The Monga Show: prototyping Amerindian Perspectivism through the girl-to-gorilla trick

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Abstract
The Monga Show is the tropical version of the girl-to-gorilla trick, a sideshow act in which a beautiful lady mutates into an agitated gorilla, through an illusion technique called Pepper’s Ghost. This paper is a personal account of the process of building a mini Pepper’s Ghost illusion device, a prototype that emulates the Monga Show. Building this device led me to speculate on the possibility of it functioning as a model that prefigures Amerindian Perspectivism (Viveiros de Castro, 2004). The paper includes diagrams showing how the device works, and a brief discussion of the differences between the Pepper’s Ghost scene and the Monga Show act.

Keywords: Prototypes; Practice-led research; Pepper’s Ghost; Amerindian Perspectivism.

1 Uma versão do artigo em Português está disponível em <http://monga.confabulando.org>. (A Portuguese version of this paper is available online).
Man ritually clothed as an animal is the counterpart to the animal super-naturally naked. The former, transformed into an animal, reveals to himself the “natural” distinctiveness of his body; the latter, free of its exterior form and revealing itself as human, shows the “supernatural” similarity of spirit. (VIVEIROS DE CASTRO, 2012:122).

What I am pressing for is a means for drawing things together—gods, non humans and mortals included. (LATOUR 2008:13).

**Introduction**

This paper is a personal account of the process of building a *mini Pepper’s Ghost illusion device* for the exhibition *Intention: Conversations, Experiences and Knowledge*, held by the School of Communication, Royal College of Art, London, from December 5 to 12, 2017. The show, which featured work-in-progress by research students (MRes, MPhil and PhD), took place only three months after I had joined the College as a PhD candidate. Thus, the piece I built for the exhibition is not related to what became the core of my doctoral research, and it consists today of a considerable digression from my current studies. Nonetheless, building the device led me to speculate on the possibility of it functioning as model that presents some aspects of Amerindian Perspectivism (VIVEIROS DE CASTRO, 2004). I will here narrate this process, hoping that, as a prototype, the device might *proliferate into affinal objects*, notwithstanding it has not *quite accomplished its own closure* (JIMÉNEZ, 2014:385).

It is not the aim of this account to discuss Amerindian Perspectivism in detail, or to discuss the idea of the prototype within the larger field of an anthropology of prefiguration. For such discussions I refer the reader to the works of Viveiros de Castro (2004, 2012) and Jiménez (2014, 2017) respectively. For the moment, I will just position myself in the heterogeneous field of practice-led research in art and design. In this type of research, artistic and communicational practices—creative processes, experimentations with materials, gestures, sounds, techniques and tools—are constituents of the research itself. Thus, this text is the writing of a design researcher who shares this premise. What I present here departs from the understanding that “making” is an integral part of researching, or, in this case, it is an integral part of understanding other perspectives.

**Apparition versus transformation.**

The *Monga Show* is the tropical version of the *girl-to-gorilla* trick, an amusement park sideshow act in which an illusion technique called *Pepper's Ghost* is used to transform, before the public, a woman into a gorilla. The transformation happens in a dark shed, while a voice narrates the events, initially in a mysterious tone: ‘*This beautiful lady is Monga, her past is unknown...*’ Until the complete transformation, when the enraged gorilla breaks out of the cage and attacks the audience: ‘*Calm down Monga! Please calm down!*’ Shouts the terrified narrator.
Pepper's Ghost is a technique invented in England in the second half of the nineteenth century. Perfected and patented by John Henry Pepper in 1862, Pepper's Ghost became part of the theatre machinery of the time, and was used to make a ghost appear onstage. What effectuates the apparition of the ghost is a flat and completely transparent surface, a glass panel, positioned at forty-five degrees between the stage and a trapdoor hidden from the public. In the trapdoor—completely dark—there is a person, a body. When spotlighted, the body has its image reflected to the stage, appearing to the public as a figure, more or less clear depending on the illumination: the more illumination the body in the trapdoor receives, the sharper the ghost becomes in the scene. (Figure 1).

