## Tectonic Movements at the Advent of the Digital Age

I was in New York in the eighties, when the tectonic(1) movements of the North American plate were felt all the way down to the East Coast. Suddenly everything moved, unless you were sitting absolutely still, in which case the only thing set in motion was the water in your body.

## south east west north

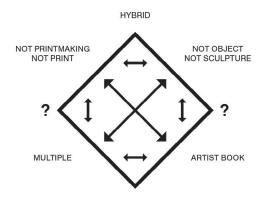
The aim and intended locus of impact of this text is Monica Giron's research into the field of printmaking and, more precisely, into the field of the 3D prototyping print process.

3D printing is a process of making solid three-dimensional objects from a digital file, i.e. a virtual design. The file can be created directly in the computer using a 3D modeling program or be created through 3D scanning of an analogue object. The actual digital object is created by a 3D printer using additive processes. This means that the print is created by laying down continuous layers of materials, until the object is produced. In spring of 2014, we were planning Monica's visit to the Oslo National Academy of the Arts in Oslo, Norway, She would participate in a two-month artist-in-residence at the Academy's Printmaking and Drawing department. Prior to her arrival, we had several conversations about the possible approach to the project. Monica was then working on a piece entitled Wonderful World; she had in mind a project that could be understood as art piece or as rendition of the shape of the continents and of our perception of them.

Mónica had already made a number of prints, specifically the Bonding pieces (2011-2015): drawings created in Buenos Aires, digitally printed at Trykkeriet, Bergen, and then intervened with paper cutouts and volumes. Or the Congress piece (2012), an overlay of lithography on digital print created as an experimental exercise at Kunstfag-Khio in conjunction with the Printmaking and Drawing department there. For the twomonth long artist-in-residency at the Academy in Oslo in 2014, we considered working with a 3D print. This new work would also be produced in the zone I define as (2)(3)"Printmaking in the Expanded Field."

In today's visual culture, the presence of printed materials is so commonplace that it goes more or less unnoticed. It is not the result of a craft but a form of dissemination. The result of what we call "printing" is that which comes from the act of printmaking but does not involve dissemination.

Printmaking in the expanded field, a possible suggestion (4)



Columbus wrote the following in his diary to the Queen of Spain; "To send me, Christopher Columbus, to the above-mentioned countries of India; and furthermore directed that I should not proceed by land to the East, as is customary, but by a Westerly route, in which direction we have hitherto no certain evidence that anyone has gone." (5)

It is interesting to think back to the 15<sup>th</sup> century when the world was thought to be flat, which meant you were doomed if you sailed over the edge of the then-known or envisioned world.

The radical changes in the field of printmaking in the last twenty years have totally altered our approach to the media. Printmaking is now an art form that encompasses sculpture, performance, clothing, installation, commercial arts, cyberspace, 3D prototyping, artist's books, multiples, ready-mades, newspapers, etc.

It is widely known that many artists make prints at some point in their career and that often some of their best work is produced during that printmaking phase.

Printmaking today deals with everything from tradition to the digital hi-tech. As with much contemporary art, what the medium encompasses is so vast that once precise dividing lines, even within printmaking itself, are no longer operative.

Blurring the lines between different techniques creates seemingly unlimited possibilities. The parameters of the medium are constantly expanding, which leads to a cross pollination that perfectly reflects art today.

New technologies and innovative approaches to the medium on the part of artists from all fields and cultural backgrounds have given it a relevant and radical meaning. Thanks to other consequences of the medium's recent technical and conceptual developments, printmaking is once again an important, and indisputably contemporary, medium. The discussion around originality and authenticity, the fake and the copy, simulacra and so forth must be balanced out to allow for traditional processes as well as the introduction of the new.

The way Giron moves with and within, to and from, the tectonic plates and whatever information we might have about them (flat or rounded, the spheres themselves) challenges how we think about printmaking and printed worlds whether digital or hands on. At the same time, it provides little guidance on how to proceed, on which path is best.

Giron used first a sphere, then a clay model of the mass of the continents on the basis of the spherical model. The clay continents were scanned to generate a digital mesh. She is now working on the digital mesh as if it were a sculpture in order to restore and reconfigure data lost during the digital scanning procedure. The digitally scanned conversion of the analogue 3D clay piece entailed a sort of plastification or softening of the digital shape. In the scanning, some of the visual and 3D data in the handmade clay shape was lost, mainly sharp angles or edges, crevices, pointed tips, valleys, gorges, ledges—all of which are fundamental to chiaroscuro. The resulting mesh evokes the clay piece but has to be reconfigured in the digital field in order to restore its character.

Giron returns to the resulting information time and again, adding or creating discernible—more or less expressive—layers of digital information in order to recover what has been lost. This operation in mathematical computer technology is apparently akin to territorializing those same digital continents or tectonic plates. Giron seems to be claiming them one by one, as they appear on the screen.

