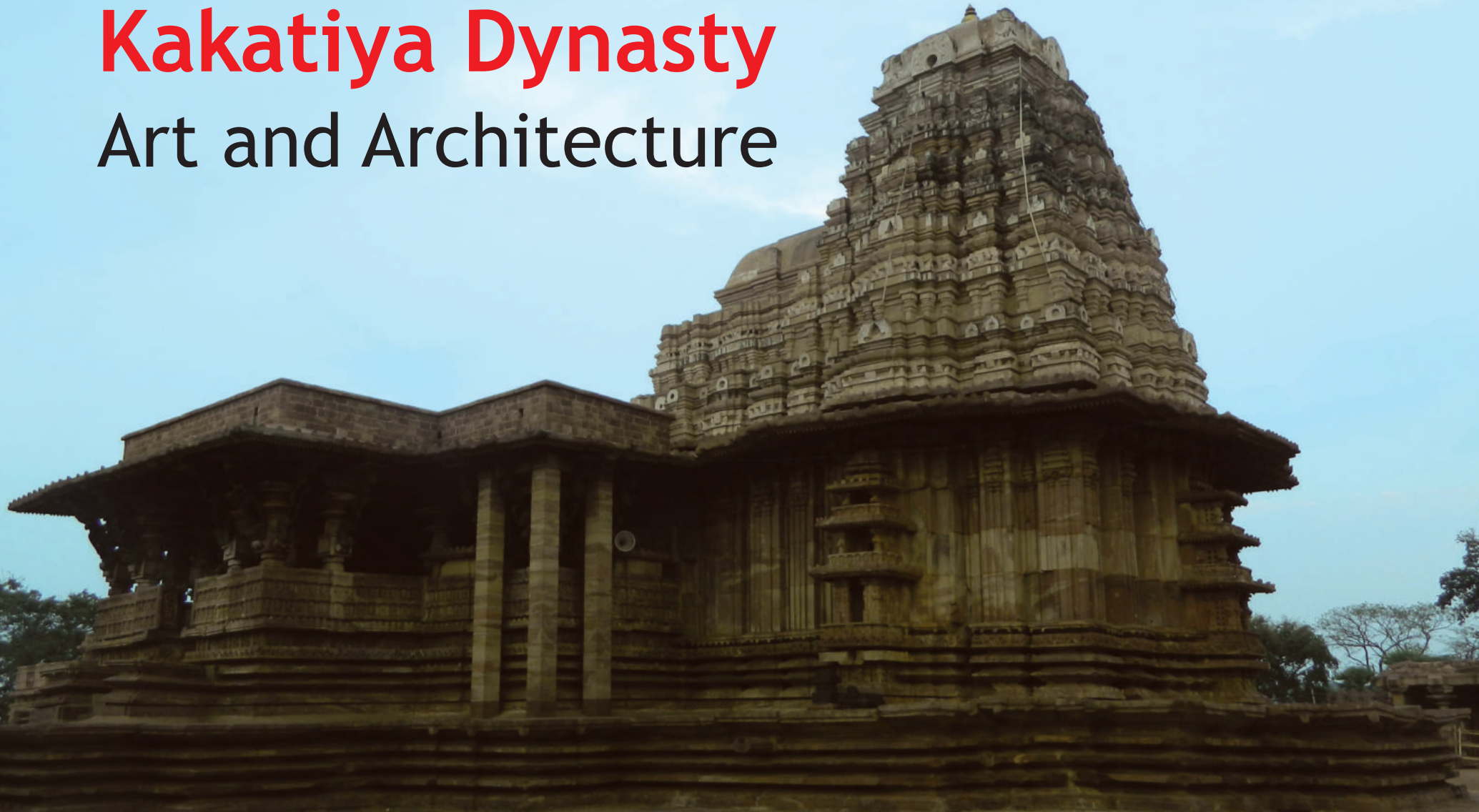


Kakatiya Dynasty

Art and Architecture



Project-III
Guide: Prof. Raja Mohanty

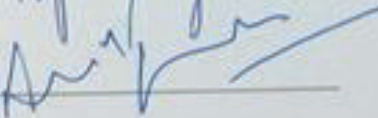
Submission: Srinivas Godala
M. Des Visual Communication
126250012 (2012-14 Batch)

Industrial Design Centre
IIT Bombay

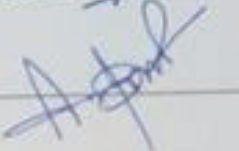
Approval Sheet

The Industrial Design Project III entitled "Kakatiya Dynasty Art and Architecture" by Srinivas Godala; Roll no.126250012 is approved, in partial fulfilment of the Master in Design Degree in Visual Communication at the Industrial Design Centre, Indian Institute of Technology Bombay.

Project Guide: 

Chairperson: 

Internal Examiner: 

External Examiner: 

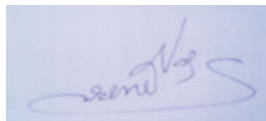
Date: 1 AUGUST 2014

Place: IDC, IIT Bombay

Declaration

I declare that this written submission represents my ideas in my own words and where others' ideas or words have been included, I have adequately cited and referenced the original sources. I also declare that I have adhered to all principles of academic honesty and integrity and have not misrepresented or fabricated or falsified any idea/ data/face/source in my submission.

I understand that any violation of the above will be cause for disciplinary action by the institute and can also evoke penal action from the sources which have thus not been properly cited off from whom proper permission has not been taken when needed.



Srinivas Godala
Roll no: 126250012
M.Des
Visual Communication

Date:

Acknowledgement

I would like to thank Prof. Raja Mohanty for giving the chance to work on this topic and his valuable guidance and direction during the project. I would also like to thank Mr. Krishnaiah superintend of Archaeology survey of India, Hyderabad, for his help and allowing me to take library books and I thanks to librarian Mr. John for his support.

I would also like to thank Prof. G.V. Sreekumar, Prof. Mandar Rane and Prof. Sudesh Balan for their support and encouragement during the project.



Abstract

This project aims at paying a visual tribute to the art, culture and architecture of the Kakatiya Dynasty in Andhra Pradesh - such as the Warangal Fort, the Thousand Pillar Temple and the Ramappa Temple.

The finely sculpted dancers, beautiful flowers, aesthetically carved *Prakaras* or *Gopuras* says a lot about our ancient art and culture. This project takes the shape of a pictorial book that communicates the essence of Kakatiya art and architecture. Through this project I have tried to improve my understanding of photography, communication design and visual design.



Contents

| | |
|---|--------|
| 1. Introduction | 2 |
| 1.1. Aim of the project | 4 |
| 1.2. Reason to choose the Subject | 4 |
| 2. Process | 5 |
| 2.1. Data collection | 5 |
| 2.2. Photo shoot | 8 |
| 2.3. Preparing content for book | 8 |
| 3. Designing Book | 16 |
| 3.1. Size of the book | 17 |
| 3.2. Grid | 18 |
| 3.3. Font for the book | 20 |
| 3.4. Page layout iterations | 22 |
| 4. Learnings | 31 |
| Bibliography | 32 |



1. Introduction

The reign of the Kakatiya dynasty can be broadly divided into two phases. In the first phase they ruled as feudatory chiefs. Subsequently they became the sovereign and imperial rulers. The second glorious phase of the kakatiyas began from about A.D. 1158 and lasted till A.D. 1323. This period of 165 years spanned over the reigns of illustrious Kakatiya emperors that included Rudradeva (A.D. 1162-1195), Mahadeva (A.D. 1196-1198), Ganapatideva (A.D. 1199-1262), Rudramadevi (A.D. 1263-1289) and Prataparudra (A.D. 1290-1323). They brought unprecedented political stability, economic prosperity, linguistic and cultural, artistic splendour and literary efflorescence to the empire they built which we can broadly identify with the present state of Andhra Pradesh. Their unique qualities of undaunted valour, statesmanship and administrative acumen made them a force to be reckoned with as popular rulers within the Deccan.

