not the ultimate aim of the process. As O’Sullivan claims “art is: a bundle of affects” [14] and thus our work becomes more organized around the prototype as an affective medium.

### Embodied filming and performance

The haptic moving images are effects of relationships with surroundings, and the other performer created in performative usage of haptic cameras. The images gain thus affectivity. The other elements, that is, montage, ed-

iting, cutting and most importantly framing (following the movement of touch) are manifestations of embodiment and materiality of filming as well.

Focusing on the process of filming with our prototype we understand that our camera is not a solipsistic device like tablet or smartphone camera, instead it is a “vision machine” striving for affectivity while mediating between two performers and between two performers and their environment. It is built in a way to disclose mediation of the digital camera. The contemporary digital devices blackbox the elements and processes of mediation, they become hidden from sight. Our device with its physical limits (length of the cables, close proximity to the objects, enough light) often records the moments of filming, disclosing the existence of cameras in the frame of the video, and breaking the fiction of non-mediation in filming.

Digital cameras theoretically and practically are very different from analog ones in many points, one being the materiality of the recording. Marks mentions a very important element in the context of how our tools are designed, that is editing. “Because it is a database manipulation, digital video erases the difference between editing, animation, and special effects.” [11] In our approach the first editing is happening on spot, while filming, the shots are cut randomly from one camera to the other. The randomness allows for retaining of the event of performance this kind of filming is. When one is in the middle of the event, one cannot perceive everything, the digital programming could give us an illusion of totality, but instead we try to allow for this loss. This might be a loss of a better shot or of a better light, or of the other side of the filmed object. But the decision to allow for these losses follows the logic of touch, and, reveals the “yearning to have perceptions that nobody has perceived before” [11].

A problem Marks describes as inherent to digital media in context of affectivity (she calls affectivity Firstness following C. S. Peirce’s descriptions of perception) is that digital media translate everything into 1 and 0, and render all that is perceived in a symbolic form (which is the Thirdness in Peirce’s description of perception). [11] We attempt with manipulation of the tools and digital programming to transcend digital restrictions, and to find a new Firstness that is not in a function “of the intrinsic relationship to the external world but of qualities immanent to the digital medium” [11]. Marks

