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CONCLUSION

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The dissertation has been devoted to an exploration of the relationship between two metaphors of the architecture, architecture as metaphor of art and architecture as metaphor of science. However it is no surprise that the marriage of these two metaphors will enable to visualise a greater picture of the 'place'. Further it will enable to reveal the bond between man and the world, which he is in, by creating a unity between them, while modifying the place in order to fit to the modern world.

The unity was achieved by responding to the ritual behaviour created through perception of the image of the place. Symbolic expressions of all these images address the higher meaning of life, by seen invisibly of the word, and thereby revealing meaning of life to its people.

By making science part of this meaning has created a successful end result, in the modern world, in the modern way of life.

The particular modifier, which is examined here, is the thermal comfort, taking the effects of increased outdoor comfort levels, which is due to increased global temperature and urbanisation. Further, to examine the effects of modifier focus was made to Beira Lake as a current issue with neglected water body in the middle of the city.

End results of the comfort analysis enabled to establish the importance of the thermal comfort for enable 'place'. At present situation thermal comfort is part of the checklist and at the same time it acts as a modifier of the 'place'.

Thus the rising global temperature of the world and urbanization is seemingly irreversible. In this sense in future, the outdoor comfort levels will be made much worse than today. In such conditions thermal comfort cannot be included in the checklist but it will be an essential modifier.

According to the current trend of rising outdoor temperature at some stage it will arrive to the threshold, where modification of physical envelope will not support to the image of the city. In other words modification will not concretise the ritual behaviour of the place.

In such situations the thermal comfort will not act as a modifier but it should be counted as a determinant of the place. In other words comfort it self is empowered to create an image in human psyche. In this sense it does not facilitate the ritual behaviour but it creates it. Futuristic designs, covering the entire cities with artificial domes can be consider as responses to such 'image'.

In tins sense exploring all scientific modifiers of the place, and a way to evaluate it within the symbolic meaning of life, will enable to visualise a cross section of the 'place' in the future world. This can often be viewed as a springboard to enable meaning for life, meaning for this world in future.



APPENDIX

Table 02 - Data obtained by measuring

| Time (p.m.) | Point | Temperature | | Temperature ref | | Wind speed (m / s) | Lighting |
|----------------|--------|-------------|------|-----------------|------|-----------------------|----------|
| | | Dry | Wet | Dry | Wet | | |
| 12.43 | Zone 1 | 32.5 | 26.5 | 33 | 26 | 1.2 | 14000 |
| 12.46 | Zone 1 | 32 | 26 | 33 | 26 | 1.75 | 11000 |
| 12.48 | Zone 1 | 32 | 26 | 32.5 | 25.5 | 0.65 | 11000 |

