

Fatimid Cairo: the transformation of an urban logic

Galal H. Galal-Edeen, BSc, BA(Arch), MSc(BSAD), MSc(AAS), PhD, MBCS
 London Metropolitan University, Cairo University & Community Design Collaborative (Halim), Cairo.

History



Cairo, the largest metropolis in Africa, started life in 969 C.E. as a settlement of the conquering Fatimid army, headed by Jawhar Al-Siqelli, the ex-slave, ex-Christian soldier of Al-Moez, the Fatimid Khalif who sent him. Jawhar chose an area some 5 Km to the north-east of the Roman settlement (known as Babylon-in-Egypt) as the new capital. (Fatimid area is outlined in purple)

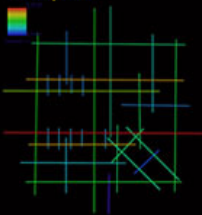
As well as being the location of the oldest university in the Islamic world (Al-Azhar, founded 970 AD), it has been, and continues to be, known as a seat of the finest craftsmanship of the Islamic world: fine jewellery, woodwork, ceramics and glass were all features of the city.



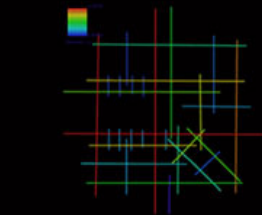
The original plan by Jawhar Al-Siqelli (below) was not built in this exact form. It rather provided a source for action for the builders who worked over many nights and in the process deviating. Subject this plan to Space Syntax analyses led to a surprise....



First plan

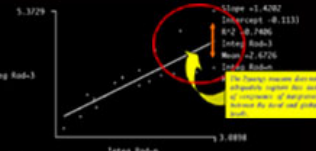


Local Integ.



Global Integ.

As we move from the local to the global levels of integration analysis, there is a significant shift in the value of different lines. This behaviour is not accounted for by Synergy measure, which is simply a measure of correlation between local and global integration values for some layout. Synergy does not account for the large distance between strong integrators that act locally, and those that act globally. We coined the term "Congruence" as a measure of the likelihood that the same lines that are strong integrators at the global level are also strong integrators at the local level. This first plan of Fatimid Cairo displays low local/global integrator congruence.



Fatimid Cairo in 1087



Local Integ.



Global Integ.

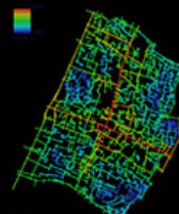


Again, a low degree of "congruence" that is not accounted for by calculating the correlation between Local and Global integration values. For some lines, there is much wider spread of integration values between the local and the global levels than for the rest.

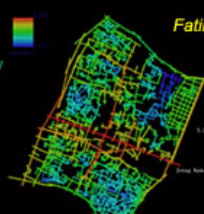
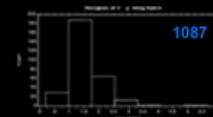
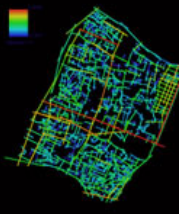
Fatimid Cairo in 1919



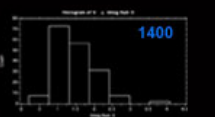
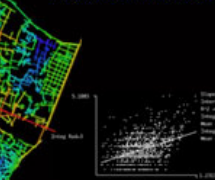
Local Integ.



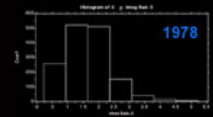
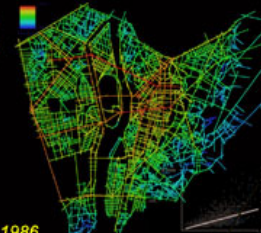
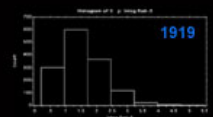
Global Integ.



Fatimid Cairo in 1978



Modern Cairo in 1986



Local integration distribution: moves from bias to low values to a greater variety of values across the layout. The town is becoming more intelligible to strangers.