



Habitability of

Extreme Worlds

Exit Strategy

Extreme Habitability

of Worlds

a varying inescapable
human-environment relation

51st ESLAB Symposium: Extreme Habitable Worlds, December 4-8th 2017 European Space Agency ESA/ESTEC, Noordwijk, The Netherlands
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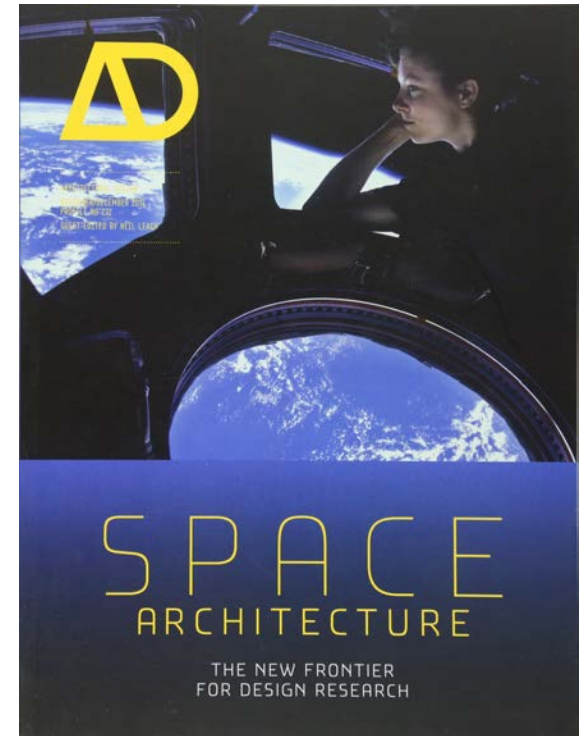
Why should architecture go to the Moon?

What is architecture bringing there? What is architecture bringing back?

Does architecture differentiate the « Habitability of Extreme Worlds »

& the « Extreme Habitability of Worlds »?

-> 3 moments in *Space Architecture*



Architectural Design, 3 special issues

- Editor John McHale (the Independent Group), 1967 - a utopic critique of earth architecture
- Editor Rachel Armstrong, 2000 – outer space limitless potential, opening to private initiatives
- Editor Neil Leach, 2014 - a feasible project, functional, rational, reliable

-> *Technology as environment, in a perspective of habitability*

In the **Correalist Manifesto** (1939), Architect Friedrich Kiesler establishes the interlinked parallel co-emergence of the human environment, the technological environment and the natural environment.

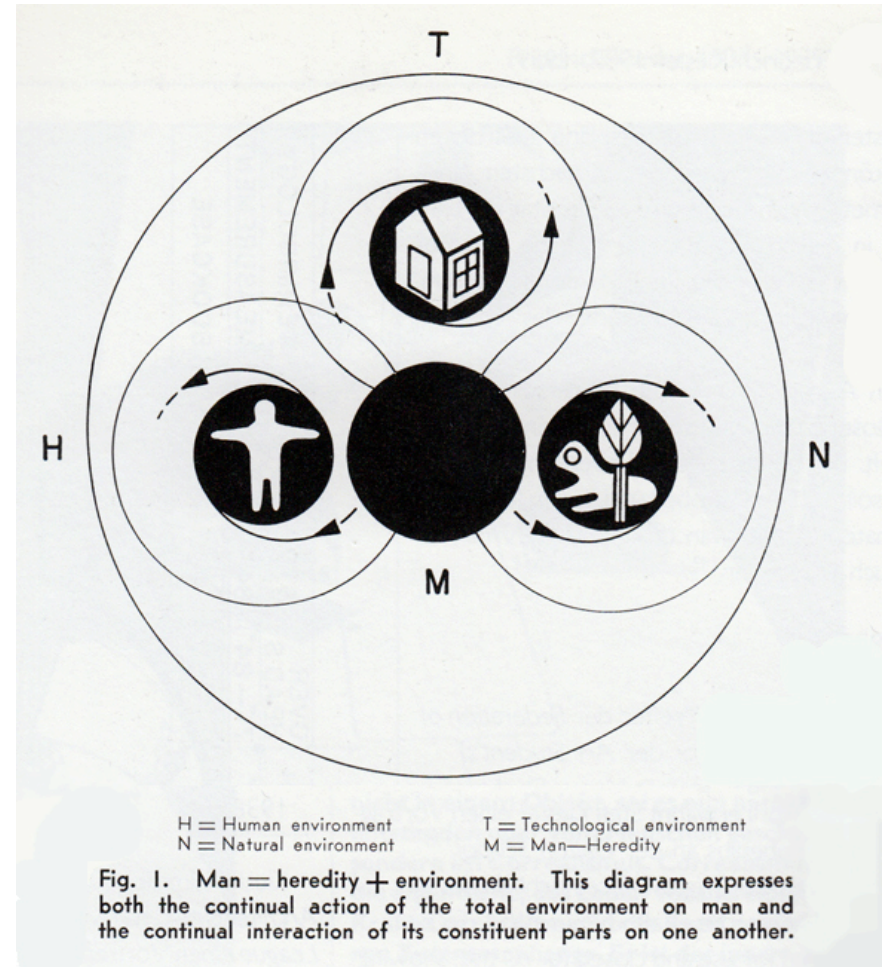
A continual action of the total environment acts upon man while a continual interaction of the constituent parts with one another form the heredity: a set of interchangeable anabolic-catabolic, physiochemical, biological, social active forces.

