

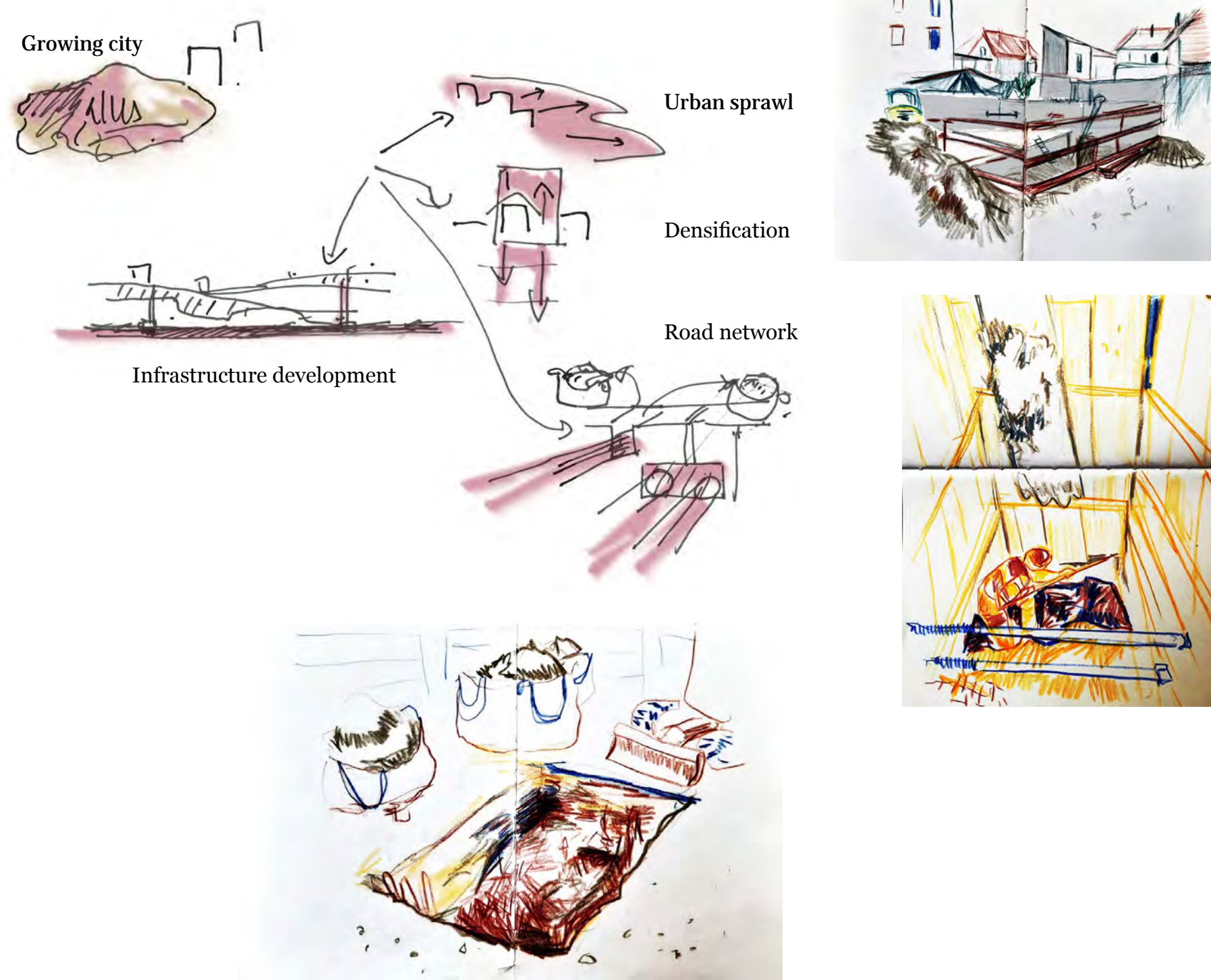
Landscape architecture as a means to guide the urban soil cycle towards eco-design

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URBANIZATION: A MACHINE FOR PRODUCING INERT LAND

A growing city is an excavated land machine



The city produces inert soil through urban sprawl, densification, the creation of networks and major infrastructures