The Unique feature of the Kakatiya administrative system was the superiority

of the village assemblies over the mandalika chiefs or the administrative officers. The common people received prompt justice from the king and the unjust actions of the mandalikas were corrected on the complaint made by people or its assemblies. In this respect people enjoyed better privileges under the Kakatiyas than under the Vijayanagara rulers of later period. Thanks to the development of tank irrigation in this period there was economic prosperity. This paved the way for proliferation of trading activities and the formation of new trade guilds. An interesting feature of the medieval times was that many of the activities of the contemporary society were centred around temples. They were the centres of exchange or distribution and redistribution and so the guilds were closely associated with the temples.

A rich legacy in art and architecture has been left behind by the Kakatiyas. We are witness to a large number of Kakatiya temples of artistic merit at several Places

and the magnificent forts built by them. The temples as stated above were important centres throbbing with social, economic as well as religious, artistic and literary activities of the society. Most of them are now in ruins and they crave for urgent attention of scholars for multidisciplinary studies so that their all-round significance can be conveyed to the present society and preserved for the posterity. A systematic and co-ordinated archaeological study of these monuments is sporadic. This lacuna has been fully brought out by Huntingtons in their scholarly work, *The Art of Ancient India*. They observe that because of this and the fact that relatively few of them have been fully studied, Kakatiya temples are ripe for future study, as it is expected that they could provide a very well documented sequence of the Deccan buildings, primarily of the eleventh to thirteenth centuries, the greatest period of building activity”.

A comparative study of the Kakatiya art and architecture with that of the Hoyasalas, reveals that both of them were derived from

a common source Western Chalukyan art and architecture. But both of them had developed a few individual characteristics of their own in as much as they share some common features. Following the Western Chalukyan architectural tradition the Kakatiyas carried on the construction of temples more vigorously as the prevailing socio-economic conditions were quite congenial. The religious frenzy of the preceding centuries gradually gave way to forces of harmony. While the Kakatiya rulers themselves had become ardent followers of Saivism, they showed the way to their subjects by installing composite shrines dedicated to the deities of different faiths. Wealthy individuals followed the same tradition.

The enlightened Kakatiyas had embarked upon liberal construction of different temple forms in variably associated with water tanks thus realising the twin objectives of punya and purushardha. These temples take the forms of Ekakuta, Dvikuta, Trikuta, Mandapa and Panchukuta,

depending upon the number of shrines put up together on a common plinth with a common rangamandapa. Each of these shrines has a presiding deity. The popular temple form is trikuta as the “trinity” is the most venerated concept of the Hindu mode of worship as well. The trikuta shine is the most common form in Telangana. It is built on a cruciform ground plan. This architectural style reached its high watermark of the grand edifice in the Thousand Pillar temple at Hanumakonda which raised by king Rudradeva in A.D. 1163. Sri N. Ravi has described one at Ramanujapuram and another at Atmakur, both in Warangal district. They systematically analysed the architectural and sculptural features of this form of temple at the former site and underlined the significance of raising such a monument in the context of the prevailing spirit of the age.

While the sculptures of Hoyasala school of Karnataka are graceful but small and bear excessive ornamentation on their bodies. The Kakatiya sculptures are more elongated

and with minimum ornamentation at times. They avoided clustered decoration and made the figure look more vigorous as well as graceful. Black basalt is used for the pillars, door jambs, lintels and other motifs. The artists of 10th to 13th centuries AD did not have to face religious acrimony and their and their love for the beautiful is further developed, Further notes that though the sculptures lacked symmetry unlike in the Greek art, the indigenous artists gave them vigour and movement. The Palampet nagini dancer in mudra, dvibhanga and tribhanga twists of their bodies, still look pulsating with life and blood.

The glories Kakatiya rulers had not only given to Andhradesa an uninterrupted sovereign rule for nearly two centuries, but also promoted and patronised literature both in Sanskrit and Telugu.



1.1 Aim of the project

The aim of the project is understand the Art and Architecture of Kakatiya Dynasty, which was developed in Warangal district temples such as Warangal fort, Thousand pillar temple and Ramappa temple and process of temple construction methods, technology used during the Kakatiya period. The final design output is pictorial book explains visual narration of temples art, symbols, finely curved dancer (bracket figures) and architecture, The second goal is understand the visual design in book design in terms of layout, Grid and Typography.

1.2 Reason to choose the Subject

Since my childhood days I heard about kakatiyas temples art, beautiful sculptures, When I was 8th standard I visited Ramappa temple first time. I was wondered that temple finely curved, shined black stone dancers, elephants patterns, flowers and angry lions sculpted on prakaras(temple

walls). Perini dance sequence, loving couples and mythological hitihasas sculpted on four pillars in the inside temple, these master piece sculptures were impressed me in that time. Apart from those one thing is there was wonder that floating bricks (low weight bricks) used in shikara construction. Later I was visited thousand pillar temple, Warangal fort, All those sculptors were followed common elements in all temple such as flowers, elephants, dancers and lions. Since I Thought about Kakatiya art, sculptures those experiences were brought to me make interest to do this topic.

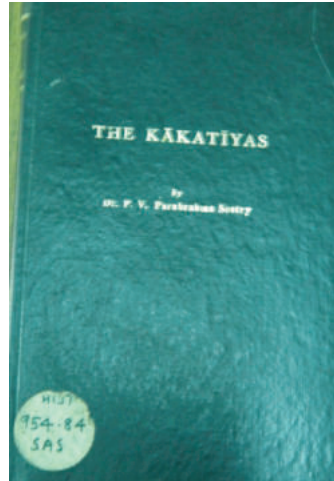
2. Process

2.1 Data Collection

When I started this project, my first approach to study and collect the information about this subject was from Archaeological survey of India. I spent 10 days in the library of Archaeology department which is located in Hyderabad. I went through some books and articles on Kakatiya dynasty those are I have given below details of book names.

1. The Art and Architecture of Kakatiyas.
2. Cultural Heritage of the Kakatiyas.
3. Engineering and Technological Achievements During the Kakatiya Period.
4. The Kakatiyas.
5. Orugallu Asalu Charithra.
6. Sahasra Sthambu devalay(Kakatiya Vamsh ka hithihaas).