![Image of Pepper's Ghost illusion](https://commons.wikimedia.org/wiki/File:Peppers_Ghost.jpg)

**Figure 1:** Gravure showing a Pepper’s Ghost illusion stage set up (1862).


However, despite appearing in greater or lesser sharpness to the public, the ghost retains its virtual quality. It is a figure devoid of body, floating without substance. While onstage objects and actors remain opaque, the ghost appears transparent, able to traverse (and be traversed) by furniture, bodies, swords, fire, and other “material” objects. In this way, a visible world (flesh and blood beings) opposes an occult world (spirits, souls, ghosts). In an opposition which is regulated by visibility: visible beings are totally visible; occult beings are partially visible.

Optical devices and occult phenomena have, in the nineteenth century, a close relationship. And in the case of ghosts, this relationship becomes particularly relevant because of a previous question about the appearance of ghosts. What form, what appearance, would a ghost have? *The mode of appearing becomes crucial with ghosts and spirits because they are generally understood, by both believers and sceptics, to be apparitions rather than ordinary material...*
objects. (Gunning, 2007:103—emphasis mine). And so it is, for example, in the photographs of spirits of that time: the translucent appearance of some figures in the photograph is taken as proof of its phantasmagorical quality. While figures of the “material world” appear opaque in the pictures, figures of the “spiritual world” appear transparent in the pictures (Fischler, 2005). Ghosts, therefore, have the appearance of people, but do not have their bodies. The ghost is an appariation without a body.

The device that effectuates the Monga Show is slightly different from the device that effectuates the Pepper’s Ghost. However, the illusion technique, based on illumination and glass panel, is the same in both. As in the Pepper’s Ghost act, the device used for the Monga Show consists of two rooms, or identical compartments, where one is facing the audience and the other is hidden. The compartments are separated by a transparent, flat, glass panel, positioned between them at forty-five degrees. The intensity of light in the compartments is adjusted so that the glass reflects what is in the hidden compartment over what is in the visible compartment and vice versa. In other words, in order to operate the transformation of a woman into a gorilla, the light of the woman’s compartment is dimmed down, while at the same time light is increased in the compartment where the gorilla is, which causes the reflection of one body to overlap the other body. (Figure 2).

Figure 2: The audience sees a gorilla when the light is on in the gorilla’s compartment (left); Audience sees the reflection of the woman’s body overlapping the gorilla when light is on in both compartments (right).

Unlike the Pepper’s Ghost scene, what takes place at the Monga Show is the transformation of a body. One body (woman) becomes another body (gorilla). The Pepper’s Ghost operates an apparition, while the Monga Show operates a transformation. This difference is not merely conceptual, it is a difference in the quantity of people operating each spectacle: whereas at the Monga spectacle two persons are present (the woman and the gorilla), in the Ghost spectacle only one person is present. At the Monga Show, the light is adjusted to reflect
the image of one body over another body: a second body is required. It receives, as a support, as a canvas, the reflected image of the first body. In the Pepper’s Ghost scene, the light is adjusted to reflect the image of a body in space: a second body is not required. At the Monga Show, the public is always faced with a body of flesh and blood, a person: first a woman, then a gorilla. While at the Pepper’s Ghosts, the public has before them a virtual figure, without body, immaterial. In one show, amusement resides in a dematerialised figure, able to traverse the furniture and float in space. In the other, amusement is found in a materialised figure, who howls, knocks things out, breaks the cage, and runs after the audience.

This difference seems to find parallel in the difference between European ethnocentrism and Amerindian ethnocentrism, as presented by Viveiros de Castro: *The ethnocentrism of the Europeans consisted in doubting whether other bodies have the same souls as they themselves; Amerindian ethnocentrism in doubting whether other souls had the same bodies.* (VIVEIROS DE CASTRO, 2012:115—emphasis mine). This difference became the bases of my question, or speculation: Is the Monga Show, with its operational differences from the Pepper’s Ghost act, and with its particular configurations and arrangements of bodies, a model of Amerindian Perspectivism?

