E = ENERGY OF MEMORIES



MOUHAMADOU B.N. CISSE

INTRODUCTION

The different forms of energies in the Atacama are constantly interacting with each other. Alternate forms of energies, such as memories of hope, trauma, fear, joy, rituals play a defining role in the behavior of living and non-living things. These memories help us understand the context and reactionary meaning of all elements in the Atacama.

The concept of memory as an energy can be explained through the laws of thermodynamics (Rudolf Clausius and William Rankine) and the concept of entropy expanded by Rosalind Krauss. The Law of Conservation of Energy, states that energy cannot be created or destroyed in an isolated system. Similarly, memories are created through the reactions to other memories. The second law of thermodynamics states that the entropy of any isolated system always increases. According to Rosalind Krauss, changes are irreversible, even attempting to subvert to its original state will cause further changes.

These memories are affecting living and nonliving things and directly or indirectly affects their behavior and sometimes even becomes a catalyst to decisions. Through a series of illustrations, this project will speculate on the ability to use digital art as a tool for system literacy of the economic, social, political and ritualistic energy systems in the lithium triangle. By illustrating the memories, I seek to allow the viewer's perceptions of the art to be shaped by his experience, also allow the art to shape perception and convey experiences and memories to the viewer.

CONTENT

l.	The Human Memory	OI
	3.1 Memory of Synergy	11
	3.2 Memory of Overexploitation	13
	3.3 Memory of Trauma	21
	3.4 Memory of Encroachment	29
	3.5 Memory of Ecocide	35
2.	Nature's Memory	
	4.1 Memory of Color Chemistry	41

Synergy [sin-er-jee]

definition:

The interaction or cooperation of two or more organizations, substances, or other agents to produce a combined effect greater than the sum of their separate effects.

source:thesaurus

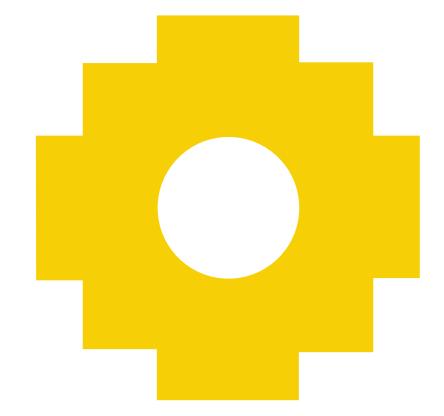
1

MEMORY OF SYNERGY

The culture, rituals, and landscapes exhibit a set of relations unifying all living and non-living things in the Puna de Atacama.

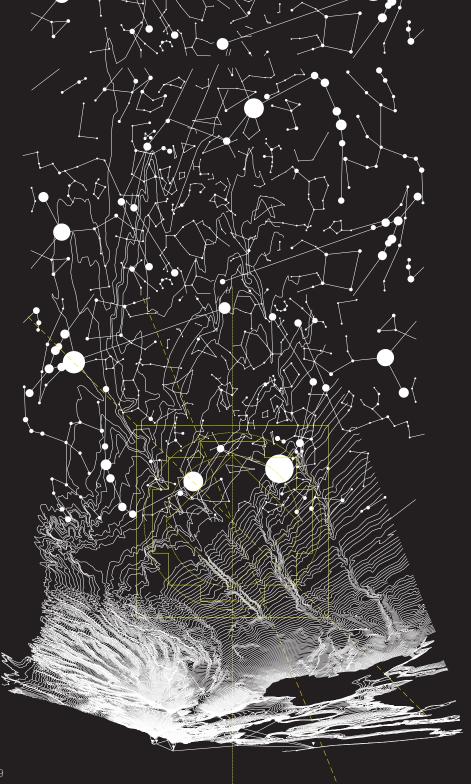


Seasonal canal cleaning in camar Source: ny times



The Chakana

The Chakana or Incan cross is considered to have holy, cosmological and geometric values. this stepped cross was used as a measuring tool, a calendar and a navigation tool which was used throughout the Incan empire.