Heredity is built around the continuous and balanced evolution of needs: human, but also technological, natural.

Technology, like the human, nature or architecture, is a time-based tool, a process of adaptation.

Architecture acts as technology.

The environment as a totality fuses the human, nature & technology into a single organic entity, totality in evolution, in support of life.



Technology

extends the human body capacity.

Technology has an overbearing tendency in monitoring and caring, anticipating needs of bodies: a will to homogenize, control all conditions of environments.

The body searches for **thresholds, ways to appear & disappear**, exit, free itself from technology.

“we shape our tools & our tools shape us”

(Sharma, 2017)

Yet, when cultural systems continuously establish technology as the final extension of man, technology becomes the sediment, the physical fabric of places we inhabit. It **seeps into our manner of physically inhabiting places**.

Humans become disposable to a binary robotic norm:

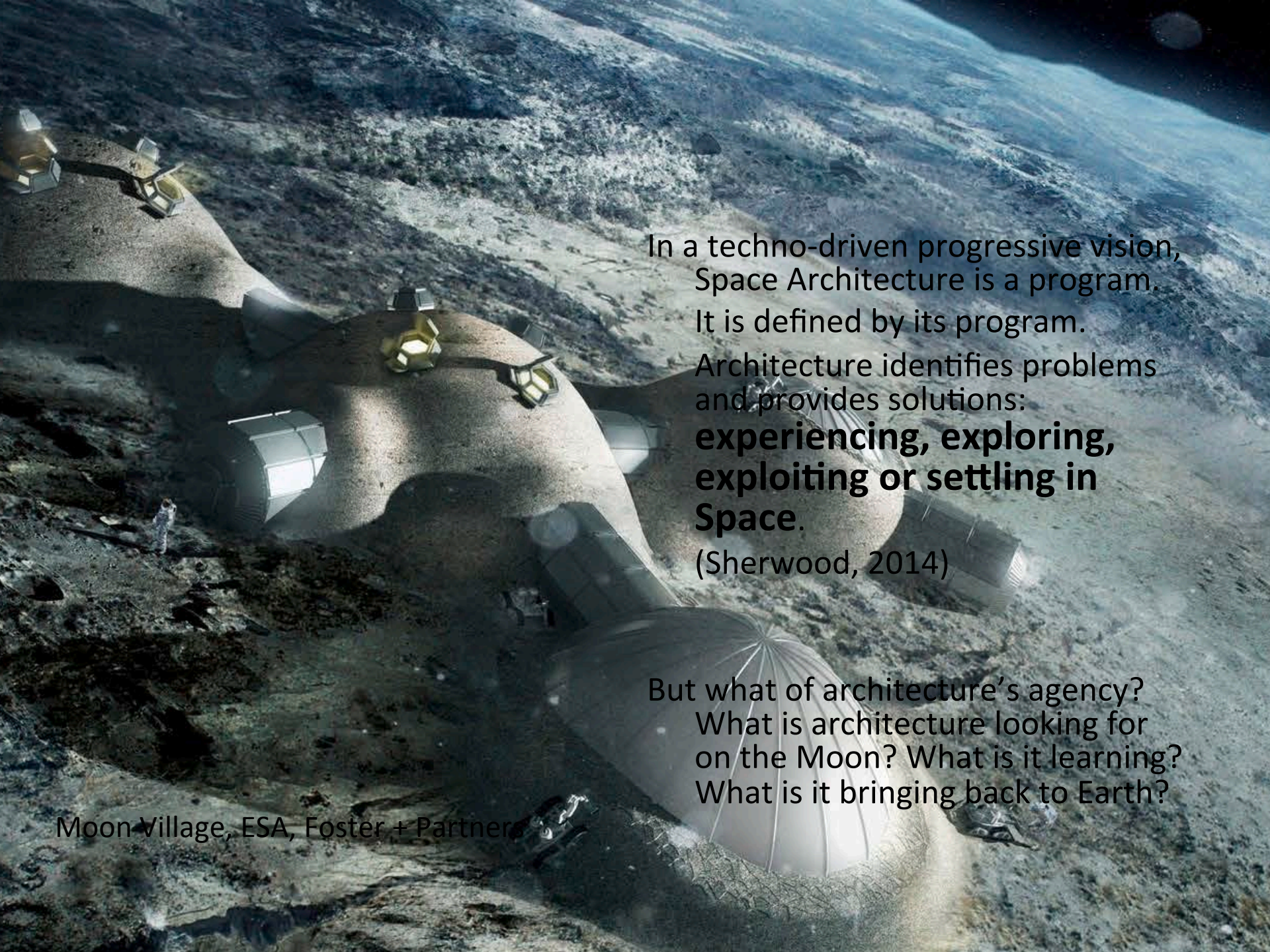
a set of solely expansion driven laws or

