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A Way Of Looking At The Big Picture:
Material Perspectives In Architecture

Kürtüncü, Burçin¹
1. Istanbul Technical University, Department of Architecture, Istanbul, Turkey, burcinkurtuncu@gmail.com

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"You don’t understand anything until you learn it more than one way.” Marvin Minsky (Cognitive Scientist).

Good architects have to be good thinkers. Thinkers/scientists that we appreciate are interested in more than one field of knowledge. They are not limited in a single discipline constructing their points of view by contributions of multiple fields. To name a few: Marvin Minsky, Alan Turing, Manuel de Landa, Sanford Kwinter...

Even the disciplinary field names themselves refer to many different themes which appear to be related to many other fields in a multidisciplinary approach. eg. Geography's subthemes are listed as location, place, human-environment interaction, region and movement. Let's take movement as a 'geographic' theme, movement theme refers to the movement of people, living things, goods, even ideas. It will even include migration studies. It is almost impossible to comprehend some 'real world' complexities, shortly complex bodies through one single discipline or scientific field. We need to adopt an integrated, multi-disciplinary approach to grasp these bodies through bigger windows.

While a single discipline opens up a single way of looking at a subject, to achieve a multi layered standpoint, we need to understand it again and again through different windows. Complex bodies are considered as complex structures or systems such as cities, living organisms, clusters of organic or inorganic beings. They are arranged by regular or irregular, ordered or disordered structures. They are in a constant process of change during the course of time, either very slow or very fast. As we understand, there are no simple objects in the whole universe, either natural or manmade. Simple/single objects can only exist in theory. They can be imagined through abstraction and by isolating and eliminating issues that accompany them. Everything exists in a flow: Things move, change, grow, interact, age, decay and transform. Even the inorganic matter... it is impossible to picture or simulate their entire process.

Referring to Deleuze and Guattari for the concept of 'immanence', we can say that there are qualities immanent to all of these things/bodies, which accomodate a knowledge of actualization, which define and organize them. These immanent qualities are carried potentially within the matter and they let some unexpected or expected actualizations to emerge in their lifetime. This immanence can be considered as the integrity of matter and knowledge, like in the relationship of proteins and dna. The knowledge that is immanent to matter defines an occurance, an emergence, and a process of realization. It decides its transformation, realization, its evolution, even the matter never exactly disappears, it implies also its dissolution into particles and scattering into the universe. In this way, immanence and emergence define how matter actualizes, its generative qualities and outcomes. The matter -organic or inorganic, complex or (relatively) simple, biological or geographical- starts to transform in the course of time. It carries on its own historical process by different external and internal forces acting on it within a field, it establishes interactions and changes everlastingly.

It is also very necessary to model and represent this immanence in architecture, and other fields. Diagram is a key concept in representation when we approach these fields in a materialistic perspective. The term Diagram prescribes a
non-symbolic kind of representation, which emphasizes the qualities of becoming and change. It enables architects, designers, or other thinkers to provide a contingent attitude to their subjects.

In this case, referring to the concept of 'new materialism', looking at things in a materialistic perspective - as argued until now - carry us to a trans-disciplinary understanding. Either we are architects, designers, scientists, or thinkers, it connects us to other fields while the common ground for each field is a prosperous field of actualizations, matter and forces. In this perspective, this material field and the diagrams representing it could incorporate any pluralities. They can include all the processes, possible interactions, occurrences, effects, forces, and vectors acting on that matter. Trying to represent these complex beings in their virtual/actual conditions and in their potentiality, requires us to seek new ways of representing and visualizing the data. We can also admit that complexity is self potentiating: They generate their own meaning for us to interpret them. Complex bodies, real world phenomenon likely include much more than we are able to conceive. Trans-disciplinarity is admitted as a cure to humanize deter-minism in sciences whether they are positive sciences, humanities or earth sciences. It is possibly the cure for a single disciplinar mentality trapped into its own limits.

As architects, we are still hopeful for our own field and its potential relatives to create new connections in addition to existing ones, and make fresh initiations to deal with our subjects more comprehensively.

Bibliography
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Biography

Burçin Güngen Kürtüncü was born in Ankara, 1973. She graduated from Ankara Atatürk Anatolian Highschool and studied architecture at Istanbul Technical University through 1993-1997. She also received her MSc and PhD degrees in Architectural Design Program at the same university. During her PhD research, she visited Illinois Institute of Technology, Chicago as a research scholar between 2003-2005. She works at ITU, Department of Architecture since 2000 and teaches mostly first year architectural design studio besides other undergraduate classes such as elective course 'Architecture and Interdisciplinary Studies', 'Diploma Project', and graduate classes such as 'Architecture, Design, Theory' and 'Thesis Research'. She is currently conducting a post doctoral research focusing on the city of Ankara at Middle East Technical University. Her research interests focus on architectural design education and studio, representation matters of art and architecture, the use of diagrams in architectural design.