WINTER, SUMMER

DAY, CULTIVATION



EAST, WEST

SOUTH, NORTH

-MINING, ECOSYSTEM-

MEMORY OF SYNERGY

overexploitation [ek-sploi-tey-shuhn]

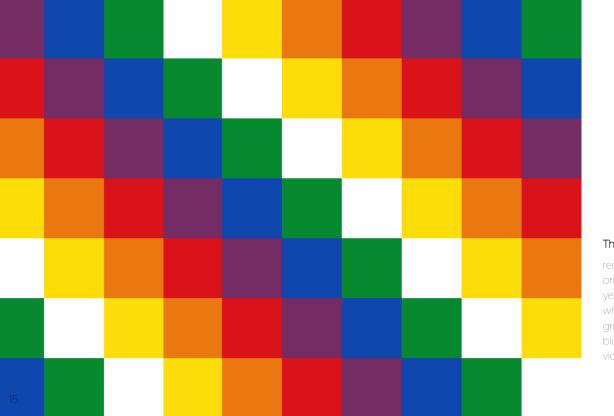
definition:

The action or fact of making excessive use of a resource.

source:thesauru



The natural metabolism of the ecosystem is disrupted by economic goals. The ecosystem is going through tachycardia (fast heart rate) in order to meet the demands.



The Whiphala

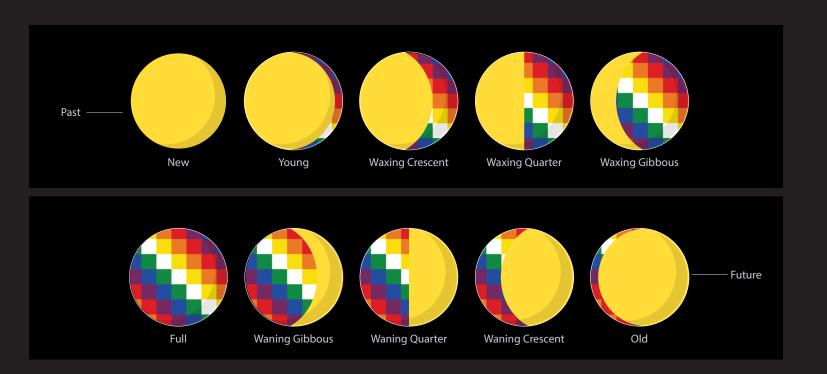
red: earth and Pachamama orange: society and culture yellow: energy

white: Time

green: natural resources

blue: heaver

violet: Andean government and self-determination



we fight for our cultural light to shine brighter. mining will try to silence us. but then, we will shine again, but the mining will silence us, then we will shine again, and then the mining will silence us, then we shined again, later mining silenced us, we shined again,

> Lithium will try to silence us, like the moon, we may never cease to shine

lithium	nitrogen	sodium	chlorine	iron	copper	silver	gold
3	7	11	17	26	29	47	79
Li	Ν	Na	Cl	Fe	Cu	Ag	Au
6.941	14.007	22.990	35.453	55.845	63.546	107.87	196.97



YOU EXTRACTED FOR PEACE OF MIND BUT TURNED OUT TO BE OUR PIECE OF MIND.

trauma [trou-muh, traw-]

definition

emotional shock following a stressful event or a physical injury, which may lead to long-term neurosis.

source:thesauru

MEMORY OF TRAUMA

The memories of the past traumas influence the Atacama today. This fears grew through the accumulation of memories following colonization, genocides, segregation and coups d'etats...