one dominated by capitalist-imperialist expansion and progress aim amplified by technology, beyond all other laws, in a non inclusive-holistic but crushing of others manner, submitting, dissolving human free-will to technology. This norm could be named

« *exonomy* ».

Exit becomes the mechanism for humans to perpetrate the **establishment of sovereignty over other environments and maintaining autonomy, a separation and control.**

The natural environment is limited to being an economic resource: an energy or fuel.



In a techno-driven progressive vision,
Space Architecture is a program.
It is defined by its program.

Architecture identifies problems
and provides solutions:

**experiencing, exploring,
exploiting or settling in
Space.**

(Sherwood, 2014)

But what of architecture's agency?
What is architecture looking for
on the Moon? What is it learning?
What is it bringing back to Earth?

Moon Village, ESA, Foster + Partners

-> technology as a « non-excluded, self-sufficient or autonomous » model

Man can extend himself but where to?
He cannot escape himself.

**“there is simply
nowhere to go.”**

Humans cannot exit the extensions of
selves.

Can humans live within technological
constraints without being disposable?

Can care and exit act in a balanced,
intertwined manner?

Humans are embedded within a complex
of mutually forced dependencies that
require loosening.

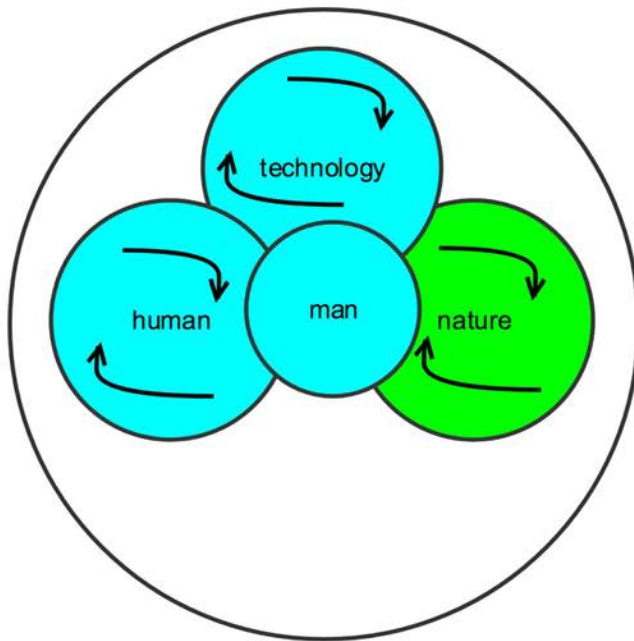
(Sharma, 2017)

The extensions of man provide
the body a capacity to
**re-order the sensory and
social apparatus:**
body rhythms, power dynamics
(politics, economics, social
structures), technology and
futuraity.