**The girl-to-gorilla trick as a speculative device.**

I contemplated the possibility of using the girl-to-gorilla trick to understand the difference between European ethnocentrism and Amerindian ethnocentrism after reading Viveiros de Castro’s explanation of Amerindian ontology, according to which the different sorts of persons—humans and nonhumans—apprehend reality from distinct points of view:

Humans see humans as humans; they see animals as animals, plants as plants, [...]. On the other hand, animals (predators) and spirits see humans as animals (as game or prey) to the same extent that game animals see humans as spirits or as predator animals. By the same token, animals and spirits see themselves as humans: they perceive themselves as (or they become) anthropomorphic beings when they are in their own houses or villages; and, most important, they experience their own habits and characteristics in the form of culture. Animals see their food as human food (jaguars see blood as manioc beer, vultures see the maggots in rotting meat as grilled fish); they see their bodily attributes (fur, feathers, claws, beaks) as body decorations or cultural instruments; they see their social system as organised in the same way as human institutions are (with chiefs, shamans, ceremonies, exogamous moieties, and whatnot). (VIVEIROS DE CASTRO, 2004:466).

A few months after having read this passage, I was wrestling with methodological issues at the very beginning of my doctoral research at the Royal College of Art. Questions regarding my position in relation to my research object, and questions regarding the possibility of representing this research object were urgent. It occurred to me that the girl-to-gorilla trick could be used as a metaphor to speculate on these issues. Furthermore, if I could build a device that emulates the girl-to-gorilla trick, this device could, perhaps, be more than a “metaphor”, *a thing regarded as representative or symbolic of something else*, to use a dictionary definition (“metaphor”, 2010), but it could be speculation itself.

The word “speculation” is not used here by coincidence: *speculation means to form a theory or conjecture about a subject without firm evidence* (“speculation”, 2010), but speculation is
also the action or result of speculating. In its Latin version, speculat is to observe from a vantage point (Ibid.), and it has the same root as speculum, mirror. Isn’t it precisely by mirroring, or by speculation, that the girl-to-gorilla trick works? In addition, the show provides a point of view, a vantage point, to the audience, from which one observes the transformation of woman into gorilla; one observes the representation of these bodies (woman and gorilla); and observes speculation (as in mirroring) itself, that is, the procedure that operates the transformation. The bodies are speculated (mirrored) and seen by way of speculation. In Deleuzian terms, the girl-to-gorilla trick has speculation as an affect (1988). It is a device, a specific configuration of bodies and properties, with the capacity to speculate and be speculated. It seemed to me that prototyping the girl-to-gorilla trick would be an interesting exercise in making, in the form of an object, my questions about transformation, representation, apparition, and, perhaps, about Amerindian Perspectivism.

A “glottis-to-glottal-stop” trick, for the work-in-progress show

For the work-in-progress exhibition Intentions: Conversations, Experiences and Knowledge, I built a small object (10x20x20cm) that emulates the Monga Show. I called it a mini Pepper’s Ghost illusion device. However, instead of transforming a woman into a gorilla, the device transforms a glottis (a scientific illustration of a glottis) into my research object, the glottal stop (or rather, one of the forms the glottal stop takes in typography: the apostrophe [']). Thus, instead of the “girl-to-gorilla” trick the device produced a “glottis-to-glottal-stop” trick.

The first step for building the device, was sketching a layout as to cut it and fold it out of paper or cardboard (Figure 3). The design is malleable enough for building devices of various sizes and materials. However, dark colours are recommended in order to make the Pepper’s Ghost illusion effect more efficient. I laser-cut it from a 3mm, black, A1 cardboard. The resulting piece is miniature version of the Monga Show plan. It has two compartments (of 10cm³ each) and these compartments are separated by a flat and completely transparent acrylic panel, positioned at a forty-five degrees angle between them. Each compartment has an entrance for a led lamp on the compartment’s upper facet (the compartment’s ceiling). The lamps are attached to a dimmer switch circuit, powered by a 9V battery. At the exhibition, the piece was installed at eye-height level, and the audience could adjust the intensity of the light in each compartment in order to operate the transformation from “glottis” to “glottal-stop”.

