If you give a child a sheet of paper, when he or she doesn't have any colored pencils to play with, his or her first reaction will be to fold it. That's the spontaneity of folding! Just as the folds of the waves animate the sea, a single fold in a sheet will bring any flat surface to life.

– Nicole Charneau

Folds are everywhere, inside and outside. Every living species and non-living objects have the folds right from the birth to the death. When the child is in the womb of a mother, it is folded. Pumping heart, brain has folds in it, the body is folded, cells are folded, DNA is folded. Folds are present inside out. Waves are folded. Vibrations have the folds. Folds are visible and invisible. There are folds and counter-folds and the only act between the two is unfolding.

Similar to the way a carpenter works with the raw wood, potter works with the mud, the paper artist sculpts the paper to get life out of paper. There exist infinite possibilities on a single piece of paper. Out of nothing a beautiful sculpture takes a birth, with the mere presence of the craftsman around the material.

Folds and identity, form

The sheet of paper is blank, initially. There is nothing, it is empty or it is full. Each fold made on the piece of paper leaves its impression/trace on the paper. Each fold gives the new identity to that sheet of paper. Looked back over the period of time, the identity of something at this moment is formed through the series of folds. Folds determine the form and make something appear. With each new fold, something transforms into something else. It is simply the infinite play of folds and counter folds. Folds give the form and form defines the identity.

Folds and expression

Feelings of anger, fear, contentment are expressed through the folds on face, body. Anger, fear, insecurity keeps body rigid. One goes into the shell when feeling insecure. Worry is manifested in the form of wrinkles on the face. Feeling of contentment, joy is expressed by unfolding the whole body. Simple blinking of the eyelids, indicates the life in the body. Folds awaken the curiosity.

Folds and Nature

A simple fold on a plane wall brings the life to the wall. Just as a single wave on the surface of the sea, animates the sea, a single fold on the piece of paper, bring the paper to life[1]. A single fold can bring any flat surface to life. Nature expresses itself through folds. Blooming of flower, growth of the living bodies, folding of the leaves

of the shy-plant, folding of the body inside the shell by turtle, flying birds are nothing but the expression of the life by nature.

<u>Folds – signify the growth</u>

As the plant grows over the period of time, it unfolds itself in all the dimensions. When sun-rays fall onto the flowers, leaves, they start unfolding slowly. The leaf of the plant grows over the period of time. The life cycle of plant is transformation: from seed to full grown size, the blooming of flower, the unfolding of leaf, the branching of roots [3]. Growth of a plant or any living organism can be looked as unfolding in space and time. Life is a succession of transformations.

Folds - Aesthetics and functions

Folds serves the two purposes. Especially in the context of architect, they provide the stability to the structure at the functional level, and they provide a beautiful sense of aesthetics as well. Folds exist with the paradoxical nature, folds provide the stiffness, and folds provide the flexibility [2].

Folds – memory and impression

Single fold on the sheet of paper can be associated with the concept of memory. If the folded paper is unfolded, the impression remains on the paper forever, creating memory. Symbolically, people sometimes make fold on page of a book and use it as a bookmark. This bookmarking method is used to mark memory.

Folds – A mystery, magic and secret

Different notions that can be attached to folding are secrets, mystery, magic.

Folds - expansion and contraction

The first and most visible application of folds in design is to to save the space through the expansion and contraction of objects. This provides the way for easy portability of objects.

References

- [1] The art of folding: Creative Forms in Design and Architecture
- [2] Origami Folding: A Structural Engineering Approach, mark Schenk and Simon D. Guest