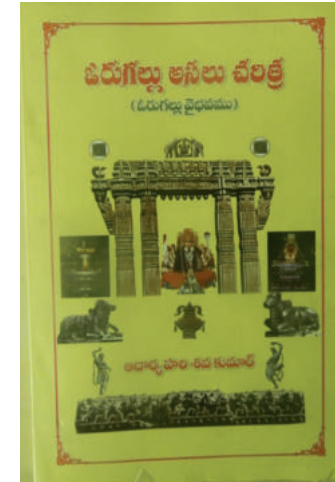
And also followed other books which I got from warangal. Studying all these books helped me a lot, because I got to know all the information such as entire dynasty, culture, literature, people, art and architecture.



Book Title:

The Kakatiyas

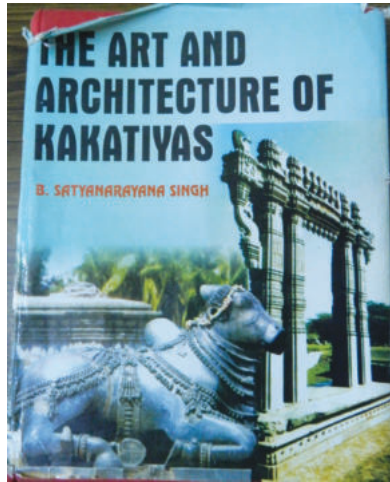
Author: Dr P.V. Parabrahma Sastry
Publisher: The Government of AP
Hyderabad.



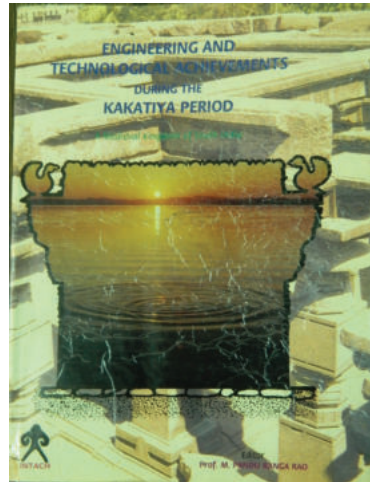
Book Title:

Orugallu Asalu Charithra

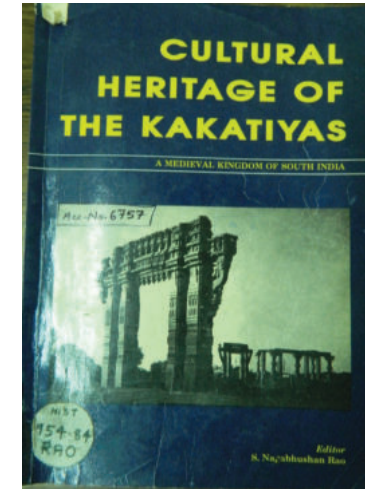
Author: Acharya. Hari Shiva Kumar
Publisher: Potti Sri Ramulu Telugu
University



Book Title:
The Art and Architecture of Kakatiyas
Author: B. Satyanarana Singh
Publisher: Bharatiya Kala Prakashan



Book Title:
Engineering and Technological Achievements during the Kakatiya period
Author: Edited by Prof. Pandu Ranga Rao
Publisher: INTACH, Warangal Chapter and District Council for Cultural Affairs, Warangal.



Book Title:
Cultural Heritage of the Kakatiyas
Author: Edited by S. Nagabhushan Rao
(Multiple authors written individual chapters)
Publisher: District Council for Affairs, Warangal & INTACH, Warangal Chapter



2.2 Photo shoot

Though I got the information and photographs from other resources, most of the images which I got were black and white, and also they were in low resolution. Then I decided to go to the actual places Warangal fort, thousand pillar temple and ramappa temple and shoot the photographs which are relevant and fulfil the main objective of the book design. I have captured the detailed work in the temple. Then I have illustrated those photographs in the book.

2.3 Preparing content for book

I have gone through all the data collection and books sort out the information for book content for satisfy the project goal. The following chapters I have given bellow.

History of Kakatiya

The 12th century witnessed the emergence of a new dynasty “Kakatiyas“ with Warangal (Orugallu or Eka Silanagama) as

its capital. Prola-2 was the first independent ruler(1116-1157 A.D.) of this dynasty with Hanamakonda as the seat of power. His successor Rudradeva (1158-1195 A.D.) extended the kingdom north wards up to the Godavari delta. He built a fort at Warangal to serve the purpose of a second capital. The next ruler was Mahadeva, who strengthened and expanded the kingdom to the coastal Andhra during his short rule. His son Ganapathideva (1190-1262 A.D.) was the greatest among the Kakatiya rulers who shifted the capital to Orugallu and ruled for more than sixty years with a vast empire annexing the territories of Velanati and Telugu Choda rulers(Nellore) and also Kayastha Kings(Cuddapah and Kurnool). He had maritime trade links with countries of far East and Srilanka.

Ganapatideva was succeeded by his daughter Rudramadevi(1262-1289 A.D.) also called “Rudradeva Maharaja,” by virtue of her valour and able governance of the kingdom, attired in male garb. She assumed the regal title “Raya Gajakesari”. Her grandson Prathapa Rudra succeeded to the throne in 1289 A.D. and ruled till





1323. He was the last ruler of the Kakatiya Dynasty. In the final war he was captured and sent to Delhi by Ulugh Khan, the son of Ghiyas-ud-Din Tughluq. But Pratap Rudra died mid-way. Thus came the end of the Kakatiya Dynasty by 1323 A.D.

Art and architecture

The Kakatiyas derived their architecture from the Chalukyas but added indigenous character to it. The Chalukyan art was itself a blend of northern and southern India. The Kakatiyas simplified it by avoiding clustered decoration and made it look more vigorous and graceful. Locally available granite and sand stone was used for the main structure whereas Vimana was built with lime and bricks. A certain type of floating brick is still a curiosity of our museums. The dolerite (black basalt), a volcanic Deccan trap rock, was used for the pillars, jambs, lintels and its motifs. The polished specimens of this work are a treat to our eyes till now. It shows their religious devotion to this art. Kakatiyas stepped their Vimanas instead of using curvilinear horizontal spires of Chalukyas and vertical structures of the north. The motifs are deeply cut

and polished showing a high standard of workmanship and skill than the Karnataka work. No adequate basement was provided for the structure and its weight was transmitted directly to the ground instead of distributing it with arches. Hardly any cementing material was used. This brought an early decay to this construction.

Temple plans

Ramappa temple

Like the 1000 pillars Temple most Kakatiya period temples were erected on modestly raised platforms of 1.2 to 2.0 m high. The structures were not only impressive but were also exquisite and superbly decorated internally by carvings of stone. The builders were more concerned with the details of decoration than with the stable foundation. One of the general Racherla Rudra constructed the star shaped Ramappa temple dedicated to Lord Siva. The temple is located at Palampet in Warangal District, Telangana state (earlier in Andhra Pradesh state). The total height of temple is 12.19m. Twelve life size female dancing girls, the nandi (bull) and superb interior carvings decorate the temple. The foundation is





raised confined sand platform. Along the periphery of the platform retaining walls were provided. On the top the sand was confined by stone slabs.