The exhibition took place in 2017, from December 5 to 12, only three months after I had enrolled the PhD program. At that very early stage of the research, my questions in regards to the glottal stop were quite general: Can I see the glottal stop? Can I represent the glottal stop? What is my position, as researcher, in relation to my research object? Can I exchange perspectives with my research object? What is an “object”? What are the forms of the glottal stop and how can they be transformed? The exhibition seemed like a good opportunity to prompt conversations around these questions with fellow PhD candidates, as well as a good opportunity to share these questions with a wider public. Furthermore, while making an object whose primary function is transformation—and that relies on representation, speculation (as in reflecting, mirroring), and perspective to enable transformation—, I was thinking about these questions myself.
Neither the conversations, nor the making, aimed to answer the general questions I was concerned with, but rather to pose them in the form of a device, which in turn could direct further development of the device, which in turn would aid new speculations, recursively, in an open-ended process, which would allow for new meanings and questions to emerge. It became clear, then, that the device was not a finished object, but a prototype: a thing-that-is-not-quite-an-object-yet, a modelling device (JIMÉNEZ, 2014). Furthermore, the device could be used not only to transform a girl into a gorilla, or a glottis into a glottal stop, but it could be used to transform whatever two things, images, bodies, into each other, back and forth. For all these reasons, and as noted before, I found the device particularly useful to generate speculations on transformation, representation, and perspective.

Figure 3: Layout to be cut and folded from cardboard.

Modelling Amerindian Perspectivism through the girl-to-gorilla trick

After the exhibition, I kept modelling questions and ideas through the mini Pepper’s Ghost illusion device. One of these ideas was Amerindian Perspectivism. Amerindian Perspectivism is an indigenous theory according to which different sorts of persons—humans and nonhumans—apprehend reality from distinct points of view. It is not, however, a form of relativism. In addressing this point, Viveiros de Castro (2004) poses the question, “does the Amerindian perspectivist theory posit a multiplicity of representations of the same world?” (2004:471). He goes on to explain that there is sufficient ethnographic evidence to see that the opposite is the case. In Amerindian cosmologies “all beings perceive ("represent") the world in the same way. What varies is the world that they see” (2004:472).
One of the implications of this ontology, is that what we see, in our world, as “nature” is seen by other species, in their worlds, as “culture” (VIVEIROS DE CASTRO, 2012:112). For example, what we see as “blood” (nature) is seen by jaguars as “beer” (culture); Likewise, what we see as “beer” is seen by jaguars as “blood”. By the same token, in the Monga Show what we (a human audience) see as a woman, would be seen by an audience of gorillas as a gorilla; and what we see as a gorilla, would be seen by gorillas as a woman.

Noteworthy is that the perspectival difference has its origin in the body, and not in the position of the body: “animals see in the same way as we do different things because their bodies differ from ours” (2012:113). Where “body” is not a physiological unity, but “an assemblage of affects or ways of being that constitute a habitus.” (Ibid). That is to say, jaguars see as “beer” what humans see as “blood” not because of a physiological difference between the human body and the jaguar body, but rather because of affects, “in the old sense of dispositions or capacities which render the body of every species unique: what it eats, how it moves, how it communicates, where it lives, whether it is gregarious or solitary.” (Ibid). What differs is the world.

In trying to make sense of these ideas, I went back to the sketches made for building the mini Pepper’s Ghost illusion device, and tried to present Amerindian Perspectivism diagrammatically:

**SCENE 1: The human’s world** (Figure 4):

- If the viewer is a human (H), facing another human (H), in a human’s world, then the human sees the other human as a human.

- If the viewer is a human (H), facing an animal (A), in a human’s world, then the human sees the animal as an animal.

Note that in both cases, the light is always turned on in the same compartment. This particular configuration is what I will call the world—a specific assemblage of affects. In this world, bodies and things are assembled in a particular manner (the flat transparent surface is at this particular position, the light is turned on in this particular compartment, the two compartments have the exact same size). Thus, these bodies and things affect each other in a particular manner, creating this world. In this world, humans see humans as humans and they see animals as animals, because things where drawn together this way. In an animal’s world, animals see the same things differently because things are drawn together differently.
Figure 4: The human’s world.