Columbus wrote: "The land was first seen by a sailor called Rodrigo de Triana, although the Admiral at ten o'clock that evening standing on the quarter-deck saw a light, but so small a body that he could not affirm it to be land."(6)

How are the "territorializing aspects" of working with 3D prototyping media relevant to developing a new land in the digital world? A land that will then be transformed into a physical object to be handled with your hands and then to be re-thought as an outdoor sculptural piece on monumental scale, a shape that rests on land or in the water (the sea). How does the study of Giron's choreographic movements and of the change they effect allow us to read these pieces? Is Giron territorializing these printed objects? Or is she territorializing her own body and its surroundings in a way that makes them appear to be something else? Her research into the world of 3D prototyping by deconstructing and reconstructing her Continents pieces or the tectonic plates on different levels makes them seem to take on new meanings. How is she using the coding system relevant to this process? The 3D prototyping program appears to be constantly coding and decoding, and hence the question of transcoding arises.(7) On a visual level, the pieces seem to connect land to land or continent to continent but only when the movements of the disassembled object stops. The question, then, is what does the movement look or feel like?

As an artist, it is difficult to conceive an artwork in the digital sphere. But, for the viewer, it is just as difficult to understand analogue-digital procedures or combinations thereof. Art today is characterized by making use of and combining knowledge from several different fields. Works of art cross traditional boundaries and produce new and different effects. Knowledge previously reserved for specialists in one particular discipline is now accessible to artists working in all disciplines. In artistic research, this paves the way for new artistic idioms based on a large range of skills in the field of printmaking.

Columbus wrote: "At two o'clock in the morning the land was discovered, at two leagues' distance."(8)

The act of pressing "Ctrl - P" or "Cmd - P" is performed millions of times every day.

Standing before a group of students in the Printmaking Department of the New York University in the mid-eighties, Professor Krishna Reddy said, "You are the plate," "You have become the plate." He is talking about our physical awareness of a printing plate: a surface intervened by crevices and depressions that, both in their presence and their removal (i.e, the ink in the crevices being transferred to the carrier, which is the paper), points to a 3-dimensional object on a 2-dimensional plane.

Giron seems to be making the Continents pieces or the tectonic plates over and over again, first in watercolour, then in clay, then 3D printed in plaster, then 3D printed in bronze, then in digital format, then floating on an LCD screen... then again in plaster, and as a pencil line, and then digital again, and— hopefully on a large scale as an installation in a public space. Giron is repeating, yes, but also adding a *différance(9)* within or by means of each repetition. Might we see this movement, or action, as the building of a performative body, a new becoming of the tectonic plates or of the Continents pieces themselves?

To immerse oneself totally in the piece (artwork) requires total presence and integrity.

Jan Pettersson Oslo, January 2016

## Notes

(1) The word "tectonic" refers to the structure of the earth's crust and the large-scale processes which take place within it.

(2) Printmaking in the expanded field occurs as soon as we begin to question tradition and art history, as well as the set criteria established by Modernism.

(3) Youtube links for the seminar "Printmaking in the Expanded Field," September 14-18, 2015 at the Oslo National Academy of the Arts
Day 1: <u>https://www.youtube.com/watch?v=VxWmtla-yK8</u>
Day 2: <u>https://www.youtube.com/watch?v=XFoa6ewsB34</u>
Day 3: <u>https://www.youtube.com/watch?v=G0hAWmGS7hA</u>
Day 4: <u>https://www.youtube.com/watch?v=-Cv7MPwG67s</u>

(4) *Printmaking in the Expanded Field a Pocket Book for the Future* with introduction by Jan Pettersson.

(5) Original source: Christopher Columbus, "Journal of the First Voyage of Columbus," in Julius E. Olson and Edward Gaylord Bourne, eds., *The Northmen, Columbus and Cabot, 985-1503, Original Narratives of Early American History.* New York: Charles Scribner's Sons, 1906.

(6) Original Source: Christopher Columbus, "Journal of the First Voyage of Columbus," in Julius E. Olson and Edward Gaylord Bourne, eds., *The Northmen, Columbus and Cabot, 985-1503, Original Narratives of Early American History.* New York: Charles Scribner's Sons, 1906.

(7) In *Of the Refrain*, chapter 11 of *A Thousand Plateaus*, Deleuze and Guattari write: "One case of transcoding is particularly important: when a code is not content to take or receive components that are coded differently, and instead takes or receives fragments of a different code as such."

(8) Original Source: Christopher Columbus, "Journal of the First Voyage of Columbus," in Julius E. Olson and Edward Gaylord Bourne, eds., *The Northmen, Columbus and Cabot, 985-1503, Original Narratives of Early American History.* New York: Charles Scribner's Sons, 1906.

(9) Jacques Derrida, L'écriture et la différance, 1967. Ed.du Seuil