

The Game of Knowledge Playing at Spiritual Liberation in 18th- and 19th-Century Western India Schmidt-Madsen, Jacob

Publication date: 2019

Document version Publisher's PDF, also known as Version of record

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Citation for published version (APA): Schmidt-Madsen, J. (2019). The Game of Knowledge: Playing at Spiritual Liberation in 18th- and 19th-Century Western India. Det Humanistiske Fakultet, Københavns Universitet.

Download date: 09. apr.. 2020

The Game of Knowledge

Playing at Spiritual Liberation in 18th- and 19th-Century Western India

by

Jacob Schmidt-Madsen

Part 1

Thesis

Department of Cross-Cultural and Regional Studies
University of Copenhagen

THE GAME OF KNOWLEDGE: PLAYING AT SPIRITUAL LIBERATION IN 18TH- AND 19TH-CENTURY WESTERN INDIA

Submitted by

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under the supervision of

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in partial fulfillment of the requirements for the degree of

DOCTOR OF PHILOSOPHY

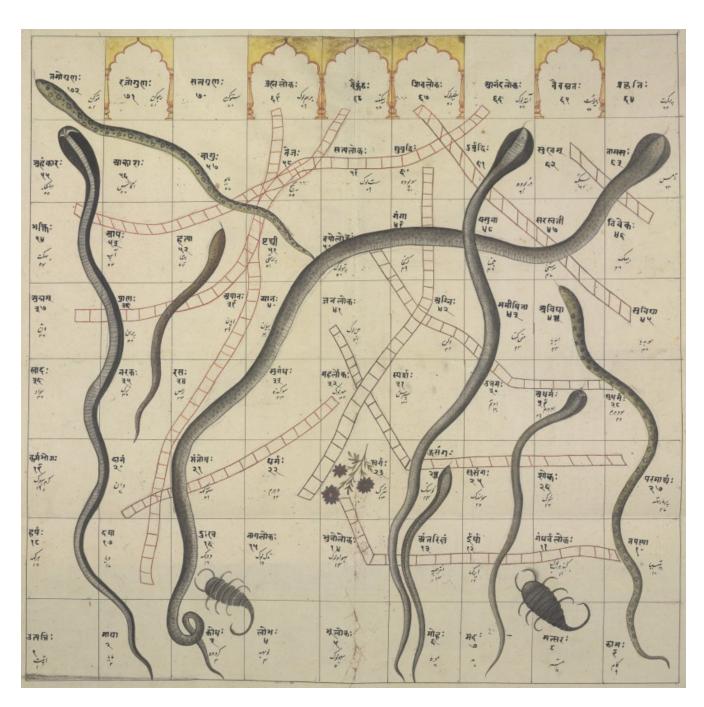
in the

DEPARTMENT OF CROSS-CULTURAL
AND REGIONAL STUDIES

at the

UNIVERSITY OF COPENHAGEN

2019



The earliest datable gyān caupar chart (Va72#7). Lucknow, 1780-82.

Abstract

English

It has long since been established that the modern children's game of snakes and ladders originated from the Indian game of gyān caupar (game of knowledge), but it has rarely been asked how gyān caupar itself originated, and what exactly constitutes it. The present thesis tells the story of gyān caupar based on nearly 150 unique and mostly unpublished game charts and several little explored secondary sources. The majority of the game charts derive from Vaiṣṇava and Jaina communities in 19thcentury western India, though a few reach back to the late 18th century. The thesis argues that the charts developed from tantric drawings of the subtle body used for purposes of meditation and visualization, and only later acquired the properties of a formal game system. Other influences can be traced back to the 12th-century Chinese game of xuanfo tu (table of Buddha selection) and the 15th-century Italian game of gioco dell'oca (game of the goose), but gyān caupar itself does not appear to have been invented before the late 17th or early 18th century. The game charts consist of a sequentially numbered and inscribed grid diagram overlaid with snakes and ladders forming connections between individual squares. The representational value of the charts changes according to the world-views of the different religious communities in which they appear, but they all share a common concern with questions of cosmography, karma, and religious practice. The design is remarkable for its close integration of game mechanics and theme, and while it is possible to reconstruct the rules by which the game was played, little can be said about the uses to which it may have been put beyond that of mere play. Plausible suggestions include education, divination, and self-exploration, but, as evidenced by the later history of the game, such uses have long since fallen away, leaving only the innocent fun of a purely abstract game system.

Danish

Det har længe været kendt at det moderne børnespil snakes and ladders stammer fra det indiske spil gyān caupar (videnspillet), men spørgsmål om hvor gyān caupar selv stammer fra, og hvori det rent faktisk består, har sjældent været rejst. Den nærværende afhandling fortæller historien om gyān caupar gennem små 150 unikke og overvejende upubliserede spilleplader samt en række underbelyste sekundære kilder. Størstedelen af spillepladerne stammer fra Vaisnava- og Jaina-miljøer i 1800tallets vestlige Indien, mens enkelte rækker tilbage til slutningen af 1700-tallet. Afhandlingen argumenterer for at spillepladerne repræsenterer en videreudvikling af tantriske fremstillinger af det astrale legeme til meditations- og visualiseringsbrug der først senere antog karakter af et spil. Andre indflydelser kan spores tilbage til det kinesiske spil xuanfo tu (buddhaudvægelsestabellen) fra 1100-tallet og det italienske spil gioco dell'oca (gåsespillet) fra 1400-tallet, men gyān caupar selv synes først at være blevet til i slutningen af 1600-tallet eller begyndelsen af 1700-tallet. Spillepladerne består af et serielt nummereret og beskrevet feltdiagram med slanger og stiger der forbinder individuelle felter. Spillets repræsentationer veksler afhængig verdenssynet i de forskellige religiøse miljøer spillepladerne stammer fra, men deler et fælles fokus på kosmografi, karmalære og religiøs praksis. Spildesignet udmærker sig ved en tæt sammenhæng mellem spilmekanik og tematik, og mens det er muligt at rekonstruere de oprindelige regler, er det svært at sige hvilke formål spillet måtte være blevet brugt til ud over ren underholdning. Læring, spådom og selvudforskning regnes alle for plausible forslag, men, som spillets senere historie vidner om, er en sådan brug for længst blevet opgivet til fordel for den uskyldige glæde ved et rent abstrakt spilsystem.

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Notes on Transliteration

The present study is based on sources primarily written in Sanskrit, Braj Bhāṣā, Rajasthani, Gujarati, and Marathi. Passages written wholly in Sanskrit or in vernacular verse have been transliterated in full, while prose passages written wholly in the vernacular or in a mixture of Sanskrit and the vernacular have been transliterated with omission of medial and final a when left unpronounced (e.g. Sanskrit paramapada versus vernacular parampad). Words which are current in the English language, such as karma and yoga, have been written as such, while words which are less generally known, such as bhakti and lākh, have been written in italics and with diacritics. Names of historical and mythological persons and places have been transliterated with diacritics (e.g. Harikṛṣṇa Śarmā instead of Harikrishna Sharma), while names of current persons, places, institutions, etc. have been transliterated according to standard practice (e.g. Shatrunjaya instead of Śatruñjaya). Exceptions have been made wherever the name of a current person, place, institution, etc. only occurs in Devanāgarī script, in which case it has been transliterated with diacritics.

Abbreviations

Charts

Gyān caupaṛ charts included as primary sources are referenced as follows:

[religious affiliation] + [no. of squares] + # + [serial number] + [lower case letter if chart exists in multiple variants]

Religious affiliations are abbreviated as follows:

Ad Advaita Vedānta

Ja Jaina

Şū Şūfī

Va Vaisnava

Examples:

Va72#8 Vaiṣṇava chart with 72 squares, no. 8

Ja84#24a Jaina chart with 84 squares, no. 24, variant a

Texts

AŚ Arthaśāstra (Kangle 1960)

AV Atharvaveda (Gippert, Petr & Vavroušek 2012)

BhG Bhagavadgītā (Belvalkar 1968)

BhP Bhāgavatapurāṇa (Goswami 2009)

BS Brahmasūtra (Dvivedin 1915)

BU Bṛhadāraṇyakopaniṣad (Limaye & Vadekar 1958: 174-282)

CS Carakasaṃhitā (Ācārya 1981)

GB Gorakh bāṇī (Callewaert 1991: 489-98)

GPS Gorakh prāṇ saṅkalī (Yatīndranāth 2015)

GŚ Gorakṣaśataka (Kuvalayānanda & Shukla 2006)

HYP Haṭhayogapradīpikā (Digambar & Jha 1970)

JBRR Jñān bājī ramvānī rīt (Jeṭhābhāī 1977/78)

JV Jīv vicār (Vrajlāl 1928)

KGS Kabīr granthāvalī (sākhī) (Callewaert & de Beeck 1991: I, 281-302)

KK Krīḍākauśalya (Harikṛṣṇa 1982)

KV Kāśikāvṛttī (Sharma et al 2008)

LN Laghunyāsa (Narayanaswami 2007: 1-3)

MS Mānasollāsa (Gondekar 1925-61)

MU Mudgalopanişad (Panshikar 1925: 351-53)

RCM Rāmcaritmānas (Poddar 1956)

ŖPŚ Ŗṣabhapañcaśikhā (Klatt 1879)

RV Rgveda (Aufrecht 1877)

SK Sāṃkhyakārikā (Sharma 1933)

SKB Sāṃkhyakārikābhāṣya (Sharma 1933)

SP Skandapurāṇa (Chaukhamba 2003)

ŚU Śvetāśvataropaniṣad (Limaye & Vadekar 1958: 283-300)

SS Sarvārthasiddhi (Śāstrī 1997)

ŚS Śivasaṃhitā (Vasu 1914)

SSP Siddhasiddhāntapaddhati (Gharote & Pai 2005)

TAAS Tattvārthādhigamasūtra (Tatia 1994)

TS Taittirīyasaṃhitā (Gippert & Fushimi 2012)

VP Viṣṇupurāṇa (Pathak 1997-99)

VS Vājasaneyisaṃhitā (Gippert & Kümmel 2012)

Journals

AAW Art & Antiques Weekly

AJMR Asiatic Journal and Monthly Register for British and Foreign India, China,

and Australasia

BGS Board Game Studies: International Journal for the Study of Board Games

JGLF Journal Général de la Littérature de France, suivi d'un Bulletin de la Littérature Étrangére

Dictionaries

ĀVŚK Āyurvedīya-śabdakośa (Jośī & Jośī 1968)

BBSK Brajbhāṣā sūr-koś (Ṭaṇḍan 1974)

DME A Dictionary, Marāṭhī and English (Molesworth 1857)

DoB Dictionary of Bhakti (Callewaert 2009)

ODNB Oxford Dictionary of National Biography (<u>www.oxforddnb.com</u>)

OHED Oxford Hindi-English Dictionary (McGregor 2002)

RSK Rājasthāmnī sabad kos (Lāļas 2013)

SED Sanskrit-English Dictionary (Monier-Williams 1899)

Catalogues

CC Catalogus Catalogorum (Aufrecht 1891-1903)

NCC New Catalogus Catalogorum (Dash et al 1949-)

SCHB A Supplementary Catalogue of Hindustani Books in the Library of the

British Museum Acquired During the Years 1889-1908 (Blumhardt 1909)

Languages

Ara. Arabic

BrBh. Braj Bhāṣā

Guj. Gujarati

Hi. Hindi

Mar. Marathi

Per. Persian

Pkt. Prakrit

Raj. Rajasthani

Skt. Sanskrit

Preface

The present thesis is the result of a life-long fascination with games and simulations, both as a player and as a designer, combined with years of academic training in South Asian languages and cultures. The predecessor of the modern children's game of snakes and ladders, popularly known as *gyān caupaṛ* in western India, first came to my attention in the summer of 2012 when I stumbled upon *The Art of Play: Board and Card Games of India* (Mumbai, 2006) edited by British art historian Andrew Topsfield. The hand-made game charts, inscribed in a mixture of Sanskrit and vernacular languages, immediately caught my attention, and in early 2013 I submitted an MA paper on the topic which was later published online by *The Matheson Trust for the Study of Comparative Religion.*¹ Since then I have documented more than 150 original charts mostly produced between the late 18th and early 20th centuries, and expanded my research from South Asia into parts of East Asia, the Middle East, and Europe.

Little scholarly work has been done on *gyān caupar* and related games, and the road ahead has not always been easy to pick out or travel. Setting out with two key articles by Topsfield as my trusted guides (1985, 2006a), I worked my way through books, articles, catalogues, and lists of auction lots to track down anything and everything relevant to the topic. However, it quickly became apparent that it was the same little bits of information which made the rounds between publications, and that especially art books and exhibition catalogues tended to copy from each other, repeating the same old commonplaces over and over again. In addition, images of the charts were often printed at a low resolution which only allowed me to appreciate them as pieces of art, but not to read the inscriptions they carried. I soon began contacting institutions and individuals to acquire high resolution images of the charts, but even then my attempts were often frustrated by irresponsive owners, impossible bureaucracy, and exorbitant fees.

It was only when I traveled to India in the autumn and winter of 2013, and again in the same period of 2016, that my luck began to change. After an initial meeting with

¹ http://themathesontrust.org/papers/hinduism/Schmidt-Madsen-Road Maps for the Soul.pdf.

Siddharth Y. Wakankar, one of the few Indian scholars to have contributed meaningfully to the study of *gyān caupaṛ* (Wakankar 2007), I was able to make headway with some of the Indian libraries, museums, research institutions, and private collectors that had so far ignored my requests, or altogether escaped my attention. As my research database increased, so did my success in convincing people to open up their doors to me, and after a few appearances in prominent Indian newspapers, such as *Times of India*, *Gujarat Samachar*, and *Dainik Bhaskar*, people even started contacting me themselves with information about charts in local museums or private homes. Presenting my material at seminars and conferences led to further insights and contacts, and soon I found myself traveling around Europe meeting with scholars, curators, dealers, and collectors. Though some doors have remained locked throughout the years, and many others may still have to be found, I feel confident that the charts documented here represent a sizeable portion of the total number of charts which have survived the ravages of time and come down to us in one form or another.

Perhaps the biggest challenge apart from procuring the charts has been acquainting myself with the many languages in which they are written. I come from a background in the now defunct Section of Indology at the University of Copenhagen, focusing mainly on the study of ancient India, and what initially attracted me to *gyān caupaṛ* was the idea of a game chart inscribed in Sanskrit. However, it soon became clear that a wealth of other languages, including Rajasthani, Gujarati, Marathi, Braj Bhāṣā, and Persian, would also be required in order to fully understand the charts and the multiple contexts in which they appear. Someone less passionate about his subject matter, and more acutely aware of his personal limitations, might have chosen to back

^{2 &}quot;Spiritual Lessons in Snakes and Ladders" in *Times of India*, 26 Sep, 2013. Accessed 20 Jan, 2019: http://timesofindia.indiatimes.com/city/ahmedabad/Spiritual-lessons-in-snakes-and-ladders/articleshow/23069903.cms.

^{3 &}quot;Prācīn ramat sarpsīḍī viśe saṃśodhan" [Researching the Ancient Game of Snakes and Ladders] in Gujarat Samachar, 20 Sep, 2013. Accessed 20 Jan, 2019: https://gyanchaupar.files.wordpress.com/2013/08/gujarat-samachar 130920.jpg.

^{4 &}quot;Khel ke rahasya ko khojne ke lie juṭāīm 150 sāmp-sīṛhī" [150 Snakes and Ladders (Charts) Collected to Reveal the Mystery of the Game] in Dainik Bhaskar, 6 Nov, 2016. Accessed 20 Jan, 2019: https://www.bhaskar.com/news/RAJ-KOT-OMC-snake-and-ladders-game-facts-news-hindi-5453723-PHO.html?ref=ht (online version entitled "Kyā haim sāmp-sīṛhī ke aṅkom kā gaṇit, nark-svarg se juṛā is khel kā riśtā" [What Is the Math Behind the Numbers of Snakes and Ladders and the Connection of the Game to Heaven and Hell?]).

away, but seeing as the charts and any living knowledge of them were fast disappearing, I resolved to go ahead and attempt to overcome the obstacles as well as I could. As part of my PhD program, my department at the university generously allowed me to follow the Hindi courses offered by the then newly established Section of Modern India and South Asia Studies, and I was able to use the language skills thus acquired as a basis for engaging with the vernaculars of both primary and secondary sources. Many gaps in my knowledge of these languages still remain to be filled, and I am deeply grateful to all the people who have assisted with translations, paraphrases, comments, and corrections along the way. Despite the linguistic shortcomings of my study, I hope that it will prove significant enough to justify its existence, and, if nothing else, enable other scholars more at home in the vernacular landscape of western India to build on it.

Jacob Schmidt-Madsen Copenhagen, 26 Jan 2019

Acknowledgments

A complete list of all the people who have helped me in the course of researching and writing the present thesis would take up far too many of the one lakh words allotted me to get my message across. I will therefore have to confine myself to the few who have been of special importance to my work. Most of all I am grateful to my supervisor Prof. Kenneth G. Zysk who has been supportive of me throughout my education in the Section of Indology at the University of Copenhagen, and who always believed in my thesis despite its unconventional subject matter. I would also like to thank Andrew Topsfield, Honorary Curator and former Keeper of Eastern Art at the Ashmolean Museum, for sparking my interest in the game of knowledge, and keeping up a healthy and productive correspondence over the years since I first contacted him with nothing to offer but my enthusiasm. The same goes for Siddharth Y. Wakankar, connoisseur par excellence of all things obscure in Indian literary traditions, who kicked open many a door for me, and got me started on the road to collecting game charts both inside and outside India. The International Board Game Studies community also deserves mention for taking me in at an early stage, allowing me several occasions to present and discuss my findings with them, and finally nudging me to host their annual colloquium in Copenhagen in May 2017. Last, but certainly not least, I am grateful to the Department of Cross-Cultural and Regional Studies at the University of Copenhagen for enrolling me as a PhD Fellow in a difficult time of budgetary cutdowns and other austerity measures. Despite the loss of the Section of Indology and several other sections devoted to the study of the world outside our own, I hope that the department will remain committed to cross-cultural ideas and initiatives that others would rather see fall by the wayside.

For Liv

Introduction

यह मात्र एक खेल नहीं है⁵

- inscription on modern Jaina *gyān caupar* chart⁶

Among the pastimes most commonly found on the shelves and floors of children's rooms are fairy tale books and traditional board games. As it happens, the two often share the same trajectory: they originated in obscurity, were primarily intended for adults, and had to undergo censure before they could be safely delivered into the hands of children. While fairy tales were picked clean of sex and violence, traditional board games were simplified and stripped of any meaning beyond that of winning and losing. The present thesis leaves the fairy tales to the folklorists, and takes up the subject of traditional board games; or, to be more precise, the subject of a single traditional board game. Snakes and ladders is easily one of the most successful children's games of all times, and since it was first marketed toward the end of the 19th century, it has been played continuously by excited children and patient adults all over the world. How a purely luck-driven game could attain such popularity without involving any element of gambling remains a cause of wonder to game designers and scholars alike. While I do not aim to strike at the root of that wonder, I do hope to be able to demonstrate why people might have been attracted to the original version of the game as it was played especially in 18th- and 19th-century western India. Back then it was not always the innocent and abstract pastime that it has become today. It was a game of knowledge deeply rooted in religious thinking and capable of revealing the innermost secrets of self and universe. The evidence presented in the following pages and chapters even suggests that the earliest form of the game was not a game at all, but rather a tantric diagram of the subtle body with various cosmic principles

⁵ I.e. yah mātra ek khel nahīm hai [this is not just a game].

The chart was published by the Dharmoday Pariksha Board in Sagar, Madhya Pradesh. A copy hangs at the Shri Shantinath Digambar Jain Atishay Kshetra at Bajrangarh outside of Guna, Madhya Pradesh. Thanks to Tillo Detige for bringing it to my attention and providing me with a photograph.

mapped on to it. Ironically, just as the Indian game would eventually be transformed into a European game, the mechanics that turned the original tantric diagram into *gyān caupar* may themselves ultimately have derived from Europe.

The beginnings of snakes and ladders in the West can be traced back to the late 19th century. In October 1892, the London-based company F. H. Ayres, of then one Britain's leading manufacturers of sports and games took equipment, out design registration for a spiral-track race game featuring snakes and ladders as a key mechanic (fig. 1). The design was made to be printed on paper which would then be mounted on a circular wooden base. Only a few copies of the finished product are known to exist, and none of them are titled or accompanied by the original set of rules.8 However, it does

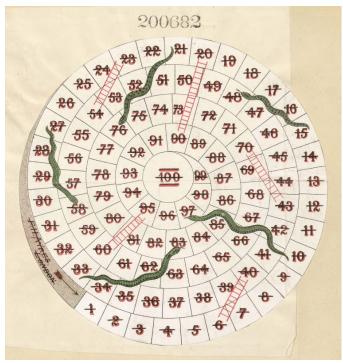


Fig. 1: Untitled game with snakes and ladders. London, 1892.

not require much imagination to infer the broad strokes of the rules from the wealth of similar games that were to follow in its wake. Each player would move a single pawn from the first to the last square of the numbered track according to the roll of a die or the spin of a teetotum. If a pawn landed at the foot of a ladder, it would climb to the square at the top of the ladder, and if it landed on the head of a snake, it would slide back down to the square at the tail. Other details, such as the exact starting position of the pawns, their interactions throughout the game, and the rules for landing in the

The claim featured on the Wikipedia page of games manufacturer Jaques of London that they began publishing snakes and ladders in 1888 cannot be verified (acc. 11 July, 2018: https://en.wikipedia.org/wiki/Jaques of London). American games historian Bruce Whitehill informs me that the current company is known to "fabricate parts of their history on their website and in their catalogues" (pers. comm.). I tried reaching Jaques of London for comment, but they never got back to me.

⁸ One copy is in a private collection in London, another is in the Richard Ballam collection of games at the Bodleian Library in Oxford (cataloguing in progress), and a third is in the Victoria & Albert Museum in London (acc. no. B.892-1993).

final square, are more difficult to guess at as they tend to vary between different versions of the game.

On the 15th of March 1893, less than half a year after F. H. Ayres registered their design, a patent for a related game concept was registered by journalist Richard Harte from Croydon in south London. The patent specification was accompanied by a sample design sketch (fig. 2) which Harte made sure to point out was neither fixed nor final. The arrows and ladders could be replaced with "other emblematical devices," the sequential numbering of the squares could be rearranged, and the spinner in the center was only optional (Harte 1893: 1). The rules, however, were clearly stated in the specification. Each player controlled a single pawn which proceeded along the sequentially numbered track square by square according to the number spun, thrown, or otherwise randomly generated. The arrows and ladders functioned like the snakes and ladders in the Ayres game, and the winner was the first to arrive in any square of the top row which did not have an arrow pointing down from it (i.e. sqs. 29,33,34 in the

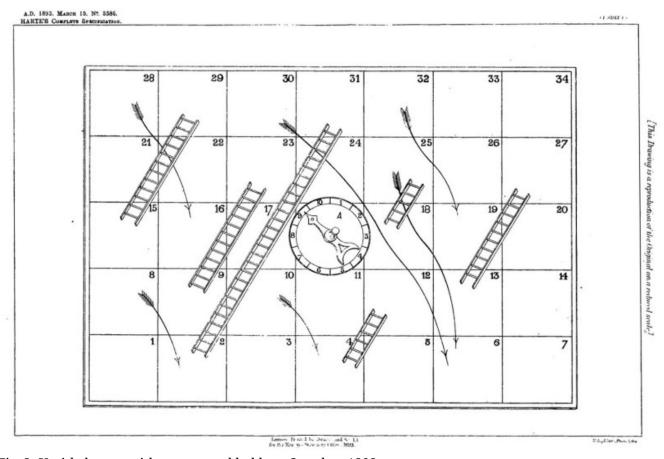


Fig. 2: Untitled game with arrows and ladders. Croydon, 1893.

design sketch). Harte's application was accepted a month after it was received, but there is no indication that the proposed game was ever published. Neither does the patent appear to have been enforced, as numerous games conforming to Harte's formula would soon begin to be made both inside and outside Britain.

The inspiration for the games proposed by Ayres and Harte did not come from any single source. Luck-based race games had been on the rise in Europe since the invention of gioco dell'oca, or the game of the goose, in Renaissance Italy, and had dominated the commercial market for board games in Britain since at least the late 18th century (Goodfellow 1998: 70-1). Goose games often explored colorful yet educational themes, such as history, travel, morality, and even love, and carried instructions of reward and punishment for landing on specific squares. The instructions were sometimes written on the game board itself, and sometimes in an accompanying booklet, making the games poorly suited for younger children who had not yet learned to read, and did not have an adult or older sibling to play with. Ayres had previously published a series of abstract race games which did not require literacy, and which might have inspired the design for their new game. They, too, were made from circular wooden blocks, but instead of pasting a print on top of them, one or more spiraling rows of tiny holes were drilled into the surface, presumably to allow players to record their current positions with pegs instead of pawns. 9 Considering the serpentine associations of the spiral track, it is possible that the games were inspired by the goose game known as The Royal Pastime of Cupid, or Entertaining Game of the *Snake* published by R. H. Laurie around 1850 (fig. 3). Popular in England since the late 17th century, Laurie's game was only the latest in a series of reprints of a Spanish game designed by the Dutch engraver Pieter de Jode I around 1620. 10 Since the game lays out the track in the shape of a coiled serpent, Ayres may simply have abstracted the design for their own games.¹¹

⁹ Examples can be found in the Edinburgh Museum of Childhood and in the Richard Ballam collection of games at the Bodleian Library (cataloguing in progress).

¹⁰ For a detailed history of de Jode's *El Juego Real de Cupido*, or the real game of Cupid, see Leesberg 2015.

¹¹ Caroline Goodfellow, apparently unaware of de Jode's original, goes on to suggest that Laurie's game may have been inspired by the ancient Egyptian game of *mehen* which was also laid out in the shape of a coiled serpent (Goodfellow 1998: 71). This suggestion, however, is almost certainly anachronistic as very little was known about ancient Egypt when de Jode designed his game in the early 17th century. On the other hand, when the Ayres design was registered in 1892, it would have been

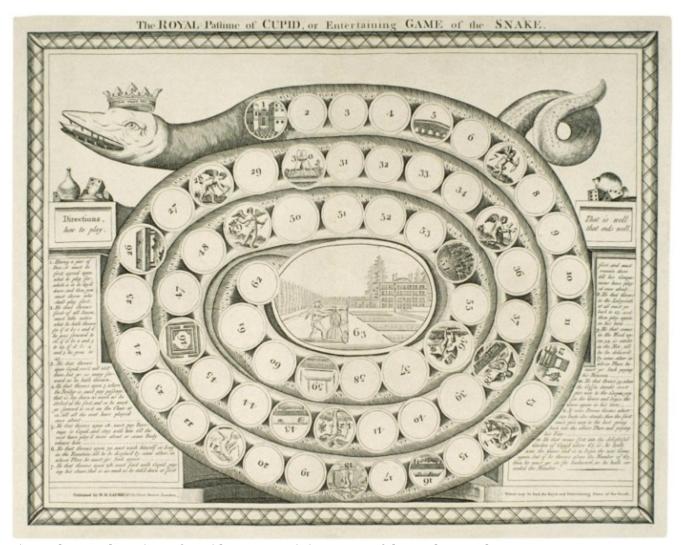


Fig. 3: The Royal Pastime of Cupid, or Entertaining Game of the Snake. London, c. 1850.

The main novelty introduced by Ayres and Harte was the snakes and ladders and the ingenious way in which they maintained the concept of reward and punishment associated with goose games without requiring literacy of the players, and without interrupting the flow of the game by asking them to consult an inscription or a manual. The use of a visual device to link squares and cause pawns to be promoted and demoted may already have been in vogue at the turn of the 2nd millennium BCE when the Egyptian game of 58 holes first appears in the archaeological record (Crist *et al* 2016: 103-24), but it was not a common feature in goose games which often included

possible, though perhaps neither likely nor necessary, for the designer to have come across illustrations of *mehen* in recent publications of ancient Egyptian art objects and tomb paintings (e.g. Lepsius 1849-58: II, iii, 61, fig. 61a).

more complex and varied rules for landing on specific squares. ¹² Even so, it is not the visual device itself, but rather the imagery used to express it, which gives away its origin as Indian. At the time of the invention of the Ayres and Harte games in the 1890s, the imagery of snakes and ladders had already featured prominently in a religiously themed race game from western India for more than a century (see frontispiece). ¹³ The game was played on a grid of sequentially numbered squares, somewhat reminiscent of that suggested by Harte ¹⁴, and followed more or less the same rules as the Ayres and Harte games. We do not know whether Ayres and Harte had direct access to copies of the Indian game, but we do know that a beautifully crafted version of it (Va124#1), probably prepared for the court of Baji Rao II (r. 1796-1818) in Pune, had arrived in London as early as 1831 (fig. 4). Several other copies might have made their way to the shores of England in the intervening years, and the lithographic prints appearing throughout India toward the end of the 19th century might also have influenced Ayres and Harte in their designs. ¹⁵

The Indian game was known by different names among the different religious communities which adopted and transformed it according to their own beliefs. In Gujarat and Rajasthan, where the game found its earliest and widest distribution, it was generally referred to as $gy\bar{a}n$ caupar by the Vaiṣṇavas and as $gy\bar{a}n$ $b\bar{a}z\bar{\imath}$ by the Jainas. Both names indicate a game (caupar, $b\bar{a}z\bar{\imath}$) of knowledge ($gy\bar{a}n$) as testimony to the insight which it provides into subjects such as cosmology and soteriology.

¹² For an exception, see the game of *Sonne*, *Mond und Sterne* (Berlin, 1825). It consists of four concentric circles of squares connected by a single square in each circle. If a player overshoots the connecting square, he has to continue around the same circle until he gets another chance at landing on the connecting square, thereby moving into the next circle (Strouhal 2015: 49).