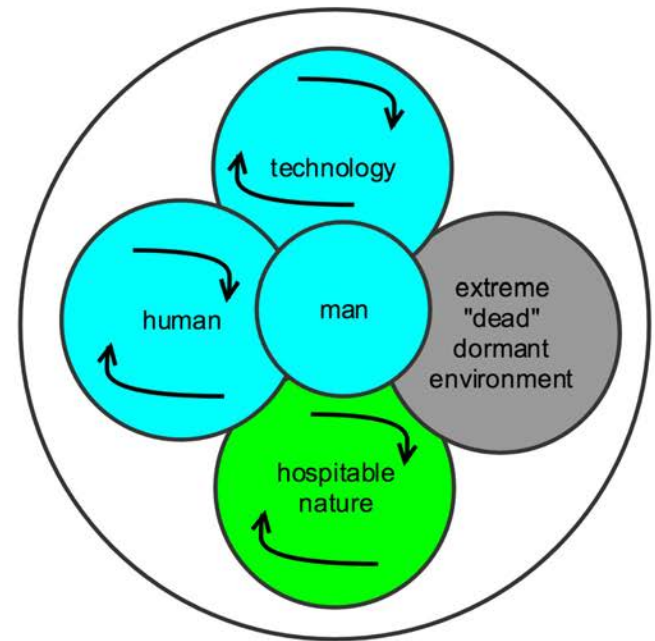
-> a co-emergent architecture: « architecture of life »

When Kiesler's *Co-realist model* is applied to an extreme environment, nature partitions itself into a hospitable nature and a « dead » (or dormant) environment.

the correalist model on Earth



the correalist model leaving Earth

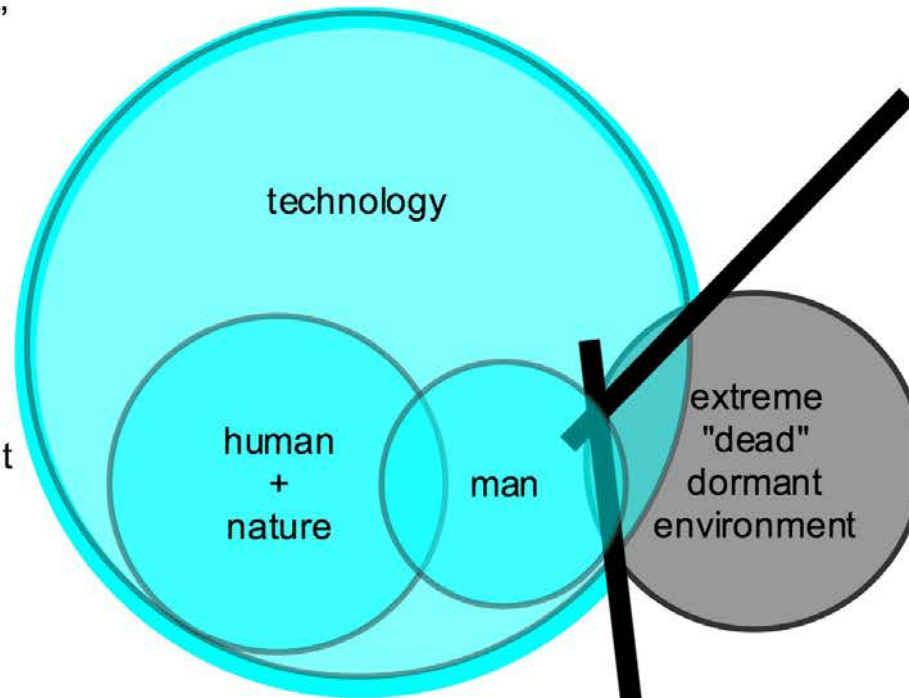


an Extreme habitable world:

the world is extreme and man protects himself from it

architecture provides perfect,
homogenous, controlled,
comfortable, ideal, stable,
fixed environments
and conditions for humans

a rational environment
a shelter
aiming for self-sufficiency
anticipating, solving all
possible conditions or
evolutions of the environment



**a stable
hermetic
impenetrable
separation
protects
man from an
extreme
environment**

thus architecture has
no consideration for
heredity, variation,
evolution of man and of his
relation to the environment