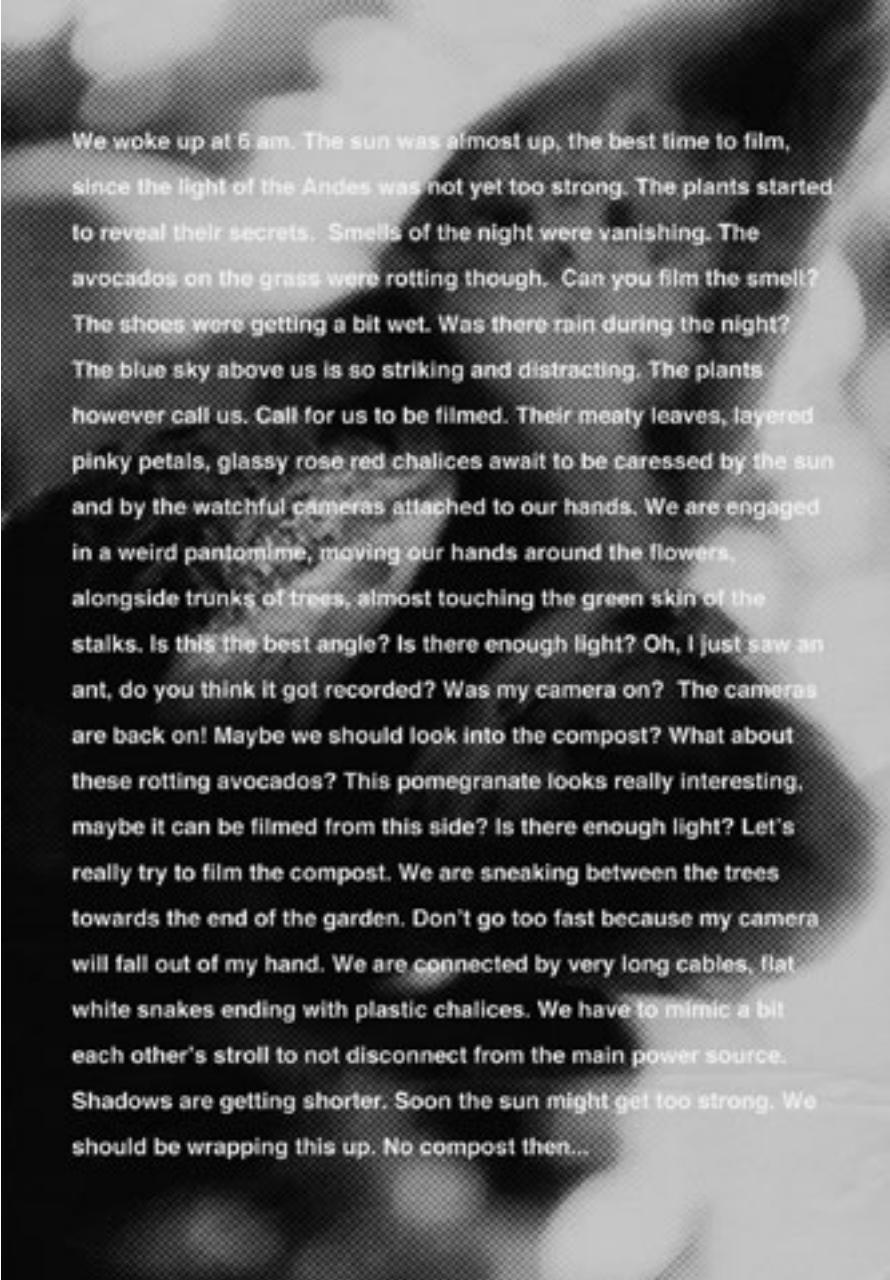
focuses on glitches and attempts at digital crosswiring of audio and visual inputs. Our tools are not that very stable, so we left the experienced glitches as part of the works. We understand this gesture as one of the ways the materiality of the digital can be revealed.

Our move to more affective image production is connected not only with embodied digital medium through glitches or encoded randomness, but already with hardware of the DIY designed and adjusted cameras. In an attempt to transcend representative cinematic tools towards presentation we are building our own “vision machine”. And this allows for a different approach to digital video and medium. In a way the haptic visuality is ‘confusing’ not just for the viewer, but also to the digital programs operating behind our cameras. This is visible in problems the cameras have with focus and light; and points to their materiality.



Figure 6. Two performers using Haptic Cameras.

Our prototype introduces yet another element of construction of moving image, that is collaborative filming. The visual cognition of surroundings and the other’s body has to be produced in coordination with the other participant, acting as either an object of the camera or second performer. The prototype has four cameras attached with 1-meter long cables to the recording system, so the performers have to film in synchrony and close proximity to each other. In practice we strive for the same pace of walk and the same general direction while performing filming. The videos of “Portbou” and “Garden Exercises” were produced this way. In case of our filming we are dependent not only on the object of



We woke up at 6 am. The sun was almost up, the best time to film, since the light of the Andes was not yet too strong. The plants started to reveal their secrets. Smells of the night were vanishing. The avocados on the grass were rotting though. Can you film the smell? The shoes were getting a bit wet. Was there rain during the night? The blue sky above us is so striking and distracting. The plants however call us. Call for us to be filmed. Their meaty leaves, layered pinky petals, glassy rose red chalices await to be caressed by the sun and by the watchful cameras attached to our hands. We are engaged in a weird pantomime, moving our hands around the flowers, alongside trunks of trees, almost touching the green skin of the stalks. Is this the best angle? Is there enough light? Oh, I just saw an ant, do you think it got recorded? Was my camera on? The cameras are back on! Maybe we should look into the compost? What about these rotting avocados? This pomegranate looks really interesting, maybe it can be filmed from this side? Is there enough light? Let's really try to film the compost. We are sneaking between the trees towards the end of the garden. Don't go too fast because my camera will fall out of my hand. We are connected by very long cables, flat white snakes ending with plastic chalices. We have to mimic a bit each other's stroll to not disconnect from the main power source. Shadows are getting shorter. Soon the sun might get too strong. We should be wrapping this up. No compost then...