¹³ Harte's choice of downward-pointing arrows over snakes may have been prompted by a desire for a less frightening and more family-friendly imagery. While arrows never replace snakes in the Indian game, they consistently replace ladders in a later Turkish version of the game dating back to the turn of the 20th century (Ṣū100#4ab,6abc,7,8,9).

¹⁴ Harte agrees with the Indian game in numbering the squares row by row from bottom to top, but differs in numbering each row from left to right instead of alternating between left to right and right to left. Though the *boustrophedon* movement of the Indian game had already appeared in other goose-like games, including some that were inspired by Indian themes (e.g. Strouhal 2015: 28), the grid used by Harte may indicate a further borrowing.

¹⁵ Early lithographic prints of the Indian game include a Ṣūfī version printed in Lahore in 1890 (Sū100#10), two Jaina versions printed in Mumbai in 1894 (Ja84#24a) and 1902/03 (Ja84#24b), and a version from Tamil Nadu, probably of the *parampad sopān* variant, printed in Chennai in 1895 (Beveridge 1915b). Woodblock prints of the related Bengali game of *golok dhām* were also produced in Kolkata during the same period (Topsfield 2006a: 178).

Following earlier writings on the game, I have chosen to adopt the name of *gyān caupaṛ* throughout the thesis. Other popular names included *mokṣpaṭ* (board of liberation) in Maharashtra, *parampad sopān* (ladder to Paramapada, i.e. Viṣṇu's heaven) in Tamil Nadu, *vaikuṇṭh pāḷi* (board of Vaikuṇṭha, i.e. Viṣṇu's heaven) in Andhra Pradesh, and *vaikuṇṭh khel* (game of Vaikuṇṭha) or *nāgpāś* (snake-dice or snake-trap) in Nepal. Among the Ṣūfī communities in north India, it was sometimes referred to as *gyān caupaṛ*, but a more common name, especially in Persia and Turkey,

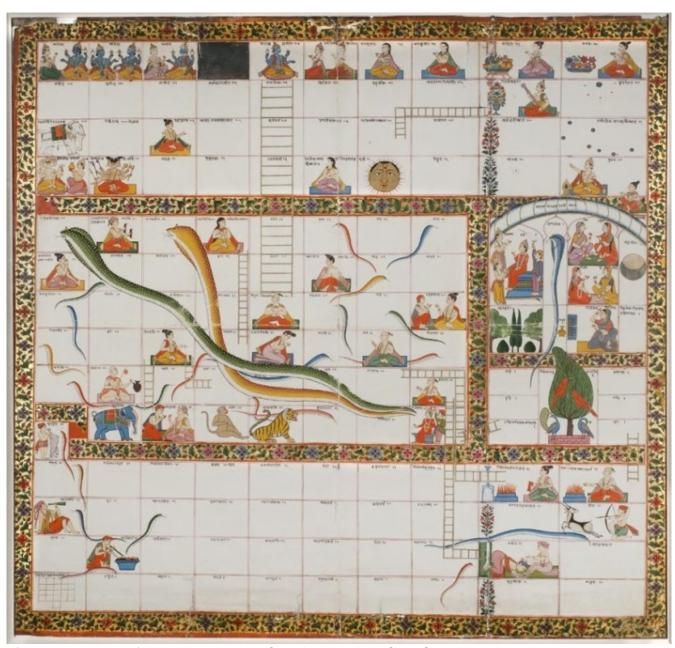


Fig. 4: 124-square Vaiṣṇava gyān caupaṛ chart (Va124#1). Maharashtra (Pune?), c. 1800.

was *shaṭranj al-'ārifīn* or *satranc-ı urefa*, both of which mean chess of the wise. The reason that a single game could be used to communicate such a great variety of religious world-views lay in the simplicity of its design and the universality of its message. All the communities to which it spread could easily agree on a metaphor of existence where players began at the bottom, and had to make their way to the top, sometimes aided by the rungs of a ladder, and sometimes hindered by the fangs of a snake. The particulars of individual world-views only existed on the game charts as legends written in the squares of the grid. These did not influence how the game was played, and could be easily replaced when it traveled between communities. Often changes would also be made to the size of the grid and the number and position of the snakes and ladders, but except for minor variations the rules would stay the same.

As snakes and ladders was beginning its triumphant rise in the West around the turn of the 20th century, its predecessor in the East was entering into a period of decline from which it would never recover. Despite the appearance of cheap lithographic prints and detailed mentions in publications such as Harikrsna Śarmā's Krīdākauśalya, or skillfulness in games, first published in 1885, and A. B. Devdhar's Sacitra marāṭhī khelāñcem pustak, or illustrated book of Marathi games, published in 1905, nothing could save gyān caupar from falling into obscurity. M. N. Dvivedi, a professor of Sanskrit from Nadiad in Gujarat, wrote an article about the game for the Theosophical Society in America in 1893, in which he stated that the game was not "very generally known" and that "only very old people here and there [...] speak of such things, and occasionally show them" (Dvivedi 1893: 9). On the other hand, an account from 1895 by G. R. Dampier, a Junior Magistrate at Saharanpur in Uttar Pradesh, described the game as being "much played by Hindús, especially those of the Bráhman caste" (Dampier 1895: 25). The two statements contradict not only each other, but also the available evidence, since Dvivedi reports from one of the richest regions in terms of gyān caupar charts, while Dampier reports from an area which is not known to have left any other charts than the one he sketched himself. A possible reason for this discrepancy might be that Dvivedi, being a Brahmin, was not aware of the mostly Jaina charts found in Gujarat, while Dampier, being a Magistrate, had easier access to the fewer and mostly Vaiṣṇava charts found in north India. In any case, the fact remains that the vast majority of existing charts date from the 19th century, and that the game only seems to

have survived beyond that period to a very limited extent, and often in greatly simplified versions, within select Jaina communities in western India and in the context of religious festivals associated with Viṣṇu and Śiva in south India.¹⁶

Today, the story of gyān caupar and the role it played in the development of snakes and ladders has all but been forgotten. The last remnants of it seem to have died out sometime in the first half of the 20th century when game manufacturers stopped producing copies of snakes and ladders illustrated with stereotypical Oriental imagery (fig. 5). Despite the obvious interest of gyān caupar to students of religion, games, art, and even linguistics, little sustained scholarly effort has been devoted to understanding the game and its context.



Fig. 5: Snakes and ladders. Birmingham, 1920-30.

Until recently, the most comprehensive descriptions were found in popular writings on spirituality making various unsubstantiated claims about the history and interpretation of the game (e.g. Johari 2007). While such writings may legitimately be seen as forming part of a living tradition of engaging with and interpreting the game, they tend to remove it from its historical context and realign it with modern panreligious views that distort its original sectarian bias. British art historian Andrew Topsfield, who specializes in Indian painting during the Mughal period, is the first to have studied the game charts critically without recourse to undue speculation. His two main articles on the subject draw on a significantly larger basis of material than had previously been known to exist, and remain the natural starting point for any serious study of gyān caupar (Topsfield 1985, 2006a). Other valuable contributions include Shaykh Muḥammad al-Hāshimī on the Turko-Persian shaṭranj al-'ārifīn (Michon 1998), Deepak Shimkhada on the Nepalese nāgpāś (Shimkhada 1983), Venkatasubramanian

¹⁶ Modern Jaina charts are usually made explicitly for children with a view to teach them the basic tenets of their religion, while modern south Indian charts rarely include legends, relying instead on colorful illustrations for effect.

Balambal on the south Indian *parampad sopān* (Balambal 2005: 81-96), and Siddharth Y. Wakankar on the Maharashtrian *mokṣpaṭ* (Wakankar 2007).

The present thesis builds on the above studies, and shows the importance of gyān caupar for furthering our understanding of cultural forms and activities existing at the interface between games and religion. The thesis greatly expands on the number of known charts, and provides critical readings and analyses of the two earliest and historically most significant types of charts. It brings to light the often neglected passages written in prose and verse outside the squares of the charts, and fully engages with early secondary sources in Sanskrit, Hindi, Marathi, and Gujarati. In doing so, it manages a plausible reconstruction of the rules of the game as it was played in its own time, and adds new contextual layers to the understanding of the charts. In an attempt to go beyond the already documented influence of gyān caupar on snakes and ladders, the thesis situates the game in a wider historical context and asks the question of what it may itself have been influenced by. The possible answers include a number of mechanically and thematically related games from as far afield as Europe and East Asia, as well as three rarely noticed grid diagrams from India traditionally used for purposes other than play. The thesis also enters into a discussion of how meaning is attributed to games by separating the formal system of gyān caupar from its representational value, and demonstrating how the game design joins the two together textually, visually, and mechanically. The analyses of the critically read charts cover the same ground in much more detail, and also add a further experiential dimension which has not previously been explored. Analyzing the game as a static object is quite different from analyzing it as an interactive process, and the conclusions reached about its propensity for focusing the attention of the players and generating emergent narratives show the importance of an experiential approach for understanding how the game might have been used for purposes other than play. This is a theme of relevance not only to gyān caupar, but also to other games associated with ritual, worship, divination, and other religious practices.

The main questions that the thesis tries to answer concern the origin, history, meaning, and usage of *gyān caupaṛ*. When and where was it first invented, and how did it follow from previously existing games and other cultural forms and practices? In which communities did it originally flourish, and how was it adapted and transformed by

other communities to which it traveled? What were the religious knowledge systems represented by the charts, and how were they communicated textually, visually, and mechanically? And, finally, who were the users of the game, how did they use it, under which circumstances, and for what purposes?

Thesis Outline

The **first chapter** establishes a theoretical and methodological framework for critically reading and analyzing gyān caupar charts. It identifies the game as an interpreted formal system (Haugeland 1985), and demonstrates how an inherently meaningless formal system acquires meaning by assigning representational value to the positions, tokens, and rules of token manipulation which constitute it. It then goes on to describe how the charts are classified according to religious affiliation and the number of squares included in the various grid formats. The classification makes it possible to approach each group of charts as so many manuscripts of the same text, which can then be read square by square, snake by snake, and ladder by ladder according to standard principles of textual criticism. The readings allow for a further division of each group into subgroups, designated as types, based on a combination of textual variation and available provenance information. The types of charts best suited to answer the research questions can then be singled out and analyzed textually, visually, and game mechanically. Since neither primary nor secondary sources are explicit about how the charts should be understood or used, and since multiple possibilities suggest themselves, the analytical framework takes inspiration from the theory of affordances (Gibson 1977). The theory does not presuppose any knowledge about the intentions of the original designer of an object, but rather views the object in terms of the possibilities of interpretation and interaction which it affords the user. The framework follows the identification of formal, conceptual, and experiential affordances (Sharp 2015) as central to the analysis of hybrid objects existing in the interface between art and games.

The **second chapter** situates *gyān caupaṛ* in a game historical context, and traces influences from games both inside and outside India which may have contributed to its invention. It begins by outlining the evidence available in primary and secondary sources for reconstructing the earliest history of the game, and concludes that it likely

originated in western India in the late 17th or early 18th century. The main part of the chapter falls in three sections which discuss possible influences from related games current at the time in Europe and East and South Asia. The first section demonstrates that gyān caupar shares its formal system with the Italian gioco dell'oca, or game of the goose, which reached western India in the mid-16th century, and spawned a variant at the Mughal court sometime in the 17th century. The second section demonstrates that the conceptualization of gyān caupar as a spiritual journey of souls through the cycle of rebirth was preceded by the game of xuanfo tu, or the table of Buddha selection, dating back to at least 12th-century China. Xuanfo tu later gave rise to the Tibetan game of sa lam rnam bzhag, or arrangement of the paths and stages, which organizes the inscribed squares into a grid similar to that of gyān caupar. Sa lam rnam bzhag coexisted with gyān caupar in the Kathmandu Valley around the turn of the 19th century, and possibly even earlier, and though the two games operate according to different formal systems, it is likely that they influenced each other visually and conceptually. The third and final section relates gyān caupar to its namesake caupar and other games belonging to the same family. It demonstrates that the main themes associated with gyān caupar had already been attributed to earlier games in India, and that gyān caupar therefore appeared as a natural continuation of indigenous traditions for designing games.

The **third chapter** presents an overview of the more than one 150 *gyān caupar* charts used in the study, reconstructs the history of their transmission, and discusses how they might have been used and by whom. The charts have been collected from a wide range of publications, institutions, and private collections, and the majority of them remain unpublished. The description of the charts focuses on material, design, manufacture, and game equipment, such as dice, pawns, and instruction manuals. The transmission history is based on the hypothesis, supported by the distribution of evidence, that the charts originated in western India, and spread in multiple directions reaching as far as Tamil Nadu in the south, Nepal in the north, and the Persian and Ottoman empires in the west. The earliest forms of the charts were the 72-square Vaiṣṇava and 84-square Jaina charts associated with individual practitioners, religious institutions, and royal courts. They later developed several variants, some of which established themselves as distinct groups, while others never seem to have been

produced in more than a few copies. Some variants, such as the south Indian parampad sopān and the Bengali golok dhām, took the game in wholly new directions, and have therefore mostly been left out of the study. Detailed descriptions of gyān caupar and the uses to which it was put only date from the late 19th century onward, and may have been influenced by later developments in the game, which make it difficult to reconstruct its original interpretation and usage. The approach taken has therefore been to identify modern uses of the game, and trace them backward in time as far as possible. The information thus obtained, corroborated by early pieces of evidence on the charts themselves, indicates that the Vaiṣṇava charts were mostly used for purposes of religious entertainment, while the Jaina charts were mostly used for purposes of religious instruction. It does, however, seem that especially the Vaiṣṇava charts may also have lent themselves to purposes of meditation, visualization, and divination.

The **fourth chapter** provides a critical reading, analysis, and comparison of two types of 72-square Vaiṣṇava and 84-square Jaina charts established as the earliest and most widespread forms of gyān caupar. The critical readings are presented as grid diagrams which show the preferred reading in each square, and the preferred placement of snakes, ladders, and footprints (a special feature only found on Jaina charts). Though the specifics of the two readings vary in almost all aspects, the overall representational value follows along the same lines. It has therefore been possible to divide the analyses of the readings into the same main sections relating to the topics of cosmos, karma, and religious practice. The analyses consider the structure of the charts and the relative positions of legends, snakes, ladders, and footprints, as well as the game mechanics which tie them together. Related legends sometimes appear sequentially in accordance with the numbering of the squares on the game track, and sometimes spatially in accordance with the hierarchical organization of the grid. This indicates an inherent tension between the game and non-game properties of the charts, and emphasizes the important point that the inscribed grid diagrams on which gyān caupar was played originated in cultural forms and practices not previously associated with games. Structurally, the Vaiṣṇava charts represent the subtle body and the cosmic principles mapped on to it, while the Jaina charts represent the universe in the form of the cosmic man as depicted in traditional cosmographies. However, when activated

through play, both types of charts become representations of the cycle of rebirth as traversed by individual souls, or pawns, according to the laws of karma, or throws of dice. The final comparison between the critically read charts demonstrate that the Jaina charts were adapted from the Vaiṣṇava charts, and that a second group of Jaina charts, which does not show the same degree of influence from the Vaiṣṇava charts, may have been an attempt at purging the original Jaina charts of Vaiṣṇava influence. This strongly suggests that <code>gyān caupar</code> originated in non-game grid diagrams of the subtle body adopted by Vaiṣṇava <code>bhaktas</code>, or devotees, in late 17th- or early 18th-century western India.

The **fifth chapter** reconstructs the rules of the critically read 72-square Vaisnava and 84-square Jaina charts, and examines the experiences afforded by the charts when activated through play. It begins with a discussion of the simulational aspect of games, drawing upon Handelman and Shulman (1997) who treat cosmologically themed games as analogue models (Black 1962) simulating the key features of a complex system with recourse to a simplified version of the same system. This allows us to view gyān caupar as a simulation of the inner workings of the cosmos and the process of spiritual progress and regress on the path toward final liberation. The procedural logic controlling the simulation is embedded within the rules of the game which are reconstructed as far as the available sources allow us. A sample playthrough is then conducted for each of the two critically read charts, providing us with the data necessary to analyze the experiences provided by the charts. The single pawn controlled by each player changes the focus from the totality of the chart to the square currently occupied and the squares that can be reached on the next throw of the dice. Similarly, the sequence of squares landed upon generates an individual narrative which can then be used as a basis for interpretation. The game can therefore either be viewed in terms of winning or losing, or in terms of establishing an interpretational space between the properties of the game and the imagination of the player, allowing for the creation of personal stories described by Calleja (2009) as alterbiographies. How these stories might have been received and used by the players cannot be established without additional evidence, but they clearly demonstrate the potential of engaging with gyān caupar as something above and beyond mere entertainment.

The **sixth and final chapter** widens the perspective on gyān caupar by situating it in the context of related cultural forms and practices other than games. It identifies the grid diagram as an interface between games and non-games, and uses the example of grid-based bhadramandalas (Bühnemann 1987, 2007) as loci of ludic, or playful, processes employed in ritual. It then goes on to describe three different charts from between the mid-17th and mid-18th centuries relevant to the study of gyān caupar. The first chart is a tantric grid diagram of the subtle body conceptually related to Vaisnava gyān caupar charts previously identified as the earliest form of the game. The diagram shares multiple readings with the Vaiṣṇava charts, and also includes several snakes representative of the energy channels $(n\bar{a}d\bar{t})$ of the subtle body. The second chart is a cosmographical grid diagram of the mythical Mount Meru which not only serves as the axis mundi of the universe, but also of the subtle body. It associates specific vices ($p\bar{a}pa$) and virtues (punya) with specific hells and heavens, similar to the function of snakes and ladders in gyān caupar, and includes two lines or ladders of its own leading up to the topmost squares of the chart, privileging Vaiṣṇava bhakti, or devotion, above tantric and yogic samādhi, or intense meditation. The third chart is an astrological grid diagram showing the various auspicious and inauspicious results of planets transiting through the zodiacal signs relative to one's own natal moon sign (gocāraphala). The formal system of gyān caupar has been added to the chart, and an inscription explains that it can either be used as an astrological table, a divinatory tool, or a mere pastime. The evidence provided by the three charts adds substantial weight to the argument that gyān caupar derived from tantric grid diagrams of the subtle body, that it adopted and integrated the diagrams into the context of Vaisnava bhakti, and that the transition from non-game to game was suggested by the ludic properties of the diagrams. Finally, it suggests that the initial transition may have occurred at the Rajput courts of western India, as indicated by numerous analogue examples from the court of Mahārāja Kṛṣṇarāja Odeyar III (r. 1799-1868) in the Princely State of Mysore.

The final chapter is followed by a **conclusion** and a series of **appendices**. Appendix A presents a detailed description of all existing *gyān caupaṛ* charts that I am currently aware of. Appendix B provides a typology of the charts used in the study, and organizes them into groups and types. Appendix C contains transcriptions of the 72-square Vaiṣṇava and 84-square Jaina charts which constitute the earliest forms of the

game. Appendix D expands on the diagrammatic representations of the critical readings of two types of 72-square Vaiṣṇava and 84-square Jaina charts analyzed in chapter four by providing the full readings behind them. Appendix E gathers together the verses sometimes inscribed on the charts used in the study, and suggests reconstructions and translations. Finally, Appendix F provides full transcriptions and translations of two late 19th-century text passages central to our understanding of how *gyān caupar* was perceived at a time when it was still actively being played. The first passage is from the out-of-print and not easily available *Krīḍākauśalya*, written in Sanskrit with a Hindi auto-commentary in 1872, while the second passage is from an unpublished manuscript written in Gujarati in 1877/78.

Chapter 1

What's in a Game?

As art historian Deepak Shimkhada discovered during his research for an article on the Nepalese version of gyān caupar in the early 1980s, the game charts are not always recognized as such. The chart (Va72#24) at the Field Museum of Natural History in Chicago, which prompted his interest in the subject, was broadly classified as a "religious work" (Shimkhada 1983: 308), while two other charts (Va72#22,23) at the Nepal National Museum in Kathmandu were similarly exhibited as works of art rather than games (*ibid.* 317). Shimkhada's experience mirrors my own on several occasions when collectors and connoisseurs have refused to recognize the charts as games, or, on other occasions, as anything but games. An example of the former attitude is found in an extensive commentary on a Şūfī chart (Sū100#4a) written in 1938 by Shaykh Muḥammad al-Hāshimī who considers previous commentators to have turned the "chess of the wise" (shaṭranj al-'ārifīn) into the "chess of the negligent profligates" (shaṭranj al-ghāfilīn al-musrifīn) (Michon 1998: 72). Though al-Hāshimī does not refer to the commentators by name, nor give out any details about their alleged misconceptions, he appears to have been especially opposed to the identification of the chart as a game. Despite the obvious invocation of chess in the title of the chart, he never once refers to it as a game, insisting on its sole function as a diagrammatic representation of the pathway to God. Others go even further, as the local scout of a private collector from Germany discovered when he inquired about a privately owned Jaina chart in Jodhpur, Rajasthan. The owner of the chart told the scout that it was neither for sale nor used for play, but served as an object of worship on account of its previous association with Jaina monks. Further examples of the ambiguous position of gyān caupar between a game and a religious object will be given throughout the thesis, but obviously the problem of definition needs to be addressed here at the very outset.

Games are notoriously difficult to define, and no single definition stands out as generally accepted among game scholars. Katie Salen and Eric Zimmerman - whose encyclopedic *Rules of Play* became something of a bible among academics and

designers upon its publication in 2004 - list no less than eight different definitions by prominent authors within the fields of play and game studies, and then goes on to add one more of their own (Salen & Zimmerman 2004: 73-80). Brian Sutton-Smith argues that "when it comes to making theoretical statements about what play is, we fall into silliness" (Sutton-Smith 1997: 1), and Espen Aarseth invokes Wittgenstein to argue that a game can only be defined as an individual member of a larger and largely undefinable family of games (Aarseth 2011). Aarseth, together with Gordon Calleja, recently went on to argue that it is not so much the object itself as the way in which we choose to engage with it that determines whether it should be defined as a game or not (Aarseth & Calleja 2015: 7-8). It would therefore be perfectly possible for an object to be construed as a game in one context, and as something other than a game in a different context. This is certainly true of gyān caupar which, as we have already begun to see, might easily lend itself to other purposes than mere play. It is, however, important to understand that, its religious connotations non-withstanding, gyān caupar was invented as a game rather than, say, a yantra, or mystical diagram, which it clearly resembles and might easily be mistaken for. This is evidenced by its title, which invokes the concept of a game, and by the existence of a formalized set of rules for interacting with it as a game. Though the rules are rarely inscribed on the charts themselves, they are often alluded to, and except for al-Hāshimī mentioned above, commentators always refer to the charts as games, and to those who interact with them as players. We should therefore take care not to downplay the ludic, or playful, qualities of the charts in our search for associated layers of religious meaning, and make sure that we understand the charts as games before we try to understand them as something other than games.

The first part of this chapter begins by classifying *gyān caupaṛ* as a traditional board game belonging to the category of race games, and then goes on to distinguish between the formal system underlying the game and the representational value attributed to it. The second part outlines the research methodology of the study, and discusses key aspects of reading and analyzing the charts.

Traditional Board Games

The field of board game studies has traditionally been constructed as a historicoempirical field with little emphasis on theoretical considerations. This is probably due to its origins outside academia, into which it has only recently begun to be introduced.¹⁷ As a result, theoretical discussions of what defines and constitutes a board game are few and far between. 18 The standard system of classification remains the one suggested by H. J. R. Murray in 1952 when he divided board games into five categories of alignment and configuration (e.g. merels), war (e.g. chess), hunt (e.g. fox and geese), race (e.g. backgammon), and mancala (e.g. oware). The categories, which were meant to reflect "the early activities and occupations of man" (Murray 1952: 4), have been accused of being unscientific¹⁹ and ideologically suspect,²⁰ but despite several attempts to improve or replace them, no one has as yet been able to succeed in the endeavor. Perhaps the single biggest problem with Murray's categories is that they fail to take into account the wealth of board games produced since the turn of the previous century, and especially since the 1970s and 1980s. Since it was never Murray's intention to include such games in his survey, and since he wrote it before the vast majority of them had been invented, he cannot be blamed for their omission, but the need for a more inclusive system of classification is now more pertinent than ever. David Parlett tried to remedy the situation in his Oxford History of Board Games by adding the category of theme games (Parlett 1999: 9), but this is inadequate to the task

¹⁷ The first colloquium on board games was held at the British Museum in 1990 (Finkel 2007: 1), and the first academic journal devoted to their study was launched in 1998 (*BGS* 1). Before then, advances in the field had mostly been made by amateurs and enthusiasts with little or no formal academic training. Stewart Culin (1858-1929), who pioneered the ethnographical study of games, worked as a museum curator and director, while H. J. R. Murray (1868-1955), whose books on chess (1913) and other board games (1952) are still widely referenced, was employed as a school inspector.

¹⁸ This is contrary to the situation in the related field of digital game studies which began within academic disciplines, such as literature and other media studies, with a strong theoretical basis. Consequently, questions of game ontology, even when also applicable to non-digital games, has primarily been framed within the context of digital games.

¹⁹ See, for example, Alexander J. de Voogt who finds the categories "arbitrary" and lacking in a "theoretical base" (1995: 9).

²⁰ Ulrich Schädler recently argued that the categories rest on the scientific basis of now largely discredited theories of human evolution advanced by 19th-century anthropologists, such as Edward B. Tylor (1832-1917), Alfred C. Haddon (1855-1940), and the philosopher and psychologist Karl Groos (1861-1946) (Schädler 2017).

at hand, and only serves to uphold a largely false dichotomy between traditional and modern board games.²¹

Traditional board games are often defined as evolved and non-proprietary in opposition to modern board games which are defined as invented and proprietary. The problem with this distinction, as Parlett is quick to point out, is that some traditional board games have in fact become proprietary, while some proprietary board games have reverted back into the public domain (Parlett 1999: 5-6). One might also add that the distinction between evolved and invented is difficult to uphold, and that it gives off the impression that evolved games were never invented, and that invented games never evolve. Another popular dichotomy is that between abstract and representational games, but, as Parlett also points out, board games that we would consider abstract today were often considered representational at some time or other in the past (*ibid*. 6). The obvious example in the present context is of course snakes and ladders, which is as abstract as its predecessor gyān caupar was representational, but most other traditional board games, whether originally intended as representational, or only interpreted as such later on, have experienced a similar loss of meaning, leaving them to be regarded by contemporary society as purely abstract games.²² Parlett ends up suggesting a third dichotomy between positional and theme games (ibid. 6-7), but it is difficult to see how this improves on the dichotomy between abstract and representational games; something clearly evidenced by its failure to catch on among board game scholars who still seem to prefer Murray's categories over anyone else's.

The purpose of the present thesis is not to suggest a new scheme of classification for board games, and we will therefore have to content ourselves with referring to *gyān caupaṛ* as a traditional board game belonging to the category of race games. Murray does not appear to have been aware of *gyān caupaṛ* when he wrote his survey, but his definition of race games as games "in which teams of equal size race one another along

²¹ Contemporary board gamers usually refer to board games by a combination of theme and mechanics without any clear structural framework for doing so. The world's largest board game site boardgamegeek.com currently has a database of around 100.000 games organized according to 84 categories and 51 mechanics. Accessed 20 Jan, 2019.

²² An extensive survey of the meaning ascribed to both abstract and representational games, whether board games or otherwise, is found in Jean-Marie Lhôte's book on the symbolism of games (Lhôte 1976). Also see Lhôte 1996.

a given track, and the first player to complete the course with his team wins" (Murray 1952: 4-5) leaves little doubt that this is how he would have categorized it.

Formal Systems

A useful way of describing traditional board games is suggested by the philosopher John Haugeland who, instead of focusing on the physical object itself, focuses on the formal system which underlies and informs it. Using chess as an example, he identifies three key requirements of a formal system: it should involve token manipulation, and it should be both digital and finitely playable. Token manipulation (Haugeland 1985: 48-52) necessitates the existence of tokens and positions. The rules of the formal system govern the ways in which the tokens can be manipulated by adding them to and removing them from the system, changing their positions within it, and altering or replacing them. Translated into chess terminology, this means that different pieces are placed in different squares and moved around according to type, that they are capable of eliminating each other, and that a pawn which reaches the other end of the board is promoted to a piece of a different type. That a formal system is digital (ibid. 52-63) means that positions are discrete units with no middle ground between them. A piece either occupies or does not occupy a position; it cannot be placed halfway between two positions and said to occupy both of them partially. This would introduce ambiguity into the system and make us incapable of properly "reading" its current state and "writing" its subsequent states. Finally, the requirement of finite playability (ibid. 63-71) dictates that we should be able to identify and perform every legal move regardless of the current state of the system. In chess, this is achieved by using a limited number of pieces allotted a limited number of legal moves on a board consisting of a limited number of squares.

One might wonder why Haugeland does not include the requirement of a formal win condition as this is an essential feature of most games, and certainly of all traditional board games. The truth, however, is that Haugeland is not really interested in games, but rather in how the formal systems that inform them can be used as examples of the much more complex formal systems that control the operations within a computer (*ibid*. 48). Formal systems are not exclusive to games, and the only reason that games include win conditions is that they would not be much fun to play if they did not (*ibid*.

50-1). While this observation may seem obvious, or even banal, it alerts us to just how little separates a formal system used for the purpose of a game from a formal system used for the purpose of something other than a game. If we take the example of the formal system underlying gyān caupar (fig. 6), we find that it consists of a sequentially organized series of positions. Each participant controls a single token which is added to the first position of the series. The participants then take turns generating a random number within a fixed range, and move their token forward the corresponding number of positions. Certain positions are linked to other positions, and if a token ends its move on such a position, it must immediately continue backward or forward to the linked position. If a number generated by a participant would cause his token to move beyond the final position of the series, the token is moved backward from the final position by the exceeding number of positions. 23 If it were not for the rule that the first token to end its move on a predetermined position wins the game, the formal system would continue endlessly and probably not be recognized as a game at all. In fact, the only thing that would save it from being regarded as a completely pointless activity would be the attribution of a representational value transforming it into a simulational, educative, divinatory, or other kind of tool.