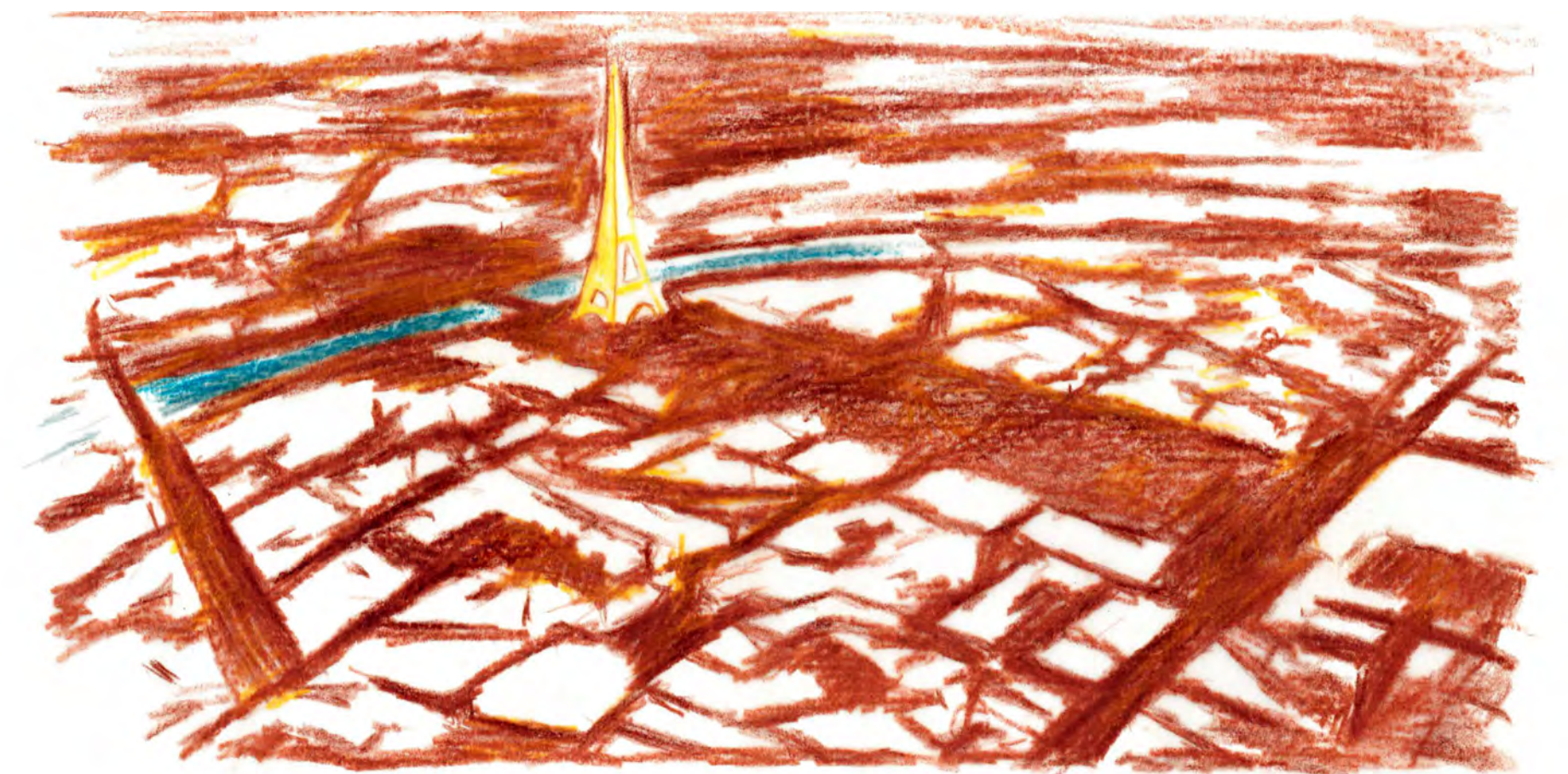
Schematic cross-section of Paris, a city with holes, inspired by a drawing by Mylène Guin, in "la théorie du Sous-sol parisien", 2014

It is difficult to put oneself in the shoes of a landscape architect and to think about the evolution of territories without feeling in a delicate position, in which the awareness of our impact on our immediate and distant environment places us almost as much in a situation of responsibility as of creativity.

