Traces in Emerging Structures

Mathematics is typically taught in the Bourbaki-Hilbert style: definition, theorem, proof, maybe an example.

This way, mathematics seems to be extracted out of an eternal source of truth — a music constituted by the accords: definition-theorem-proof-(example).

In fact — and Benasque is a good example for that — mathematics is developed in the reverse order. First of all it is a matter of open communication. Then, one sits down and configures traces or pieces of mathematically approved fragments until the picture exhibits some consistency, relevance or significance. At this moment, one anticipates definitions which will — somehow naturally — lead to a theorem (or a lemma...).

This applies to art as well: it is about emerging structures and the traces that are left in the process of perception. In this way, there is an analogy between arts and sciences.

Günter Leugering

These paintings «en miniature» (oil-colors on paper) reflect some of the recent personal experiences during our stay here in Benasque within the last ten days.

While most of you were preparing new results in the domain of applied mathematics, I had some rather private «parallel sessions» in our charming apartment patio in the «casco antiguo» where I tried to create structures artificially, which means, I placed a first color-setting on paper that offered to me the chance to make the different color-fields, lines to be become a configuration by underlining, pointing out, adding or withdrawing, until the process is said to be finished.

The final aim, I have always been working towards, is comparable to the art of a poet, combining words of our everyday-language in such an unusual way that the meaning of the poem becomes multivalent (by allusion) and readable at the same time so that the preceding personal experience becomes communicable and, thus, could be shared across borders.

Barbara Lucas-Leugering

Benasque, September 2, 2013