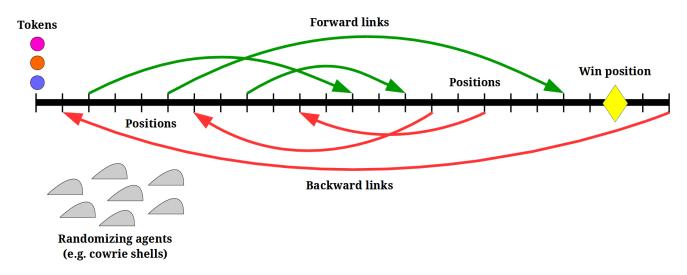


Fig. 6: The formal system of gyān caupar.

²³ The rules presented here are general in nature, and appear with some variations in available sources. A detailed reconstruction of the rules based on available sources can be found in chapter five.

By considering formal systems in the abstract with little or no connection to their concrete manifestations, Haugeland highlights the fact that formal systems are independent of the media through which they are expressed (Haugeland 1985: 58). Whether one plays chess on a board, a screen, or in the mind, the formal system of the game remains the same.²⁴ Similarly, the charts manifesting the formal system of gyān caupar only represent one way of doing so. Generally speaking, they consist of a grid diagram with a number of squares corresponding to the number of positions in the system. The first position is located in the bottom left of the grid from where the sequentially organized positions continue *boustrophedon* to the top. The links between positions are indicated by snakes or ladders depending on whether they lead backward or forward, and the winning square is located in the top central square. The tokens can be represented by any easily distinguished objects, but the randomizing agents are almost universally dice or cowrie shells. Though the formal system could have been manifested in any number of alternative ways, it is important to understand that the formal system is as much a product of the charts as the charts are a product of the formal system. The two almost certainly developed in concert, and the only reason that we are keeping them separate is to understand how something as seemingly innocent as a traditional board game could suddenly become invested with layers of meaning that go far beyond those of winning and losing.

Representational Value

For Haugeland, identifying the formal systems of traditional board games is only the first part of a three-part process aimed at describing the "interpreted automatic formal system" of a computer (Haugeland 1985: 48). That a formal system is automatic means that it is played or processed by a computer, thereby allowing for much greater complexity than if it were operated by a human. That it is interpreted means that the properties that make up the system can be made to stand for something other than themselves, and that this other can be used to convey a meaning that is not inherent in the system as such. As Haugeland points out, formal systems are self-contained and

²⁴ A popular illustration of the medium independency of chess is provided by filmmaker Satyajit Ray in his 1977 adaptation of Munshi Premchand's famous short story Śatrañj ke Khilāḍī, or the chess players, first published in 1924. When the desperate wife of one of the chess players hides the pieces to stop her obsessed husband from playing, he merely substitutes them with a corresponding variety of nuts and vegetables.

semantically neutral without any capacity for meaning unless related to the outside world (*ibid*. 50). The interpretation of a formal system is therefore solely dependent upon the symbolic or representational value attributed to it. While Haugeland uses this insight as a starting point for an investigation into the concept of artificial intelligence, we shall pursue a more modest course, and try to understand how it relates to the generation of meaning in traditional board games.

A good example of how different representational values can be attributed to one and the same formal system is provided by the family of asymmetric board games classified as hunt games by Murray. One of the simplest members of this family, played in various parts of South Asia, takes the form of a triangle divided into six parts by one vertical and two horizontal lines (fig. 7). The game is played on the points where the lines intersect, allowing for a total of ten legal positions. One player usually controls a single piece, beginning at the apex of the triangle, while the other player usually controls

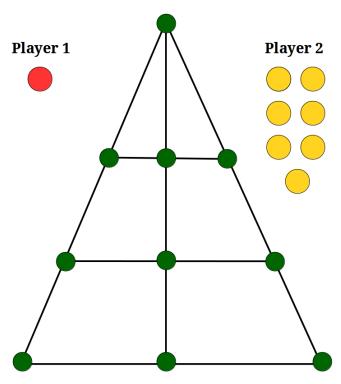


Fig. 7: Sample hunt game.

six or seven pieces freely distributed across the triangle. During his turn, the player controlling the single piece is allowed to move it to a vacant position adjacent to its current position, or jump over an occupied position to a vacant position directly behind it, thus eliminating the piece in the occupied position. The player controlling the many pieces is only allowed to move one of them each turn, and only to a vacant position adjacent to its current position. The goal of the single piece is to eliminate all the opposing pieces, while the goal of the many pieces is to prevent the single piece from being able to move by completely surrounding it.

Though the formal system does not contain any meaning in and of itself, the asymmetric nature of the system and the different approaches to winning seem to

suggest a conflict between two opposing forces of unequal strength. Whether the game was originally invented with that representation in mind, or whether the representation was only added after its invention, the game was consistently interpreted as such by the cultures and societies to which it spread. The interpretation, however, varied greatly with regard to the identification of the opposing forces. The game was framed as a conflict between a tiger and a herd of goats in South Asia, as a fox and a flock of geese in western Europe, and as a general and a band of rebel soldiers in East Asia. The complete list of regional variations is much longer than the few examples given here,25 but the important point is that however one chooses to interpret the game, it can still be drawn on the ground and played with a handful of pebbles without any reference to what it might mean. We can even imagine a situation where two persons with different cultural backgrounds and no shared language between them would play the same formal version of the game, yet consider its representational value differently. The player controlling the single pawn might interpret it as an elephant trampling a group of hunters, while the player controlling the many pawns might interpret them as a flock of sheep trying to stop a wolf from eating them. For this and other reasons, traditional board games are easily passed on between different cultures and societies, and are highly adaptable to their surroundings.²⁶

Despite the formal system of *gyān caupar* being even more simple than that of the hunt game described above, the representational value attributed to it is far more complex and challenging (fig. 8). While any race game, as indicated by the name suggested by Murray, can be said to represent a contest of speed along a track toward a goal, *gyān caupar* goes further by attaching a legend to each of the positions in the formal system. The legends, written in the squares of the game charts, will be fully explored in the chart analyses in chapter four, but for now we can say that they represent spiritual stages on the path to liberation, with the initial position indicating birth, and the win position indicating liberation. Other representational values are attributed to other elements of the formal system, though these are only rarely made explicit on the charts

²⁵ The most complete list of hunt games currently available remains the one provided by Murray (1952: 98-112).

²⁶ A recent study points to board games and alcohol as two of the most important factors in facilitating social interaction between different cultures in the Ancient Near East (Crist *et al* 2016).

themselves. Most obvious among them are the snakes and ladders which, instead of just connecting seemingly random positions, are interpreted as connecting different spiritual stages. The overall implication, as supported by available evidence from charts and commentaries, is that the snakes represent negative karmic fruition, while the ladders represent positive karmic fruition. The tokens are rarely commented upon except in later literature, but the context makes it clear that they represent incorporeal selves, or souls, and, as indicated by the fact that each player only controls a single token, possibly even the souls of the players themselves. This leaves only the dice or cowries to be considered, and here again the context indicates that they represent the karmic fate of the souls. Though it might be argued that the lack of agency on the part of the players go against the concept of karma, this is only true if we choose to see the game as a simulation of the karmic system rather than a reflection of the players' own karma. All this will be explored and exemplified in more detail later, but if we step back and take a broader view of the game, we can describe it in general terms as a representation of the spiritual journey of souls through existence toward liberation.

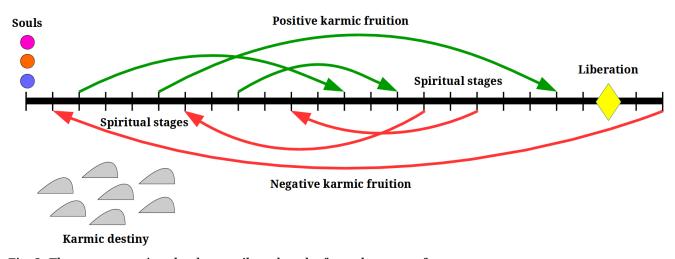


Fig. 8: The representational value attributed to the formal system of gyān caupaṛ.

It is important to remember that the function of the legends is purely representational, and that however they might cause us to interpret the formal system is of no consequence to its operation. The fact that we can add, remove, and alter the legends without impacting the formal system not only shows that they form a separate semantic layer, but also explains the apparent ease with which *gyān caupaṛ* came to be adopted by different religious communities. The only requirement for a successful

adaptation was the substitution of one set of legends for another set of legends. Even so, most communities also chose to individualize the format of the charts by changing the number of squares, the organization of the grid, and the placement of the snakes and ladders. Evidence strongly suggests that these additional changes were not incidental, and that they should rather be taken as indications of how minor adjustments to the underlying formal system, such as changing the number of positions and the links between them, could be used to influence the representational value further. Examples include adjusting the ratio between the number of snakes and ladders to represent an easier or a more difficult path to liberation, and changing the number of squares to represent a contextually important number, such as 84 squares for the 84 $l\bar{a}kh$, or 8.400.000, possible birth-situations (*yoni*) in the universe, or 72 squares for the 72.000 energy channels ($n\bar{a}d\bar{i}$) or compartments (kostha) in the subtle body ($s\bar{u}ksma\acute{s}ar\bar{i}ra$).²⁷

Research Design

The single biggest obstacle to understanding the representational value attributed to the formal system underlying *gyān caupaṛ* is the lack of sources describing the charts and their usage prior to the late 19th century. This situation is not unique to *gyān caupaṛ*. Despite the fact that board games first entered the archaeological record in the Bronze Age cultures of Egypt, Mesopotamia, and the Indus Valley, they have largely been ignored by the historical record until the turn of the 20th century. With a few notable exceptions, such as the 12th-century *Mānasollāsa* (Gondekar 1925-61), the 13th-century *Libro de los Juegos* (Golladay 2003), and the 17th-century *De Ludis Orientalibus* (Hyde 1694), early references to games are few and far between, and

²⁷ As Dominik Wujastyk reminds us, enumeration is often based on the structural imperatives of magical numbers rather than actual attempts at exactitude (2009: 194). This also means that the same numbers are used as the basis for a wide range of auspicious enumerations, making it almost impossible to discover the intended reference of a particular number outside of a specific context. In fact, the very attempt at doing so would probably be considered futile, as the importance of the number itself would far exceed the importance of any particular enumeration to which it might refer.

²⁸ Gary O. Rollefson (1992, 2012) and John Simpson (2007) have identified stone slabs engraved with parallel rows of circular depressions dating from the neolithic period as game boards, but the identification is mainly, if not solely, based on a superficial resemblance with known game boards of the mancala type. A recent study suggests that the stone slabs may rather have been used, together with cylindrical clay objects, as "fireboards" for igniting tinder (Goren-Inbar *et al* 2012).

rarely consist of more than a few passing observations and comments. In the case of *gyān caupaṛ*, we are helped along by the wealth of textual, visual, and ludic information provided by the charts themselves, as well as by the tradition of interpreting the charts exemplified in several later commentaries. We should, however, be careful in making assumptions about the early history and usage of the charts on the basis of commentators writing at a time when their origin had been forgotten, and the purely mechanical aspects had come to dominate the understanding of the game. As already mentioned, the charts may in part have developed from cultural forms and practices which only came to take on the character of a game in later stages of their development.

In order to avoid undue confirmation bias in speculating about what gyān caupar might or might not have meant to those who played it, the present thesis takes inspiration from the theory of affordances which expands the focus from the actual to the potential uses of an object. The theory was originally developed within the field of ecological psychology by James Gibson who coined the term "affordance" with reference to the opportunities for interaction which the environment affords its inhabitants: ground affords walking, water affords drinking, other species afford hunting, the opposite sex affords reproduction, etc. (Gibson 1977: 68). The theory was picked up by Donald Norman who saw that it could be effectively applied to industrial design if the designer recognized that the affordances of an object are only of value to the consumer if they are also perceived as such (Norman 1990: 9). While any container might afford being drunk from, a container designed to be drunk from should suggest this affordance over other affordances it might have, such as collecting trash or trapping insects. This, however, assumes that the prior knowledge and experience of the consumer cause him to recognize the affordances intended by the designer, which is not always true for a consumer removed from the original context of the design. The example that I am getting at is, of course, gyān caupar whose very name suggests that it should afford both knowledge and playing, but whose design alone does not clearly indicate how it should be played or which knowledge it should impart. The present challenge therefore is to plausibly reconstruct not only the rules of the game, but also the meaning that it was intended to convey.

The shift in focus from industrial design to traditional board games is not as farfetched as it may at first appear. Indeed, the ideas presented by Norman have long
since been adopted within the fields of human-computer interaction and game design.
As anyone who has tried to navigate the interface of a computer program will be
painfully aware, the ways in which it communicates its intentions to the user is crucial
to its success. Today, affordance theory features prominently within the field of game
studies where John Sharp recently demonstrated its application to hybrid objects
existing within the contested space between games and art (Sharp 2015). Sharp
distinguishes between the conceptual, formal, and experiential affordances of such
objects, providing an analytical framework helpful in identifying the manifold ways in
which *gyān caupar* might originally have been engaged with. Before we enter into a
discussion of the framework and its application, we will, however, have to consider the
question of how at all to construct the empirical object of *gyān caupar*.

Reading the Charts

The primary sources for the present study comprise nearly 150 unique charts, more than 170 if variants are included, and more than 200 if undocumented charts are also included.²⁹ Each chart exhibits its own minor or major differences from the other charts, and it would therefore make little sense just to pick one or two and subject them to extensive analysis. This is more or less what was done in the past when the sample size was much smaller, and access much more limited. Given the large and complex nature of the material now available, the aim has been to provide an overview of the various groups of charts, as well as the different types of charts existing within those groups, and subject the most important among them to analysis. An initial step toward a working typology was taken by Topsfield who organized the charts according to religious affiliation and number of squares (Topsfield 1985, 2006a).³⁰ The typology presented here follows Topsfield's approach, but expands on it by also considering questions of provenance and variant readings, thereby allowing

²⁹ See Appendix A for a comprehensive list of charts.

³⁰ It should be noted that religious affiliation and number of squares are approximate categories that cannot always be determined unambiguously. Consequently, the former only includes general descriptions, such as Vaiṣṇavism and Jainism, while the latter only includes the sequentially numbered squares in the playing grid without reference to individually numbered additional squares.

for a more detailed subdivision of the material.³¹ This results in at least one major diversion from Topsfield who separates 84-square Jaina charts into those topped by an architectural superstructure and those surrounded by the head, arms, and feet of the cosmic man (*lokapuruṣa*) (Topsfield 1985: 207). While this separation is perfectly valid from an artistic point of view, it does not follow the subdivision of charts suggested by the legends, which cut across similarities of design, indicating that the visual and textual elements of the charts do not necessarily go hand in hand.

The methodology employed in the present study considers groups of charts related by religious affiliation and number of squares as so many manuscripts of the same text. This allows for the comparison of charts square by square, snake by snake, and ladder by ladder, resulting in critical readings of individual groups of charts in the manner of traditional textual criticism. The purpose is not to create stemmas and suggest archetypes, but to arrive at critical readings sufficiently representative of the totality of charts within a group to function as credible bases for further analysis and discussion. Because of the sequential as well as hierarchical ordering of legends in the squares of the grid, it is possible to identify when a textual variation is merely occasioned by the switching around of adjacent legends or the use of synonymous terms of expression, and when it represents a genuine variation which might relate the chart to a different type of chart within the same overall group. Furthermore, the general idea that snakes and ladders connect squares with negative and positive legends, respectively, serves as a corrective not only to misplaced snakes and ladders, but also to misplaced legends. As one might expect, the complexity of the charts and the careful alignment of the formal system and its representational value have resulted in numerous errors of transmission, many of which can be easily spotted and corrected by a text critical approach.32

The critical readings of the charts make it apparent that two groups in particular take precedence over the remaining groups. The 72-square Vaiṣṇava and 84-square Jaina charts are not only by far the most numerous, they also include the earliest datable,

³¹ See Appendix B for a full typological overview of the charts.

³² The approach could also be used to undertake a study of the process of transmission which would allow us to map out the historical, linguistic, and artistic relationship between individual charts in great detail. Fascinating and important as such an undertaking would be, it lies outside the scope of the present study. For those willing to attempt it, the critical readings and chart transcriptions presented in the appendices provide a solid starting point.

and, in the case of the former, the geographically most widespread charts. The 72square Vaiṣṇava charts can be divided into five types (a,b,c,d,e), and the group of 84square Jaina charts into three types (a,b,c), the first of which can be further divided into three subtypes (a1,a2,a3). The characteristics of individual groups and types are detailed in Appendix B, and also receive further attention in chapter three, sufficing it to be stated here that one type within each group was identified as more significant than the others, and thus chosen as the focus of analysis for the group in question. For the 72-square Vaiṣṇava charts, type a was the obvious choice as it is the only major type deriving from western India where gyān caupar is likely to have originated. Choosing along regional lines was not an option in the case of the 84-square Jaina charts since they almost exclusively derive from Gujarat and Rajasthan. Consequently, the primary reason for choosing the type a charts was a simple matter of choosing the most widely represented type which, as a secondary point of consideration, also happens to have the most in common with the 72-square Vaisnava type a charts. Among the three subtypes, subtype a1 was chosen because subtype a2 only goes back to the late 19th century, and because subtype a3 only appears to be a slightly more verbose version of subtype a1.

Analyzing the Charts

The diagrammatic representations of the two critically read types of charts form the basis of the central analyses of the thesis which seek to understand the interplay between the formal system and the representational value of $gy\bar{a}n$ caupar. The analyses are informed by the theory of affordances as developed by Gibson and Norman and applied by Sharp who suggests that "conceptual, formal, and experiential affordances provide a framework for thinking about how communities of practice approach a cultural form" (Sharp 2015: 7). The communities of practice which Sharp have in mind are mainly those of designers and players, and the cultural form that of digital games, but his analytical categories have a much wider application which can easily be extended to include other interactive cultural forms such as $gy\bar{a}n$ caupar. The three main questions the categories allow us to ask of the charts lie at the very heart of what we are trying to understand about them: what were the charts trying to communicate? how did they go about communicating it? and how was the communication received by those who engaged with them?

Sharp defines conceptual affordances as "the things for which a community of practice believes [a] cultural form can be used" (ibid. 5). It is important to note that the answer to this question is not necessarily the same as the answer to the question of what a cultural form is actually used for. We know that gyān caupar was used as a pastime, but we also have several indications that it was used as something other than a pastime. This is evident from the overtly religious representations of the charts, as well as from the descriptions of those representations in primary and secondary sources alike. Add to this the fact that the charts have almost exclusively been preserved in isolation from any dice or pawns used to interact with them as games. While this may simply speak to the ephemeral and interchangeable nature of such game equipment, it also serves as a reminder of the prominence awarded the charts as distinct cultural forms above and beyond their practical use as game surfaces. In comparison, the cloth boards of the related game of *caupar*, from which *gyān caupar* derives its name, have often been preserved together with dice and pawns, and in the case of boards belonging to the upper echelons of society, as many gyān caupar charts also did, the accompanying game equipment is often of a highly elaborate and exquisite nature (Finkel 2004b: 47-48). While an illiterate person might identify the numbered and inscribed grid of a gyān caupar chart unaccompanied by dice and pawns as a mystical diagram, a literate person might identify it as a map of self and universe revealing secrets of religious knowledge and practice. Similarly, a chart accompanied by dice and pawns might either be seen as an innocent pastime, or as a means of simulating cosmic and karmic processes. In order to understand the purposes for which the charts were made, and the not necessarily identical purposes for which they were used, we will have to explore the concepts afforded by them textually, visually, and ludically.

Sharp goes on to define formal affordances as "the means by which the conceptual goals can be materialized" (Sharp 2015: 5). This includes the tools and materials that go into making the object, the design that governs its manufacture and composition, and in the case of a game - the rules by which it operates. As Sharp is quick to point out himself, conceptual and formal affordances can be difficult to separate as they tend to act as frames for each other (*ibid*. 6). The form through which the content is expressed is itself part of that content, and *vice versa*, rendering any attempt at separating the two difficult at best, distorting at worst. In the case of *gyān caupaṛ*, the use of an

inscribed grid diagram is as much a formal as a conceptual tool in that it acts not only as a frame for the legends, but also as a way of organizing them hierarchically. While the sequential numbering of the squares suggests a linear progression from bottom to top, the rows and columns suggest a spatial organization which would not have been possible if the legends had been presented in the form of a list. We might even say that the grid expresses the inherent tension between game and non-game by allowing us to read it sequentially in accordance with the rules of the game, or spatially in accordance with a diagram used for purposes other than play. Turning our attention to the formal system underlying the charts, we find that it, too, straddles the divide between conceptual and formal affordances. Though I agree with Haugeland that formal systems do not contain any inherent meaning, the example of asymmetrical hunt games given above demonstrates that formal systems can indeed be suggestive of context-dependent interpretations. In fact, one of the major concerns of modern day game designers is to invent mechanics that adequately express the theme of the game they are trying to design.33 The translation of the formal system of gyān caupar into a detailed representation of a spiritual journey stands out as a rare example of a traditional board game that managed to do just that.

Finally, Sharp defines experiential affordances as "the kind of experiences an audience anticipates having through the consumption of its community's artifacts" (*ibid.* 6). While experiences naturally differ depending on whether a person engages with a *gyān caupaṛ* chart as a game or as something else, once again it is the potential for ludic interaction which should interest us here. Just as a book has to be read, or a painting has to be seen, so a game has to be played in order for it to be experienced as such. While context and mode of play may vary, the basic operation of throwing the dice and moving the pawns generates a common experience which can be interpreted in multiple ways depending on the representational value attributed to the game system. Relating a single square occupied by a pawn to the totality of squares in the grid, creating a specific sequence of squares as the pawn moves along the track, and repeating parts of that sequence whenever the pawn lands on a snake and slides back

³³ See, for example, Brenda Brathwaite's recent series of non-digital games entitled *The Mechanic is the Message* (Brathwaite & Sharp 2010). In tackling difficult and often controversial topics, such as slave trade and the holocaust, she seeks to develop games which force players to consider the relationship between mechanics and theme.

down the grid, are all complicit in forging an interpretive link between conceptual and experiential affordances. Whether one of education, divination, meditation, or something else entirely, the experience afforded by *gyān caupaṛ* is one that far exceeds what we would normally associate with a game. While the analyses in chapter four unfold the representational value of the charts concept by concept, whether invoked by legends, illustrations, mechanics, or the interplay between them, chapter five looks at how the different elements come together and present players with a unique experience each time they sit down and actually play the game.

The methods of critically reading and analyzing the charts described above help us understand not only the ideas that went into making them, and the ideas that might be extracted from them, but also the wider historical and religious context in which they originated. In keeping with my stated intention to examine the charts as games before examining them as something other than games, we begin the process of contextualization in the next chapter by looking at a series of related games which may have influenced the invention of *gyān caupaṛ* sometime around the late 17th or early 18th century.

Chapter 2

The Beginnings of Gyān Caupar

The origins of traditional board games can rarely be traced with any accuracy. More often than not they evolved over long periods of time as constantly changing variations of already existing games. While the exact origins of gyān caupar are as much in doubt as those of most other traditional board games, the idiosyncracies of the design suggest that it was invented by a single person at a single point in time rather than developed by successive generations of players. It should therefore be theoretically possible to arrive at a single original chart and name its author. No such original chart or author has as yet come to light, and likely never will, but the very probability of their existence indicates that gyān caupar was conceived of as a coherent whole, and that it introduced something truly new into Indian board game history. The underlying formal system had been known in Europe since the 15th century in the form of gioco dell'oca, or the game of the goose, and the overall representational value attached to it had been known in China since the 12th century in the form of xuanfo tu, or the table of Buddha selection, but neither had been a feature of Indian board games prior to the invention of gyān caupar. The present chapter traces possible influences on gyān caupar from games both inside and outside India, but before we can begin such an undertaking in earnest we need to set the record straight about what we know and do not know about the beginnings of gyān caupar. Claims of hoary antiquity have often been made to invest the game with an almost scriptural authority, and while some can easily be dismissed, such as Harish Johari's wholly unsupported statement that the game is "at least 2.000 years [old]" (Johari 2007: 2), others require us to look closer at the available evidence.

An often repeated tradition attributes the invention of *gyān caupaṛ* to the *sant*, or poetsaint, Jñāneśvar (c. 1275-96) who wrote a celebrated commentary on the *Bhagavadgītā* in Marathi, and who is often credited with establishing the *bhakti*, or devotional,

movement in Maharashtra.34 The astrologer Harikṛṣṇa Śarmā, who completed his Krīdākauśalya in 1872, explains that Jñāneśvar invented a chart with 85 squares to bring relief to the living (KK 241), and Balvant Khandojī Pārakh, who wrote a hagiography of Jñāneśvar fifteen years later, goes on to add that the poet-saint's younger brother Sopandev invented a smaller chart with only 72 squares (Parakh 1886: 199). The tradition is exclusively referred to in Maharashtrian sources, including several game charts (Va84#4,8,9ab,10) from the region, and may have come about as a result of the evocative names bestowed upon Jñāneśvar and his siblings who - in order of succession of birth - were called Nivṛttināth, Jñāndev (a.k.a. Jñāneśvar), Sopāndev, and Muktābāī (Bahirat 1956: 12). The names call to mind key stages on the spiritual path to liberation where one must cease performing worldly acts (nivṛtti) in order to obtain the knowledge ($j\tilde{n}\bar{a}na$) that will reveal the ladder ($sop\bar{a}na$) to liberation (mukti). There is no evidence in support of the tradition dating from before the second half of the 19th century, and since the earlier Vaisnava and Jaina charts from western India remain silent on the subject, we should probably consider the attribution of the invention of gyān caupar to Jñāneśvar as a local attempt at claiming originality and authority for the Maharashtrian charts.³⁵

Within the world of academia, Shimkhada and Topsfield have both individually suggested the possibility that a Buddhist prototype dating back to the Pāla-Sena period (8-12th cents.) may have pre-existed *gyān caupaṛ*. Shimkhada's argument rests on the assumption that the number 72 is more closely associated with Buddhism than with other South Asian religions, and that 72-square Vaiṣṇava charts should therefore be seen as adaptations of an earlier Buddhist game (Shimkhada 1983: 321-2). This is, of course, pure speculation, and completely fails to take into account the significance of the number 72 in the descriptions of the subtle body on which the charts are partly based (see *The Subtle Body* in chapter four). Topsfield is more convincing in seeing a

³⁴ The *Bhāvārthadīpikā*, popularly known as the *Jñāneśvarī*, was completed in 1290, and is considered scripture by the followers of the *vārkarī* sect in Maharashtra (Zelliot 1987: 92-93). English translations can be found in Bhagwat 1979 and Pradhān & Lambert 1967-69.

³⁵ Local traditions also attribute the Ṣūfī version of *gyān caupaṛ*, known as *shaṭranj al-'ārifīn*, as well as the related Tibetan Buddhist game of *sa lam rnam bzhag*, to 13th-century religious teachers. Al-Hāshimī attributes the invention of the Ṣūfī charts to Muḥyī al-dīn Ibn al-'Arabī (1165-1240 CE) (Michon 1998: 54), while a 19th-century *sa lam rnam bzhag* chart carries an inscription attributing it to Sa-skya Paṇḍita (1182-1251 CE) (Tatz & Kent 1978: 6-7).

possible survival of an earlier Indian Buddhist game in the related Tibetan Buddhist game of *sa lam rnam bzhag* (Topsfield 2006a: 177). However, as will be seen later in the present chapter, the origins of *sa lam rnam bzhag* appear to be secular rather than Buddhist and to lie in East rather than South Asia. Furthermore, evidence for the existence of *sa lam rnam bzhag* prior to *gyān caupaṛ* is sparse and indirect, and no *sa lam rnam bzhag* charts predating the earliest *gyān caupaṛ* charts have as yet been documented.

The earliest evidence we have of gyān caupar is the game charts themselves, though, unfortunately, their provenance is often in doubt. As further detailed in chapter three, several existing charts were made to look older than they actually are, and have sometimes been equipped with false colophons supporting their claim. Consequently, a Jaina chart (Ja84#3a) dated to VS 1792 (1735/36 CE), and held to be the earliest known chart since it was first reported more than thirty years ago (Topsfield 1985: 203, fn. 3), must now be regarded with skepticism (fig. 9). This leaves a Vaiṣṇava chart (Va72#7) commissioned by Richard Johnson from a local artist in Lucknow sometime between 1780-82 as the earliest known chart that can be



Fig. 9: 84-square Jaina chart (Ja84#3a). Rajasthan, dated 1735/36 CE. Possibly a later forgery.

dated with certainty (see frontispiece).³⁶ Topsfield's suggestion that the "fully developed maturity" of the earliest charts indicates that they were preceded by "a lengthy process of evolution over several centuries" (Topsfield 2006a: 175) also need revision in light of

³⁶ Johnson (1753-1807) arrived in India in 1770 as a servant to the East India Company, and was employed as Head Assistant to the Resident in Lucknow from 1780-82. He was well versed in Arabic, Persian, and Urdu, and collected a large number of manuscripts and miniatures currently held in the British Library in London (Falk & Archer 1981: 14-29).

the evidence presented here, which demonstrates that everything from the visual design of the charts to the rules by which they were played may have been borrowed from elsewhere with little variation. While it is certainly true that the paucity of charts predating the 19th century is partly due to the fragility of the materials on which they were drawn (Topsfield 1985: 203), the lack of any exemplars or references from before the late 18th century could as well indicate that they had not yet been invented.³⁷

A prototypical Jaina chart was reported by the late Rangachar Vasantha in a manuscript of the *Mahānisīhasutta* dated to the 11th or 12th century. The Mahānisīhasutta belongs to a group of Śvetāmbara Jaina texts known as Cheyasuttas which deal with the rules of monastic life, and it contains a chapter entitled Kammavivāgavivarana which discusses the consequences of good and bad actions (Schubring 1918: 11-13). Vasantha allegedly saw the manuscript in a temple library at the Jaina pilgrimage site of Shatrunjaya in Gujarat, and informed Topsfield that it contained a karmic diagram similar to a gyān caupar chart except for the snakes and ladders which it was missing (Topsfield 2006a: 175-6).³⁸ The manuscript was never documented by Vasantha, nor its location revealed, and with her passing in 2011, it now seems unlikely that her claim will ever be verified. An educated guess would be that what she saw was not an actual gyān caupar chart, but rather a diagram of sorts reminiscent of gyān caupar. Numbered and inscribed grid diagrams feature prominently in South Asian traditions, and often appear in Jaina manuscripts as a means of visualizing doctrine. An example relevant in the present context is the Karmagrantha, or book of karma, written by Devendra Sūri in the 13th century (Dundas 2002: 99). It provides a detailed description of the various divisions and subdivisions of karma, and is often accompanied by complex grid diagrams.³⁹

³⁷ It should also be noted that other cloth and miniature paintings associated with Jainism and Vaiṣṇavism in western India do indeed survive from as far back as the late 14th and 15th centuries (Talwar & Krishna 1979: 82; Topsfield 2002: 25).

