The phenomenon of towers
A study on the development and impact of multi-use telecommunication towers

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ABSTRACT

From the biblical Tower of Babel to the irreverent Leaning Tower of Pisa to the shiny ultra-modern Menara Kuala Lumpur, Man's fascination for reaching out to the heavens and the drive to height has provided the unebbing impetus for him to search for the means of achieving this goal. Technology takes this goal to task.

Technology is the making of things that previously did not exist. It results in forms that exist only because people want to make them. Technology hence deals with the creation, the artificial. There are two sides to technology however: structures - the static, local, and permanent works - and machines - the dynamic, universal, and transitory ones. The CN Tower in Toronto and the Space Needle in Seattle for example, were designed to resist loads with minimum movement and to stand for as long as their societies stand. By contrast, machines like elevators and cars only work when they move and are constantly being made obsolete by newer models. The emphasis in this research is on the beauty and development of the static, the structural art of increasing height - this one-half of technology.

This paper will attempt to investigate the phenomenon of towers. This will include evaluation of their historical and architectural developments, socio-political impact, changes in uses, etc. with focus on the means of achieving them through the structural and material sciences of technology. The ultimate purpose is to be able to discover the trend (if even any) in the reasons for such structures beyond economy and necessity and establish possible construction methods of future reiterations.

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