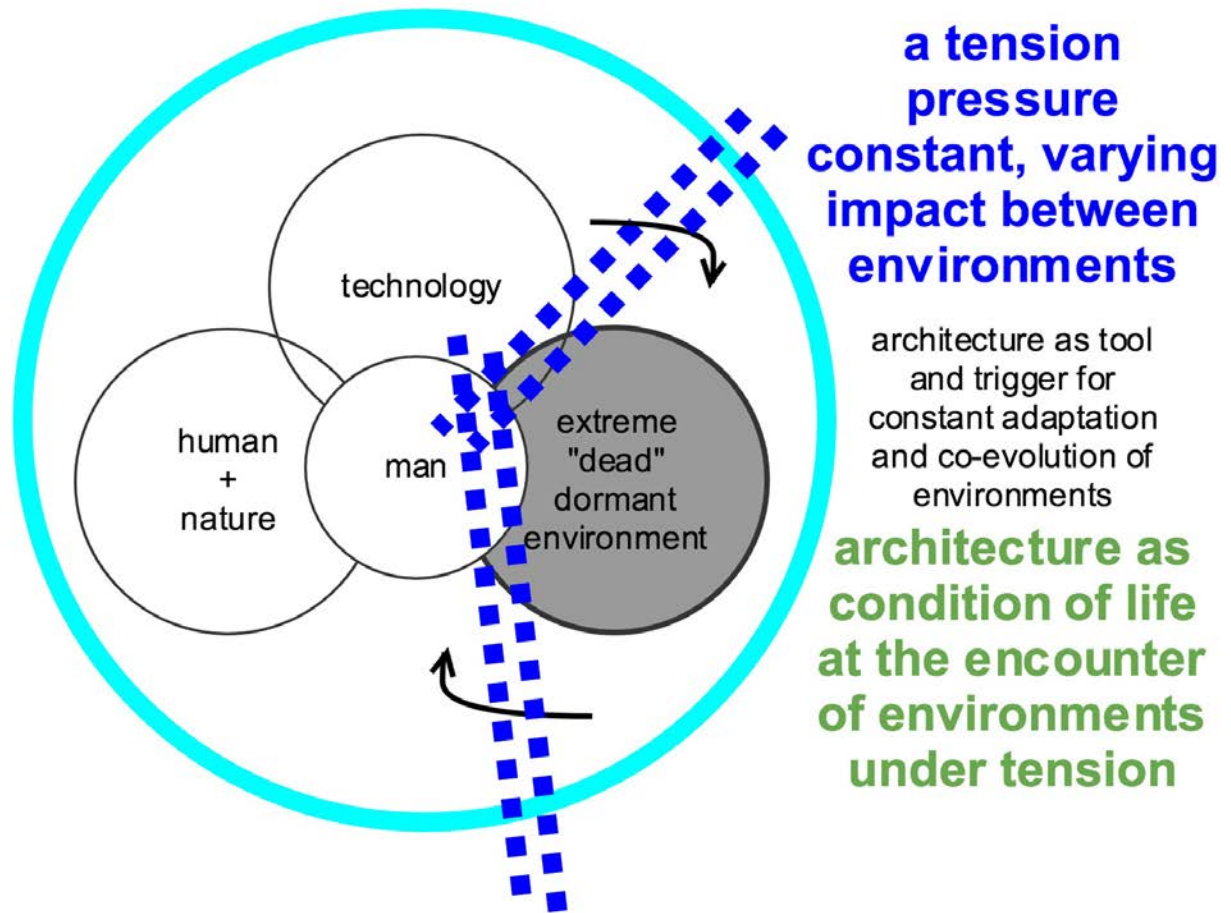
the Extreme habitability of worlds:

a dynamic confrontation of environments

The tension and tendency for hybridity between environments can be used as fuel for processes of life.

Architecture is no more a tool for a hermetic concealment, a preservation of the human but as a dynamic threshold to trigger or maintain life.

-> a co-emergent *architecture of life* within a « dead » environment.



Consider the environment as an organic totality, including the extreme or "dead".

Use the tension and tendency for hybridity between all environments (technological, natural, dead) and the human, as fuel to a dynamic emergence and adaptation of life.

Conclusion: *Outer space, an architectural point of view*

Man cannot separate himself and his needs from his environment.

Technological, human and natural environments can be considered as **co-emergent with the « dead »**, as an **all inclusive totality**, made of **dynamic interrelations** (not of mechanical causality and finality but organic differentiation).

An architecture embracing, using differentiation (rather than controlling or erasing it) will transition from an *Architecture of the machine* to an *Architecture of life*.

The « dead » environment then represents an opportunity for extreme dynamic differences.

Ultimately the human will undergo an evolution in these new dynamic environment interrelations. Is then the human as we know it the new frontier of Space Architecture?

Architecture acts as an intermediary space, in which the difference between two environments transforms the pressure zone into a dynamic interface for a new kind of energy, movement and life.

Back **on Earth**, architecture can consider the implementations of this *Architecture of life* of dynamic interrelations, against **an architectural object aspiring to producing a fixed « dead » environment**.