The pillars directly rest on the floor slabs and beams. The pyramid shaped structure on the sanctum sanctorum was partly constructed with light bricks which float on water. Because of the poor confinement and movement of the ground water, some of the columns settled as much as 36 cm cracking the floor and sill beams. The soil profile and the details of the foundation are shown in in fig bellow. This temple is located on the downstream close to the Ramappa lake. The high water table (almost at the ground level) was essentially due to the lake water. The 1000 pillars Temple and Ramappa Temple are the very typical cases whose foundation were resting on confined sand. The builders of this period knew that confined sand. Gives good stability, but were not definite about the extent of confinement to be provided so that the structures remain stable for some centuries. Such cases of raised foundations by confining the dense sand for temples are

found in Cambodia as well. The damage caused to the Cambodian temples is also due to the yielding of retaining walls confining the sand.

Thousand pillar temple

A 1000 pillars temple was built by king Rudra-1 of Kakatiya dynasty for Lord Shiva at Hanamkonda in Warangal, Telangan state (earlier in Andhra Pradesh). The temple measures 31*25m. The supper structure essentially consisting of columns and roof, (single storeyed) was built on a raised confined thick sand platform about 2.5m above the ground level. The pillars are carved out of coarse grained porphyritic granite and dolerite. Line mortar was used in the roof slabs. The soil profile and the details of foundation section are shown in fig (), the containment of sand was not sufficiently effective. Over the period of time the side walls confining the sand yielded and the movement of sand produced uneven settlements under the columns resulting heavy cracking of the floor beams and slabs and tilting of columns. The builders of that period in the region were not aware of the type of





foundation to be adopted on silty and clayey soils. Though such foundation soils were tackled by mat foundation of stone slab or rubble stone in the other regions of the country. A very extensive study of the soils at the Kakatiya temple structures was made by the faculty of REC, Warangal recently.



3. Designing Book

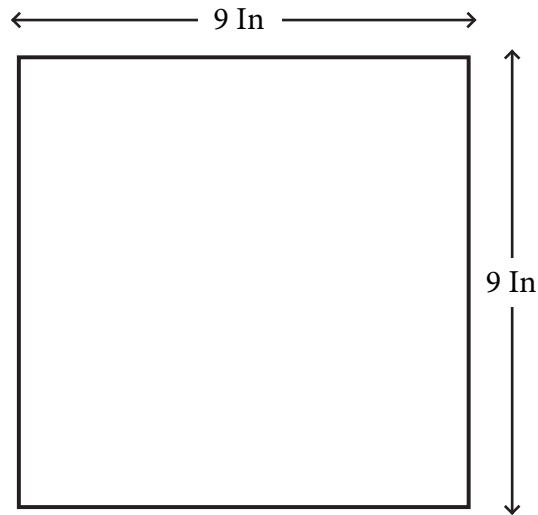
I have read all those books collected from Archaeology Survey of India (ASI) and other from Warangal, All were explained about Kakatiya dynasty, Art, culture and architecture in huge content of books done by ASI scholars and other authors, there was no visual explanation about the Kakatiya art, sculptures and Architecture for general people in easy understanding manner, Thus after discuss with my guide, I decided to do design the book based on visual explanation of Kakatiya Art, Sculptures and Architecture for easy understanding and its feel like virtual tour to people (readers).



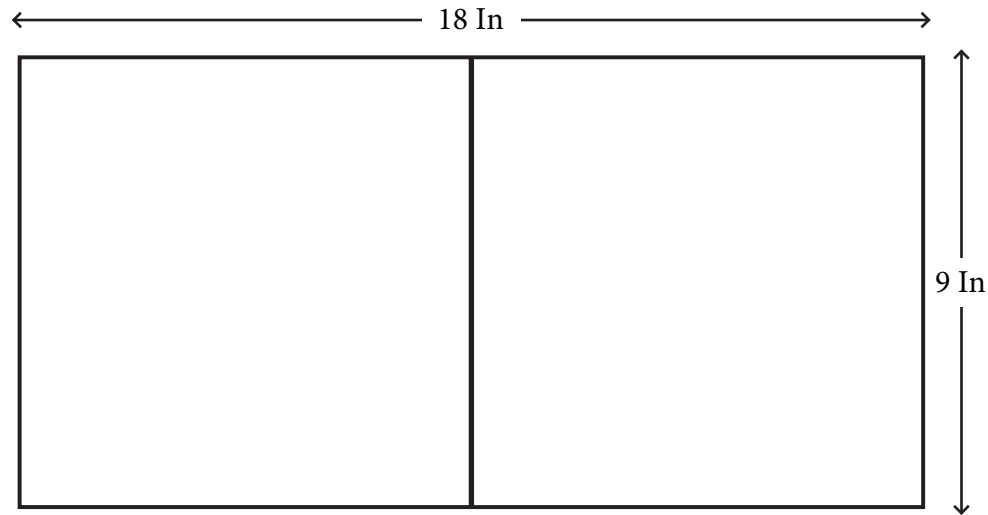
3.1 Size of the book

I have observed the many pictorial books; Photo communications books, Art books in library and ASI library, through this all printing related issues, economy paper size and book should be easy to carry anywhere,

keep in mind all these issues finally the book size is 9 inches X 9 inches for Single spread, 18 inches X 9 inches for Double spread size.



