3) El-Shazly, A., "Spatial Digraph of 'Danna' Slum Area in Alexandria, Egypt," *Proceedings of the International Conference on Green Buildings, Civil and Architecture Engineering, Universal Researchers in Civil and Architecture Engineering (URCAE – London, UK),* **Dubai, 25-26 December 2015, pp.97-103.ISBN 978-93-84422-50-9**

The digraph with distance ranking of survey rooms in 'Danna' slum area at Alexandria clarifies the social logic of spatial interface in extended conception of space syntax. The irreflexive functional relationships among the room set interchanges the 'visitor' domain with the 'inhabitant' structure at different levels of spatial resolutions. From the global structure of deep 'inhabitant' and shallow 'visitor' interface, the local spatial system reverses the process of social logic. The essence of one 'bedroom' alternates the sign of covariance with the multiple room structure to cause a dynamic digraph networking between the 'visitor-inhabitant' domains. Meanwhile, the 'living' of more 'inhabitant' networks negatively covariate with the 'kitchen' to change to a 'visitor' space and vise versa. The common 'staircase' covariate with the layout rooms to filter 'inhabitant' from 'visitor' domains, except the unique 'kitchen' that covariate with 'inhabitant' as 'visitor' or the inverse as well. The weighted digraph further clarifies the interactive ranks of dense networking of 'kitchen, living & bedroom-I' compared to other rooms, while the shared facilities of 'toilet & staircase' have more stable network distribution.