Table 03 - The outputs of the run simulation models

| Existing Built Form | | | Established Built Form - Colonnaded | | | Established Built Form - Solid | | | Established Built Form - Solid with shading | | |
|---------------------|----------------|------|-------------------------------------|----------------|------|--------------------------------|----------------|------|---|----------------|------|
| Time | Operative temp | THI | Time | Operative temp | THI | Time | Operative temp | THI | Time | Operative temp | THI |
| 1 | 25.6 | 20.6 | 1 | 27.1 | 22.6 | 1 | 28.1 | 24.0 | 1 | 30.7 | 27.5 |
| 2 | 24.9 | 19.7 | 2 | 26.6 | 22.0 | 2 | 27.6 | 23.3 | 2 | 30.2 | 26.9 |
| 3 | 24.3 | 18.8 | 3 | 26.1 | 21.3 | 3 | 27.2 | 22.8 | 3 | 29.7 | 26.2 |
| 4 | 23.8 | 18.2 | 4 | 25.7 | 20.7 | 4 | 26.8 | 22.2 | 4 | 29.3 | 25.6 |
| 5 | 23.5 | 17.8 | 5 | 25.4 | 20.3 | 5 | 26.5 | 21.8 | 5 | 28.9 | 25.1 |
| 6 | 23.2 | 17.4 | 6 | 25.2 | 20.1 | 6 | 26.3 | 21.6 | 6 | 28.5 | 24.5 |
| 7 | 26.2 | 21.4 | 7 | 27.4 | 23.1 | 7 | 29.2 | 25.5 | 7 | 29.5 | 25.9 |
| 8 | 30.1 | 26.7 | 8 | 29.6 | 26.0 | 8 | 32.5 | 30.0 | 8 | 30.3 | 27.0 |
| 9 | 33.7 | 31.6 | 9 | 31.5 | 28.6 | 9 | 35.3 | 33.8 | 9 | 31.3 | 28.3 |
| 10 | 37.4 | 36.6 | 10 | 33.2 | 30.9 | 10 | 38 | 37.4 | 10 | 32.7 | 30.2 |
| 11 | 40.4 | 40.7 | 11 | 34.4 | 32.5 | 11 | 39.9 | 40.0 | 11 | 34.2 | 32.3 |
| 12 | 42.2 | 43.1 | 12 | 35 | 33.4 | 12 | 41 | 41.5 | 12 | 35.3 | 33.8 |
| 13 | 43.2 | 44.5 | 13 | 35.4 | 33.9 | 13 | 41.6 | 42.3 | 13 | 36.2 | 35.0 |
| 14 | 43.4 | 44.8 | 14 | 36 | 34.7 | 14 | 42.1 | 43.0 | 14 | 37.2 | 36.3 |
| 15 | 42.5 | 43.5 | 15 | 36.3 | 35.1 | 15 | 41.9 | 42.7 | 15 | 38.1 | 37.6 |
| 16 | 40.6 | 41.0 | 16 | 35.9 | 34.6 | 16 | 40.8 | 41.2 | 16 | 38.3 | 37.8 |
| 17 | 37.3 | 36.5 | 17 | 34.7 | 33.0 | 17 | 38.6 | 38.2 | 17 | 37.7 | 37.0 |
| 18 | 31.2 | 28.2 | 18 | 31.4 | 28.5 | 18 | 33.3 | 31.1 | 18 | 35.5 | 34.0 |
| 19 | 29.7 | 26.2 | 19 | 30 | 26.6 | 19 | 31.3 | 28.3 | 19 | 34.2 | 32.3 |
| 20 | 29.1 | 25.4 | 20 | 29.5 | 25.9 | 20 | 30.8 | 27.7 | 20 | 33.4 | 31.2 |
| 21 | 28.4 | 24.4 | 21 | 29.1 | 25.4 | 21 | 30.3 | 27.0 | 21 | 32.9 | 30.5 |
| 22 | 27.7 | 23.5 | 22 | 28.6 | 24.7 | 22 | 29.7 | 26.2 | 22 | 32.3 | 29.7 |
| 23 | 26.9 | 22.4 | 23 | 28.1 | 24.0 | 23 | 29.2 | 25.5 | 23 | 31.7 | 28.9 |
| 24 | 26.2 | 21.4 | 24 | 27.6 | 23.3 | 24 | 28.6 | 24.7 | 24 | 31.2 | 28.2 |

Table 04 - Material specifications of the building elements used

True for all simulation models

| Name | Conductivity (W/m.K.) | Specific heat (Wh/kg.K.) | Density (kg/m ³) |
|--------------------|--------------------------|-----------------------------|---------------------------------|
| Concrete | 1.70 | 0.24 | 2300 |
| Reinforce concrete | 1.28 | 0.26 | 2100 |
| Cement motar | 0.93 | 0.29 | 1800 |
| Brick | 0.50 | 0.20 | 1300 |
| Earth | 1.40 | 0.22 | 1300 |
| Cement plaster | 1.30 | 0.28 | 2050 |
| Dummy material | 500 | 0.10 | 0.10 |
| Water | 0.60 | 1.60 | 1000 |

Climatic Data

Station - Colombo

Latitude - 6.9 N

Longitude - 79.87

Altitude - 7.3 m





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Table 05 - Climatic data

| | | Sixty years average climate (1920 – 1979) | Recent average climate (1994 – 2000) |
|---|-----|--|---|
| Temperature C | Max | 30.6 | 33.4 |
| | Min | 23.8 | 26 |
| Humidity | Max | 88 | 90 |
| | Min | 76 | 73 |
| Sunshine hours (Hours per day) | | 7.9 | 7.9 |

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