Single Spread

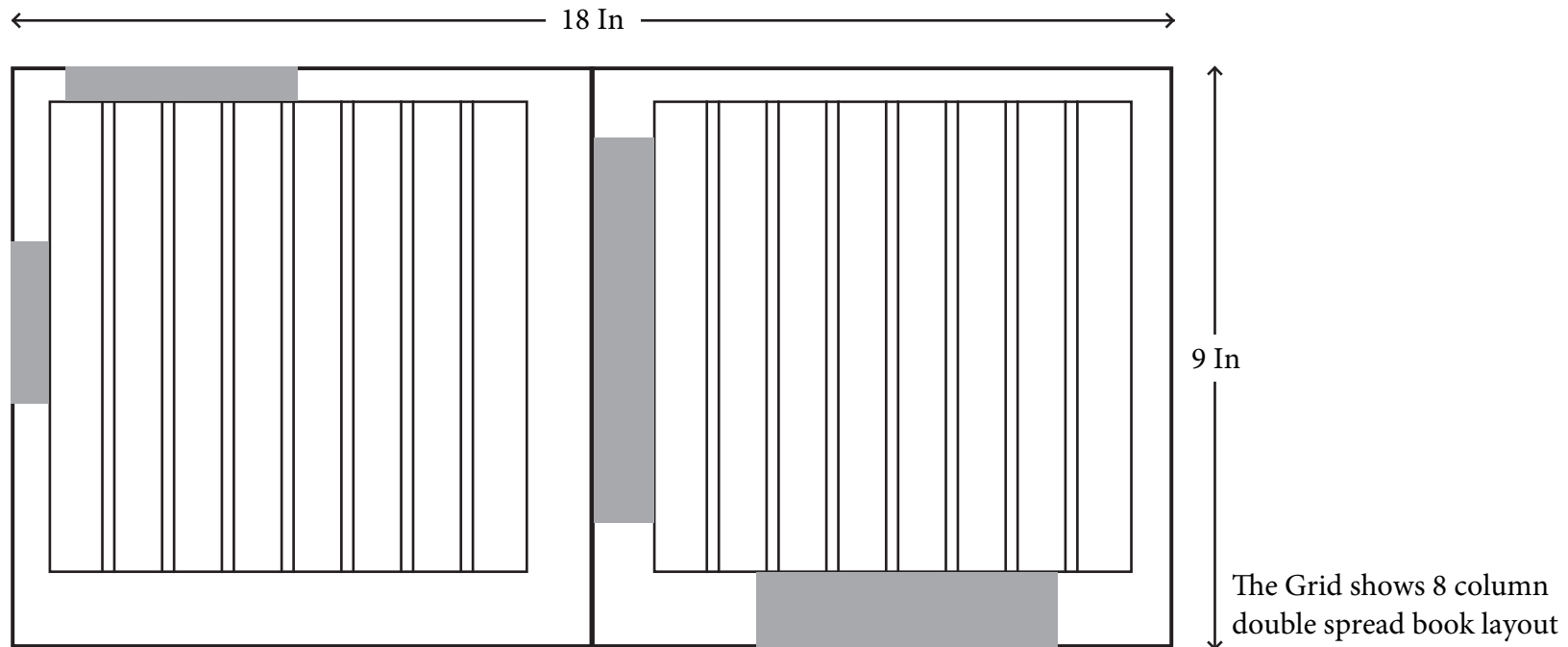


Double Spread

3.2 Grid

A Grid is used to organize the space and information for the reader it maps out a plan for the overall map. Following is the final grid made for the page layout design of the book.

It's an 8 column grid with top and outside margins measuring 20 mm each, inside margin 25mm and bottom margin 36 mm given.



3.3 Font for the book

I have categorized the two type fonts for emphasis for visual attention and readability for the reader, Font for Title of the book and chapters name and Font for Body copy. Following were the various options listed for the text of the book.

1. Trajan pro
2. Constantia
3. Gill sans
4. Perpetua
5. Adobe calson
6. Futura

I have finalized the two typefaces one is Trajan pro, seconcond typeface is Constantia from listed above.

| Font | size | Leading |
|------------|-------------|---------|
| Trajan pro | 24 pt | |
| Constantia | 15pt, 10 pt | 13 pt |

Trajan pro font for Title of the chapters font size is 24 pt.

Constantia font for Heading and Body copy font size is 10 pt, leading is 13pt. heading size is 15 pt.