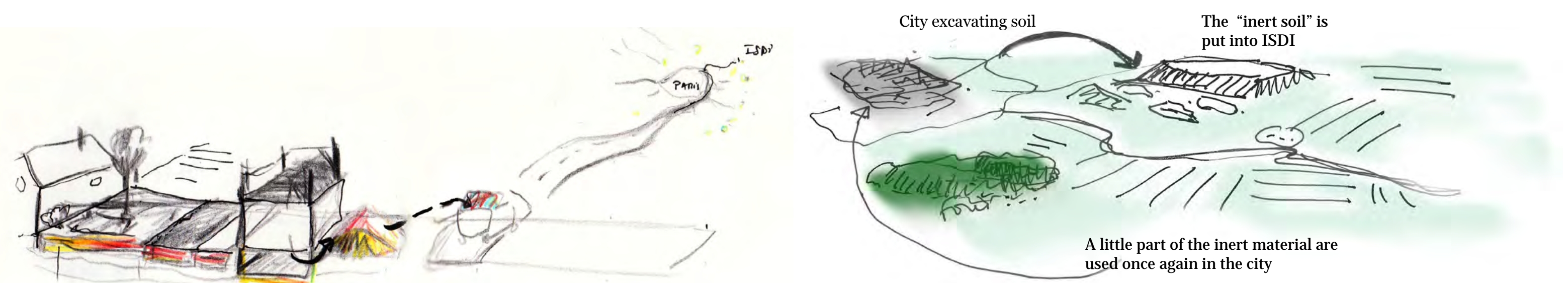
GEOGRAPHY OF LAND MOVEMENT FROM SOIL IN THE CITY TO INERT SOILS IN WASTED AREAS IN RURAL PERIPHERIES

Nowadays, there is a close dependence of metropolises on their «Hinterlands» in the daily flow of energy and material exchanges, in particular through the binomial «Need/resource», or even the trinomial «need/resource/waste».

Each year in the Ile de France, nearly 29 Millions tons of what is called «inert» soils is put in waste areas in the periphery of Paris due to the urban process.



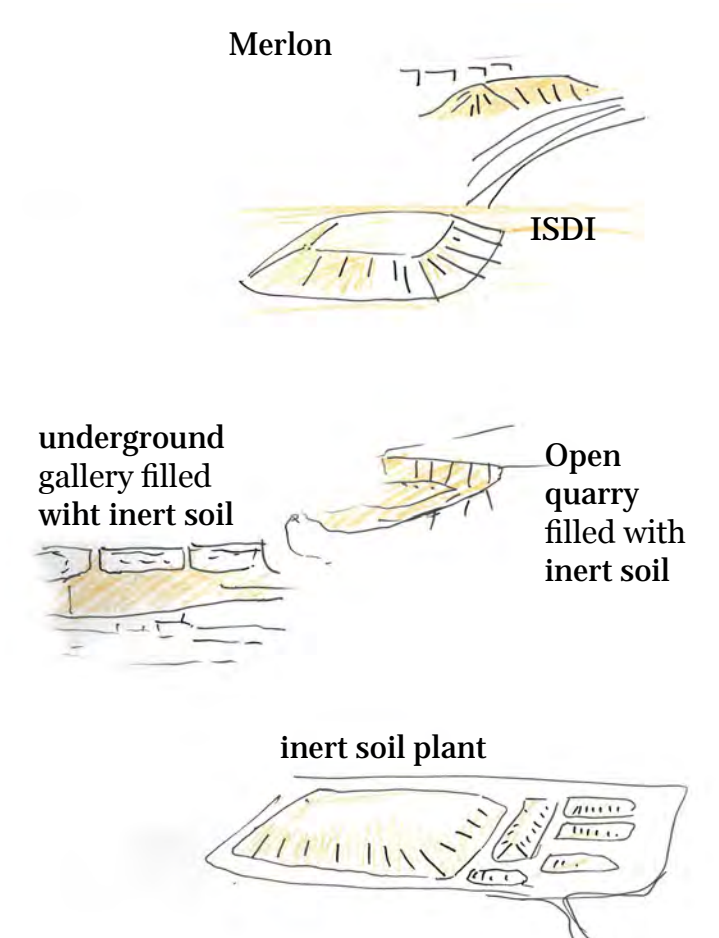
If Paris and its suburbs kept the inert soil produced by contemporary urbanization, in 20 years the equivalent of Paris intra-muros would be buried under several meters of soil and rubble



From soil to waste: the soil and rubble due to urbanization are dumped in ISDI (landfill area for inert waste)

As soon as it leaves the excavation site, a large part of the excavated soil is dumped in an ISDI (Inert Waste Storage Facility). This is deeply changing the geography of the rural periphery in creating new form of sites, mainly due to opportunities facilities and functional purposes.

