‘In any environment, both the degree of inventiveness and creativity, and the possibility of discovery, are directly proportional to the number and kind of variables in it.’ Simon Nicholson, Architect

In 1972, architect Simon Nicholson developed the Theory of Loose Parts; the idea that loose parts, materials which can be moved around, designed and redesigned, and tinkered with; create infinitely more opportunities for creative engagement than static materials and environments. Basically, the more materials there are, the more people can interact.

Think about a gallery or a museum. Which exhibits are you more drawn to: the paintings on blank walls or the interactive pieces? While the paintings are undoubtedly beautiful or invoking in some way, it is always the interactive exhibitions, the ones which we can engage with physically which draw our attention, inviting us to come and experiment.

As an architect, Nicholson was talking mostly about playground and school design and rethinking the static play equipment and environments, proposing instead one incorporating loose materials to engage children’s natural creativity and inventiveness.

Much like Malaguzzi said, Nicholson also believed that creativity was not for the gifted few, that all children are born as creative beings, curious about the world and keen to experiment and discover new things:

“Creativity is for the gifted few: the rest of us are compelled to live in environments constructed by the gifted few, listen to the gifted few’s music, use gifted few’s inventions and art, and read the poems, fantasies and plays by the gifted few. This is what our education and culture conditions us to believe, and this is a culturally induced and perpetuated lie.” (The Theory of Loose Parts: An important principle for design methodology, 1972)

It reminds us of Malaguzzi’s image of the child. If you believe the child to be inquisitive and creative, competent and capable, intelligent and whole, then you will create environments which reflect this.

“Children learn most readily and easily in a laboratory-type environment where
they can experiment, enjoy and find out things for themselves.”

What Nicholson is saying here is, an environment which is rich in open-ended materials and real materials, invokes children to experiment, engage, construct and invent; invites them to tinker, to manipulate and to play.

Nicholson encourages us to think: how much of this material/activity/toy have we invented (or been invented by another)? And how much can the child invent?

We need to tip the scales in favour of the child-leave room for the child to invent, to re-invent, to deconstruct; to be creative.

This is the theory of loose parts.

Nicholson’s paper reflects the time in which it was written (early 70’s) and how he predicts the nature of schools in the future:

“The whole education system, from preschool to university, is on the verge of changing. For who needs these institutions in their present form?”

Loris Malaguzzi was the founder of Reggio Emilia’s educational philosophy. He participated in the birth and building of Reggio Emilia’s network of municipal preschools (3-6) and infant-toddler centres (0-3). Malaguzzi was the untiring promoter of an innovative philosophy of education which, with its theory of the hundred languages, gives value to the potentials, the resources, and many intelligences of all children.

This is probably the most well-known aspect of the Reggio Emilia Approach: the belief that children use many, many different ways to show their understanding and express their thoughts and creativity—a hundred different ways of thinking, of discovering, of learning through drawing and sculpting, through dance and movement, through painting and play, through modelling and music, and that each one of these Hundred Languages must be valued and nurtured.

These languages, or ways of learning, are all a part of the child. Learning and play are not separated.

At LECS educators allow the child to use all of their senses and all of their languages to learn.