³⁸ In an audio recording of a lecture given by Vasantha at the Oxford Centre for Hindu Studies in 2004, she claims to have seen a *gyān caupaṛ* chart in a 7th-century manuscript from Gujarat (Vasantha 2004, 41:10 - 42:15). This is probably the same manuscript she later informed Topsfield about, although by then she had begun describing it as dating from the 11th or 12th century.

³⁹ Another example is provided by an 18th-century Jaina *sarvatobhadracakra* diagram from Rajasthan which includes five numbered and inscribed 9 x 9 grids visually reminiscent of *gyān caupaṛ* charts (Andhare *et al* 2000: 178, fig. 102).

The earliest confirmed reference to *gyān caupaṛ* dates from half a century after the earliest known chart. It is found in *The Asiatic Journal* of May 1831 as part of a list of donations presented at a general meeting of the Royal Asiatic Society on the 16th of April in the same year. I quote the reference in full because of its value in reconstructing the early history of *gyān caupaṛ*:

From Captain H. Dundas Robertson, of the Bombay army, a coloured drawing of the Shastree's game of *Heaven and Hell*. A translation of the inventor's account of the game accompanied it, and was read. It appears to be founded on a careful examination of the metaphysical systems of the Hindus. The game is divided into a number of squares, of which a part represent the systems of the different philosophers. The plan of the game exhibits the most highly approved methods that have been laid down by Hindu theologians for gaining beatitude. It contains two heavens and two hells. The "Great Heaven," or *Muc'sha*, is in fact the Divine essence itself, at which the souls of the good arrive by two different roads: one of which is short (that of *Capila*); and the other long (that of *Patanjali*). Both are described in detail, and there are also instructions for playing the game. Two dice and as many men as there are players (twenty-five) are used; the dice are of ivory, about two inches in length, and square. The men are of five different forms, and as many different colours. The author's name is Trivingally Acharya Shastree.⁴⁰

The elaborate and highly idiosyncratic chart (Va124#1) is still kept in the Royal Asiatic Society, though the accompanying manual, pawns, and dice have unfortunately all been lost (fig. 4).⁴¹ The name of the author probably refers to Trivengaḍācārya ⁴² Śāstrī who was patronized at the court of Baji Rao II (r. 1796-1818) in Pune (Moskalev 2009). Trivengaḍācārya was a well-known chess player among the Europeans in India, and his treatise *Vilāsamaṇimañjarī* (Kulkarṇī 1937), or the bouquet of gems of amusement, was translated into English as early as 1814 (Shastree 1814). It seems plausible that a learned and somewhat eccentric chess enthusiast who enjoyed playing with his back to the board against several opponents at once, and who claimed never to have lost a

⁴⁰ AJMR, vol. 5, New Series, May-August 1831, p. 85.

⁴¹ The loss was already recorded by F. E. Pargiter in his description of the chart from 1916 (p. 539), and has recently been confirmed by librarian Edward Weech (pers. comm.).

⁴² Emended to Trivenkaṭācārya in *New Catalogus Catalogorum* which also suggests Tiruvenkaṭācārya (*NCC* 8, p. 268).

game against a European (anon. 1840: 310)⁴³, might have designed his own elaborate version of *gyān caupaṛ*, and that it might have caught the eye of Captain Robertson who was appointed as magistrate of Pune after the end of the third Anglo-Maratha War in 1818 (Duff 2011: 485). More information on the reception of Triveṅgaḍācārya's game in Europe can be gleaned from the *Journal Général de la Littérature de France* which included the news of the donation a little later in the year. It mentions that the game is currently *en vogue* in India⁴⁵, and goes on to compare it with *Le Noble Jeu de l'Oie*, or the royal game of the goose, which enjoyed great popularity in Europe at the time. The possible connection between the two games will be explored in detail below, so nothing further needs to be added here, except that the similarity between them must have seemed much more obvious then than now.

An even earlier reference to *gyān caupar* is found in a recent doctoral thesis by Kalpna Chaudhry on the depiction of women in art and literature in Mughal India. She claims that a game called "Govind Prema Gyana Chaupar" was popular in the harems of Rajasthan during the period, and gives as her source an entry in the *Dastūr komvār* of the Jaipur court from VS 1857 (1800/01 CE) (Chaudhry 2014: 82). 46 The *Dastūr komvār* is a record of court protocols, and though Chaudhry does not mention the context in which the reference occurs, it is worth noting that the protocols contain, among other things, information on the exchange of gifts between royal and religious figures (Hastings 2002: 234) which might provide further clues into the early history of *gyān caupar*. The title of the game provided by Chaudhry refers to the Vaiṣṇava deity Govinddevjī which was installed as the tutelary deity of Jaipur by the city's founder

⁴³ An anecdote tells that Trivengaḍācārya did in fact once lose a game to a European lady, but only in order to secure a contract from her or one of her connections (Forbes 1860: 169).

⁴⁴ *JGLF*, vol. 34, August 1831, p. 111. The journals *The Metropolitan* (vol. 1, no. 3, July 1831, p. 123) and *Das Ausland* (vol. 5, March 1832, p. 352) also repeated the news from *The Asiatic Journal* with little variation.

This is confirmed by a reference to <code>gyān caupar</code> in a book on the customs of south Indian Muslims written by "a Native of the Deccan" and translated by a surgeon of the East India Company stationed in Chennai in 1832 (Shurreef & Herklots 1832: app. VII, pp. lii-liv). "Geeān-chowsur" appears in a list of games said to be popular among "the respectable classes," along with chess, <code>caupar</code> (incl. the related <code>causar</code> and <code>paccīsī</code>), and <code>ganjīfa</code> (Mughal playing cards). The reference is particularly interesting since south Indian versions of <code>gyān caupar</code> can only be traced as far back as the late 19th century, and never appear in any format other than Vaiṣṇava or Śaiva. Obviously, more research needs to be done on the spread of Ṣūfī versions of the game throughout India.

⁴⁶ The full reference reads: "Dastur Komwar, vol. 25, VS 1857, f. 138."

Mahārāja Savāī Jay Siṃh II in 1739 (Horstmann & Bill 1999: 3). It therefore seems likely that the chart in question was devoted to Govinddevjī, and that it perhaps not only carried the name of the deity, but also its image in the top panel. Unfortunately, no such chart is known to exist, and the hope of finding one is dimmed by several uncertainties surrounding the reference to it. The entire passage in which the reference occurs appears to have been taken more or less *ad verbatim* from G. N. Sharma's *Social Life in Medieval Rajasthan* which, however, only gives the name of the game as "Govind Prema," and describes it as "consisting of 134 pieces made of either wood or ivory" (Sharma 1968: 133).⁴⁷ This does not fit the description of any game known to me, and makes it highly unlikely that it had anything to do with *gyān caupar* as indicated by Chaudhry. It has not been possible for me to check the relevant passages in the *Dastūr komvār* myself, and until given the chance to do so, I have decided to put my trust in the authoritative work of Sharma, and disregard the additional and possibly confused information given by Chaudhry.⁴⁸

The above review of the available evidence relating to the origins of *gyān caupaṛ* shows that the earliest known charts date to the late 18th century, and it is unlikely that the period of development went back further than the early 18th or late 17th century. Considering the poor survival rate of Indian cloth and paper paintings, charts going back even further could simply have been lost to the ravages of time, but the lack of early references remain conspicuous, especially when considering the high status that would likely have attached itself to a game inviting both literacy and an advanced understanding of religious knowledge systems. The lack of references stands in stark

⁴⁷ Sharma gives the reference to *Dastūr komvār* as "*Dastur Komwār*, V.S. 1786 (1729 A.D.), f. 333" (Sharma 1968: 133, fn. 144) which does not agree with Chaudhry's reference, and might therefore lead us to believe that they are referring to different mentions of "Govind Prema." However, the reference given by Chaudhry is also given by Sharma in the preceding footnote (*ibid.*, fn. 143), indicating the possibility that Chaudhry may have accidentally copied the wrong reference from Sharma. According to Sharma, the reference that Chaudhry claims for "Govind Prema Gyana Chaupar" actually refers to an unnamed "*cowri* game of 10 squares with 200 *cowris* to play with" (*ibid.* 133). A game fitting this description is found in a private collection in Rajasthan with which I am acquainted. It is called *das ghar* (ten houses), and belongs to the mancala family of games (cf. *navagrāmaśatakaṅkarīkhela* in *KK* 325-30). A similar game with 4 x 10 squares and 200 cowries was on display in the Shree Sanjay Sharma Museum & Research Institute in Jaipur in the fall of 2016.

⁴⁸ Several requests for information sent to the Rajasthan State Archives where the *Dastūr komvār* is kept yielded no results. Chaudhry herself kindly responded to my emails, but ultimately was not able to provide any other documentation than that which is found in her thesis.

contrast to the related game of *caupar* which finds frequent mention as a game of royalty, and as a metaphor for life and liberation, in western Indian literature and painting from the 16th century onward (Topsfield 2006b: 19-21). If gyān caupar had already been invented at the time, we might reasonably have expected it to have been the chosen ludic metaphor of existence among religious authors.⁴⁹ We might also have expected it to find mention side by side with *caupar* in the late 16th-century $\bar{A}'\bar{\imath}n-i$ Akbarī which devotes a whole chapter to the sports and games popular at the court of Akbar (r. 1556-1602) (Blochmann 1873: 297-307). A further example to the same effect is Thomas Hyde's De Ludis Orientalibus (1694) which is the earliest European treatise on Asian games. The lack of mention in this erudite yet highly eclectic work is certainly no guarantee that *gyān caupaṛ* did not exist at the time, but it is worth noting that Hyde includes the related games of *caupar* and *shengguan tu* (Hyde 1694: II, 68-101). ⁵⁰ For the sake of completion, it should also be mentioned that neither caupar nor gyān caupar finds mention anywhere in the extensive description of games and pastimes in the Krīḍāviṃśati section of the 12th-century Mānasollāsa (MS 5.1-20) written by Someśvara III who ruled over the Western Chalukya Empire from 1127-38.

Whatever the exact origins of *gyān caupaṛ*, it is evident that it was not created in a vacuum. All aspects of the design bear the clear mark of external influences, whether from games or cultural forms and practices other than games. Its originality does not reside in the individual elements, but in the way they are brought together to form a game which integrates mechanics and theme far more closely than had previously been achieved in Indian board game history. In order to fully appreciate the several layers which make up *gyān caupaṛ*, we will have to look at them both in separation and as a whole. The present chapter begins the investigation by exploring a series of board games from Europe and East and South Asia, all of which may demonstrably have influenced *gyān caupaṛ* mechanically, thematically, or otherwise. Later, in chapters four and five, we shall see how these influences flowed together to create a wholly new

⁴⁹ Toward the end of the 19th century, when the authors of the gospel of Śrī Rāmakṛṣṇa Paramahaṃsa (1836-86) needed a game to serve as a metaphor for human existence, they chose the later Bengali variant of *gyān caupaṛ* known as *golok dhām* (see *History and Transmission*, chapter three).

⁵⁰ The information on *caupar* and *shengguan tu* is summarized by Victor Keats in his partial translation of *De Ludis Orientalibus* (Keats 1994: 310-15). The relation of *shengguan tu* to *gyān caupar* is discussed in the section on *East Asian Influences* below, while the relation between *caupar* and *gyān caupar* is discussed in the section on *South Asian Influences*, also below.

and unique game, and finally, in chapter six, we will build on our insights from former chapters to identify influences from beyond the realm of games. Only then will we be able to understand how *gyān caupar* originated in the interface between games and religion, and how it came to be used for purposes of both playful seriousness and serious play.

European Influences

The mechanics of *gyān caupar* bear a strong resemblance to those of *gioco dell'oca*, or the game of the goose, which enjoyed widespread popularity throughout Europe from the late 16th and well into the 20th century. Goose probably began as a gambling game in the taverns of 15th-century Italy, but was later adapted as an educational game, and came to be used as a playful way of teaching children and young adults about a wide range of topics from moral behavior and career choices to history and geography. The following discussion explores the possibility that European travelers and missionaries brought the game with them to India in the 16th and 17th centuries, thereby influencing the development of *gyān caupar*.

Gioco dell'Oca

The traditional goose game, as exemplified by an early Italian print from 1598 (fig. 10), is played along an ovoid spiral track consisting of 63 squares, beginning at the periphery and ending at the center. Each player controls a single pawn which enters the track in the first square and moves forward according to the throw of two six-sided dice. A third of the squares contain illustrations instructing players to jump ahead, fall behind, lose a turn, pay a stake into the kitty, or likewise. The only illustration occurring multiple times is that of a goose which allows players to continue forward the same number of squares just moved. That is, if a player rolls a "5," and ends his move on a goose, his pawn is allowed to continue forward for another five squares. If, on the other hand, a pawn ends its move on another player's pawn, the latter is moved back to the square from which the former began its move. The first player to land exactly on sq. 63 wins the game, and collects all the stakes in the kitty. Though players would quickly learn the instructions associated with the different illustrations, they would also be printed on the game chart together with the rules of play. In the later

⁵¹ Detailed examples can be found in Goodfellow 2008: 43-134.

and more heavily illustrated versions of the game, the instructions would take up a good deal of space on the charts, and sometimes even be printed in a separate booklet. This was especially true of the educational versions of the game which often used booklets to provide additional and more detailed information about the topics depicted on the game charts (Goodfellow 2008: 65).

Though the length and shape of the track, as well as the illustrations and the instructions associated with them, varied between especially later versions of the game, the overall concept remained the same. A similar situation applies to *gyān caupaṛ* which has several defining features in common

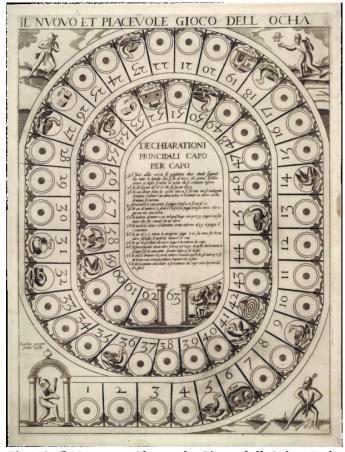


Fig. 10: Il Nuovo et Placevole Gioco dell Ocha. Italy, 1598.

with goose. Both games are purely luck-based and played with single pawns moving forward along a unidirectional track according to the throw of dice or cowries. The main difference lies in the design of the track, which is spiral in the case of goose, and folded back upon itself to form a vertically oriented rectangular structure in the case of *gyān caupar*. Furthermore, *gyān caupar* does not locate the winning square at the end of the track, but rather in the center of the topmost row, or somewhere above it, making it possible for players to overshoot the target, and either continue moving back and forth in the top row until they land on it, or slide back down along the body of a snake and begin climbing again. The instructions associated with individual squares are also simpler in *gyān caupar* as they only allow for jumping ahead by means of ladders and falling behind by means of snakes. Since the illustrations of the snakes and ladders indicate the squares connected by them, there is no need to memorize

instructions for specific squares, and so none were written on the charts.⁵² This marks an important distinction between *gyān caupaṛ* and goose games in that the former did not require literacy, whereas the latter did. Though literacy would have enhanced the experience of *gyān caupaṛ*, it was not required in order to play the game and determine a winner. This would probably have improved its appeal and popularity among the illiterate classes significantly.

Goose traditionally included a sequence of thematic illustrations comprised of a bridge, an inn, a well, a maze, a prison, and a figure of death, which together would seem to generate a loosely woven narrative of a dangerous journey. The earliest known description of the game in a Bolognese manuscript from 1585 explains that the number of squares correspond to the nine seven-year cycles which was believed to make up a person's life (Leesberg 2015: 34). This has been discussed in detail by goose historian Adrian Seville who remarks that the conclusion of the ninth cycle in the 63rd year, also known as the "grand climacteric," posed the greatest danger of all, after which peace and wisdom was thought to ensue (Seville 2016a: 121-22). If goose was indeed based on numerological principles, and its track represented the journey through life, it would tie it even closer to gyān caupar which unambiguously represents the journey of souls through the cycle of rebirth toward liberation. As shown in chapter one, the representational value of a formal game system is extraneous to the system itself, and gyān caupar might therefore simply be seen as an adaptation of goose to a different religious and philosophical context. However, if there is any truth in the matter, it probably is not the whole or the only truth. The track design of gyān caupar refers back to an age-old Indian tradition of drawing grid diagrams with numbered and inscribed squares, and the very idea of using board games as representations of life and the world is probably as old as board games themselves. Still, the obvious overlap between the game systems of goose and gyān caupar, as well as the more subtle thematic correspondences, would seem to suggest at least some degree of influence.

The earliest known reference to goose appears in a book of sermons written by the Dominican preacher Gabriele da Barletta in 1480 (Seville 2016a: 121-22). Barletta

⁵² Some Vaiṣṇava charts (Va72#6,28,34, Va84#4,9ab,10) do in fact list the squares connected by snakes and ladders, but only by the legends they carry, and not by the numbers of the squares in which they are located, thereby giving off the impression of an exegesis rather than a player aid.

taught theology at the University of Parma, and was renowned for his sermons throughout Italy (Alecci 1964). He refers to the game of the goose (locha) alongside tarot (triumphos) and backgammon (tavole) as games that one might play during Christmas, and it therefore seems likely that the game was already well established at the time. About a hundred years later, at the end of the 16th century, it spread to several other European countries. Francesco de Medici (r. 1574–87) gifted a copy of the game to Philip II of Spain around 1585, and French, British, and Austrian prints were made in the years 1597-98 (ibid.



Fig. 11: Game of the goose. Gujarat, c. mid-16th century.

118-20). Interestingly, the earliest known example of the game is not a print from Europe, but an intricately carved wooden game board inlaid with ivory, horn, and gold wire from 16th-century Gujarat (fig. 11). The numerals are consistent with those used in Italy in the 15th century (Seville 2013: 3), and it seems evident from the labored execution of especially the geese that the artisan was not familiar with the design of the game. The game board was therefore likely made on order for a wealthy European customer who had supplied the artisan with a printed copy of the game from Italy. A clearly related example from the same area in the late 16th or early 17th century is even more intricately carved, and improve greatly on the geese as if the design had become more familiar in the preceding decades. Early travel accounts from India in the 16th and 17th centuries make frequent reference to the manufacture of game boards and gamesmen (Jaffer 2002: 21; Chong 2013: 130), and it therefore seems quite possible that foreign game designs, such as goose, would have entered into the

⁵³ The board recently appeared in an antique shop in Paris. According to Seville, it was probably intended as a gift for a European cabinet of curiosities (pers. comm.). Website of *A la façon de Venise* accessed 22 Dec, 2017: http://www.alafacondevenise.fr/affichage dyn objets.php? action=showfull&vpic=254&gll=-1&tpic=4&maxp=9&page=1.

production line of local artisans, and perhaps even spread onward to the upper echelons of society.

Du Point au Point

Some of the most important agents of intellectual and cultural exchange between Europe and India were the Jesuit missions. This is especially true of the period during Akbar's reign in the second half of the 16th century and before the ascension of Aurangzeb in 1658. The Society of Jesus, whose members were known as Jesuits, was founded in 1534, and officially approved by Pope Paul III in 1540. Already in 1542, one of the founding members, Francis Xavier (1506-52), arrived in Goa on the western coast of India to begin spreading the Catholic faith among the locals. The Jesuit approach to conversion was more flexible and culturally sensitive than other approaches at the time, and Xavier made a point of bringing engravings, paintings, and statuettes with him on his travels to appeal to the hearts and minds of the locals (Bailey 1999: 6). Art formed part of the rhetorical strategy of the Jesuits, and was not only used to create an emotive response, but also to cross language barriers, create visual narratives, and serve as aids in meditation and memorization (ibid. 8). The Jesuit missions brought original oil paintings and thousands of prints from all over Renaissance Europe to India, and actively encouraged the blending of Western and Indian art on an unprecedented scale (*ibid.* 10-11).

The missions relevant to the present discussion are the three Mughal missions to the court of Akbar in 1580-83, in 1591, and again in 1595 until his death in 1602, after which the mission continued under the auspices of other rulers until the suppression of the Society of Jesus in 1773. Among the leaders of the first mission was the aristocrat Rodolfo Acquaviva (1550-83) from Atri in the Kingdom of Naples. He had gone to Rome to join the Society of Jesus in 1568, and had set sail for India in 1578 (Pirri 1960). According to Akbar's historian Abu'l-Fazl, Acquaviva and his fellow Jesuits arrived at court with a "large caravan laden with choice goods" (Beveridge 1939: 1026-27), and though it seems unlikely that a game of goose was among the goods at a time when it was still mostly associated with drinking and gambling, it seems equally unlikely that Acquaviva should not have known about it from his childhood in Atri and his student years in Rome. Abu'l-Fazl does not mention the game in his reports, but we know from

the \bar{A} ' \bar{t} n-i $Akbar\bar{t}$ that Akbar had a great fondness for games (Blochmann 1873: 303) which, given the cultural open-mindedness of the Jesuits, might have prompted later missions to include such items among their goods. The second mission in 1591 was short-lived, and does not seem to have had much of an impact (Bailey 1999: 118), but the third and final mission which began in 1595 and lasted for nearly two centuries was on a much grander scale. It had a strong emphasis on "religious spectacle and display", and included, among other things, "[r]ich costumes and liturgical vestments, curtains and candles, flowers, singing and organ music, theatre, bell-ringing, fireworks, and the exhibition of pictures" (ibid. 122-3).

The development of the educational potential of goose would have provided the Jesuits with a further incentive to introduce it in Mughal India. numerological interpretation of goose had already been suggested in 1585 (see above), and in 1587 the Spaniard Alonso de Barros demonstrated how the game might be adapted for more worthwhile purposes than drinking and gambling when he created filosofia cortesana, or the game of courtly philosophy (fig. 12). Barros kept the design and mechanics of traditional goose intact, but changed and added illustrations and inscriptions to make the game reflect a moral vision of the hard and diligent work required to succeed in one's ambitions at court (Millán 1996). The idea that the purport

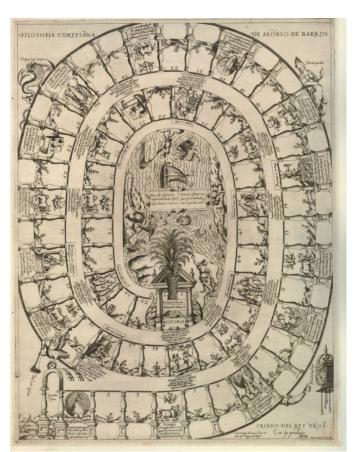


Fig. 12: Filosofia cortesana. Madrid, 1587. This version from Naples, 1588.

of the game could be changed simply by changing the theme of the illustrations, and by

⁵⁴ Akbar took great interest in western goods of all kinds, and even had an envoy sent to Portuguese Goa with the express purpose of acquiring "wonderful things" from the West. Later, a treaty between James I of England (r. 1603-25) and the Mughal Emperor Jahāngīr (r. 1605-27) would include an annual donation of "all the [western] rarietyes that they can find" to the Mughal court (quoted in Jaffer 2006: 12).

adding any explanations necessary to convey it, spread like wildfire throughout Europe and caused the production of thousands of differently themed versions from the 17th to the 19th centuries. It was only a matter of time before someone would think of adding a religious theme to the game, and the first one recorded to have done so was indeed a Jesuit. Father Jean Pierron had arrived as a missionary among the Iroquois of New France in 1668, but soon despaired of teaching them through the usual media of reading and writing. Instead, according to a report written by him in 1670, he was inspired by God to make good use of their passion for playing games and design a missionary goose game for the sake of their conversion. He described the game, which he called *Du point au point* in reference to the journey from the point of birth to the point of salvation, as follows:

It is composed of emblems which represent all that a Christian has to know. The seven Sacraments are all seen depicted there, the three Theological Virtues, all the Commandments of God and of the Church, together with the principal mortal sins; even the venial sins that are commonly committed are there expressed in their order, with marks of the horror that ought to be felt for them. Original sin, followed by all the ills that it has caused, appears there in a particular order. I have represented there the four ends of man, the fear of God, the Indulgences, and all the works of mercy. Grace is depicted there in a separate Cartouch, conscience in another; the freedom that we have to obtain salvation or destruction, the small number of the Elect,— in a word, all that a Christian is obliged to know is found expressed there by emblems which portray each of these things. (Thwaites 1899: 207-9)

The Iroquois apparently took great interest in the game, and though Pierron may have exaggerated, or at least over-estimated, its missionary impact (Finet 2012: 103), he goes on to suggest that it might also be successfully introduced among the rural people of France. He mentions that he has written a short book on the game, and states his intention to send a copy back to France the following year and have the game engraved so multiple copies can be made (Thwaites 1899: 211). Unfortunately, neither the game nor the book has survived. 55 However, another religiously themed game, also

⁵⁵ Finet speculates that Pierron may have been inspired in his endeavors by didactic drawings, and provides an example from 1626 entitled "The Mirror of the World" (Finet 2012: 96). It appears to show the different paths leading to heaven and hell on the day of the last judgment, and might easily have been turned into a goose-like game.

entitled Du point au point, with the subtitle pour la fuite des vices et pour la pratique des vertus, was printed sometime between 1675-80 (fig. 13). 56,57 The printed game does not correspond to the description given by Pierron, which may cause us to speculate whether Pierron's game was changed into something less heavy-handed, and thus better suited for the French market⁵⁸. or whether the mere description of it inspired a different game with a similar name and theme. Still, at the heart of the matter, is the fact that a Jesuit preacher saw the of potential goose games missionary tool in the late 17th century, and that he thought it such an enlightened idea that it might be applied

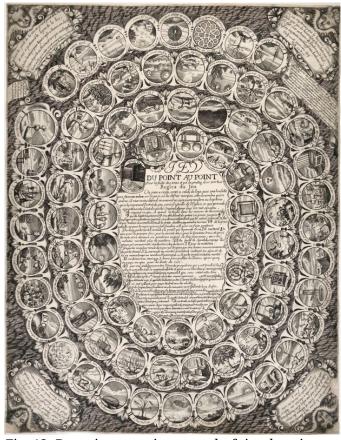


Fig. 13: Du point au point: pour la fuite des vices et pour la pratique des vertus. Dijon, c. 1675-80.

to a wider audience in need of religious instruction.⁵⁹

Henry-René d'Allemagne dates the game to 1640 in his comprehensive history of French goose games (1950: 77), but Adrian Seville and fellow games historian Thierry Depaulis do not find any support for the dating. Based on the verses dedicated to "Madame de Rouvil Abbesse de S. Julien" in the top right corner of the print, they believe that it must be posterior to the establishment of the Abbey of Saint-Julien de Rougemont in Dijon in 1673 (pers. comm.).

⁵⁷ The print differs from standard goose games in having 72 instead of 63 squares. This is similar to the number of squares in what is probably the earliest group of *gyān caupar* charts, i.e. the 72-square Vaiṣṇava charts (see *History and Transmission* in chapter three). It should, however, be noted that several other goose games also divert from the traditional 63 squares.

⁵⁸ Finet quotes a contemporary letter written by Pierron's associate in New France, Marie of the Incarnation (1599-1672), who describes his didactic paintings in gruesome detail with images of Iroquois being tortured by demons for shutting their ears to the Jesuit teachings (Finet 2012: 95).

⁵⁹ Jacques Villotte, writing in 1730, mentions a Jesuit missionary called "Father N." who invented a similar game in Armenia, also in the late 17th century. The game had a spiral track consisting of 46 illustrated squares which each explained "un mystère ou une des grandes vérités du christianisme" (quoted in d'Allemagne 1950: 43).

Ganj

We do not have any evidence of religious goose games being introduced into India, but we do have evidence from the late 17th century that the traditional goose game had come to the attention of the Mughal court which the emperor Aurangzeb (r. 1658-1707) had relocated to Aurangabad in Maharashtra in 1682 (Sarkar 1933: 15). The evidence appears on a few folios dedicated to games amid scattered notes on the imperial court appended to an Indo-Persian manuscript on scents and perfumes (Digby 2006a: 75). The manuscript was transcribed in 1698 by Muhammad A'zam whom Digby suspects might be the eponymous son of Aurangzeb. 60 A'zam refers to the game as bāzī-e firangī, or a European game, and presents two closely related but not completely identical descriptions which clearly show it to be an elaborated version of goose. 61 Each player has a single pawn which moves along a unidirectional track according to the throw of three cubic dice. 62 The track includes 16 illustrated squares, several of which, such as the bridge, the well, and the prison, are also found in traditional goose. Other squares, such as the elephant, the singing-girl, the dragon (azhdar), and the emperor (bādshāh), give the game a distinct Mughal feel, and seem to push the theme in the direction of adventure and romance. Since A'zam not only gives the names of the squares, but also indicates the spacing between them, it becomes possible to reconstruct the track except for a few inconsistencies. Digby concludes that it was most likely a spiral track on a 13 x 13 grid with four or nine central squares joined together to form the kitty inscribed with the word ganj, or treasure (ibid. 77). Since a central square consisting of only four squares would break up the symmetry of the grid, a central square consisting of nine squares seems more likely, making for a track with a total length of 161 squares when counting the center as a single square.