Figure 7. "Garden Exercises" text that accompanied the film.

perception but also on cameras, on circumstances of the surroundings, and on the other performer. Marks says in *The Skin of the Film* “to be dependent upon an object affirms not only the materiality of one’s body but also the incompleteness of one’s self: it suggests that meaning inheres in the communication between self, objects, and others” [10]. In an attempt to preserve the performative character of our filming without simply recording this process visually, which would bring us back to the digital Thirdness, we decided recently to try a form of description of our activities out in a kind of a ‘phenomenological writing down’ of what was happening. O’Sullivan mentions that there are many ways of bringing the affective into art production [14]. It does not have to be by radical becoming “bodies without organs” as Deleuze and Guattari propose in their *Thousand Plateaus* [14]. The decision of writing down the experience of the event of filming was an experiment at a more affective approach to art. The text is simple and not edited. It has been used as a part of the “Garden Exercises” installation. And we see it as an integral and vital part of the work. Without this text and without a more performative way of presenting of this work the intercultural character of this piece could be lost in translation.

## Conclusions

“Indeed, you cannot read affects, you can only experience them.” [14]

The quote above is a perfect summary of the conundrum with which we struggle especially in context of writing and researching in our project.

We try to find new as little representational way of making art as possible. But then we are met with the problem of language, and research language especially, which is the domain of the earlier mentioned Thirdness.

Derrida writes: “between touching and the untouchable [...] there is the originary intrusion, the ageless intrusion of technics, which is to say of transplantation or prosthetics.” [in: 11] The untouchable of touching is the way of touch – the mediality, and therefore it is the technics or rather technology what “intrudes” that mediality [in 11]. The mediality is what we believe also comes to the fore in our work. The fragmentary character of our videos, whether they are videos of humans or environment, illustrates this well. The performative conscious inclusion of body into the filming process reveals body as

the initial medium of any cognition and communication. The medium must become the message, as Groys claims changing famous McLuhan’s claim [8], must be suspected to be researched and revealed as the hidden surface of any initial perception. It cannot be turned into a subject of research, rather, it has to be caught in its state of mediation, in its mediality. The gesture of touch, central in *Haptic/Visual Identities* project, as any gesture according to Agamben, is “the exhibition of mediality” [1] and in our work connects to affectivity and new way of perceiving and presenting mediality. As Merleau-Ponty describes the self-recognition of the body in its state of mediality, it proves that it is the touch that affords it: “The body catches itself from the outside engaged in a cognitive process; it tries to touch itself while being touched, and initiates ‘a kind of reflection which is sufficient to distinguish it from objects” [13]. We recognize that in a similar sense our work brings the body to the fore through haptic visuality, but simultaneously it reconnects with surroundings and other performer, cutting short the usual distance of vision, in a possible new sensibility.

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Universidad de Caldas, Universidad Nacional sede Bogotá, Universidad de Antioquia, Universidad Jorge Tadeo Lozano, Pontificia Universidad Javeriana, Universidad de los Andes, Universidad de Nariño, Corporación Universitaria Autónoma de Nariño, Universidad Pontificia Bolivariana, Universidad Instituto Tecnológico Metropolitano, Universidad de Ibagué, Universidad del Tolima, Universidad EAFIT, Universidad de Manizales, Universidad del Valle, Universidad Católica de Manizales, Universidad Católica de Pereira, Universidad de Investigación y Desarrollo UDI Bucaramanga, Universidad Autónoma de Bucaramanga, Universidad Manuela Beltrán, Uniminuto, Instituto Tecnológico Metropolitano, Institución Universitaria Pascual Bravo, Institución Universitaria Colegio Mayor del Cauca, Universidad del Área Andina, Universidad de la Salle, Centro de Pensamiento y Paz Buen Vivir, Instituto Departamental de Bellas Artes, Universidad Nacional sede Palmira, Fundación Universitaria los Libertadores, Centro de Estudios Artísticos Gimnasio Campestre.