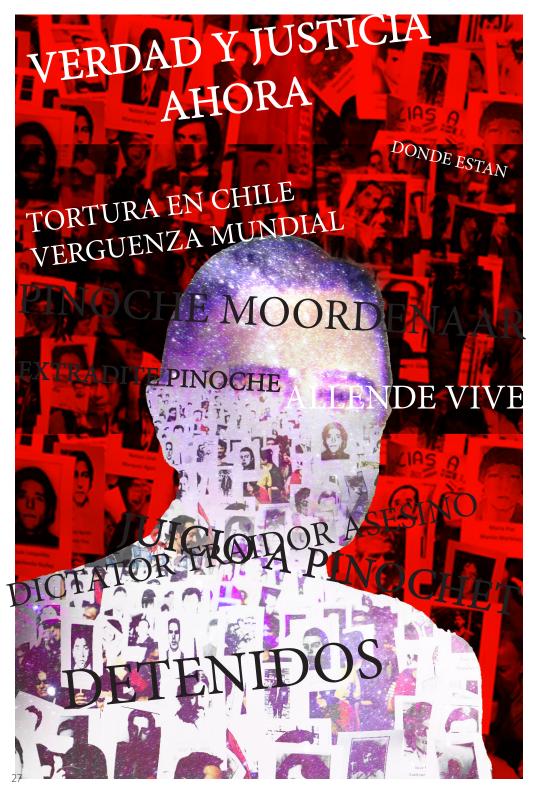
The memories cannot be undone. Your reactions to them will cause further entropy...



The military regime established by the US backed coup in 1973. The official death toll of Pinochet's terror is about 3200. Many more were jailed and tortured source: greenleft



General Augusto Pinochet source: el pais





encroachment [en-krohch-muh nt]

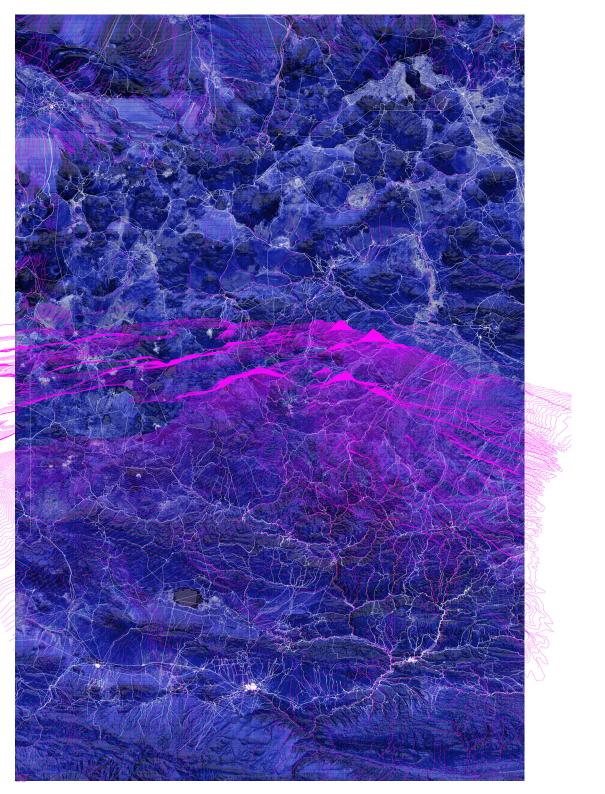
definition:

Intrusion on a person's territory, rights,

source:thesaurus

MEMORY OF ENCROACHMENT

The Atacamenos have been victims to various forms of encroachments, such as the Andean empire, the scale: the lithium concessions, infrastructure.



Manmade infrastructures are dividing mountains (the Atacamenos ancestors) into fragments.

ecocide [ek-uh-sahyd, ee-kuh-]

noun

the destruction of large areas of the natural environment by such activity as nuclear warfare, overexploitation of resources, or dumping of harmful chemicals.

source:thesauru

MEMORY OF ECOCIDE

The Longest ongoing war in history is the constant battle between the economic and ritualistic value of the land.

Do you hear me?
I am dying a slow and silent death.
I am suffering from substantial
laceration and wounds...
They will push me past my limit.

HELP...
-Mountain



This piece illustrates the clash between the economic and ritualistic value of the land.