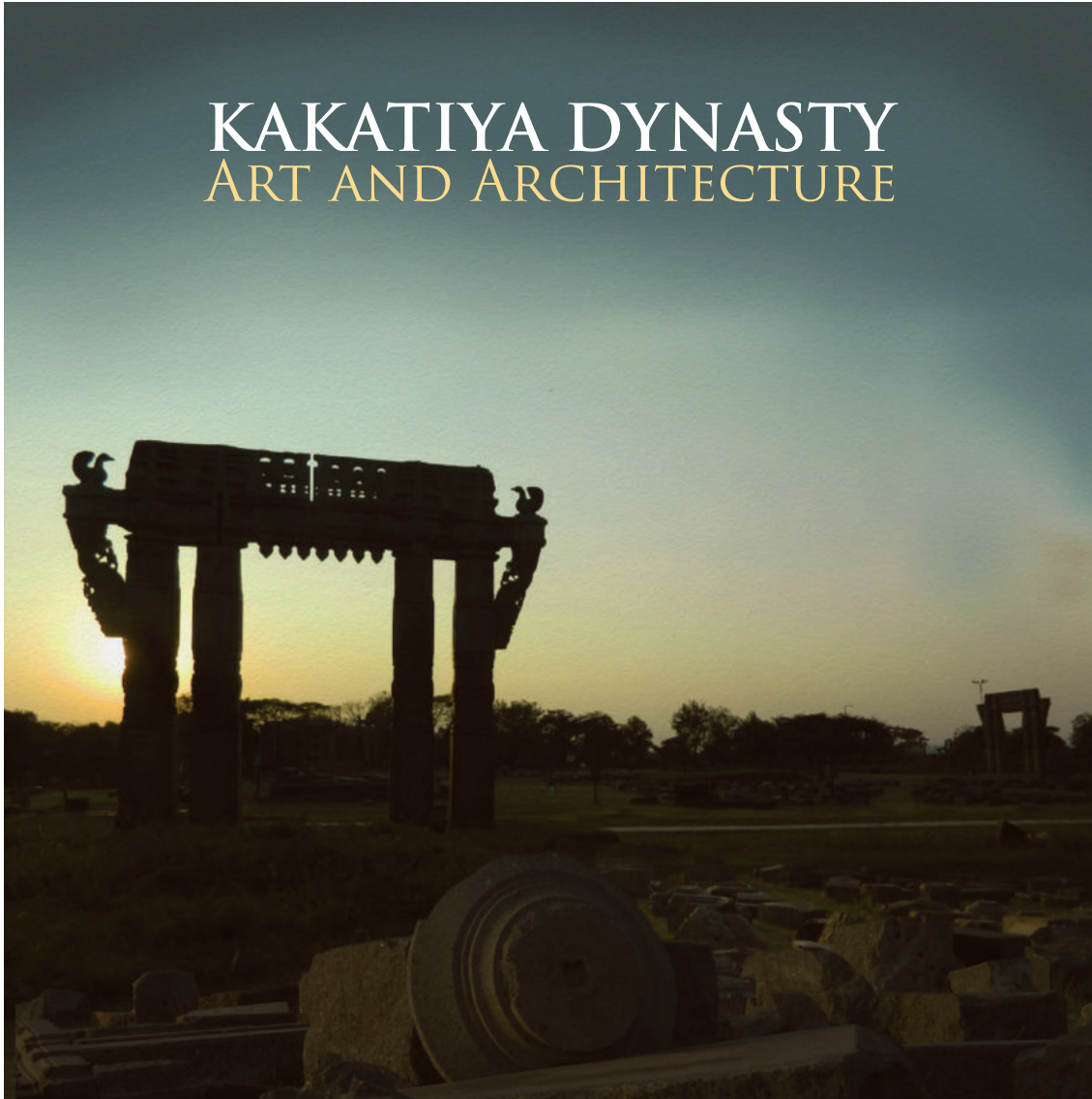
TRAJAN PRO,
24 PT, REGULAR

TRAJAN PRO,
24 PT, BOLD

Constantia, 15 pt, Bold

Constantia, 10 pt, Regular

KAKATIYA DYNASTY ART AND ARCHITECTURE



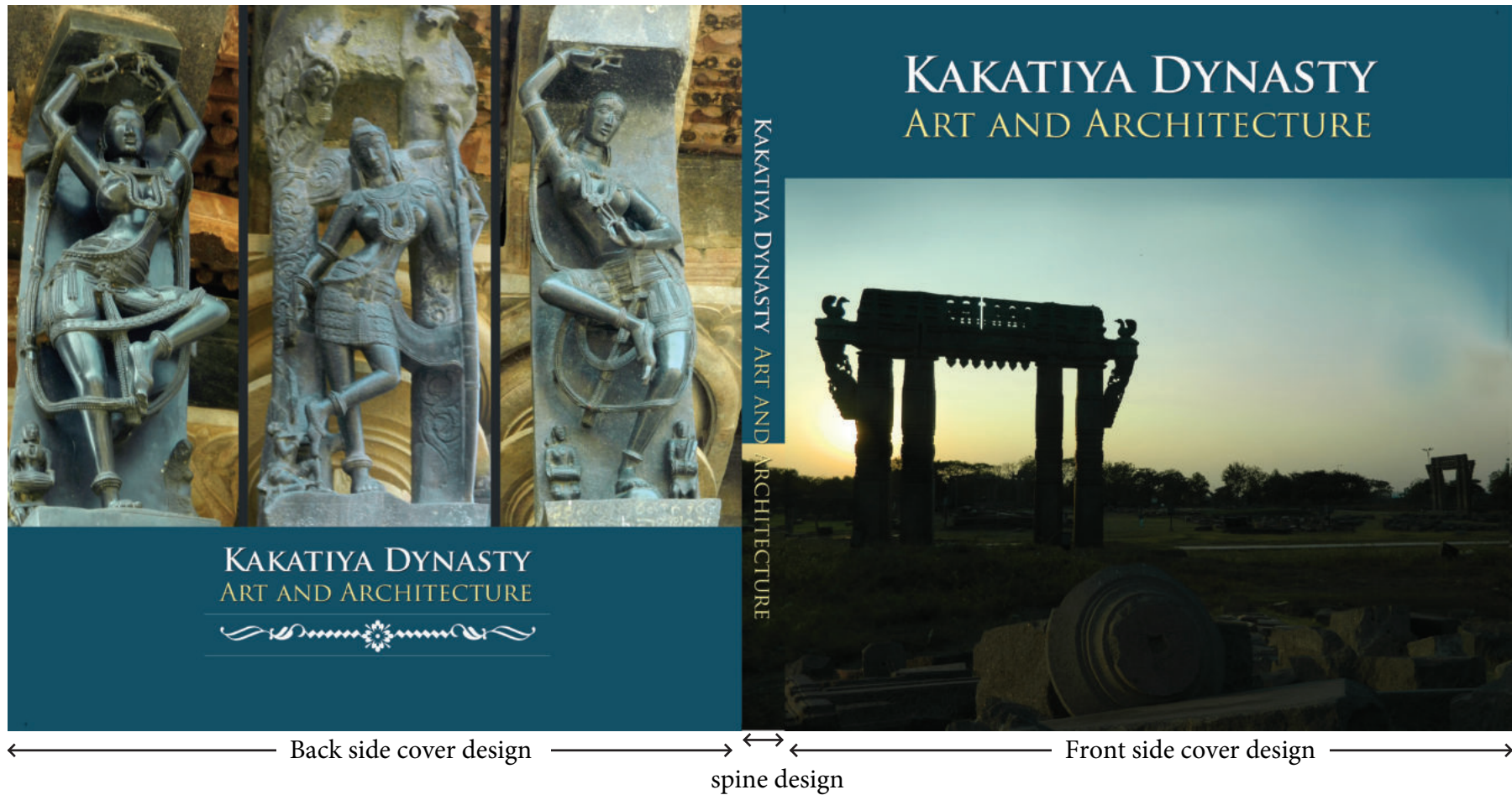
Single spread
Cover page design

3.4 Page layout iterations

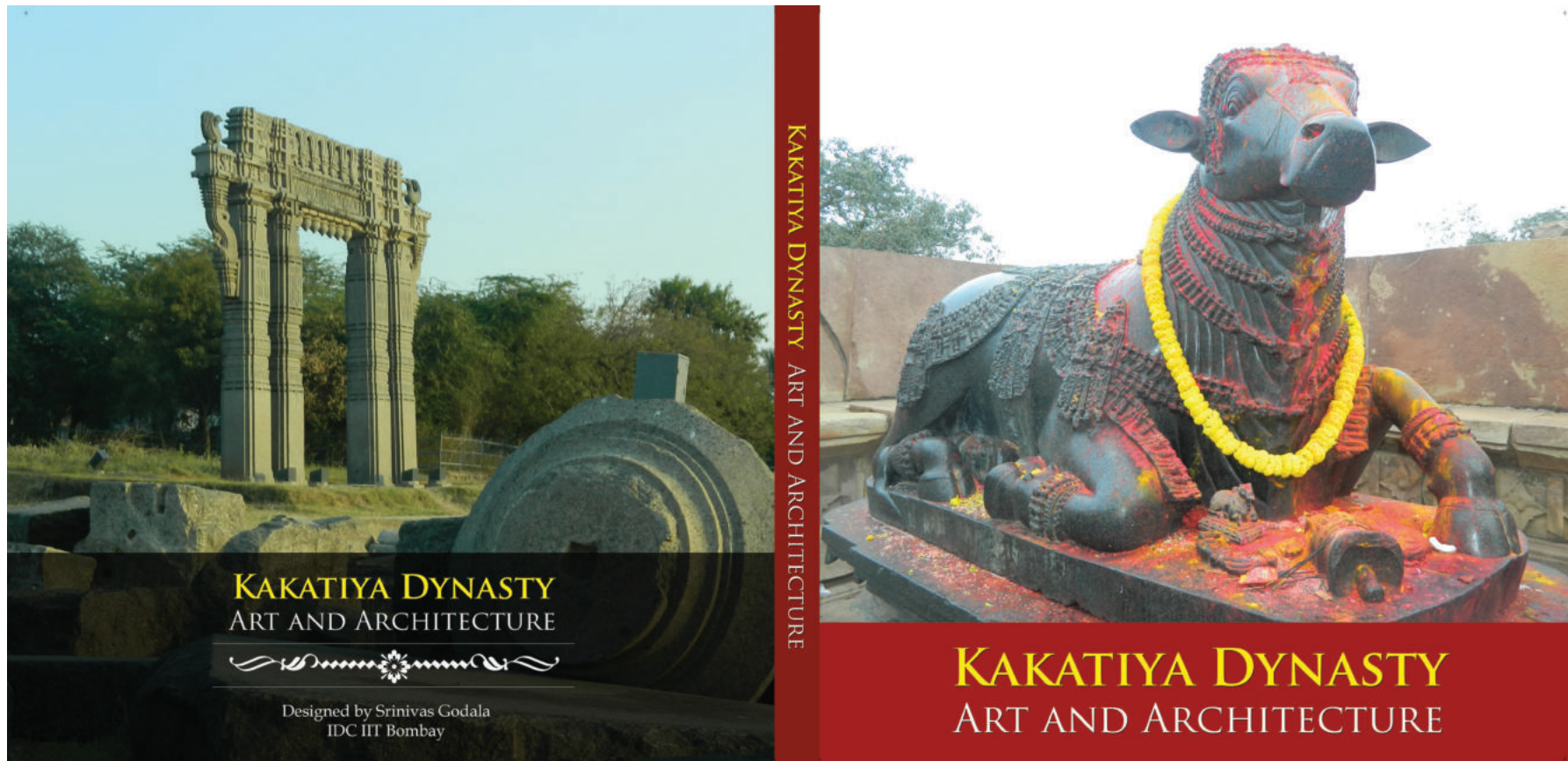
I have designed book cover page double spread designs i tried 3 options based on

key elements taken which is visually explore the kakatiya dynasty.