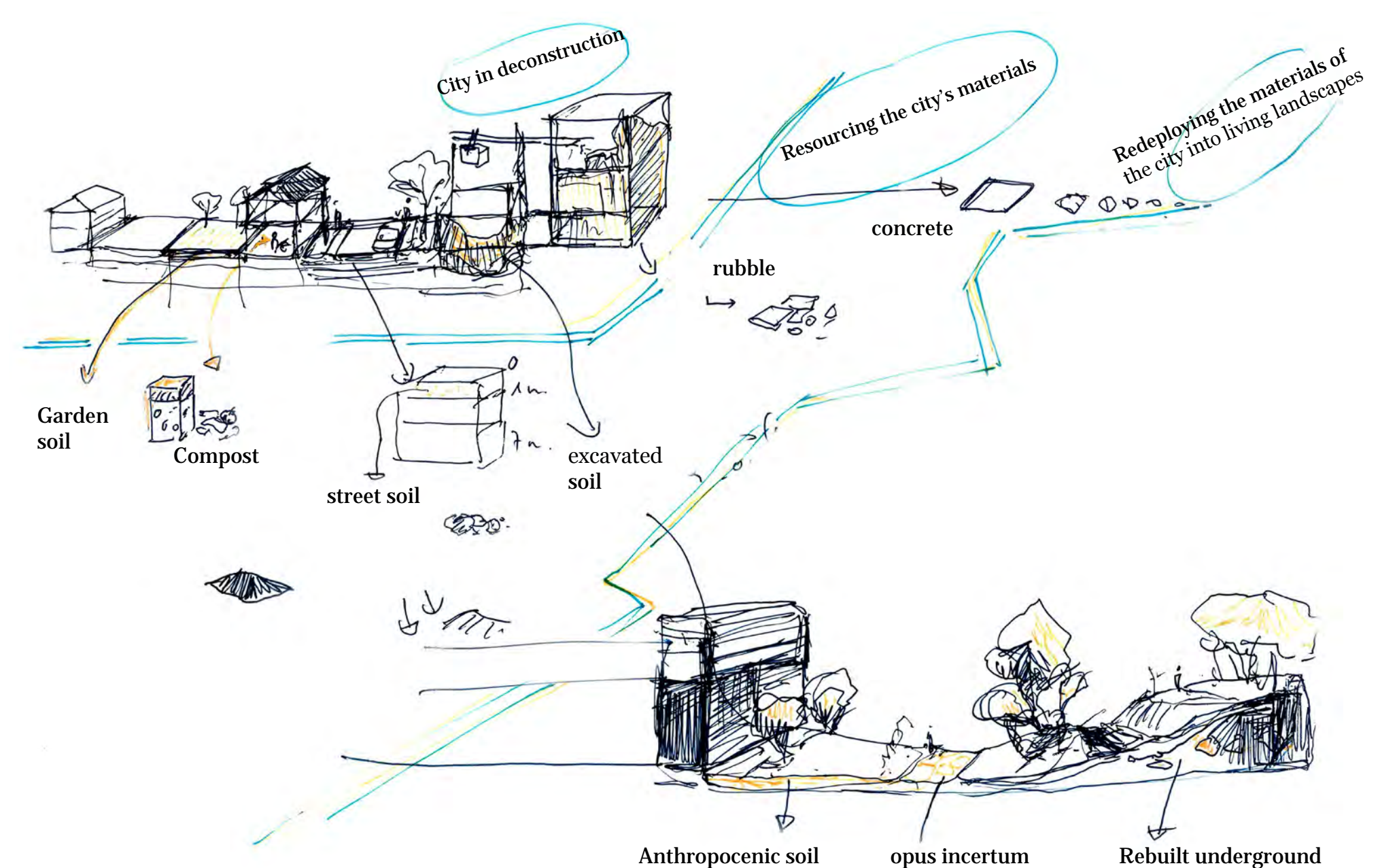
Will the flux and material of the city transform the rural area and balance of landscape territory? Can we help as landscape architect and urban planners to reduce our impacts or improve artificial landscapes?



From the merlon to the materials plant: a repertoire of forms produced by the dumping of inert earth on the outskirts of the city

HOW CAN LANDSCAPE ARCHITECTURE HELP RESHAPE THE CITY'S MATERIAL FLOWS INTO LIVING LANDSCAPES?

Landscape architecture, in its capacity to read the different ontological strata of space, from territoriality to landscape perception, can help the thought of metabolism to "set" these flows of matter in a real geography, anchored in a soil and an identity of places, which then becomes more than a system of relations, a set of landscapes in synergy.



Schematic principle of Urban process used in an eco-design way to rebuilt living landscapes. M-L Garnier