⁶⁰ A'zam was based in Pedgaon a couple of hundred kilometers south of Aurangabad from 1696-99 (Sarkar 1933: 78). Later, from 1701-05, he resided in Ahmedabad as governor of Gujarat (*ibid.* 79-82), and would therefore have been in a position of power in western India around the time when *gyān caupar* is likely to have been invented.

⁶¹ Digby notes Akbar's elaborate expansions of *paccīsī* (i.e. *caupaṛ*) and *ganjīfa* as analogue examples of how existing games were further refined at the Mughal court (Digby 2006a: 75). To these we might add the 124-square Vaiṣṇava *gyān caupaṛ* chart (Va124#1) likely produced at the court of Baji Rao II in Pune in the early 19th century, and the several 342-square Vaiṣṇava charts (Va342#1-7) produced at the Rajput courts of the Punjab Hills throughout the 19th century (Topsfield 2006a: 156).

⁶² As suggested by Digby, the use of three cubic dice instead of the two used in goose may have been inspired by the use of three stick dice in the game of *caupaṛ* as described by Abu'l-Fazl (Digby 2006a: 76).

A'zam's identification and reconstruction of the game is supported by a drawing of a later version (fig. 14) commissioned by the same Richard Johnson who also commissioned the earliest known *gyān caupaṛ* chart (Va72#7) during his stay in Lucknow in 1780-82 (see frontispiece). The game is called *ganj* after the eponymous central square which serves as a kitty, but unlike the earlier version described by A'zam, the spiral track is confined to an 8 x 8 grid, with a central square

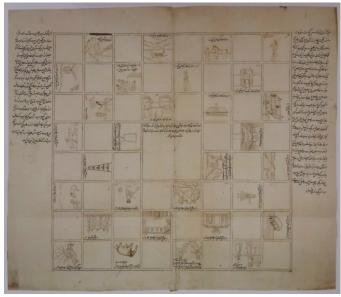


Fig. 14: Ganj. Lucknow, 1780-82.

consisting of four squares, for a total of 61 squares when counting the center as a single square. While the size of the track has been more than halved, the number of illustrations has been almost doubled, with an illustration occupying every second square beginning with the first. The illustrations expand upon those in the earlier game, and maps out the journey of a lone adventurer who travels through the wilderness, arrives at a walled city, enters the palace gardens, and finally descends into a cave where he slays a dragon and takes away its treasure as represented by the kitty in the center. The initial square, labeled *tilism*, or talisman, indicates the magical and ultimately illusory realms often encountered in the imaginative Persian tales and romances known as dāstāns and qiṣṣahs.⁶⁴ Tilisms are created by evil magicians seeking to trap the hero of the stories and preventing him from completing his quest. In the case of ganj, this means that the players must overcome fantastical creatures, such as the phoenix-like *sīmurgh* and the dragon-like *azhdahā*, before arriving at the treasure, which increases throughout the game as players land on illustrations instructing them to add money to the kitty. Without doubt the most popular dāstān in Mughal India was the *Dāstān-e-Amīr Ḥamza*, also known as *Ḥamzanāma*, or the story

⁶³ Digby wrongly dates Johnson's appointment as Head Assistant to the Resident in Lucknow from 1782-84 (Digby 2006a: 69).

⁶⁴ For an introduction to dāstāns and qiṣṣas, see the first chapter in Pritchett 1985.

of Amīr Ḥamza.⁶⁵ Here we find the famous *tilism-e hoshrubā*, or the stunning *tilism*, created by the sorcerer Afrāsiyāb, and consisting of three realms possibly represented by the three concentric squares surrounding the central square in *ganj* (cf. Pritchett 1985: 5). Despite the distinctly Mughal theme of the game, the rules - which also appear on the drawing - have clearly been adopted from goose (Digby 2006a: 81). They emphasize the advantage of *ganj* over chess, backgammon, and *ganjīfa*, in that multiple players - "as many as ten or twenty, all those who are in the room" - can join in the game (*ibid*.). The same quality adheres to *gyān caupaṛ*, and may explain the apparently excessive number of players (i.e. twenty-five) mentioned in the description of the 124-square Vaiṣṇava chart (Va124#1) above.

If *gyān caupar* were a direct descendant of *ganj*, which seems to have been a mere curiosity of the late Mughal court, we would expect the Ṣūfī charts to have been among the earliest and most widespread, but at present we are only aware of a handful of such charts from before the 20th century, the oldest of which can be dated to c. 1805-10 (Sū100#1a). Furthermore, the political climate under Aurangzeb was not conducive to neither Ṣūfīsm nor games, and after his death in 1707 power quickly began to slip from the hands of the Mughals. Consequently, the closest connection that can be comfortably established between *ganj* and *gyān caupar* lies in the fact that Richard Johnson commissioned copies of both games within a two-year period in late 18th-century Lucknow. Though *gyān caupar* would turn out to be the more successful of the two games, *ganj* may very well have been the older, deriving more or less directly, as we have seen, from the European game of goose. Georgia Caupar must remain a matter

⁶⁵ See Pritchett 1991. Akbar famously commissioned an illustrated version of *Ḥamzanāma* in 1562 which would run into 1400 illustrations and take fifteen years to complete (*ibid.* 4-5).

⁶⁶ Digby hypothesizes that goose and the Indian version of *ganj* had a common ancestor in the Islamic Middle East, and that goose may have first entered Europe in the German-speaking parts of south-eastern Europe where the Persian word *ganj* was phonetically translated into the German word *gans*, meaning goose (Digby 2006a: 74, 81-3). Unfortunately, his argumentation is not supported by direct evidence, and suffers from his apparent unawareness of Barletta's early reference to goose in 1480.

⁶⁷ Further research needs to be done on the introduction of goose games into East Asia which seems to have spawned variations similar to *ganj*. Two examples of illustrated spiral race games from 17th-century China are presented in Lo 2004 (pp. 69-72), and several other examples are discussed in Ngai 2011 (pp. 97-105). Examples of Japanese *e-sugoroku*, similar to goose and dating back to at least the 17th century, can be found in Formanek & Linhart 2002 and Masukawa 2004.

of speculation. However, given the historical circumstances outlined above, and the fact that the game mechanics of *gyān caupaṛ* had not previously been attested in India, it certainly seems possible that whoever first invented *gyān caupaṛ* was aware of goose, either through *ganj*, or, perhaps more likely, through the presence of variously themed goose games among the European elites of India.

East Asian Influences

Contrary to the influence on *gyān caupaṛ* from European goose games, which can only be detected by examining the underlying formal system, the influence from a family of East Asian games commonly referred to as promotion games is more immediately apparent in their visual design and representational value (Parlett 1999: 94-5). However, the formal system governing their operation varies significantly from that of *gyān caupaṛ*, indicating a different sphere of influence than that of goose. The sections below follow the trail of religious promotion games from China via Tibet to Nepal where evidence shows that they co-existed with *gyān caupaṛ* around the turn of the 19th century.

Xuanfo Tu

References to Daoist and Buddhist promotion games date back to 12th-century China 68 , but the earliest surviving description is found in the *Xuanfo pu*, or manual of Buddha selection, written by Ouyi Zhixu (1599-1655) in 1653. 69 Zhixu was a renowned Chinese monk, known as one of the four great masters of the Ming era, and posthumously declared as the 9th Patriarch of the school of Pure Land Buddhism. He first encountered the game of *xuanfo tu*, or the table of Buddha selection, in Nanjing, eastern China, in 1619, and went on to create his own improved version in 1629. His game was printed in 1631, and achieved a wide circulation which prompted him to revise it first in 1641, then again in 1651, and finally sometime before his death in

⁶⁸ Two Daoist and one Buddhist version are mentioned in the *Tongzhi*, or comprehensive treatise, written by Zheng Qiao in 1161 (Ngai 2011: 47-8). Earlier still would be a reference to a Daoist version in a poem by Wang Gui (1019-85) describing daily life at court (*ibid.* 95-6).

⁶⁹ The manual was translated into English by the Protestant missionary Timothy Richard in 1907. Unfortunately, he left out much of the preface which provides useful information on the background of the game (McGuire 2014: 21). The most comprehensive English-language description of the manual outside of Richard 1907 is found in Ngai 2011 (pp. 130-80).

1655. The final version was printed together with a detailed manual which remains the earliest source for understanding the game (Ngai 2011: 108). No game charts are known to have survived from the early period, but owing to a renaissance of the game in 19th- and 20th-century China, several faithful reproductions of a later date can still be found.

The game chart consists of 220 oblong squares spiraling inward like the steps of a gigantic staircase (fig. 15). The squares are divided into fifteen sections, or paths (men), each devoted to its own particular theme, such as the "Path to the Initial States and Fundamental Causes," the "Path to the Four Evil Reincarnations," the and "Path to Bringing about Good [Deeds] Extinguishing Evil [Deeds]" (Ngai 2011: 131). The sections replicate the structure of the ten dharma realms of Buddhist

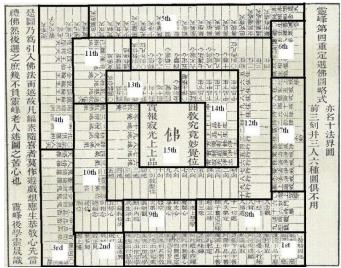


Fig. 15: Xuanfo tu. Modern reproduction. Graphics added by Ngai (2011: 147, fig. 4.2).

cosmology, beginning with the six paths of reincarnation and continuing with the four enlightened states. In accordance with Zhixu's own convictions, it also adds a section on the Pure Land teachings immediately before the final section which consists of a single large square representing the attainment of Buddhahood (*ibid.* 175-6). The squares within each section are inscribed with relevant terminology, providing a detailed overview of the complex web of Buddhist doctrine. Individual squares are further elaborated upon in the accompanying manual which also prescribes repentance rituals to help players improve their current karmic situation regardless of how far they have already progressed along the track to Buddhahood (McGuire 2014: 15-6). It is obvious that Zhixu considered *xuanfo tu* something far more than a game, and, as Ngai remarks, the "teachings discussed [in the manual] are as serious and academically profound as Zhixu's other writings and sūtra commentaries" (Ngai 2011: 146).

The representation of a spiritual journey from the lowest to the highest realms of existence through a series of karmically related squares inscribed with cosmological and doctrinal terminology is clearly reminiscent of gyān caupar, but the method of progress along the track is radically different. Players each control a single pawn which begins in the title square of the first section in the bottom right of the chart. They take turns throwing two six-sided stick dice, one after the other, both of them inscribed with a single syllable on each face. The syllables on each die make up the phrase na-mo a-mi-tuo-fo, or salutation to Amitābha Buddha, which is used by Pure Land Buddhists to praise the lord of the Western Pure Land (McGuire 2014: 11). The combination of syllables thrown determines if and where a player is allowed to move his pawn depending on the square it currently occupies. The first move always lands the pawn in one of the 21 squares in the first section in order to determine the player's initial karmic condition, such as "clinging to [heterodox] views," "giving alms with pride," or being a practitioner of the "four fundamental meditations" (Ngai 2011: 149-56). Once a pawn has entered a square in the first section, the player will have to consult the manual entry for that particular square to determine which throws will take his pawn to which other squares on the chart. The process is repeated each time the pawn enters a new square, moving it back and forth along the track until it ends up in the central square and attains Buddhahood. Though this approach might seem random from a purely game mechanical point of view, it makes good thematic sense as the game has complete control over which squares lead to which other squares. This means that apparent non sequiturs can be avoided, such as is often seen in gyān caupar when a throw of the dice or cowries moves a pawn between two thematically unrelated squares.⁷⁰ While predetermined connections in the form of snakes and ladders are only found between certain squares in gyān caupar, such connections are found between all squares in xuanfo tu which does not allow for any other form of movement.

Zhixu does not explain the rules of the game beyond the description of which throws lead to which squares, and it must therefore be assumed that they were similar to those of other promotion games current at the time (McGuire 2014: 13). Zhixu himself

⁷⁰ If, for example, a player on sq. 20 of a standard 72-square Vaiṣṇava chart throws a "4," he will have to move his pawn from charity ($d\bar{a}n$, sq. 20) to bad company (kusang, sq. 24). For more details, see the critical reading of 72-square Vaiṣṇava type a charts in chapter four.

mentions several examples of promotion games relating to Buddhism, most of which he felt were confused and illogical, but he also makes clear that they all ultimately derived from a secular promotion game commonly known as shengguan tu, or the table of bureaucratic promotion (fig. 16). The earliest known chart of shengguan tu dates back to sometime in the second half of the 17th century when it was first described in the West in De Ludus Orientalibus (Hyde 1694: II, 70-101), but references can be found as far back as the Tang dynasty (618-907) in the 9th

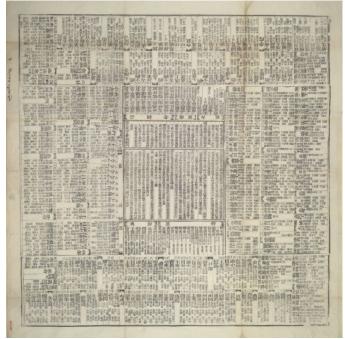


Fig. 16: Shengguan tu. China, 1840.

century.⁷¹ The game design of *shengguan tu* is largely identical with *xuanfo tu*, except that players do not ascend the spiritual levels of Buddhism, but rather the rungs of the career ladder of Confucian bureaucracy. The game was allegedly made to prepare prospective bureaucrats for the *keju* civil service exam, instituted in 605, which included the memorization of the complete hierarchy of administrative positions.⁷² Zhixu, however, also hints at another inspiration for *xuanfo tu* in explicitly basing the design of his dice on the dice used to engage with the *Zhancha shane yebao jing*, or the *sūtra* on the divination and examination of the retribution of good and evil deeds (Ngai 2011: 132-33). The *sūtra* describes a complex system of divination involving a total of 19 variously inscribed and numbered stick dice thrown to determine a person's karma and suggest ways in which negative karma may be eliminated and positive karma increased. We know from several works written by Zhixu that he had studied the *sūtra* extensively, and, according to Ngai, about a third of the 189 attainable results in the

⁷¹ A description of the game by Fang Qianli in 838 provides a *terminus ante quem* for its invention. Sources from the Song dynasty (960-1279) attribute it to Li He who is supposed to have designed it during his time as Prefect of Hezhou in 830-32, but Ngai believes that it may go back even further to the middle of the Tang dynasty (Ngai 2011: 41-6).

⁷² For further discussion of *shengguan tu*, see Stover 1974 (pp. 215-25), Lo 2004, and Ngai 2011 (pp. 39-88).

sūtra correspond to legends in the squares of *xuanfo tu* (*ibid.* 142-3). It is, however, clear that *xuanfo tu* was meant for didactic rather than divinatory purposes.

Sa Lam Rnam Bzhag

In discussing the origins of *xuanfo tu*, Zhixu claims that the first Buddhist adaptations of the secular *shengguan tu* were made by Tibetan lamas who based their design on an early Ming version by Xie Jin (1369-1415) (Ngai 2011: 109). This is demonstrably false as *xuanfo tu* is listed among several other religious and secular promotion games in the 12th-century source mentioned above (fn. 68), but since Zhixu does not appear to have had any ulterior motive in crediting the lamas with the invention of the game, it is likely that he believed the story to be true. The perceived connection to Tibet is interesting because of a Tibetan Buddhist promotion game known as *sa lam rnam bzhag*, or arrangement of the paths and stages, which may help bridge the gap between *xuanfo tu* and *gyān caupar*.⁷³

So far, no examples of the game or references to it dating from before the 19th century have been published.⁷⁴ Three examples from the late 19th or early 20th centuries (Ngai 2011: 326, 337, 339) are clearly influenced by Chinese landscape painting and Pure Land Buddhist iconography (*ibid.* 359-61), and appear to be ornate yet simplified versions of *xuanfo tu* with fewer squares and fewer connections (fig. 17). They are played with a single cubic die inscribed with syllables corresponding to the six paths of reincarnation, thus allowing for a maximum of six onward destinations from each square.⁷⁵ The destinations are written inside the squares themselves, eliminating the

⁷³ The variant name *sa gnon rnam bzhag*, or description of overcoming the stages, is also encountered (e.g. Tatz & Kent 1978: 19).

⁷⁴ A Tibetan study of the game reports that every generation of Dalai Lamas since Jamphel Gyatso (1758-1804) has painted their own version of it, all of which are now allegedly kept in the Potala and Norbulingka palaces in Lhasa (Ngai 2011: 347). Attempts at verifying the claim have so far been unsuccessful, and Tibetologists David Jackson, Dan Martin, and Jan-Ulrich Sobisch have all responded to it with skepticism (pers. comm.). Dan Martin has even suggested that the Tibetan study may have confused *sa lam rnam bzhag* with *kun-bzang 'khor-lo*, or the wheel of praise, which children was often encouraged to draw for themselves in the past (pers. comm.).

⁷⁵ The six syllables are most commonly recorded as *a*, *sa*, *ga*, *ra*, *da*, and *ya*. Tatz & Kent do not believe that they have any special meaning (Tatz & Kent 1978: 12-13), but according to a local informant in the late 19th century (Waddell 1895: 471-3) and an anonymous inquirer in 1932 (Finkel 1995: 30, fn. 5, and 45), they represent the six forms of rebirth as human, god, demon, ghost, animal, and hellbeing.

requirement of a manual, and making the game much more accessible than xuanfo tu. The visual design also diverges from xuanfo tu by abandoning the concept of distinct sections, and by organizing the squares into an 8 x 8 grid topped by two rows with 10 and 9 squares, respectively, for a total of 83 squares. Still, the overall sense of progression remains the same, with the forms and places of rebirth located closer to the bottom, and the paths and stages to Buddhahood located closer to the top. 76 I have not been able to find a rules description for the specific sa lam rnam bzhag charts discussed here, but judging from the rules of other charts from the same period, it appears that the starting square was located above the hells in the bottom rows, while the winning square was located in the



Fig. 17: Sa lam rnam bzhag. Tibet, late 19th or early 20th century.

central square of the topmost row (e.g. Tatz & Kent 1978: 12; Finkel 1995: 45).⁷⁷

The earliest known *sa lam rnam bzhag* chart is a wood-block print which Tatz and Kent consider to represent the original form of the game dating back to the 13th century (Tatz & Kent 1978: 10), though the print itself, as pointed out by Schlieter, does not seem to go back further than the 19th century (Schlieter 2012: 102, fn. 27). It consists of 72 inscribed squares organized into an 8 x 9 grid with only a few decorative elements

⁷⁶ For a comprehensive analysis of the representational value of *sa lam rnam bzhag*, see Tatz & Kent 1978.

⁷⁷ A rules description obtained by an anonymous inquirer in 1932 instructs players to begin "in the third space bottom line from left" (Finkel 1995: 30, fn. 5, and 45). This seems unlikely given the fact that *sa lam rnam bzhag* charts exclusively depict hells in the bottom row. Perhaps the meaning was that players should begin in the third square from the bottom of the leftmost column, as is also the case on a chart painted in 1971 by a young Tibetan artist exiled in India (Tatz & Kent 1978: 61).

added (fig. 18).⁷⁸ Additional inscriptions outside the grid attribute its invention to the Tibetan Buddhist monk Sa-skya Pandita (1182-1251).79 As noted by Ngai, the attribution is obviously legendary, as is a similar attribution to the Sangpu Neutok monastery in Lhasa established by Ngok Lekpe Sherap in 1073 (Ngai 2011: 323-24). The format of the chart, and its focus on legends above illustrations, are reminiscent of the 72square Vaisnava gyān caupar charts found in Nepal from around the turn of the 19th century.80 This opens up the possibility that early versions of Tibetan sa lam rnam bzhag charts borrowed their mechanics and theme from Chinese xuanfo tu charts, and their visual design from Nepalese gyān



Fig. 18: Sa lam rnam bzhag. Tibet, 19th century.

caupar charts. A possible explanation for this can be found in the fact that the Tibetan sa lam rnam bzhag charts are likely to have been painted by Newari artists from the Kathmandu Valley (*ibid*. 362-63) who also painted the Nepalese gyān caupar charts. The illustrated top panels of both types of charts provide a good example, as they exhibit the same style of painting and iconographical features. The top panels of the sa lam rnam bzhag charts depict a triad of enlightened beings seated on lotus thrones against the backdrop of a Buddhist Pure Land (Ngai 2011: 325)⁸¹, while the top panels of the

⁷⁸ Other examples of *sa lam rnam bzhag* charts with only a few decorative elements added can be found in Waddell 1895 (p. 472) and Finkel 2004c (p. 61). A further example from Bhutan can be found in Tatz & Kent 1978 (p. 13).

⁷⁹ For a paraphrase of the verses, see Tatz & Kent 1978 (pp. 10-12).

⁸⁰ Two 72-square Vaiṣṇava charts from Nepal (Va72#21,22), and to a lesser degree a third chart (Va72#24), follow the *sa lam rnam bzhag* charts from Tibet in placing greater emphasis on illustrations.

⁸¹ The most commonly depicted triad appears to be that of Vajradhara, the tantric form of Śākyamuni Buddha, flanked by the Tibetan Buddhist teachers Padmasambhava (8th cent.) and Tsongkhapa

gyān caupaṛ charts (Va72#19-25) depict the divine trinity of Brahmā, Viṣṇu, and Śiva in similar surroundings.

The Kathmandu Valley is the only place where sa lam rnam bzhag and gyān caupar are known to have co-existed,82 and sa lam rnam bzhag even evolved its own Nepalese variant known as cībhāḥ $k\bar{a}s\bar{a}$, or the *caitya* game. The design of cībhāḥ kāsā follows largely from that of the less profusely illustrated sa lam rnam bzhag charts, except that the squares are organized in the form of a caitya, or a Buddhist shrine or temple, reminiscent of the famous Svayambhunath caitya in Kathmandu. The earliest known example (fig. 19) may date as far back as the 18th century (Yoshizaki 2003: L37),83 suggesting that sa lam rnam bzhag could have been even earlier, and perhaps even earlier than gyān caupar. As we do not know what such earlier sa lam rnam bzhag charts might have looked like, their



Fig. 19: Cībhāḥ kāsā. Nepal, 18th century.

existence does not preclude the possibility mentioned above that the design of $gy\bar{a}n$ caupar charts from the Kathmandu Valley influenced the design of 19th-century sa lam rnam bzhag charts in Tibet, but it does raise the question of whether the influence could have been the other way around. Until certain evidence of sa lam rnam bzhag or $c\bar{c}bh\bar{a}h$ $k\bar{a}s\bar{a}$ charts predating the earliest known $gy\bar{a}n$ caupar charts is brought to light,

⁽¹³⁵⁷⁻¹⁴¹⁹⁾ against the backdrop of the Pure Land of Amitābha Buddha (Ngai 2011: 338-39).

⁸² See, for example, the Nepalese sa lam rnam bzhag chart reproduced in Tatz & Kent 1978 (p. 14).

⁸³ The chart was on display in the National Museum of Nepal (serial no. 343) when I visited it in the fall of 2016. Two other examples, dating to the 19th or 20th century, are held in the Asha Archives in Kathmandu. All three charts are reproduced in black and white in Yoshizaki 2003 (pp. 38-39).

we will have to content ourselves with the fact that they co-existed in Nepal around the turn of the 19th century, and that one is likely to have influenced the other.

The earliest known Nepalese gyān caupar charts (Va72#22-24) date from the early 19th century.⁸⁴ In comparison, the earliest known Indian gyān caupar chart (Va72#7) only dates from a few decades earlier, and does in fact include a reading which is otherwise only found on the Nepalese charts and a later western Indian chart (Va72#3) associated with them.85 Additional evidence that the Nepalese charts exerted their influence on Indian charts can be found on the 342-square charts from the Punjab Hills which derive their top panels from the Nepalese charts, and on two 72-square charts (Va72#3,17) from western India which follow the Nepalese charts in replacing their ladders with auspicious snakes. Against a Nepalese origin of gyān caupar is the fact the vast majority of charts derive from western India, and that the formal system underlying them is much closer to the game of goose than to sa lam rnam bzhag. Also, as will become clear in later chapters, the representational value of gyān caupar is closely aligned with the *bhakti* movement in western and northern India, and may ultimately have derived from tantric charts of the subtle body used by tantric and yogic practitioners in the same areas. All in all, though the jury is still out, I consider any potential influence on gyān caupar from sa lam rnam bzhag to have been limited to the spheres of visual design and overall representational value - i.e. the concept of a game simulating a spiritual journey from birth to liberation - and the origin of gyān caupar to have been located in western India.

South Asian Influences

The most obvious source of inspiration for *gyān caupaṛ* is, of course, the games that were current in its own region at the time of its invention. Grid-based games have a

⁸⁴ The only Nepalese charts which might date to before the 19th century are two charts (Va72#23,24) dated to the late 18th century by Shimkhada (1983: 309, 313). Given Shimkhada's lack of experience in dating *gyān caupar* charts, and the fact that the charts do not appear to stand out from other Nepalese charts now dated to the early 19th century or later, it seems reasonable to question the validity of his dating.

⁸⁵ This is the reading *vaivasvat* in sq. 65, probably referring to the seventh Manu presiding over the current *manvantara*, or Manu age. Since the reading seems to stand somewhat outside the context of the other readings on the 72-square Vaiṣṇava charts, it may simply have been an attempt at coming to terms with the disputed reading found in the same square on other charts (see the variant readings in sq. 65 in Appendix D1).

long history in South Asia, reaching all the way back to the urban centers of the Indus Valley civilization, but apart from the possible emergence of *sa lam rnam bzhag* at an earlier stage in Tibet and Nepal, games with inscribed squares appear to have been a novelty introduced by *gyān caupaṛ*. This, however, does not mean that the squares of grid-based games had not previously been associated with words and concepts, only that they had not previously been directly inscribed with them. The following discussion shows that the ideas expressed by *gyān caupaṛ* had indeed been associated with a related family of Indian race games at least since the beginning of the 1st millennium, and probably much longer.

Phañjikā

The very name of gyān caupar, or the caupar of knowledge, begs the question of how it relates to the game whose name it carries. Before we begin to answer that question, we will, however, turn our attention to the little known game of phañjikā which appears to be an earlier member of the same family of race games as *caupar*. The only known reference to phanjikā - or phanjī, as it also called - appears in a passage of the Krīḍāviṃśati section on games and pastimes in the 12th-century Mānasollāsa (MS 5.16.816-63). The passage is obscure and possibly corrupted, and Gondekar's critical edition contains numerous emendations which sometimes seem to take the reader further away from the original meaning.86 Part of the problem is that the passage is more concerned with the circumstances of the game than with the game itself. It talks a lot about the components of the game and the social interactions between the players, but very little about how the game is actually played. This is probably because readers were expected to know the game in advance, and therefore only needed to be instructed in some of the finer points of gameplay which are now mostly lost on us. Two previous attempts at paraphrasing the passage bear witness to its manifold challenges by either leaving out substantial parts (Mishra 1966: 503-5) or throwing it into even deeper obscurity (Arundhati 2004: 124-26).87 Only by comparing phañjikā to

⁸⁶ The critical edition of the *Krīḍāviṃśati* section is based on three manuscripts, the third of which appears to be a copy of the second, or at least derive from the same source. The earliest manuscript dates from 1671, more than 500 years after the composition of the text in 1131 (Gondekar 1925: vi). Gondekar describes the manuscripts as "defective and full of scribal errors" (Gondekar 1961: vii).

⁸⁷ A better understanding of the passage is signaled by a brief mention in Raghavan 1979 (p. 81), but unfortunately he does not go into any further details.

the related games of *paccīsī* and *aṣṭākaṣṭe* as discussed below can we begin to make sense of it.

The game is played on a 6 x 6 grid described as a mandala (MS 5.16.826-30ab), and thus presumably belonging in the category of bhadramandalas which are characterized by their gridbased designs and mainly used for purposes (Bühnemann ritual 73ff.).88 The exact ornamentation of the grid is not clear from the text, but it is stated that a small "offset" (bhadraka) should be added on each of the four sides (*caturdiksu*) (*MS* 5.16.827ab).⁸⁹ Each player controls five cowries of the same shape and color,90 and begins the game by placing them in one of the four

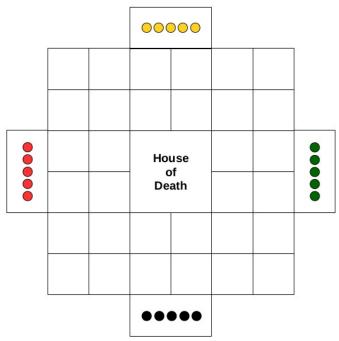


Fig. 20: Phañjikā. Tentative reconstruction of game board and starting positions.

offsets, indicating that the game was played by four players (MS 5.16.835cd-837). The goal of the game seems to have been to get all of one's cowries into a square called the house of death (mrtyugeha) and from there into another square called the house of refuge (śaranāgāra) (MS 5.16.852). It cannot be determined whether the house of refuge was an actual square in the grid, or merely synonymous with taking a cowrie

⁸⁸ The function of the *bhadramaṇḍala* as an interface between game and ritual is discussed in chapter six.

⁸⁹ The translation of *bhadra* or *bhadraka* as "offset" is adopted from Bühnemann who borrows the term from architecture (Bühnemann 1987: 63, fn. 94). In the context of *maṇḍala*s, a *bhadra* can either refer to the grid diagram as a whole, or to a pyramidal figure within the diagram consisting of a base of five squares with a row of three and then one square above (*ibid*. 46). In the case of the *phañjikā* grid, the idea seems to be that of a small square replicating the main square on each of its four sides.

⁹⁰ The related games of *paccīsī* and *aṣṭākaṣṭe* are played with four pawns per player, but an early reference to the similarly related *caupaṛ* in the *Caurāsī vaiṣṇavan kī vārtā*, dated to the 17th century (McGregor 1984: 209), states that it, too, was played with five pawns per player (Barz 1976: 120).

