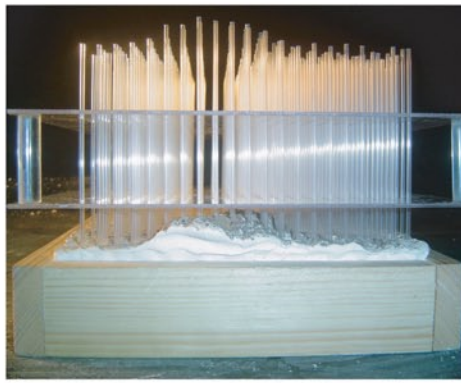




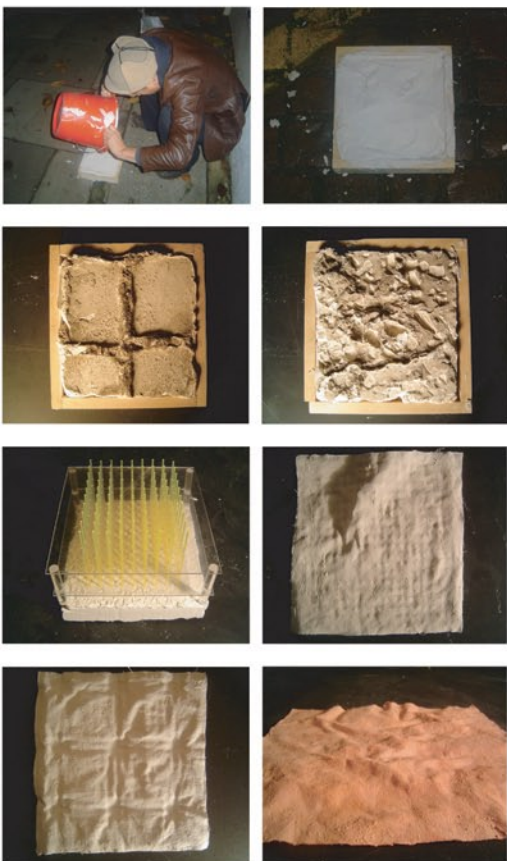
Free form surface casting showing elaborate diversity in surface topography.



Surface translation machine creating Cartesian grid to develop and advance new surfaces.



Translated casting of surface showing patterns advanced from regulated formed translation.



Surface casting process and surface translation development - originally the process began by free form casting of concrete surfaces to form an understanding of their surface values and intricacies. This showed how elaborate and wonderfully diverse surfaces we normally pay little attention to can be. Surface robustness at this close scale became clear. To develop an understanding of this, surface translation can be employed to develop and often enhance differing surfaces. 3d pin machines can be employed to form new surfaces as seen above.

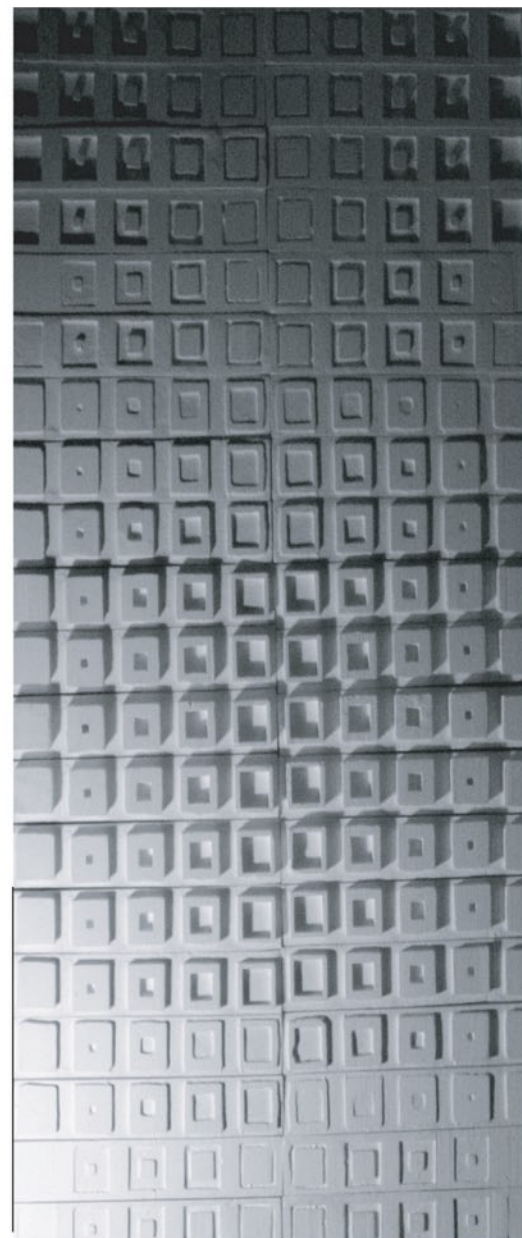
Surface robustness, vitality, durability can be developed and expressed through examination and understanding of surface quality intricacies. Surface robustness is translated and configured to form new morphologies incorporating original surface diversities. Through modulation this can be repeated and developed to determine spatial parameters.

Using a process of experimentation with pattern to create meaningful and relevant 3-dimensional systems the following results were achieved. The idea is that through a playful open process can be reached an integrated system where the structural integrity, form, and surface condition are all harmonious and homogeneous.

Through an initial study of surface abstraction the principle beginnings of surface translation can be developed. These newly free-formed surface castings highlight the vast diversity held within surfaces often thought of as flat and featureless. A subsequent understanding of these new surfaces can be developed through use of 3d pin machines to translate the original castings. This process regulated and modulated the castings to form new and more highly abstracted surface units.

By rationalising these surfaces, a rigorous examination of surface qualities and spatial relationships can be undertaken. Tiled blocks with standard motifs of varying heights are positioned in a controlled manner so as to create an undulating surface. These modules can then be utilised as building blocks which are configured in such a way as to create new flowing, more organic, 3-Dimensional forms from standardised, orthogonal tiles.

This understanding of surfaces and their diversity can be ideally applied to the development of concrete structures and surfaces advancing varied design possibilities.



Photographs showing the construction of the individual tiles and demonstrating the versatility of the finished blocks.