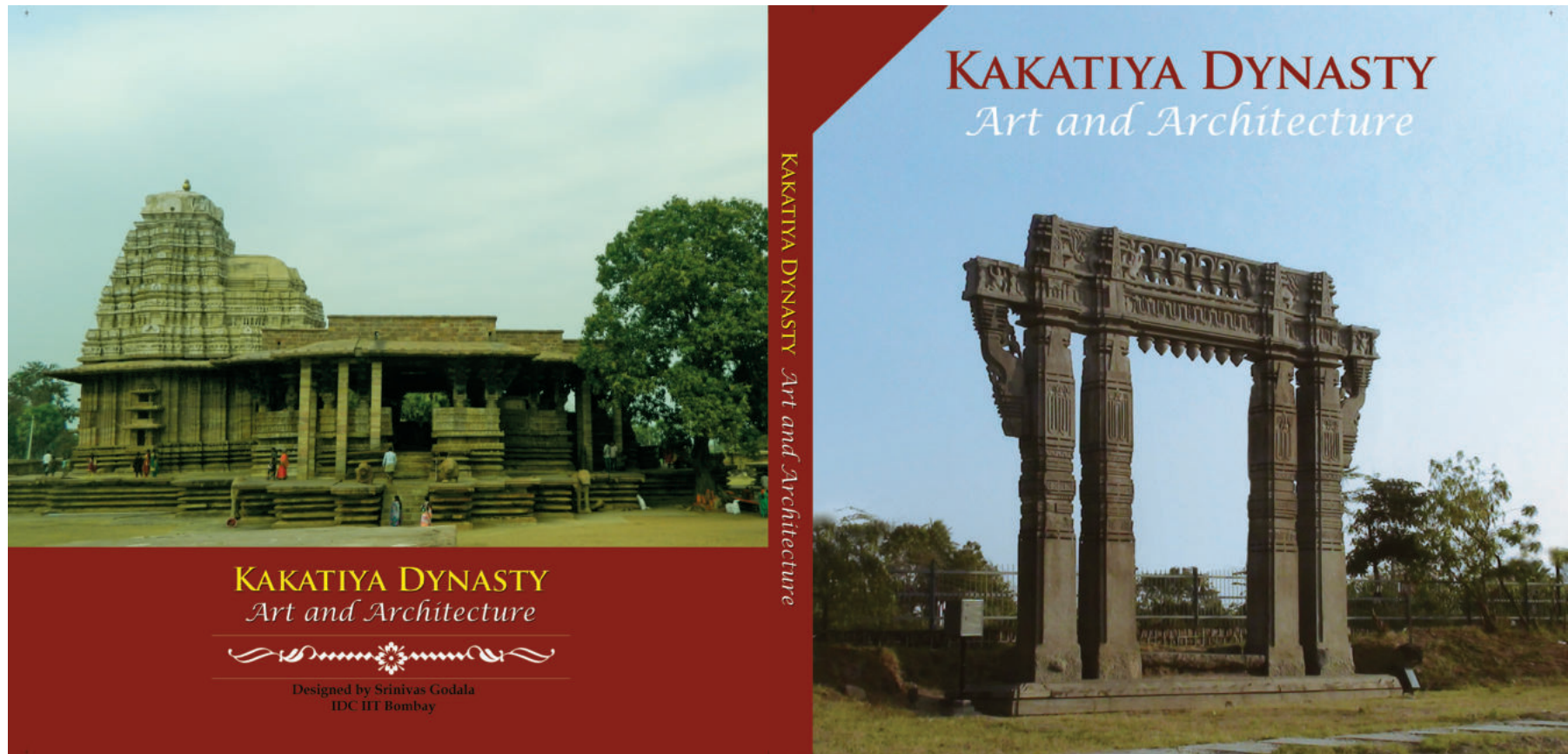
Double spread cover page design option 1



Double spread cover page design option 2



Double spread cover page design option 3



Some of starting chapter pages layouts i have given bellow

HISTORY OF KAKATIYA

The 12th century witnessed the emergence of a new dynasty "Kakatiyas" with Warangal (Orugallu or Eka Silanagama) as its capital. Prola-2 was the first independent ruler(116-1157 A.D.) of this dynasty with Hanamakonda as the seat of power. His successor Rudradeva (1158-1195 A.D.) extended the kingdom north wards up to the Godavari delta. He built a fort at Warangal to serve the purpose of a second capital. The next ruler was Mahadeva, who strengthened and expanded the kingdom to the coastal Andhra during his short rule. His son Ganapathideva (1190-1262 A.D.) was the greatest among the Kakatiya rulers who shifted the capital to Orugallu and ruled for more than sixty years with a vast empire annexing the territories of Velanati and Telugu Choda rulers(Nellore) and also Kayastha Kings(Cuddapah and Kurnool). He had maritime trade links with countries of far East and Srilanka.

Ganapatideva was succeeded by his daughter Rudramadevi(1262-1289 A.D.) also called "Rudradeva Maharaja," by virtue of her valour and able governance of the kingdom, attired in male garb. She assumed the regal title "Raya Gajakesari". Her grandson Prathapa Rudra succeeded to the throne in 1289 A.D. and ruled till 1323. He was the last ruler of the Kakatiya Dynasty. In the final war he was captured as a prisoner and sent to delhi by Ulugh Khan, the son of Ghiyasu- Din Tughluq. But Pratap Rudra died mid-way. Thus came the end of the Kakatiya Dynasty by 1323 A.D.

6 KAKATIYA DYNASTY - ART & ARCHITECTURE

Warangal fort chapter double spread layout in book

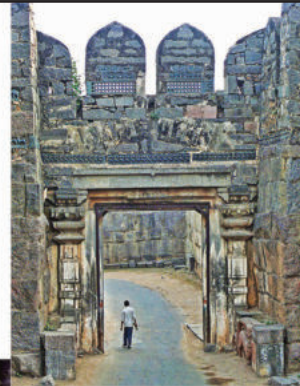


Inner page layouts

Historical Sketch

From the eleventh to the fourteenth centuries, the Kakatiya were the most powerful Hindu rulers in the eastern part of the Deccan plateau. The first stronghold of the Kakatiyas was Hanamkonda, a fort protected by rugged granite hills and earthen ramparts. In the early part of the thirteenth century the Kakatiyas moved their headquarters to a site laid out on a circular plan some 6 km away to the south-east. The new capital occupied an extensive plain with a distinctive granite boulder known as 'single rock' ('ekashila' in Sanskrit, 'orugalu' in Telugu). This feature was incorporated into the innermost citadel. Giving its name to the city which was then referred to as Orugalu (=Warangal).

Though there is no firm date for the foundation of Warangal, historians generally agree that it was laid out during the reigns of Ganapatideva (ruled 1199-1262) and his daughter, Rudramadevi, who survived for more than thirty years after her father's death. In 1294 Rudramadevi abdicated in favour of her grandson Prataparudradeva. This same king was reigning when the Deccan was invaded by the armies of the Muslim ruler of Delhi. Warangal fell to the Delhi forces in 1323, but Prataparudradeva continued to occupy the Warangal throne, subject to payment of tribute in cash and elephants. After his death there was a rebellion among the Hindu chiefs of the eastern Deccan and in 1336 their leader, Kapaya Nayaka, captured Warangal from the Muslims. Soon after, the



Deccan came under the sway of an independent line of Muslim rulers, the Bahmanis, who occupied Warangal in 1366, forcing Kapaya Nayaka to accept a humiliating peace. For the remainder of the fourteenth century and all of the fifteenth century Warangal remained a Bahmani provincial capital.