⁹¹ The text states that the game should be played by "five, seven, six, eight, nine, or sixteen players" (khelakāḥ pañca saptāpi ṣaḍ aṣṭau nava ṣoḍaśa) (MS 818cd), but it is not clear how this would have worked unless multiple offsets were drawn on each side of the maṇḍala.

⁹² *Mṛtyu*, or death, is also the name of an astrological house and one of the deities traditionally invoked in *bhadramaṇḍala* rituals (see Bühnemann 1987: 64, no. 26, and 68, no. 114).

off the grid, but since all cowries apparently had to enter the house of death before entering the house of refuge, it seems reasonable to assume that the house of death was located in the center of the grid at an equal distance from the four offsets where the cowries began the game (fig. 20). The movement of the cowries was controlled by the throw of seven larger ($sth\bar{u}la$) cowries generating a random number between one and seven depending on the number of cowries which fell face down (MS 5.16.838-46). Two results appear to have had one or more special applications which could only be used in certain situations. If all the cowries fell face up, the throw was said to be a "low seven" (kalasaptaka) (kalasaptaka) (kalasaptaka) (kalasaptaka) which would force a player to return a cowrie from the house of death to his offset and start its journey all over again (kalasaptaka) (kalasaptaka) (kalasaptaka) which would force a player to return a cowrie from the house of death to his offset and start its journey all over again (kalasaptaka) (kalasaptaka) (kalasaptaka) (kalasaptaka) (kalasaptaka) (kalasaptaka) (kalasaptaka) and the house of death into the house of refuge (kalasaptaka). In addition, a kalasaptaka throw also appears to have awarded the player another throw, allowing for multiple throws of kalasaptaka) before a different result was obtained (kalasaptaka).

Though the above description of $pha\tilde{n}jik\bar{a}$ is neither certain nor complete, it seems undeniable that the game had several things in common with the later game of $pacc\bar{\imath}s\bar{\imath}$. $Pacc\bar{\imath}s\bar{\imath}$ is a variant of caupar played with six or seven cowries instead of dice, and also takes its name from a throw of five cowries falling not face down but face up. Since $pacc\bar{\imath}s\bar{\imath}$ literally means twenty-five, which constitutes the result of the throw, it is tempting to understand $pha\tilde{\imath}jik\bar{a}$ as a variant of $pa\tilde{\imath}cik\bar{a}$ - or $pa\tilde{\imath}jik\bar{a}$, as suggested by Mishra (1966: 505) - in the sense of a group of five cowries falling face down. ⁹⁵ The

⁹³ This is contrary to the usual method of only counting cowries which fall face up. The dual use of cowries for both pawns and randomizing agents is also found in the game of *aṣṭākaṣṭe* discussed below (Smith 1851: 341).

⁹⁴ The square from which the pawn should be returned is referred to as *daladeha* (lit. body of leaves) which might be understood as the lotus in the center of the *bhadramaṇḍala* corresponding to the central square of the game (cf. Bühnemann 1987: 44-45). Gondekar emends the reading to *talageha*, synonymous with *talaṭallaka*(?) in *MS* 5.16.856, apparently implying an underworld which might also be understood as the central house of death.

⁹⁵ The *Kāśikāvṛttī* commentary (c. 7th. cent.) on Pāṇini's grammatical treatise *Aṣṭādhyāyī* mentions a game called *pañcikā* which was played with five *akṣa* or *śalākā* dice (*KV* 2.1.10). *Akṣa* is sometimes used to mean dice in general, while *śalākā* specifically refers to four-sided stick dice (Bhatta 1985: 66-68). The passage, however, states that a player wins if all the dice fall face up (*uttāna*), and loses if all the dice fall face down (*avāñc*), which would rather seem to indicate binary randomizing agents, such as *vibhītaka* nuts or cowrie shells.

readings $pha\tilde{n}jik\bar{a}$ and $pha\tilde{n}j\bar{\iota}$, as they appear in the manuscripts, refer to various kinds of flora ($\bar{A}V\acute{S}K$, p. 543), which does not fit the context very well and seems to call for an alternative interpretation such as the one suggested here. A further similarity between the throws of $pacc\bar{\imath}s\bar{\imath}$ and $pha\tilde{n}jik\bar{a}$ is that both award an extra throw and can be used to enter a new pawn on to the playing field. The main difference between them is that a $pha\tilde{n}jik\bar{a}$ throw cannot be used to move a pawn beyond entering or exiting it from the grid, while a $pacc\bar{\imath}s\bar{\imath}$ throw can also be used to move an already entered pawn twenty-five squares around the grid. It might therefore be suggested that the more limited $pha\tilde{n}jik\bar{a}$ throw was a predecessor of the more flexible $pacc\bar{\imath}s\bar{\imath}$ throw, and perhaps even that the latter game to some extent derived from the former.

Though *paccīsī* is also played by four players whose goal is to get their pawns into the center of the playing field, the cruciform shape of paccīsī makes it difficult to reconstruct the direction of movement on the quadrangular grid of phañjikā. A better candidate for this purpose is the game of aṣtākāṣṭe which is still widely played throughout especially rural areas of India.98 The game derives its name from the highest throw of eight (aṣṭan) and the lowest throw of one (kaṣṭa, lit. anything bad), and is played by four players seated on each side of a 5 x 5 grid, though different grid sizes are encountered in different parts of the country. Each player controls four pawns which are entered on to the centermost square of the row directly in front of each player. The players take turns throwing four cowries or tamarind seeds, and move their pawns accordingly anti-clockwise around the outer track of the grid until they arrive back at the square to the left of the one on which they entered. They then continue by moving into the inner track which they follow around clockwise until they arrive back at the square directly above the one on which they entered. From there a final move takes them into the central square of the grid which constitutes the winning square. 99 The main difference between the grids of astākaste and phanjikā is that the

⁹⁶ An alternative suggestion might be to emend *phañjikā* and *phañjī* to *pañjikā* and *pañjī* with reference to the calendars and almanacs, also known as *pañcāṅga*s, drawn up by astrologers (cf. Sircar 1952: 342).

⁹⁷ The same is also true of other throws in *paccīsī*, but they are likely to have inherited those traits from the original throw of twenty-five (cf. Temple 1884: 244-45; Rettberg 2008: 54).

⁹⁸ The game is known under a great variety of names, and the Bengali name of *aṣṭākaṣṭe* is only adopted here because it is the one most commonly encountered in the literature.

⁹⁹ For an early description of aṣṭākaṣṭe similar to the one presented here, see Smith 1851 (p. 341).

former has an odd number of squares along each side, while the latter has an even number. As demonstrated by Murray in his reconstruction of a related race game thought to be played on an 8 x 8 grid (astāpada) before the invention of chess (caturanga) in the middle of the 1st millennium, this, however, does not rule out a similar approach of entering and moving pawns on evenly numbered grids (Murray 1952: 129-30). An illustration of how this approach might have been applied in the case of phañjikā can be seen in fig. 21. As shown in the illustration, the players follow separate

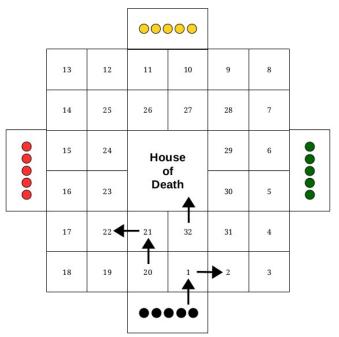


Fig. 21: Phañjikā. Tentative reconstruction of the path of movement as seen from the perspective of the player controlling the black pawns.

yet interlocking paths, which is necessary for players to be able to land on each other's pawns and send them back to start. The rules on interaction between friendly and opposing pawns vary between versions of *paccīsī* and *aṣṭākaṣṭe*, and though little can be said with any certainty regarding *phañjikā*, the possibility of sending the pawns of other players back to start seems to be implied in the text (*MS* 5.16.850-51).

Besides having elements of design and mechanics in common with games like *paccīsī* and *aṣṭākaṣṭe*, *phañjikā* also shares in an underlying cosmological and karmic symbolism which would later become a key feature of *gyān caupaṛ*. The fact that *phañjikā* is played on a *bhadramaṇḍala* grid signals that even though the game was played for purposes of entertainment, it was framed in a way which lent it a certain authority or legitimacy not otherwise associated with games. The pawns of each player are referred to as his *dhāman* (*MS* 5.16.836ab), or the inhabitants of his house, with the possible indication of a divine abode. The first goal of the players was to bring their pawns to the house of death, which indicates that entry on to the grid represented entry into the world of mortals, and that the journey through the squares represented the journey through life. Once arrived at the house of death, a *kalasapta* throw would

send a pawn back to start, and hence condemn it to another round in the cycle of rebirth. A throw of *phañjikā*, on the other hand, would allow the pawn access to the house of refuge which might then be understood as a return to their divine abode, access to the heavenly realm of their chosen deity, or perhaps even liberation from the cycle of rebirth. The pawns could therefore be seen as individual souls, and the cowries which moved them along as the forces of karma. A better manuscript of the *Krīḍāviṃśati* is required to establish the accuracy of such an interpretation, but as already demonstrated, it would only follow a well-known pattern of how representational value has been attributed to grid-based games throughout the history of South Asia.

Caupar

Nothing much can be said about the relationship between *gyān caupaṛ* and its namesake *caupaṛ* when viewed from a distance. Despite the fact that they are both dice- or cowrie-driven race games, players in *gyān caupaṛ* only move a single pawn each on an inscribed grid diagram, while players in *caupaṛ* move four pawns each on an uninscribed cruciform game board (fig. 22).¹⁰¹ It is therefore possible that the "*caupaṛ*" in *gyān caupaṛ* merely served as a placeholder for "game," similar to the generic use of words like chess, draughts, and tables in the European literature, and the invocation of *shaṭranɨ*, or chess, in the Ṣūfī versions of *gyān caupaṛ* often referred to as *shaṭranɨ al-'ārifīn*, or chess of the wise. If, however, we take into account the representational value attributed to *caupaṛ*, as will be done in the following, we begin to see how it might have influenced *gyān caupaṛ* conceptually.

¹⁰⁰ Similarly, the central square of *aṣṭākaṣṭe* was considered "the heaven of rest and undisturbed repose" (Smith 1851: 341). The requirement of a special throw to enter pawns on to the grid and remove them from the central square once they have entered it is also attested for the south Indian game of *tāyam* which belongs to the *aṣṭākaṣṭe* family of games (Bell 1969: I, 17-20).

¹⁰¹ It should, however, be noted that a pawn in *caupar* moves exactly 84 squares, which not only equals the 84 *lākh*, or 8.400.000 birth situations (*yoni*) in the universe, but also the number of squares found on Jaina *gyān caupar* charts. If one counts the nine rows of eight squares on which a pawn is allowed to move in *caupar*, excluding the squares at the bottom of other players' home rows, which are in fact skipped in some versions of the game (Ute Rettberg, pers. comm.), the total number of squares equals 72 which is also the number of squares on the largest and earliest group of Vaiṣṇava *gyān caupar* charts.

At the end of the 19th century, Edward Falkener described *paccīsī* as "the national game of India" played in "palaces, zenanas, and the public caffés" (Falkener 1892: 257), but the closely related game of *caupaṛ* had in fact already been recognized as a favorite pastime among the Hindus by Abu'l-Fazl in the late 16th century (Blochmann 1873: 303). *Caupaṛ* figures prominently in miniature paintings, folk tales, and *bhakti* poetry, and generally appears to have been a widespread and popular game during the period when *gyān caupaṛ* is likely to have been invented.

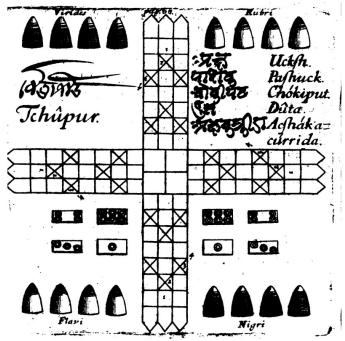


Fig. 22: Caupar. Oxford, 1694.

Though it exists throughout the subcontinent in a multitude of regional and local variations, the versions most commonly encountered in north and western India are *caupar* and *paccīsī.* 102 The two are most easily distinguished by their respective use of stick dice and cowrie shells as randomizing agents, but it should be noted that the differences between them go much further, and that *caupar* is by the far the more complicated game (e.g. Brown 1964, Finkel 2004b). The four arms of the cruciform game board radiate from an empty center, with a player seated in front of each arm, or, in the case of a two-player game, between two arms across from each other. Each player controls four pawns - or 2 x 4 pawns in a two-player game - beginning either at the center of the game board, or somewhere on the squares of his own arm. The players move their pawns down the central row of their own arm, around the outer rows of all four arms in a counterclockwise direction, and back up their own central row and into the center. In a four-player game, players sitting across from each other

¹⁰² Today the game is best known in its modern Western incarnations as Parcheesi, first produced in the US in 1867 (Whitehill 1999: 118), and Ludo, first registered in Britain in 1886 (Copisarow 2010: 208). Like snakes and ladders, Ludo has long since replaced its predecessors in India (Finkel 2004b: 57), giving rise to the mistaken notion that it is identical with *paccīsī*. Ludo, however, is a simplified version of *paccīsī* targeted at children rather than adults. Cheap copies can often be bought in the bazaars of India with a game of snakes and ladders printed on the reverse side of the board.

often act as partners who either win or lose together, but since the exact rules vary between players and regions nothing more needs to be said about them here.¹⁰³

The material most commonly used for *caupar*, when not simply drawn on the ground, was cloth. Known examples number in the thousands, but few predate the 20th century, and none seems to go back further than the 18th century (Finkel 2006: 64). An outdoor flagstone board at Fatehpur Sikri with squares made to human scale is often claimed to be from Akbar's time, but others regard both that and Akbar's alleged games with live women for pawns as mere legend. It is therefore possible that the flagstones were only laid out by one of Akbar's successors in the 18th century (ibid. 73, fn. 5). Graffiti boards can sometimes be found etched into the floors and seats of temples and other structures which go back to early times, but care should be taken not to confuse the date of the structures with the date of the graffitis they hold (Topsfield 2006b: 19). Such confusion might very well underlie Vasantha's undocumented claim that the earliest boards appear as engravings in the 8th-century Mallikārjuna (c. 695-720) and Jyotirlinga (c. 720-40) temples at Pattadakal and Aihole in northern Karnataka (Vasantha 2006a: 35). A more convincing case is that of two engraved caupar boards discovered in the city of Vijayanagara, also in Karnataka, which was sacked and subsequently abandoned in 1565. According to Elke Rogersdotter, who has documented 580 engraved boards for various games at the site, the consistency of board types, find locations, and manners of engraving makes it plausible that the boards date from the time of the living city itself (Rogersdotter 2015: 466). The low frequency of *caupar* boards might be taken as an indication that the game was not very popular at the time, or that the boards in question were only added later, but considering the relative complexity of drawing up a caupar board compared to other board types found at the site, it might also simply be taken as an indication that the favored material for *caupar* boards were cloth. 104

The earliest known description of *caupaṛ* occurs in the $\bar{A}'\bar{\imath}n$ -i $Akbar\bar{\imath}$, written by Akbar's court historian A'bul-Fazl around 1590 (Blochmann 1873: iii), and provides a detailed,

¹⁰³ Examples of early rules descriptions can be found in the \bar{A} ' \bar{i} n-i $Akbar\bar{i}$ (Blochmann 1873: 303-4), the $Kr\bar{i}$ d \bar{a} kauśalya (KK 156-85), Temple 1884 (pp. 243-45), and Falkener 1892 (pp. 257-64).

¹⁰⁴ A similar explanation might be offered for the sparse evidence of 8 x 8 grids, commonly associated with chess, engraved at the site (Rogersdotter 2015: 476). Though less complex in design than *caupar*, chess is further complicated by the need for differentiated pieces (i.e. pawn, rook, knight, etc.).

yet by no means exhaustive, summary of how the game was played at the time. 105 It is apparent from the description that A'bul-Fazl considered it a secular gambling game, but interestingly he also points out that Akbar used it to "[weigh] the talents of a man" (ibid. 304). References in Sūfī romances and illustrations in miniature paintings go back to the first half of the 16th century, and among poet-saints, such as Kabīr (15th cent.), Guru Nanak (1469-1539), and Sūrdās (c. 1480-1560), the game came to serve as a popular metaphor for the cycle of rebirth and the path to liberation (Topsfield 2006b: 19-21). 106 As mentioned above, the only game that would have served as a better metaphor for the same would have been gyān caupar, and the fact that it is not referred to by the poets lends weight to the argument that it had not been invented at the time. According to Mopidi Kallappa, whose doctoral thesis examines traditional Indian games with special emphasis on Andhra Pradesh, several references to one or more regional variations of caupar occur in Telugu literature between the 12th and 15th centuries (Kallappa 2006: 203, 205). 107 This would make them the earliest known evidence for the game, but literary references to games tend to be ambiguous, and I am hesitant to draw any conclusions before they have been thoroughly examined by board game historians proficient in Telugu. 108 An even earlier reference which has been variously attributed to chess, backgammon, caupar, and gyān caupar is found in

¹⁰⁵ Earlier still is a poetical description of the game in the Ṣūfī romance *Padmāvat*, written by Malik Muhammad Jāysī around 1540 (Shirreff 1944: vii), but it mostly focuses on a metaphorical interpretation of the various throws and the pairing of pawns on the game board (see vv. 27.23,24,31 in Agrawal 2010 and Shirreff 1944).

¹⁰⁶ As pointed out by Topsfield, there is much uncertainty about the dates of the poems attributed to the poet-saints. The most we can say is therefore that *caupar* seems to have entered the vocabulary of *bhakti* poetry sometime in the early 16th century at the latest. For more references to *caupar* in north Indian *bhakti* texts, see the entry on *caupar* in *DoB* (vol. I, p. 650).

¹⁰⁷ Kallappa's thesis was supervised by Vasantha who may herself have made inflated claims about the antiquity of both *caupaṛ* and *gyān caupaṛ* (see above), and in light of the fact that Kallappa's discussion of *caupaṛ* (2008: 188-92) appeared *ad verbatim* on a now defunct website originally maintained by Vasantha (www.gamepandit.com, last acc. 6 Sep, 2018), I remain skeptical of her findings.

¹⁰⁸ As an example, Velcheru Narayana Rao and David Shulman suggest that a passage in the Telugu *Krīḍābhirāmamu* from the first half of the 15th century refers to *caupaṛ*, though the description might as well apply to any other board game played with dice and pawns (Rao & Shulman 2002: 47, fn. 37). Surprisingly, Kallappa's overview of references to games in Telugu literature only includes the *Krīḍābhirāmamu* by virtue of its reference to a ram fight (Kallappa 2006: 204).

the 10th-century *Rṣabhapañcaśikhā* written in Prakrit by the Jaina author Dhanapāla: ¹⁰⁹

sārivva bandhavahamaraṇabhāiṇo jiṇa na huṃti païṃ diṭṭhe / akkhehiṃ vi hīrantā jīvā saṃsāraphalayammi // (ŖPŚ 32)

Like pawns, the souls ($j\bar{\imath}va$) on the game board of cyclical existence ($sams\bar{a}ra$), though carried away by the senses/ dice (akkha), are freed from captivity, slaughter, and death at the sight of you/the square ($pa\bar{\imath}m$), O Lord!¹¹⁰

The reference to "captivity, slaughter, and death" seems to rule out *gyān caupaṛ* as pawns are not able to block, capture, or otherwise interact with each other. Whether the verse then refers to backgammon, *caupaṛ*, or some other game hinges on the understanding of the word *paï* (Skt. *pada*). It might be understood as the central square in *caupaṛ* which comes into view when a pawn returns up the central row of its own arm out of harm's way from the pawns of the other players. However, the significant sculptural and literary evidence presented by Soar for the existence of a backgammon-like game in the second half of the 1st millennium, and the lack of similar evidence for the early existence of *caupaṛ*, indicates that she may be right in taking *païṃ* as a reference to the last quarter of the backgammon board from where the pawns are carried off into safety (Soar 2007: 208-9).

The representational value of *caupaṛ* is not explicitly stated in the form of legends or other inscriptions as in the case of *gyān caupaṛ*. However, the arrangement of the game board and the number symbolism associated with it are suggestive of multiple layers of interpretation beyond the formal game system itself. Kabīr compares the game board with the subtle body, and the movement of the pawns up and down the four arms with the flow of the vital breath (prāṇa) through the energy channels ($nāḍ\bar{\imath}$), the aim of which is to arrive at the central point between the eyebrows ($trikuṭ\bar{\imath}$) where the three main energy channels meet (Vaudeville 1974: 159). The 17th-century $Caur\bar{a}s\bar{\imath}$

¹⁰⁹ Johannes Klatt suggested that it might either refer to a form of backgammon, or to a form of chess with safe squares for the king (Klatt 1879: 465-66). Micaela Soar favors backgammon, but notes that it might also refer to either *caupar* or *gyān caupar* (Soar 2007: 208-9), while Topsfield seems to favor *gyān caupar*, though agreeing with Soar that the question cannot easily be settled (Topsfield 2006c: 75 and 89, fn. 2).

¹¹⁰ Translation adapted from Johannes Klatt (1879: 465).

¹¹¹ An exception is provided by an 84-square Vaiṣṇava chart (Va84#4) which states that a pawn landing on another pawn pushes it back along the game track (see *Other Rules* in chapter five).

 $vaisṇavan\ k\bar{\imath}\ v\bar{a}rt\bar{a}$ takes the metaphor even further, and compares the entire process of playing the game with worshiping the divine lord (bhagavat, prabhu) and taking refuge with him. The board is compared with the cycle of rebirth ($saṇs\bar{a}ra$), the central square with liberation (moksa), the playing pieces with the senses (indriya)¹¹², the "1"s on the three dice with the three qualities (guṇ a) of material existence ($m\bar{a}y\bar{a}$) that must be overcome, and the deliberations of the players before making a move with the contemplations of the self before seeking refuge with the divine lord (Barz 1976: 118-20). The association between the board and the world is even more explicitly stated in an unidentified text paraphrased in an article in *The Quarterly Journal of the Mythic Society* from 1923:¹¹³

The dice-board or piece of cloth (vadhra) is like a lotus flower of four petals and contains four petals, each petal being divided into three strips containing eight square divisions, and is to be considered as nature (Prakriti). The latter (the petal) is also divided into eight parts, as the earth, water, fire, wind, sky, mind, intelligence, and the ego. All these eight parts are of three different forms owing to the three qualities, Satva, Rajas and Tamas. Thus each petal contains twenty-four divisions. (Sastry 1923: 118)

The identification of the four arms of the game board with the concept of primordial matter (prakṛti) is significant because it directly connects the symbolism of the caupaṛ board with that of Vaiṣṇava gyān caupaṛ charts. The philosophical system of Sāṃkhya enumerates 25 basic principles (tattva), the first of which is spirit (puruṣa), and the remaining 24 of which are primordial matter and its constituents. The passage quoted above equates the principles of intelligence (mahat, buddhi), mind (manas), ego (ahaṃkāra), and the five gross elements (mahābhūta), which are the first to evolve from primordial matter, with the eight squares in each of the three rows of each of the

¹¹² As mentioned above (fn. 90), the version of *caupar* described here is played with five instead of the usual four pawns.

¹¹³ The text is referred to as the *Mahārājavijaya*, but I have not been able to identify any text with that title. The closest candidate is the *Rājavijaya* by Raṇahastin who flourished in Madhya Pradesh around 1400 (Pingree 1981: 108). Unfortunately, the text only exists in manuscript, and nothing much is known about it except that it is an astrological text dealing with "omens for going to battle" (*CC*, vol 2, p. 118). Since Sastry's article refers to the *Mahārājavijaya* in the context of games played during the festival of Dīvālī, the connection with *Rājavijaya* does not appear obvious. It should, however, be noted that the *Krīḍākauśalya* refers to a similar work known as the *Samarasāra*, or the essence of war, in the context of determining the prospects of victory and defeat in games (*KK* 84).

four arms of the game board. It then assigns one of the three qualities (<code>guṇa</code>) inherent in all primordial matter to each of the three rows as an illustration of how each of the eight principles enumerated contain the qualities of truth (<code>sattva</code>), activity (<code>rajas</code>), and inertia (<code>tamas</code>). Another and perhaps more obvious way to interpret the arms of the game board would have been to equate each of the 24 squares with one of the 24 principles of material existence, but what is important here is that individual squares are being associated with philosophical concepts. This follows the logic of <code>gyān caupar</code> where each square is inscribed with a concept which lends its meaning to the square and to the pawns which land on it. In fact, several squares of Vaiṣṇava <code>gyān caupar</code> charts are inscribed with principles derived from Sāṃkhya, as well as with the three inherent qualities and other associated concepts (see <code>Realms of Existence</code> in chapter four).

If we accept that interpretations of *caupaṛ* similar to the ones described above was current around the time when *gyān caupaṛ* was invented, it might be suggested that *gyān caupaṛ* represents a shift from an implicit to an explicit identification of squares with cosmological and other concepts. While the design of games like *phañjikā*, *aṣṭākaṣṭe*, and *caupaṛ* certainly lends itself to a cosmological interpretation, it is only with *gyān caupaṛ* that such an interpretation becomes manifest in the form of an inscribed grid. The history of inscribed grid diagrams other than games, with which *gyān caupaṛ* has much in common, goes back far beyond it, and it would therefore be too simple, and indeed contrary to existing evidence, to suggest that it merely evolved as an extension of the *caupaṛ* family of games. Still, the implicit identification of the squares in that family of games with a spiritual journey through existence may indeed have prepared the ground for the way in which *gyān caupaṛ* came to be conceptualized.

Perhaps more than anything else, the above attempt at tracing the influences which led to the invention of *gyān caupaṛ* has shown the difficulties in determining where one game ends and another begins. Before the emergence of modern proprietary board games, rules and formats were rarely fixed, but evolved continuously as new players experienced with new designs and modes of play. The European game of goose may have had the single biggest impact on the formal system of *gyān caupaṛ*, but it never

established itself in India, and when *gyān caupar* arrived in Europe in the first half of the 19th century, its relationship to goose was only dimly recognized. Similarly, the Tibetan game of *sa lam rnam bzhag* may have inspired the idea of using a religious grid diagram as the basis of *gyān caupar*, but it, too, was unable to penetrate into India beyond the confines of the Tibetan communities in which it continues to be played to this day. As such, *gyān caupar* reflects a tendency to absorb and integrate foreign games, and ultimately transform them into something truly unique and deeply rooted in already existing traditions of games, as exemplified by its namesake *caupar*. That the cultural forms and practices which influenced the making of *gyān caupar* did not limit themselves to games will be seen in later chapters as we begin to explore the underlying concepts and their origins in tantric diagrams of the subtle body. First, however, we will have to understand what exactly constitutes *gyān caupar* and the affordances that it offers.

Chapter 3

Source Material

The primary sources for the study of gyān caupar comprise nearly 150 unique and mostly unpublished game charts, several of which exist in multiple copies and variants. 114 The majority was produced in 19th-century western India as a playful way of engaging with the religious knowledge systems of Vaisnava bhakti and Jainism. A few charts date back to the late 18th century, and some were only made in the 20th century, though the latter can often be traced back to known examples of earlier charts. Besides Rajasthan and Gujarat, charts can also be found in several neighboring states, as well as in the Punjab Hills, Nepal, and parts of the Middle East. An undercurrent of tantric and yogic influence is visible especially in the Vaisnava bhakti charts, while individual groups of charts affiliate themselves with Ṣūfīsm and Advaita Vedānta. A detailed catalogue of charts is provided in Appendix A, together with a typological overview in Appendix B and a transcription of all available 72-square Vaisnava and 84-square Jaina charts in Appendix C. Secondary sources consists of references, articles, and books written in a variety of Indian and non-Indian languages, but unfortunately those of any substance cannot be traced back further than the late 19th century. It is, therefore, first and foremost to the charts themselves that we must turn in order to understand the early history of gyān caupar and its initial reception among the religious communities and royal courts of late 18th- and early 19th-century western India.

The sheer number and variety of charts that have come down to us indicate some of the popularity they must once have enjoyed. The impression is only strengthened when we consider the fragile nature of the charts, and the carelessness with which they are often handled.¹¹⁵ Most charts survive in private collections inside and outside

¹¹⁴ An additional 30-35 charts have been reported but still awaits documentation (see Appendix A1).

¹¹⁵ Lakshmi Narayan Khatri, the owner of the Thar Heritage Museum in Jaisalmer, told me that he found the chart (Va84#3) on display in his museum in a rubbish heap in the street where an elderly lady had thrown it while cleaning up her house. Venkatasubramanian Balambal, who has written about folk games in Tamil Nadu (Balambal 2005), explains that charts belonging to the contemporary

India without proper means of access, documentation, or storage. Temples, museums, libraries, and research institutions rarely keep more than a single chart or two, and even then questions of preservation and accessibility cannot be taken for granted. Charts also come through the hands of auction houses and antique dealers, but prices are usually prohibitive, and forgeries remain a real concern. Ultimately, the researcher is often left with unsatisfying photographic reproductions and incomplete information about provenance, size, material, etc. In the interest of future research, I have included all the information presently available to me in Appendix A, though I have taken care to mark out any charts whose authenticity appears to be in doubt.

Considering the wealth of more or less related charts produced both inside and outside India throughout the 20th and 21st centuries, I have had to decide on certain criteria for which charts to include and which charts not to include. My guiding principle has been only to include later charts which share key characteristics with earlier charts, and which can be presumed to be directly based on them. A case in point is the 72square Vaisnava chart (Va72#26a) first published by Harish Johari in 1975. Though translated into English and presented as a largely non-denominational tool for selfrealization, the original Sanskrit and Hindi terminology provided by Johari clearly relates the chart to earlier 72-square Vaisnava charts. This, together with his claim that the chart was adapted from an early 19th-century chart from Uttar Pradesh (Johari 2007: 2), has led to its inclusion in the study. On the other hand, an 84-square Tantric chart published by Chimanlals Private Limited in the 1970s and an 108-square nondenominational chart first published by Chhote Bharany in 1984 have not been included since they neither make any claims of authenticity nor conform to any other known types of earlier charts. Similarly, charts which represent late developments that came to form independent traditions have also been excluded from the study. This includes the south Indian family of heavily illustrated and often uninscribed charts known as *parampad sopān* in Tamil Nadu and *vaikunṭh pāḷi* in Andhra Pradesh, as well as the idiosyncratic Bengali charts known as golok dhām. 116

south Indian version of *gyān caupaṛ* known as *parampad sopān* are sometimes ritually disposed of after use during the festivals of Mahāśivrātri and Vaikuṇṭh Ekādaśī (pers. comm.). If a similar practice was traditionally associated with *gyān caupaṛ*, the number of lost charts may be significantly higher than otherwise suspected.