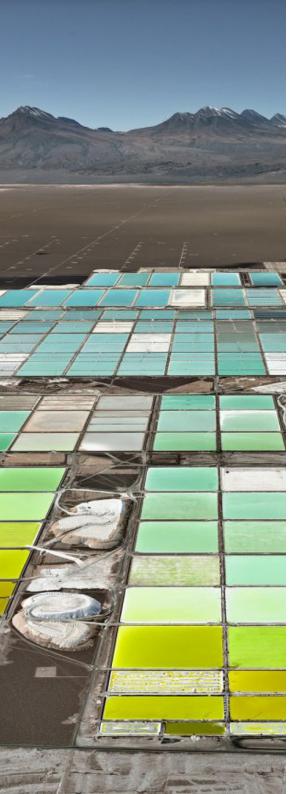
The indigenous population views the mountains as their ancestors while mining companies see a source of financial benefit.

NATURE'S MEMORY

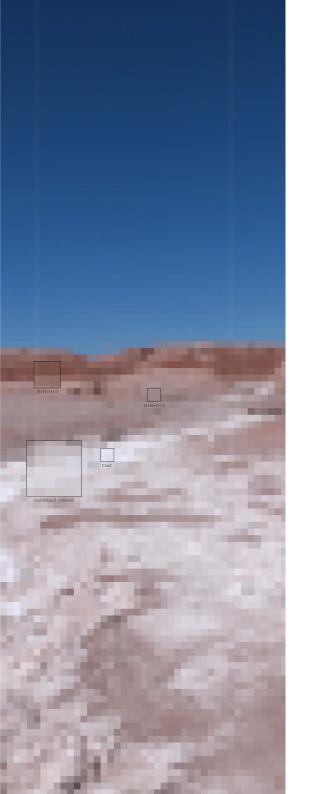
The trials and tribulations of the anthropocenes are also felt by nature. She responds, she speaks and she remembers.

This is a display of nature's memory and responses through colors

MEMORIES OF COLOR CHEMISTRY



DAY 540	
	LITHIUM SULFATE
	CHLORIDE, , MAGNESIUM, POTASSIUM, CALCIUM
	CHLORIDE, , MAGNESIUM, POTASSIUM, CALCIUM
	CHLORIDE, , MAGNESIUM, POTASSIUM
	CHLORIDE, MAGNESIUM
DAV I	CHLORIDE



Latitude: -22.932898 | Longitude: -68.417726 San Pedro de Atacama, Provincia de El Loa, Chile







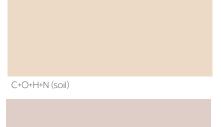


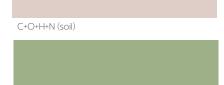


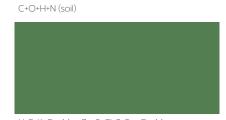
Solubility Equilibrium
Pb(NO3)2 + Na2SO4 PbSO4 + 2 NaNO3

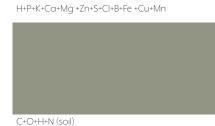


Latitude: -23.060578 | Longitude: -68.142382 San Pedro de Atacama, Provincia de El Loa, Chile







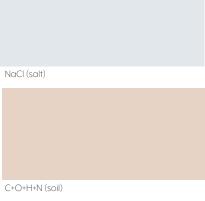




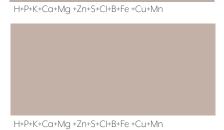
Eutrophication 106CO2+16NO-3+HPO2-4+112H2O+18H++energy+trace element (CH2O)106(NH3)16(H3PO4)+138O2



Latitude: -23.135422 | Longitude: -68.097921 San Pedro de Atacama, Provincia de El Loa, Chile









H+P+K+Ca+Mg +Zn+S+Cl+B+Fe +Cu+Mn



C+O+H+N (soil)

Aerobic Decomposition C02 2/3 N 1/3 CARBON, C 12.0107 > : NITROGEN, N 14.007