At the beginning of the sixteenth century a local Hindu chief, Sitapati, known also by his Persian title as Shitab Khan, was governor of Warangal under the Bahmanis. In 1504 he declared his independence and allied himself with Ramachandra, the Hindu ruler of Orissa, the neighbouring region to the north-east. Shitab Khan was soon threatened by the rising prosper of the Tuluva rulers of the Hindu kingdom of Vijayanagara which bordered the Warangal territories to the south-west. In 1510 Shitab Khan was vanquished by the Vijayanagara forces who then took control of the city. Some twenty years later, in 1531-32, Warangal was taken by Quli Qutub ul-Mulk and

incorporated into the Muslim Kingdom of Golconda. With the later transformation of the Golconda Kingdom into the state of Hyderabad, Warangal became part of the Nizam's dominions.

Though Warangal passed back and forth between Hindus and Muslims for more than three hundred years, the city never lost its role as an important military outpost. Its fortifications were continually strengthened, falling into disrepair only from the eighteenth century onward. The religious monuments erected by the Kakatiyas, however, did not escape destruction. The great Hindu temple dedicated to the god Shiva in the middle of the city was almost entirely demolished by the Muslims. The shrines that stand today were mostly erected by Hindu occupants in the fourteenth and fifteenth centuries, often with reused materials from demolished earlier structures. The only courtly building to survive, the Kush Mahal, is attributed to Shitab Khan.

WARANGAL FORT

11

Inner page layouts

core of the city. These portals stand freely in the middle of the four sides of an almost square enclosure (130m east-west, 144 m north-south). The portals each have a double pair of posts, with brackets supporting a massive lintel, giving an overall height of 30 m. The treatment of these elements is highly ornamental, with delicately carved lotus buds, looped garlands, mythical beasts and birds with foliated tails. The absence of Hindu figural themes possibly explains why these portals were spared by the Muslims.

Of the temple itself nothing remains except overturned slabs and smashed columns, brackets and ceiling panels; a more vivid picture of willful destruction can hardly be imagined. Traces of the original foundation slabs exposed by the archaeologists indicate a main shrine to the west and an open columned hall with a stepped plan in the middle. Recent excavations at the south-east corner of the archaeological zone have uncovered the remains of row of sub-shrines, each with a votive linga. Another small temple nearby has an open hall with sharply modeled columns and brackets; the sanctuary is low and plain. The temple is built at a noticeably higher level than the portal of the central monument and is, therefore, clearly later.

West of the ruined Shiva temple is the Kush Mahal. The courtly building consists of a single rectangular chamber. Massive slopping raised on a high plinth support five transverse, pointed arches, probably for a timber roof, now lost. Six vaulted openings are positioned on each of the long sides of the hall with entrances on the north and south.¹³ The southern end of the hall, which is stepped up slightly, may have been where Shitab Khan sat on state occasions. Steps ascend to the roof from which excellent views may be had across the site.

Among the monuments at the summit of Ekashila hill is an octagonal solid keep, with two flights of steps leading

to a circular platform for a gun emplacement. Reused materials in the walls suggest that this structure belongs to the Muslim period. An abandoned temple nearby has a flat-roofed sanctuary with plain walls and an open hall with sharply cut columns.

Other temples inside the fort, some of which are dilapidated and partly buried, appear to be similar in style. One monument of interest consists of a trio of long rectangular chambers built with finely finished stonework at the base and roughly shaped masonry, including much reused materials, above. These halls may have served as granaries. Another structure of uncertain purpose, possibly a stable, consisted of a double row of arcades with vaulted chambers.

Temple and Palace

It has already been observed that the Kakatiya period temple in the middle of Warangal was reduced to a pile of displaced and smashed stones, except for the four portals which define the sacred precinct. The sacred precinct is not located, as perhaps might be predicated, at the geometric centre of the city where the axial roads of the city presumably once intersected. Rather, it is positioned about 80 m east of the north-south axis, and at lesser distance north of the east-west axis. A similar displacement seems also to have been followed in the siting of the Kush Mahal which stands about 80 m west of the north-south axis of the city.

Though the Kush Mahal is the only royal structure to have been preserved at Warangal it post-dates both the Kakatiya and Bahmani periods. It is, however, reasonable to suppose that the capital of the Kakatiyas must have included a royal residence, and that this was built at some prominent location within the city, most likely at or near



Inner page layouts



Ramappa Temple chapter double spread layout in book

RAMAPPA TEMPLE

To describe the temple of Ramappa is to demonstrate the inadequacy of the written word. Historians and pundits of architecture have attempted what may be termed a technical exposition of this remarkable structure. But they have failed to conjure up even a faint picture of the temple and its wealth of artistry and breath-taking beauty. What the eye sees, nothing else can fully convey.

From the headquarters of the "Lake district" of Andhra Pradesh viz., Warangal, a road runs, to Mulug and beyond-a predominantly forest area. After traversing about 32 miles from Warangal, you turn left and proceed along a difficult road in the vicinity of the reserve forest. Then you come across a smallish village called Palampet whose present appearance hardly suggests that it was once a flourishing city.

Passing through Palampet, a little to the left you suddenly see the rear view of the huge temple. There is an indescribable quality about this view - like some mythical bird, on its perch, about to fly into the clear sky above. Crossing a six-foot-wide irrigation canal which takes off from the Ramappa lake and runs close to the rear compound wall of the temple, you enter the compound through a low and narrow doorway. This back door entry is obviously of recent origin, the mukhamandapa (nandimandapa) and the main gate being on the opposite side in front of the temple.

46

KAKATIYA DYNASTY - ART & ARCHITECTURE



4. Learnings

I have learned very valuable point's entire this project those are information structuring from huge content, Photo communication design. Visual design of book design, book typography and understanding the grid

Bibliography

Books:

The Art and Architecture of Kakatiyas

Author: B. Satyanarana Singh

Publisher: Bharatiya Kala Prakashan

Cultural Heritage of the Kakatiyas

Author: Edited by S. Nagabhushan Rao

(Multiple authors)

Publisher: District Council for Affairs,
Warangal & INTACH, Warangal Chapter.

The Kakatiyas

Author: Dr P.V. Parabrahma Sastry

Publisher: The Government of AP Hyderabad.

Engineering and Technological Achievements During the Kakatiya Period

Author: Edited by Prof. Pandu Ranga Rao

Publisher: INTACH, Warangal Chapter and
District Council for Cultural Affairs, Warangal.
1996

Orugallu Asalu Charithra

Author: Acharya. Hari Shiva Kumar

Publisher: Potti Sri Ramulu Telugu University

Sahasra Sthambu devalay (Kakatiya Vamsh ka hithihaas)

Author: Kavitha Bharadwaj

Publisher: Sahithi Samithi

Websites:

<http://www.flickr.com/photos/68143237@N00/3397719704>

<http://www.flickr.com/photos/68143237@N00/3397719704>

[http://flickrhivemind.net/Tags/
warangalfort/Interesting](http://flickrhivemind.net/Tags/warangalfort/Interesting)

<http://www.flickr.com/photos/41599774@N00/5316528494>

<http://www.flickr.com/photos/87467485@N06/11714282876>