¹¹⁶ *Parampad sopān* and *golok dhām* are briefly discussed in the section on *History and Transmission* below.

A few cautionary words also need to be said about the prevalence of forgeries which has only begun to be recognized in recent years. In 2006, Topsfield warned that a Jaina chart (Ja84#39) painted in the Western Indian Style of the late 15th century contained anachronisms and anomalies indicating that it was probably of a much more recent make (2006a: 150, fn. 28). Since then, several charts showing signs of forgery have come to my attention, and the phenomenon seems to have become more widespread in recent years. 117 I therefore remain skeptical of the provenance information provided by a number of charts until a convincing case can be made for their veracity. I have already mentioned the Jaina chart which was for many years believed to be the earliest known gyān caupar chart (Ja84#3a, fig. 9), but which must now be reconsidered in the light of a strikingly similar chart (Ja84#3b) of an obviously much later date. The two charts share a revealing feature found on several other suspicious charts, namely that of a uniform pattern of abrasion inconsistent with actual usage which would have resulted in a higher degree of wear and tear in the squares of the playing field and along the folds of the charts. Several suspicious charts (e.g. Va72#30ag) carry colophons dating them from between the mid-17th to the mid-18th centuries which would severely impact our understanding of the early history of the game if accepted as authentic. Apart from a uniform pattern of abrasion, they often employ word separation, western typography, and choices of expression inconsistent with their alleged antiquity. 118 I have tried to call out as many of these charts as possible, and while I may erred on the side of caution in some cases, and overlooked signs of forgery in others, I feel confident in stating that no chart pre-dating the late 18th century has as yet come to light.

The present chapter begins by providing a general description of the charts and a discussion of the dice, pawns, and manuals which accompanied them. It then goes on to outline the history and transmission of existing charts beginning in western India in

¹¹⁷ In the late summer of 2018, a private collector from Germany sent me images of a chart (Ja84#24c) that had been brought to his attention by a local dealer in western India. The chart was dated VS 1820 (1763/64 CE), but it was immediately obvious to me that it was a hand-drawn copy of a chart (Ja84#24b) printed in Mumbai in VS 1959 (1902/03 CE). The collector declined to buy the chart which was subsequently sold for nearly €30.000 to a Jaina family in India. This is only one of several such cases known to me.

¹¹⁸ One of the more obvious examples is the designation of charts as $s\bar{a}mp\ s\bar{i}rh\bar{i}$, or snakes and ladders, which is a Hindi translation of the name of the eponymous British game from the late 19th century.

the late 18th century. The chapter concludes with a discussion of available evidence for information about early uses and users of the charts. The reader is encouraged to refer to Appendices A1 and A2 throughout for additional information on individual charts.

General Description

The defining characteristic of any *gyān caupar* chart is a grid diagram with sequentially numbered and inscribed squares, some of which are connected by snakes and ladders or similar imagery. The numbering usually begins in the lower left corner, and proceeds *boustrophedon* from bottom to top along rows of legends displaying an overall, but by no means uniform, progression from predominantly negative legends to predominantly positive legends. Some charts contain nothing more than this, while others add decorative elements transforming the simple diagrams into more or less fully developed paintings. The most common forms of decoration are floral borders, architectural designs, and illustrations of deities, but some charts go even further in including elaborate backgrounds completely filling out the empty spaces surrounding the grid. Styles vary from the simple and folkish to the accomplished and elitist, preventing the meaningful application of any single stylistic label to the charts. Neither can the charts be comfortably assumed under any existing categories of painting, though the analyses of the charts presented in chapter four suggest that they may originally have been considered tantric in nature.

The stylistic variations of the charts, as well as the colophons which sometimes accompany them, indicate that they were painted by private individuals and professional artists alike. Several crudely drawn charts were obviously not produced by professionals (fig. 23), and we therefore have to inquire into the underlying reasons for drawing them. The most obvious answer would be that they were copied from more accomplished versions for purposes of play, but since they also include the legends, which are not necessary for playing them, the answer is not wholly satisfying. Five Jaina charts explicitly state that they were copied for purposes of study

¹¹⁹ The Jaina charts are hesitantly classified as *paṭas*, or cloth paintings, by Talwar & Krishna (1979: 84), while Shridhar Andhare classifies them as "miscellaneous" *paṭas*, together with letters of invitation (*vijñaptipatra*) and pardon (*kṣamāpaṇapatrika*), figurative poems (*citrakāvya*), mystical drawings (*paṭaka*) and diagrams (*yantra*), and various astrological and geographical drawings (Andhare 2000: 74).

(vācanārtha, paṭhanārtha), 120 but given the influence from Nath and Hathayogic traditions, we might speculate that other charts were drawn by tantric or yogic practitioners within the folds Vaisnavism and Jainism for purposes of meditation, visualization, or similar. 121 Some of these may have been carried around by mendicants, as evidenced by a Jaina chart (Ja84#58) drawn on the page of a notebook amidst itineraries of pilgrimages and copies of Jaina texts. A further possibility, which seems particularly relevant in some cases, is

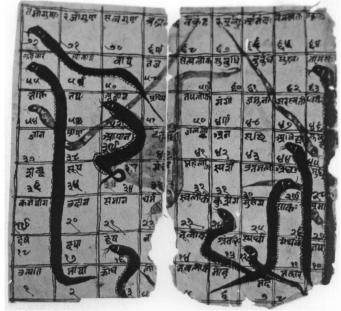


Fig. 23: 72-square Vaiṣṇava chart (Va72#3). Rajasthan, 19th century.

that original charts may have been copied by private owners or collectors before being sold off on the antiques market.¹²²

The more elaborate charts were evidently made for wealthy patrons, some of which belonged to the Rajput courts, while others were associated with Jaina institutions, such as temples, shelters ($up\bar{a}\acute{s}raya$), and pilgrimage sites. Examples of the former include a beautifully made, yet badly damaged, chart (Va72#2) from the court of Jaipur, and a series of profusely inscribed charts (Va342#1-7) from the courts of the Punjab Hills. Examples of the latter include an early 19th-century cloth chart (Ja84#10) in the Shri Vishal Jain Kala Sansthan Museum in Palitana near Shatrunjaya, and a late 20th-century wall painting (Ja84#31c) in the nearby Babu Derasar temple. Charts produced

¹²⁰ I.e. Ja84#4,17,23,32,56.

¹²¹ During a visit to the Museum of Folk and Tribal Art in Gurgaon, Haryana, art historian Subhashini Aryan, who chairs the trust managing the museum, informed me that tantric drawings known as *paṭakas*, which often combine text, diagrams, and illustrations, should be drawn by the practitioner himself in order to secure their magical efficacy.

¹²² Several charts reported in Topsfield 2006a were no longer at the Museum of Indology in Jaipur when I visited it in 2013, though other previously unreported and mostly sketched charts were. One of the sketches (Va72#4b) can be plausibly linked to an original chart (Va72#4a) exhibited in the Ciancimino Gallery in London in 1971. A handmade copy (Va99#1) of an unknown printed chart even includes the colophon of the original, telling us that it was printed at the Gyān Sāgar Press in Mumbai.

for wealthy patrons may have been commissioned from traveling artists, as indicated by the design for a Jaina chart (Ja84#25, fig. 24) on the page of what appears to be an artist's sketchbook (Finkel 2004c: 62), or from workshops similar to the ones existing in modern day Palitana. A workshop described by Hawon Ku produces a variety of large tīrthapaṭas, or paintings detailing the pilgrimage site and its temples, based on a single full-size model (Ku 2014: 7). Interestingly, the artists who work there are described as being exclusively Hindu, which agrees with the claim of art historian Pratapaditya Pal that the same artists traditionally worked for "Buddhist, Hindu, or Jain patrons" (Pal 1994: 24). This, together with the fact that Hindu priests (*pujārī*) often served in Jaina temples (Ku 2014: 7), provide a

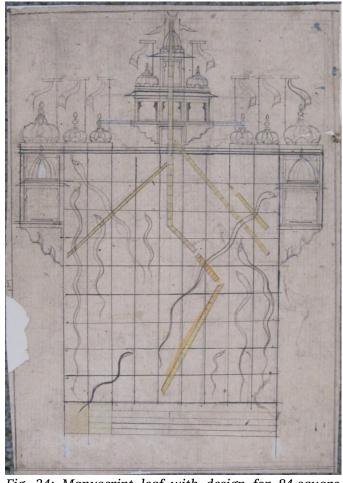


Fig. 24: Manuscript leaf with design for 84-square Jaina chart (Ja84#25). Rajasthan, 19th century.

possible clue as to why Jaina charts often display Vaiṣṇava influences.

Materials and Manufacture

Gyān caupaṛ charts were mostly drawn with ink and water-based pigments on cloth or paper, though other materials are also known to have been used. ¹²³ The simpler charts

¹²³ A wooden Ṣūfī board (Sū100#2) inlaid with mother-of-pearl originates from Lahore or the Delhi-Agra region in the second quarter of the 19th century. An unidentified chart embroidered on Chinese raw silk in the Kutch district of Gujarat around 1900 is reported by Topsfield, who also mentions the existence of bead-work charts in the same region (Topsfield 1985: 212, fn. 35). An embroidered textile chart (Va100#1) derives from 20th-century Gujarat, while a wall painting (Ja84#31c) in the Babu Derasar temple in Palitana and a tessellated coffee table (Va72#26b) of unknown origin are based on printed charts from the second half of the 20th century. Finally, a late 20th-century Ṣūfī board (Ṣū100#6b) from Turkey painted on polished stone or ceramic tile bases itself on a printed chart from early 20th-century Istanbul.

were drawn directly on the material using only one or two colors, usually black and red, while the more elaborate charts went through the standard process of preparing the material, sketching and outlining the images, and only then adding color and sometimes lacquer.¹²⁴ The shape of the playing grid depends on the number of rows and columns, but it is usually slightly rectangular with a vertical orientation. Sizes range from manuscript folia to full-blown wall hangings, though most charts fall somewhere in between, averaging about 50 cm per side. Printed sketches and diagrams appear in books and articles beginning with two charts (Va72#14a, Va84#8) published by Pārakh in 1886, only slightly predating the earliest known printed chart (Ṣū100#10) from 1890. Charts dating from around the turn of the 20th century onward are mostly printed, though hand-made charts continued to be made, albeit on a much smaller scale (e.g. Va72#1). The renewed interest in hand-made charts since the late

20th century is almost exclusively tied to the production of forgeries.

Several charts (Va72#15, Ja84#7,12b,25,37,44) have come down to us in an unfinished state which provides important insights into the process of how they were made (fig. 25). First the grid was traced with single or double lines in red or black, then the snakes and ladders were sketched together with any additional ornamentation, and finally the squares were inscribed row by row from the top down, probably to avoid smearing the ink of freshly legends. 125 written Outlining and

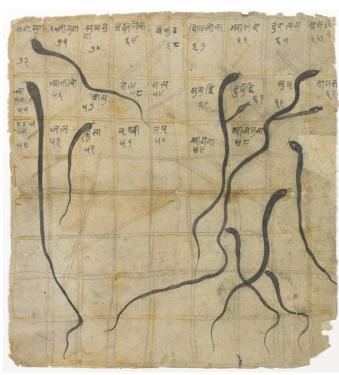


Fig. 25: Unfinished 72-square Vaiṣṇava chart (Va72#15). North India, 19th century.

¹²⁴ For more detailed descriptions of painting techniques, see, for example, Coomaraswamy 1916 (vol. I, p. 4), Talwar & Krishna 1979 (pp. 75-6), and Andhare & Bhojak 2015 (p. 21).

¹²⁵ Harikṛṣṇa includes a passage explaining how to make a 500-square Vaiṣṇava chart invented by himself (*KK* 248-53). Unfortunately, the explanation is not exhaustive, but it seems to indicate that the topmost squares, representing the abodes of the gods, were inscribed first, followed by the squares leading up to them, beginning with sq. 1 at the very bottom. This does not conform to the picture established by Va72#15 and Ja84#7, which have been partially inscribed from the top down

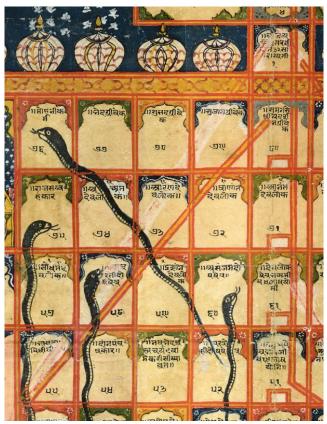


Fig. 26: 84-square Jaina chart (Ja84#18), detail. Mandsaur, Madhya Pradesh, 19th century.



Fig. 27: 84-square Jaina chart (Ja84#18), detail. Mandsaur, Madhya Pradesh, 19th century.

coloration could either happen before or after the squares were inscribed, and charts often show signs of having been corrected in the final stages of the process. Sometimes legends have been crossed or blotted out, and then rewritten, but the most common form of correction is the shortening and lengthening of snakes and ladders (figs. 26-27). This is probably due to the fact that the snakes and ladders were drawn before the squares were inscribed, thereby increasing the chance of misplacing them due to the lack of context. Though legends have sometimes been switched around to accommodate misplaced snakes and ladders, it is usually the snakes and ladders themselves that have been corrected. At other times, through oversight or carelessness, a mistake has simply been left unaddressed, even when confounding the meaning of the chart. 126

only, and it is likely that the method of production suggested by Harikṛṣṇa was unique to his own greatly enlarged chart.

¹²⁶ An example is provided by two Vaiṣṇava charts which accidentally switch around the snake leading down from *kusaṅg* (bad company, sq. 24) and the ladder leading up from the adjacent *susaṅg* (good company, sq. 25). The first chart (Va72#21) resolves the situation by also switching around the

The practice of drawing the snakes and ladders before writing the legends, probably to avoid the former overlapping the latter, is significant for our understanding of the extent to which the charts were standardized. Though we might reasonably have expected the positions of the snakes and ladders to adapt to the positions of the legends, depending on whether the terms invoked by them were negative or positive, it appears that it was mostly the other way around. Once the snakes and ladders had settled into place at an early stage in the development of the charts, they were rarely shifted around, leaving any variations in the legends to conform to the already established positions of the snakes and ladders. This is confirmed by the critical readings which show less variant readings in the squares in which the snakes and ladders originate, slightly more variant readings in the squares in which they terminate, and by far the most variant readings in the squares in which they neither originate nor terminate. The legends, however, do not vary uniformly across the charts. They tend to be more stable in rows closer to the top and bottom, and less stable in rows closer to the center. The procedure of inscribing the charts from the top down might explain the greater stability in the upper squares since they would be the first to be inscribed, and hence less prone to mistakes. It would not, however, account for the corresponding stability in the lower squares. A possible explanation might be the higher concentration of snake tails in the lower squares, which would have made the legends associated with them more obvious, but perhaps an even better explanation might simply be that the two extremes of the charts, representing the absolute positives and negatives of existence, were more clearly defined than the spaces between them.

Illustrations

A common misconception arising from the anachronistic labeling of $gy\bar{a}n$ caupar as $s\bar{a}mp$ $s\bar{\imath}rh\bar{\imath}$, or snakes and ladders, is that the charts exclusively use the imagery of snakes and ladders to indicate connections between squares. In addition to a number of unique variations which can be attributed to the idiosyncracies of individual charts, 127 three major trends can be identified. The first is that of the Vaiṣṇava charts

legends, while the second chart (Va72#23) perpetuates the mistake by retaining the original legends.

¹²⁷ Examples include four Jaina charts (Ja84#2,41,43,45) which replace snakes with finny fish or seamonsters (*makara*), possibly indicating their origin in coastal Gujarat, and a Vaiṣṇava chart (Va72#9) which replaces ladders with something resembling strips of red and yellow cloth hung with metal

from Nepal (Va72#19-25) which consistently replace ladders with benign red, orange, and white snakes, contrasting them with malign black and blue snakes (fig. 28). While the threeheaded and usually white snake leading from bhakti (sq. 54) to Vaikunth (sq. 68) should probably be identified with Śeṣa, on whose hood Viṣṇu rests during the intervals of creation, the remaining benign snakes may have resulted from a greater focus on snakes and snake worship in Nepalese culture. Another possibility, further explored in chapter four, is that the snakes in general represent the energy channels $(n\bar{a}d\bar{l})$ which form an important part of the

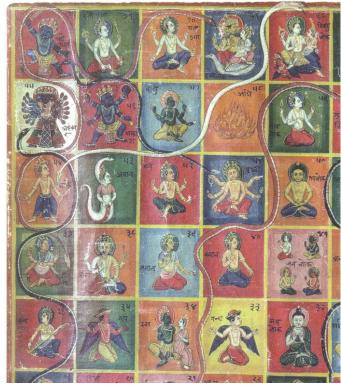


Fig. 28: 72-square Vaiṣṇava chart (Va72#20), detail. Nepal, 19th century.

subtle body in yogic and tantric literature. The second trend is found on the Jaina charts, about half of which represent ladders as a one or two lines, usually straight, without any indication of rungs (fig. 29). Topsfield was the first to suggest that they may in fact represent the lines (*śreṇi*) of transmigration by which the soul travel from one body to another, and this now seems to be corroborated by the fact that several Jaina charts include the reading *śreṇi* in the squares in which the lines originate. The third trend only dates back to the early 20th century, and is exclusively found on Ṣūfī charts from Turkey and Syria (Ṣū100#4ab,6abc,7,8,9) which replace ladders with arrows (fig. 30).¹²⁸

The combined presence of legends, snakes, and ladders leave little space for further ornamentation within the squares of the playing grid. Some charts add various background colors to the squares, and a few charts also manage to fit small

rings at the ends.

¹²⁸ The only exception is found on a modern redesign of an unidentified Vaiṣṇava chart said to derive from 19th-century Uttar Pradesh in north India (Va72#26a). It is, however, highly doubtful whether the arrows were also a feature of the original chart.

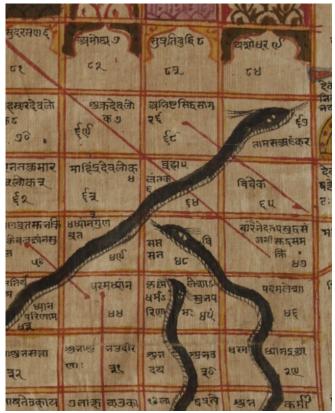


Fig. 29: 84-square Jaina chart (Ja84#16), detail. Vikrampur (Gujarat?), 19th century.



Fig. 30: 100-square Ṣūfī chart (Ṣū100#6a), detail. Istanbul, early 20th century.

illustrations within them.¹²⁹ Another popular form of decoration is cusped arches which are often used to highlight the significance of individual squares in the central column or near the top of the charts.¹³⁰ Less conspicuous, but far more significant, is the addition of little markings, usually in the form of squares, inside or between especially the central column squares of many Jaina charts (fig. 31).¹³¹ On a few charts (Ja84#6,37,55, Ja95#1) the markings have been developed into footprints (fig. 32), indicating that the tiny squares displayed by other charts should either be understood

¹²⁹ This is most pronounced on the Nepalese charts which not only color the squares, but in two cases (Va72#21,22) also fill them with figurative illustrations of the legends inscribed in them. A third Nepalese chart (Va72#24) adds heads of deities in all the squares.

¹³⁰ A Vaiṣṇava chart (Va72#6) and two Jaina charts (Ja84#6,18) are unique in decorating all squares with cusped arches, giving the impression that one is looking at the facade of a grandiose palace (the same is evidently the case with Ja84#52, though only the bottom left quarter of the chart is available).

¹³¹ The only non-Jaina chart to include this feature is a Vaiṣṇava chart (Va84#3) which appears to have been influenced by Jaina charts. This is not only evident from the markings, here developed into footprints, but also from the rungless ladders and the tiny circles in the bottom left of the chart. The tiny circles, representing basic lifeforms known as *nigoda*, are another feature particular to Jaina charts.



Fig. 31: 84-square Jaina chart (Ja84#9), detail. Rajasthan, 19th century.

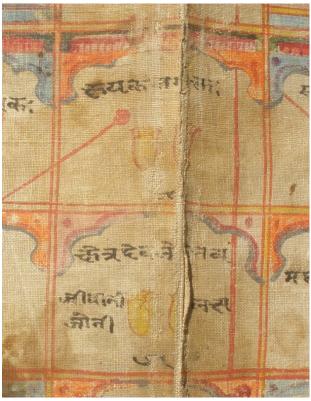


Fig. 32: 84-square Jaina chart (Ja84#6), detail. Western India, 19th century.

as abstract representations of footprints, or perhaps rather as steps. This interpretation is supported by an unpublished Gujarati manuscript and a verse found on two Jaina charts (see Appendix E2, verse #7). The manuscript and the verse agree on referring to the markings as footprints (Guj. *pagathī*, Raj. *pagatyau*), and the manuscript further explains that they serve a game mechanical function similar to that of the ladders, allowing players who land on them, and subsequently roll a "1" on the die, to ascend to the square directly above (*JBRR* 1-2). Since the footprints always, though not exclusively, occur in the central column squares enumerating the fourteen *guṇasthānas*, or stages of perfection, they should probably be understood as representing steps on the path toward liberation.

Except for the Vaiṣṇava charts from Nepal and the neighboring Punjab Hills, all of which consistently include top panel illustrations of Brahmā, Viṣṇu, and Śiva only occasionally found elsewhere, Jaina charts tend to be more fully developed as

¹³² This and other rules will be further explored in chapter five.

paintings than other types charts. ¹³³ This is partly due to the design of the grid structure which lends itself more readily to ornamentation than the grids of other charts. Jaina charts usually consist of a 9 x 9 grid with an additional square in the bottom left, two additional squares at opposite ends of the 7th row, a cross of five additional squares above the central square of the top row, and a further square, often in the form of an inverted umbrella signifying the place of liberated souls ($\bar{\imath}$ satisfied pavilions, and the five top squares into the apartments of a heavenly palace ($vim\bar{a}na$) decorated with flags and other ornaments. The bottom square usually becomes the leftmost in an additional row of variously sized squares used for illustrations and inscriptions outside the main playing grid (fig. 33). An alternative and less widespread visual design embeds the additional top and side squares within the face and arms of a person standing in the $k\bar{a}yotsarga$ pose of meditation. The main grid then becomes the body of the person, with a pair of feet added below the grid (fig. 34). ¹³⁴ The significance of this anthropomorphic iconography will be discussed further in chapter four, but for



Fig. 33: 84-square Jaina chart (Ja84#12a). Rajasthan (Bikaner?), 19th century.



Fig. 34: 84-square Jaina chart (Ja84#1). Gujarat, 19th century.

¹³³ The only illustration consistently found on Ṣūfī charts is that of a mosque surrounding the winning square above the main grid of north Indian Ṣūfī charts (Ṣū100#1ab,2,5,10).

¹³⁴ A single chart (Ja84#38) is unique in only depicting the arms and feet, and not the head.

now it should be remarked that Topsfield is at least partly right in interpreting this figure as the universe in the shape of the cosmic man (*lokapuruṣa*) (Topsfield 1985: 207).

Inscriptions

Additional text is often found outside the inscribed squares of the main playing grid. ¹³⁵ The different forms of additional text can be divided into prose, verse, and colophons. Prose passages are exclusive to Vaiṣṇava and Ṣūfī charts, while verses and colophons are mostly found on Jaina charts. ¹³⁶ The languages employed are mostly western Indian vernaculars, including Hindi, Rajasthani, Gujarati, Marathi, and Braj Bhāṣā, though examples of Sanskrit and vernacularized Sanskrit can also be found. Passages sometimes combine words and forms from different dialects and languages, and the orthography varies greatly, even within the same passages, reflecting the linguistic reality of the areas in which the charts were made. A closer linguistic study would be helpful in determining the provenance of the charts more accurately, but this lies outside the scope of the present thesis.

The prose passages found on Vaiṣṇava and Ṣūfī charts can be subdivided into those that describe the rules of the game and those that list the positions of snakes and ladders. More or less complete rules descriptions are found on at least three Ṣūfī¹³⁷ and five Vaiṣṇava¹³⁸ charts, while other charts, including Jaina charts, sometimes contain brief statements about specific aspects of the rules. A detailed overview of the rules as they pertain to 72-square Vaiṣṇava and 84-square Jaina charts is provided in chapter

¹³⁵ Additional text inscribed on 72-square Vaiṣṇava and 84-square Jaina charts have been transcribed in Appendices C1 and C2, respectively. Verses occurring across all charts have been transcribed and tentatively reconstructed and translated in Appendix E. Legends and prose passages on charts other than 72-square Vaiṣṇava and 84-square Jaina charts have been quoted in relevant passages throughout the thesis.

¹³⁶ An exception is provided by a series of seventeen closely related Vaiṣṇava charts (Va72#30a-q), all but one of which include colophons. Since the charts are likely to be modern forgeries, the unusually high frequency of colophons should probably be seen as an attempt at convincing prospective buyers of their authenticity.

¹³⁷ Ṣū100#1ab,10. The rules of Ṣū100#1b are translated into English on the chart itself, while the rules of Ṣū100#1a are translated in Beveridge 1915a and paraphrased in Topsfield 1985 (p. 209, fn. 30). The rules of Ṣū100#10 still await translation, as does the inscriptions on a further Ṣūfī chart (Ṣū362#1).

¹³⁸ Va72#34 and Va84#4,9ab,10. Unusually, the rules on Va72#34 are written in verse and combined with a detailed exposition of the chart (see Appendix E1, verse #3).

five. Lists of squares connected by snakes and ladders are found on a few Vaiṣṇava charts, 139 though they do not always correspond to the legends found in the squares themselves. This might simply be due to the inattention of the authors, but it could also indicate that the lists were sometimes copied in separation from the charts themselves. Since inscriptions and illustrations surrounding the sequentially numbered grid are not strictly necessary for playing the game, they may sometimes have been added without proper attention to the context of the chart in question. This certainly seems to be the case with two Jaina charts (Ja84#24ab) printed for public consumption around the turn of the 20th century, yet inscribed with a much earlier verse hinting at tantric and yogic influences (see Appendix E2, verse #1a).

While the prose passages are mainly descriptive of the game, the verses are mainly interpretative. They tend to focus on the religious connotations of the game and the spiritual benefits gained from playing it. They identify the grid diagram with the cosmos, and the pawns with the souls that move around it. The dice are their karma, the snakes their sins, and the ladders their virtues. Sometimes, however, more mystical interpretations manifest themselves in or between the lines, indicating that the macrocosmos might also be perceived as a microcosmos. This is true of the most widespread of the verses which appear on about twenty-five, or close to half, of the Jaina charts (see Appendix E2, verse #1a). Other verses occur much less frequently, the majority only appearing on a couple of charts each. They are mostly written in the popular dohā meter, though examples of savaiyā, kavitt, ṣaṭpadī, and other meters are also found. Except for a single verse attributed to the 15th-century poet-saint Kabīr (see Appendix E2, verse #5), I have not been able to trace any of the verses to other sources. It therefore seems that they were written specifically for the charts, and should be considered a natural part of them, even if their original meaning has sometimes been forgotten.

Colophons constitute a valuable source of information about the provenance of the charts. In some cases they consist of nothing more than a name, but in other cases they

¹³⁹ Va72#6,28 and Va84#4,9ab,10. Va72#6 appears to have adapted its list from a similar list on Va72#28, while a Jaina chart (Ja84#14) confusingly copies the list from Va72#6 almost *ad verbatim*. Harikṛṣṇa's auto-commentary to the *Krīḍākauśalya* also presents a list of squares connected by snakes and ladders (*KK* 241-45, comm.), although no chart accompanies the text. A late 20th-century Jaina chart (Ja84#31a) is alone in giving a complete list of legends, whether associated with snakes and ladders or not, as compensation for the many legends abbreviated on the chart itself.

provide detailed information about the artist and his patron, as well as the exact date and place of production. Though I have only been able to identify a few of the persons named, the fact that the same name never appears twice indicates that the charts were made locally, and that they were not mass-produced until the turn of the 20th century. Just as colophons can be powerful tools for determining the provenance of an object, they can also be powerful tools for misleading collectors and researchers alike. I have therefore taken great care in scrutinizing the colophons of the charts, only accepting those which are written in the same hand as the rest of the chart, and which does not provide a date inconsistent with the stylistic and linguistic features of the chart or its overall state of preservation.