**7 instituciones extranjeras participantes:** **Ecuador:** Universidad de las Artes, Universidad de Cuenca; **Canadá:** York University; **Estados Unidos:** University Illinois; **Francia:** College of Arts; **Argentina:** Universidad Nacional de Lanús; **México:** Centro de Investigaciones en Ciencias Cognitivas UAEM.

En total participan en el Foro **128 ponentes**, de los cuales 12 de ellos son internacionales.

El **Foro Académico Internacional** es también una oportunidad para el intercambio y la presentación a un público especializado, de los procesos investigativos que se llevan

a cabo en los programas de posgrado del Departamento de Diseño, de la Universidad de Caldas, como también de sus Grupos de Investigación. En el marco del Foro se lleva a cabo el **Coloquio Doctoral**, para este año, se presentan los avances de las tesis de 6 estudiantes del **Doctorado en Diseño y Creación**, de los cuales 3 son Exámenes de Candidatura. Además, los paneles presentan los trabajos desarrollados de cada una de las 4 líneas de investigación del Doctorado en conjunto con la **Maestría en Diseño y Creación Interactiva**. En el Foro también participan egresados y estudiantes de los diferentes programas de la Facultad de Artes y Humanidades, quienes dialogan con pares nacionales e internacionales y con el público en general, construyendo una red académica internacional que posibilita este intercambio anual.

El Comité Científico que cocada un de las mesas temáticas y conforman el jurado del concurso a mejor ponencia, es el siguiente:

Mesa 1. Gestión y Transmisión de Conocimientos

Dr. Óscar Eugenio Tamayo Alzate

Mesa 2. Interrelación Diseño, Arte, Ciencia y Tecnología

Dr. Adolfo León Grisales Vargas

Mesa 3. Diseño y Desarrollo de Productos Interactivos

Dr. Sergio Hernán Sierra Monsalve

Mesa 4. Sostenibilidad, Arte, Sociedad y Medio Ambiente

Dr. Adriana Gómez Alzate

**El Comité Evaluador**, conformado por **57 revisores académicos**, docentes, estudiantes de doctorado e investigadores quienes colaboraron en la selección de las ponencias para su participación y posterior premiación, realizaron un trabajo esencial para la cualificación de la presente publicación. La adaptación del modelo doble ciego de evaluación constituye en sí mismo una contribución a la calidad académica de los trabajos publicados. Este ha sido un gran esfuerzo no solamente del equipo organizador del Foro sino también del Comité Evaluador.

Gracias al Comité Científico y al Comité Evaluador y en especial a los **26 miembros de la RAD**, Red Académica de Diseño en Colombia, quienes con su vinculación y su participación con el Equipo Directivo en el Festival 2019, posibilitaron una amplia difusión y respaldo al evento. Gracias también a las cerca de **38 universidades e instituciones nacionales y extranjeras**, participantes a quienes felicitamos por la calidad de sus trabajos investigativos. Queremos agradecerles a todos e invitarlos de nuevo para que nos acompañen en el XIX Festival Internacional de la Imagen, cuya temática será el Diseño Participativo en asocio con la organización “Participatory Design Conference”. El Foro Académico Internacional 2020, será la oportunidad de consolidar esta red de conocimiento en el diseño y la creación, esperamos una amplia vinculación para un nuevo encuentro.

**Adriana Gómez Alzate**

Coordinadora Foro Académico Internacional  
Diseño y Creación

10 de Junio de 2019

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