Figure 5: The animal’s world.
SCENE 2: The animal’s world (Figure 5):

- If the viewer is an animal (A), facing another animal (A), in an animal’s world, then the animal sees the other animal as a human.
- If the viewer is an animal (A), facing a human (H), in an animal’s world, then the animal sees the human as an animal.

Note that this world has its particular assemblage, different from how the human’s world was assembled. In this world, the light is turned on in a particular compartment, not the same compartment that was lit up in the human’s world. Thus, in this world animals see animals as humans, and animals see humans as animals.

SCENE 3: The shaman:

Apart from all sorts of persons—humans and nonhumans, including things, spirits, humans, and animals—in Amerindian cosmologies there are also the shamans. Shamans are trans-specific species capable of exchanging perspectives, or assuming the point of view of other beings:

They [the shamans] can alternate their points of view by manipulating their sense of sight. When he wishes to change his vision, a shaman rubs his eyes for a few seconds: if he was seeing humans as animals—this being the point of view of his animal body—then he starts seeing them as humans; if he was seeing some particular animal as a person, then he will start seeing it as an animal and will then feel free to kill and eat it. (VILAÇA, 1998:25—emphasis mine)

However, to “assume the point of view of other beings” is not merely to assume a different position within the same world. Shamans are able to actually see in the way other species see in their worlds. Shamans are commutators of perspectives (VIVEIROS DE CASTRO, 2012:150) because they are able to cross ontological boundaries deliberately and adopt the perspective of nonhuman subjectivities (VIVEIROS DE CASTRO, 2004:468).

Using the mini Pepper’s Ghost illusion device to understand Amerindian Perspectivism, I thought the shaman would be the people able to operate the transformation: by adjusting the light in each of the device’s compartment—as if “rubbing the eyes for a few seconds”—the shamans cross from one way of seeing, to another way of seeing:

- Shamans see humans (H) as humans (H) or animals (A) as humans (H) depending on how they manipulate their sense of sight.

Concluding remarks: prototyping modes of vision.

Prototyping the girl-to-gorilla trick in the form of a small device—a mini Pepper’s Ghost illusion device—generated a myriad of speculations about representation, transformation, and the role of perspective in these processes. These speculations first came about in the form of general questions regarding my position in relation to my research object: can I see my research object? Can I represent my research object? From where can I see it? Can I exchange perspectives with it? What forms does it take and can these forms be transformed into each
other? Making the device for the *Intention: Conversations, Experiences and Knowledge* exhibition was a way for me to pose these broad questions in the form of an object: an object that had “transformation” as its primary function, and that relied on “speculation” (as in mirroring) to operate transformations. In a way, the prototype materialised my speculations, much in consonance with the idea that prototypes are epistemic object and critical tools (Jiménez, 2014:383).

In a second moment, I abandoned this project entirely, as it was not directly related to my doctoral research. Nonetheless, a few months later, whilst trying to make sense of Amerindian Perspectivism, I revisited the mini Pepper’s Ghost illusion device: the layouts designed prior to building the device proved particularly useful to presenting Amerindian Perspectivism diagrammatically.

In narrating this process, I hope to have conveyed,

1) One personal process of thinking through prototyping (or how broad questions, general thoughts, and speculations can be prototyped);

2) One personal account of prototyping a theory, in this case, prototyping Amerindian Perspectivism.

Although these two points are not separate, I would like to emphasise the latter, because it shows the potential of this particular prototype as a device for understanding modes of vision in Amerindian cosmologies. As we become increasingly subjected to controlled visibility regimes—in a world where the boundaries between visibility and surveillance are blurred—, inventing “vision prostheses”, designing “visibility gadgets”, prototyping “machines for seeing”, are potent ways of regaining agency of our capacity to see other worlds, or, in the case of the prototype presented here, a potent way of seeing in the way things are seen in other worlds.

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**References**


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