Finally, it should be noted that some charts appear wholly uninscribed, or only inscribed with the sequential numbering indicating the direction of play. This can usually be explained by the fact that the chart was abandoned before it was completed, or that it was meant to be used as a model for drawing other charts. Only in a few cases do numbered but uninscribed charts appear finished, and in all those cases colophons have been added as an indication of the same. Though the legends are not necessary for playing gyān caupaṛ, numbered charts without

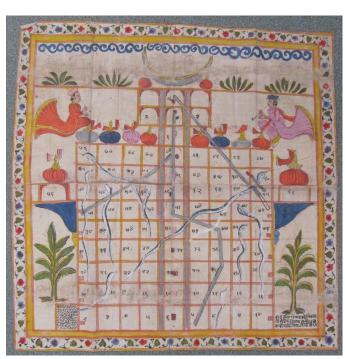


Fig. 35: Uninscribed 84-square Jaina chart (Ja84#48). Rajasthan, 19th century.

legends would appear to be a later influence from the modern game of snakes and

¹⁴⁰ Nine of the seventeen apparently forged Vaiṣṇava charts mentioned above (fn. 136) provide yet another exception by being attributed to the same artist, a certain Narotam Dās from the village of Siriyari in Rajasthan. During a visit to nearby Deogarh, a local art dealer involved in the sale of the charts to a private collector in Germany told me that a descendant of Narotam Dās still lived in the village. The art dealer arranged a visit to the descendant who turned out to be a young man with little or no knowledge of Narotam Dās or his activities as a painter. At the time of the visit, only a single chart attributed to Narotam Dās had been sold, but a year later eight more had suddenly turned up. In retrospect, I believe that the visit was arranged as a form of theatrical to convince me of the authenticity of the charts.

ladders. Most uninscribed charts show signs of forgery (Va72#30bdgh), and can therefore be disregarded, but a single chart (Ja84#48) dated VS 1902 (1845 CE) is more difficult to decide (fig. 35). I have marked it as suspicious in Appendix A, but it is not impossible that uninscribed, or at least less heavily inscribed, were also produced before the invention of the modern game of snakes and ladders.¹⁴¹

Dice and Pawns

Gyān caupaṛ charts have rarely come down to us together with any gaming equipment that may originally have accompanied them. In cases where charts have been exhibited or bought together with such equipment, the dice and pawns have invariably been taken from the game of caupaṛ which traditionally includes sixteen pawns in four different forms or colors and two or three stick dice, the latter replaced with six or seven cowries if the paccīsī variant is played. Whether the borrowing of components from other games reflects the historical situation is impossible to say, but given the prevalence of pawns and dice related to caupaṛ in western India, it makes sense if the same were also used for gyān caupaṛ which can be played with both stick dice and cowries, and only requires players to have a single differentiated pawn each.

The charts themselves have little to say about the equipment with which they were played, but the overall impression is that Vaiṣṇava, Ṣūfī, and Advaita Vedānta charts were mostly played with six or seven cowrie shells ($kaur\bar{\iota}$, $kapardik\bar{a}$, $var\bar{a}tik\bar{a}$), while Jaina charts were mostly played with a single stick die ($p\bar{a}sa$, $p\bar{a}saka$). A possible exception is the Nepalese Vaiṣṇava charts which are often referred to as $n\bar{a}gp\bar{a}s$ (snake-dice or snake-trap), possibly indicating that they were played with dice rather

¹⁴¹ An example is provided by a Vaiṣṇava chart (Va84#3) dated VS 1904 (1847 CE) which only has legends in squares containing the head of a snake, the foot of a ladder, or a footprint (the latter feature evidently borrowed from Jaina charts). The chart is painted in a colorful and folkish style, possibly indicating that it was first and foremost used as a game.

¹⁴² When I visited the National Museum in Delhi in the autumn of 2013, a Jaina chart (Ja84#8) was exhibited together with three yellow and three red dome-shaped *caupar* pieces. Similarly, the apparently forged Vaiṣṇava charts (Va72#30a-q) mentioned above were all sold together with complete sets of often beautifully crafted dice and pawns obviously designed for the game of *caupar*.

¹⁴³ This is brought out by a few Vaiṣṇava (Va84#4,10, Va99#1) and Ṣūfī (Ṣū100#1ab) charts, as well as in two verses appearing on Jaina charts (see Appendix E2, verses #3,8). Supporting evidence can be found in several early secondary sources (*KK* 243 and 250, *JBRR* 1, Pārakh 1886, Dvivedi 1893, Dampier 1895, Devdhar 1905).

than cowries.¹⁴⁴ Since the related Tibetan game of *sa lam rnam bzhag* and its Nepalese descendant *cībhāḥ kāsā* were both played with a single cubic die, this may also have been the case with *nāgpāś*.¹⁴⁵ Later printed versions of *gyān caupaṛ* generally seem to favor the use of a single cubic die.¹⁴⁶ This can probably be attributed to the diminishing availability of cowries and especially stick dice, as well as to the influence of modern games played with mass-produced cubic dice. The late 19th-century south Indian version known as *parampad sopān* continues to be played with two stick dice, though they, too, are increasingly being replaced with a single cubic die (Balambal 2005: 82).¹⁴⁷

The only references to playing pieces are found in a rules description on a Vaiṣṇava chart (Va84#4) and in a verse which appears on two Jaina charts (see Appendix E2, verse #7). The rules description is written in Marathi, and uses *cinha*, or token, to denote the pieces, whereas the verse is written in Rajasthani Braj Bhāṣā, and uses the Sanskritic *sār*, or gaming piece, which has the further connotation of essence or soul. The connotation is interesting because of an idea current in later secondary sources that players should use personal objects as playing pieces in order to strengthen the identification between themselves and the pieces (e.g. Johari 2007: 8). The earliest direct evidence of this practice is found in a Marathi booklet accompanying a chart (Va285#1) designed by the philosopher-saint Gulābrāv Mahārāj (1881-1915) sometime in the early 20th century. According to a Hindi translation of the booklet, Gulābrāv refers to the playing pieces as things or objects (*vastu*), and encourages players to think

¹⁴⁴ Other exceptions include a 72-square Vaiṣṇava chart (Va72#34) played with a stick die inscribed with the four goals of human existence (*puruṣārtha*): *dharma* (righteousness), *artha* (wealth), *kāma* (pleasure), and *mokṣa* (liberation) (see Appendix E1, verse #3, stanza no. 5), a 124-square Vaiṣṇava chart (Va124#1) played with two stick dice (*AJMR*, vol. 5, New Series, May-Aug 1831, p. 85), and a 285-square Vaiṣṇava chart (Va285#1) played with either an unspecified die or an unspecified number of cowries (Gulābrāv 1981: 7).

¹⁴⁵ A Nepalese chart (Va72#25) currently in the Musée d'Ethnographie de la Ville de Genève in Switzerland is indeed registered together with a six-sided cubic die (Lobsiger-Dellenbach 1954: 36, no. 164).

¹⁴⁶ See, for example, Johari 2007 (p. 8), Bharany 1993, Zaraev 2000, and Moskalev 2014. Several other modern versions in my own private collection are also played with a single cubic die. An exception is provided by a late 20th-century Jaina chart (Ja84#31a) which includes an image of a stick die in the bottom right corner (the same was probably also once visible on Ja84#31c painted on the wall of the Babu Derasar temple in Palitana).

¹⁴⁷ Henry Beveridge describes what appears to be a *parampad sopān* chart printed in Chennai in 1895 as being played with "shells and tamarind nuts" (Beveridge 1915b: 3-4), indicating that *parampad sopān* may originally have been played with cowries like the Vaiṣṇava *gyān caupar* charts from which it derives.

of them not as "this is my piece" (*yah merī vastu hai*), but rather as "I *am* this object" (*yah vastu maim hūm*) (Gulābrāv 1981: 6). Interestingly, a similar idea is expressed in a verse on an undated, but probably 19th-century, woodblock print of a Tibetan *sa lam rnam bzhag* chart (Schlieter 2012: 104). It is therefore possible that the practice was adhered to by early users of *gyān caupar*, but no evidence to this effect has been recorded. On the contrary, early secondary sources suggest a more prosaic relationship between players and pawns in stating that the game can either be played with gaming pieces (*nard, pyādā, viṭī*) or naturally occurring objects such as betel nuts (*supārī*), seeds (*phal*), or pebbles (*khaḍā*). The conclusion seems to be that the exact nature of the playing pieces was not of any great concern, and that any identification between players and pawns was implicit at most, and would probably only have been encouraged under special circumstances when the charts were used for something other than a mere pastime.

Game Manuals

The purely luck-driven mechanics of the formal game system underlying *gyān caupar* only require players to be able to identify the number thrown and move their pawns accordingly, but the representational value attributed to the charts requires both literacy and a detailed understanding of the religious knowledge systems expressed by the legends. The mechanically related game of the goose spawned numerous educational variants in 17-19th-century Europe with detailed explanations of individual legends written directly on the game charts or in accompanying game manuals. Evidence suggests the existence of similar manuals for *gyān caupar*, but considering the sparsity of the evidence and the emphasis on orality in Indian knowledge traditions, learned preceptors are likely to have been the preferred medium of instruction when playing the game. Two Vaiṣṇava charts (Va72#6,28) assert that the secret (*bhed*) of *gyān caupar* can only be grasped with the aid of a spiritual teacher (*satguru*), and several other charts also make reference to the importance of

¹⁴⁸ See *KK* 241-5 (comm.), *JBRR* 1, and Devdhar 1905 (p. 207). Dampier's statement that cowries were used as both dice and pawns may sound confusing at first (Dampier 1895: 25), but parallel examples are found in the games of *phañjikā* (*MS* 5.836cd) and *aṣṭākaṣṭe* (Smith 1851: 341) described in chapter two.

having a teacher.¹⁴⁹ Two charts (Va72#5, Va121#1) go even further, and describe *gyān caupar* as being played by the enlightened poet-saints (*sant*) themselves.¹⁵⁰

The earliest known reference to a game manual is found in the previously quoted description of a Vaiṣṇava chart (Va124#1) which mentions that it was gifted to the Royal Asiatic Society together with a "translation of the inventor's account of the game" (see introduction to chapter two). The account has since been lost, and it is therefore impossible to know how exactly it went about describing the game. Johari claims that a "book of chants containing schlokas" describing "the nature and meaning" of the squares accompanied the 19th-century chart on which his modern redesign (Va72#26a) is based. The śloka, or couplet, for a given square was meant to be chanted aloud by any player who landed on it, but unfortunately that book, too, has since been lost (Johari 2007: 2). The only existing game manual dating from before the 20th century forms part of an unpublished Gujarati manuscript dealing with various topics related to Jainism (JBRR, see Appendix F2). The manual begins by outlining the rules of the game, and then goes on to list the legends of an unidentified Jaina chart (Ja84#34) followed by a brief explanatory statement for each of them. The brevity of the explanatory statements are reminiscent of the largely illegible notes or commentaries written inside the squares of a Jaina (Ja84#39) and two Vaisnava (Va163#1,2) charts. Though the Jaina chart is likely to have been forged, and the Vaisnava charts are the only ones of their kind, it is possible that even standard charts would sometimes have included explanations within the squares themselves. Whether the manuscript reflects such a tradition, or whether it rather reflects a tradition of writing game manuals, cannot be decided at present.

Several printed commentaries are known from the early 20th century onward when gyān caupaṛ was beginning to disappear from its original context and be overtaken by

¹⁴⁹ See Appendix E1, verse #3, and Appendix E2, verse #3. The word *sadguru*, often rendered as *satguru* in the vernacular, is used by poet-saints with reference to spiritual teachers and the supreme being (Vaudeville 1987a: 33-34). In the context of Jainism, which excludes the idea of a supreme being, the meaning should probably be limited to that of spiritual teacher. The fact that Jaina charts use the term at all can be seen as an example of influence from Vaiṣṇava charts, as well as a testimony to the close relationship between Jaina and *sant* traditions in western India (Schomer 1987: 8).

¹⁵⁰ See Appendix E1, verses #2ab. The phrase *khelat sant sujān* (the wise saints are playing) also occurs in a popular *bhajan*, or devotional song, which has the spring festival of Holī as its object of play rather than *gyān caupaṛ*. The full lyrics can be found here: http://deshdharm.blogspot.com/2011/03/blog-post.html (acc. 20 Jan, 2019).

the commercial success of snakes and ladders. The earliest example is the previously mentioned Marathi booklet accompanying the chart (Va285#1) designed by Gulābrāv Mahārāj. The first part of the booklet introduces the game and presents a long list of rules which greatly increases the complexity of playing an already highly complex chart, while the second part explores the main philosophical concepts on which it is based. While the chart and the accompanying booklet would certainly form an interesting study in their own right, they cannot be used to generalize about the earlier and much simpler versions of *gyān caupar* which could easily be played without reference to a manual. Examples of later manuals include the purely theological treatise on a Ṣūfī chart (Ṣū100#4a) written by Shaykh Muḥammad al-Hāshimī in 1938 (Michon 1998), and a number of later commentaries written for a mostly Western audience in an eclectic New Age blend of popular religion and mysticism. While it is quite possible that later commentaries follow an interpretive spirit similar to that of earlier commentaries, they cannot be relied upon for a historical understanding of *gyān caupar*.

History and Transmission

In chapter two we saw that the earliest known evidence for *gyān caupaṛ* cannot be traced back further than the late 18th century, and that the game itself probably was not invented before the late 17th century at the earliest. In this section we look at the distribution of existing charts in an attempt to trace their history and transmission. A rough map of the production areas and transmission lines of the main groups of charts can be seen in fig. 36 which also gives an approximate count of charts, excluding copies and variants, found in the different areas. The majority are 72-square Vaiṣṇava and 84-square Jaina charts from Rajasthan, though neighboring Gujarat also was a center for especially Jaina charts. The earliest known Vaiṣṇava chart dates from 1780-82 (Va72#7), while the earliest known Jaina chart dates from 1797 (Ja84#56), but it

¹⁵¹ My understanding of the booklet is limited to an abridged Hindi version published on the occasion of the 100th anniversary of the birth of Gulābrāv Mahārāj in 1981 (Gulābrāv 1981). The Marathi original was published as Śrautakrīḍāviśeṣa in volume 18 of Gulābrāv's collected writings (Gulābrāv 1957), and has recently been reissued as Mokṣpaṭ yā kheļāsambandhīcī māhitī (Gulābrāv 2007).

¹⁵² See Johari 2007, Bharany 1993, Zaraev 2000, Moskalev 2014, and Tatz & Kent 1978 (on *sa lam rnam bzhag*). An unpublished commentary on a Nepalese chart (Va72#21) written by a German initiate into a contemporary Vaiṣṇava community was kindly forwarded to me by the author herself.

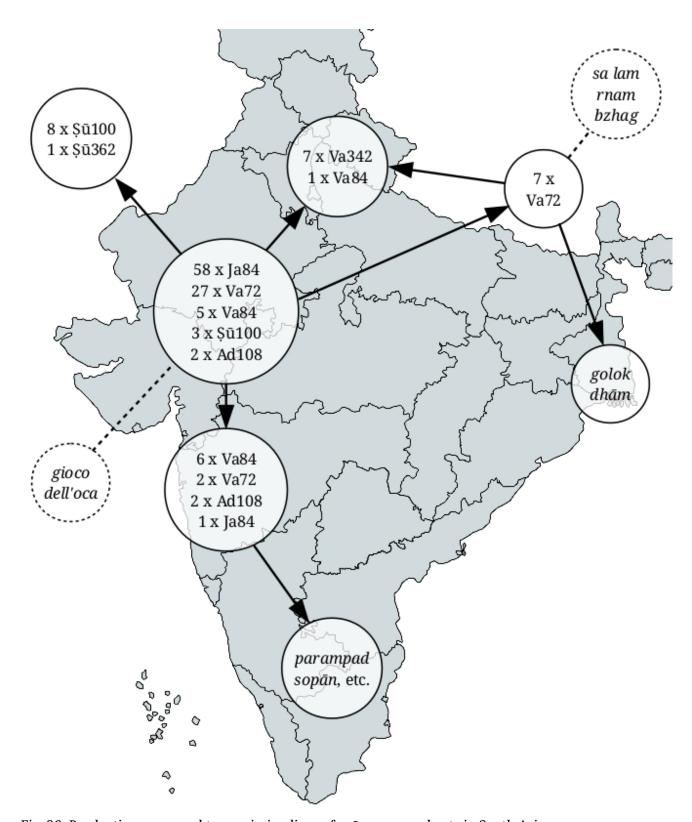


Fig. 36: Production areas and transmission lines of gyān caupar charts in South Asia.

cannot be established with certainty whether the Vaiṣṇava or the Jaina charts developed first. A closer examination of the charts provides several clues which lead us to suspect that the Vaiṣṇava charts were the earliest, but this can only be fully explored at the end of chapter four after the analyses of the critically read charts. For now it must suffice to say that <code>gyān caupar</code> began as either a Vaiṣṇava or a Jaina phenomenon in western India sometime in the late 17th or early 18th century.

Beginning with the 72-square Vaiṣṇava charts, we can see that the western Indian charts (type a) spread both south to Maharashtra (type b) and north-east to the Kathmandu Valley in Nepal (type c). The Maharashtrian branch appears to have stood in the shadow of the more popular 84-square charts in the region, while the Nepalese branch established itself by developing its own unique visual style. The squares of the Nepalese charts are colored yellow, blue, red, green and orange, and in some cases (Va72#21,22,24) illustrated with humans, deities, and other figures. The top panels are decorated with various landscapes foregrounded by Viṣṇu in the center, Brahmā to the left, and Siva to the right. The gods are usually seated or stood on lotus thrones, and in one case (Va72#24) on their respective mounts Garuda (Viṣṇu), Haṃsa (Brahmā), and Nandin (Śiva). However, the most striking feature is that the ladders are replaced with red, orange, and white snakes, and that their number is reduced from the usual ten to only six. Two western Indian Vaisnava charts (Va72#3,17) follow the same practice, further reducing the number of snakes substituting for ladders to four, but since the two charts only appear in the 19th and 20th centuries, they cannot be said to represent an intermediate stage in the transmission of charts from Nepal to India, and thus cannot be used as evidence that gyān caupar originated in Nepal. 154 The question of origins has already been discussed in chapter two, and need not be repeated here, but as the map of production areas clearly shows, the main concentration of charts is located in western India.

Continuing west along the trade route from Nepal to the Punjab Hills, we find the **342-square Vaiṣṇava** charts which Topsfield suggests may have been invented at the court of Mahārāja Saṃsār Cand of Kangra (r. 1775-1823) (Topsfield 2006c: 84). The most

¹⁵³ The characteristics of individual chart types are described in more detail in Appendix B.

¹⁵⁴ A single Jaina chart (Ja84#49) also replaces ladders with snakes, but the legends on it appear confused and influenced by Vaiṣṇava readings, indicating that the chart is most likely a modern day forgery.

conspicuous feature of the charts is the size and organization of the playing grid which is divided into two halves separated by a single column of inscribed but unnumbered squares (fig. 37). Players can either start in the left or the right grid, but as the game progresses, snakes and ladders connecting the two grids across the central column can cause players to change sides. The legends follow the same overall scheme as the 72-square Vaisnava charts, but greatly expands on it by, for example, increasing the number of hell squares from one to



Fig. 37: 342-square Vaiṣṇava chart (Va342#4). Punjab Hills, 19th century.

twenty-eight. While the ladders indicate influence from western Indian charts, the top panels showing Brahmā, Viṣṇu, and Śiva seated on lotus thrones indicate influence from Nepalese charts. Top panels showing the three deities side by side are also found on some 72- and 84-square Vaiṣṇava charts from western India, suggesting that stylistic influences from Nepal, including the substitution of snakes for ladders on two western Indian charts, played a continuous role throughout the history of *gyān caupaṛ*.

The number of **84-square Vaiṣṇava** charts is far smaller than the number of 72-square Vaiṣṇava charts, but can be found in many of the same regions, including Rajasthan (types a and b), Maharashtra (types c and d), and the Punjab Hills (type a). It is the most diverse among the different groups of charts, but never seems to have grown large enough to establish a sizable standard in any of the regions. The majority of 84-square Vaiṣṇava charts are found in Maharashtra where local tradition attributes their invention to the 13th-century poet-saint Jñānesvar. However, the two different types found in Maharashtra are not only at odds with each other, but also with the 72-square

¹⁵⁵ Perhaps the most obvious example of how Indian and Nepalese influences merged in the Punjab Hills is found on an 84-square Vaiṣṇava chart (Va84#12) which includes both ladders and benign red snakes as vehicles of promotion. The influence may have carried over to a Ṣūfī chart (Sū100#3) of Persian origin which replaces ladders with curved red lines with pointed ends resembling wriggling worms or small snakes.

Vaiṣṇava charts from which they are obviously descended. Type c only includes one or two ladders, and focuses much more heavily on Sāṃkhya enumeration than the 72-square charts, while type d does not include any ladders at all, and plays according to a variant set of rules which allows pawns to branch off in different directions after arriving at a specific square about a third of the way through the track. Several other idiosyncratic charts, including the 124-square chart (Va124#1) which made its way to the Royal Asiatic Society in 1831, were also produced in Maharashtra. Most of them date from the late 19th century, and should probably be seen as attempts at further developing or refining the game at a point in time when it had long since established its own tried and tested formats.

It is tempting to speculate that the format of the 84-square Vaiṣṇava charts was inspired by the earlier and much more numerous 84-square Jaina charts. Besides having the same number of squares, the 84-square Vaiṣṇava type a and b charts from Rajasthan follow the 84-square Jaina charts in adding a superstructure with additional squares above the main playing grid, indicating that the former could have developed from the latter. The 84-square Jaina charts, however, differentiate themselves from the 84-square Vaisnava charts by also adding squares at the sides of and below the main grid. They also tend to include more illustrations surrounding the grid, longer legends in individual squares, and verses interpreting the representational value of the game. Despite the increased complexity of the 84-square Jaina charts, they remain surprisingly stable throughout the period of their production, and only include two variant types. The first type, divided into three subtypes (a1, a2, and a3), is by far the most numerous and the most directly indebted to the 72-square Vaiṣṇava charts. The second type (b) does away with the traces of Vaisnava influence, and may be seen as an attempt at purging the first type of them. The supposedly later development of type b charts is not apparent from the available source material which dates the earliest known type b chart (Ja84#56) to Śaka 1719 (1797 CE), and the earliest known type a chart (Ja84#9) to VS 1870 (1813 CE). However, the opposite explanation, that the type a charts should have begun adopting Vaisnava legends after the development of the type b charts, seems much less likely. As discussed further at the end of chapter four, it would therefore seem that the type a charts came before the type b charts, but that the latter branched off from the former at an early stage in the development of the charts.

Whatever the exact relationship between the two types, they never established themselves outside Rajasthan and Gujarat,¹⁵⁶ and did not spawn any major variations.¹⁵⁷ Interestingly, the Jaina charts include the same number of snakes (9) and ladders (6) as the 72-square Vaiṣṇava charts from Nepal, but no definite conclusions can be drawn from this, and it seems unlikely that the two groups of charts should have influenced each other as they do not overlap in any other regards and have not been found in the same geographical areas.

Another important group of charts is the **100-square Ṣūfī** charts which can be traced back to early 19th-century Delhi or Ajmer (Şū100#1ab) (fig. 38). Only a few north Indian examples (type a) are known to exist, and they all conform to the same format, showing their most obvious traces of influence from Vaiṣṇava and Jaina charts in the two long snakes reaching down from the top left and right of the charts. They only appear toward the end of the Mughal period when the empire had more or less collapsed, and they never managed to establish their dominance in India. 158 They did, however, travel west through the Persian and Ottoman empires where they established new variants (types b

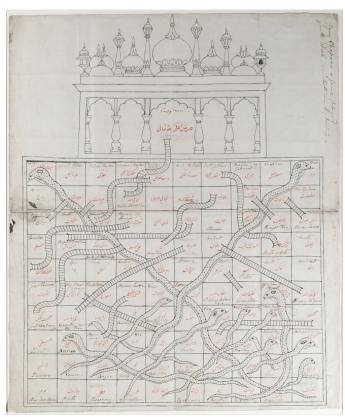


Fig. 38: 100-square Ṣūfī chart (Ṣū100#1a). Delhi or Ajmer, 1805-10.

and c) around the turn of the 20th century which continued to be printed at least into

¹⁵⁶ Two Jaina charts (Ja84#24ab) printed in Mumbai around the turn of the 20th century are clearly related to earlier charts from Rajasthan and Gujarat. All other known Jaina charts from outside Rajasthan and Gujarat are from later in the 20th century.

¹⁵⁷ Modern Jaina charts aside, a 95- and a 156-square chart are the only known examples of Jaina charts with a number of squares other than 84.

¹⁵⁸ See, however, the note in Shurreef & Herklots that *gyān caupaṛ* was popular among the respectable classes of south Indian Muslims in the first half of the 19th century (1832: App. VII, pp. lii-liv).

the 1940s. 159 Mughal interest in the game can, however, be traced back to the earliest known 72-square Vaisnava chart (Va72#7) which includes legends in both Devanāgarī and Nastalīg scripts, though this may simply be due to the fact that the chart in question was commissioned by an Englishman (Richard Johnson) in Lucknow at a time when both scripts would have been equally current. More telling is another 72-square Vaisnava chart (Va72#8) from early to mid-19th century translates the Vaisnava terminology written in Devanāgarī script into more less closely corresponding terminology written in Nastalīq script (Topsfield 2006a: 147-48). This chart is unique in that it would allow players of different faiths to land in the same squares vet derive their own independent meaning from them.

The different groups of charts discussed above constitute the main versions of gyān caupar as it existed throughout

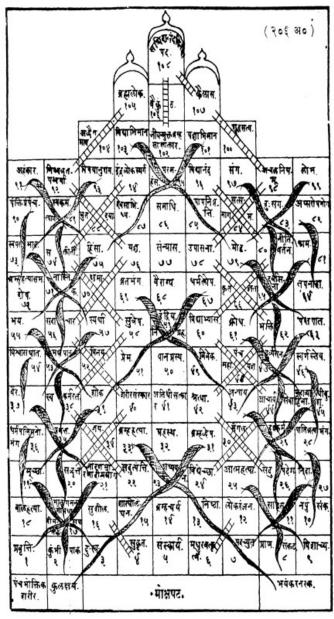


Fig. 39: 108-square Advaita Vedānta chart (Ad108#1b). Maharashtra, 1905.

India and beyond. Attempts at further developing the game into other formats have already been touched upon with regards to Maharashtra, but it is important to note that such attempts were also made elsewhere. An interesting example is presented by the 108-square Advaita Vedānta charts found in late 19th-century Gujarat (types a and b) and Maharashtra (type a). The type a charts indulge in great numbers of snakes and ladders which often form long chains of connected squares, detailing the several

¹⁵⁹ The latest known chart (Şū100#7) probably dates from sometime in the 1940s.

stages a player passes through as he climbs up or falls down an entire sequence of snakes or ladders (fig. 39). 160 The south Indian version of gyān caupar variously known as parampad sopān, moks pathamu, and vaikunth pāļi (fig. 40) constitutes yet another variation. The earliest mentioned chart is a print from late 19th-century Chennai which is now lost to us, but seems to have shared in the format of the profusely illustrated poster-size charts still sold in temple shops throughout south India (Beveridge 1915b). Most examples known to me consist of a 12 x 11 grid with an additional row added above. The additional row is usually reserved



Fig. 40: 132-square parampad sopān chart. Modern print, Mysore.

for saints and deities, while the squares of the main grid are filled with a great variety of images, including animals, flowers, and other motifs from nature, as well as religious figures, mythological characters, and major temples. The top row of the main grid is sometimes inscribed square by square with Telugu characters spelling out the name of the game as pa-ra-ma-pa-da-so- $p\bar{a}$ -na-pa-tha-mu, or the board of the ladder leading to Paramapada (i.e. Vaikuṇṭha), but apart from that, legends are rarely found on modern prints. Older versions tend to mix illustrations and legends which might indicate that the design developed gradually from the purely inscribed $gy\bar{a}n$ caupar

¹⁶⁰ Though Devdhar suggests that players should only climb up one ladder or fall down one snake at a time (1905: 207), Dvivedi notes with regard to the 108-square Advaita Vedānta type *b* charts, which include far less snakes and ladders, that players should only stop climbing or falling when they reach the end of a sequence (1893: 8). It is likely that both rules were applied to both types of charts depending on the preference of the players.

¹⁶¹ Two such charts were bought by myself in Chennai in 2013, and several other copies available to me indicate that they are also printed in various other locations throughout south India. An early version of the game may have been designed by Kṛṣṇarāja Oḍeyar III in Mysore around the mid-19th century (Sri Jayachamarajendra Art Gallery, Mysore, sr. no. 369, acc. no. 1224). The illustrations are confined to the bottom third of the chart, while all squares carry inscriptions.

charts to the purely illustrated *parampad sopān* charts.¹⁶² Wakankar has suggested that the game developed from Maharashtrian *gyān caupaṛ* charts traveling south with the Maratha kings of the Tanjore Dynasty which established itself in modern day Tamil Nadu from 1674-1855 (Wakankar 2007: 87).¹⁶³

The spread of gyān caupar also led to the invention of hybrid games which only had one or more key features in common with the original. This includes the Bengali game of golok dhām (fig. 41) which enjoyed great popularity in Kolkata around the turn of the 20th century, and which was still being circulated in cheap woodblock prints as late as the 1960s. 164 The game appears to have been a local hybrid of sa lam rnam bzhag and gyān caupar which might have resulted from the co-existence of the two games in nearby Nepal (see Sa Lam Rnam Bzhag in chapter two). 165 Only a few copies of golok dhām are known to exist, and the three different types that I am aware of all share the



Fig. 41: 64-square golok dhām chart. Kolkata, c. 1970.

¹⁶² A description of three different charts, including an older chart which mixes illustrations and legends, can be found in Balambal 2005 (pp. 87-94). An inscribed cloth chart, similar to Balambal's "Board 1," was on display in the Chennai Government Museum when I visited it in 2013.

¹⁶³ Wakankar has elaborated on this in a private correspondence with Topsfield where he explains that some charts include pictures of the royal family of the Bhonsles which ruled the state of Tanjore (Topsfield 2006a: 178, fn. 68).

¹⁶⁴ The game appears in a list of items collected for the museum at the Indian Institute in Oxford in 1884 where it is described as "lately invented" (Topsfield 2006a: 178, fn. 65). The game is also mentioned twice in the gospel of the Bengali mystic Śrī Rāmakṛṣṇa Paramahaṃsa (1836-86). The entry for 29 September, 1884, describes Rāmakṛṣṇa watching some of his followers playing the game (Nikhilananda 1974: 533), while the entry for 2 October, 1884, reads: "In the game of golakdham [sic] one may advance a great deal, but still somehow one's piece may fail to reach the goal" (ibid. 541).

¹⁶⁵ This point was further elaborated in an unpublished paper presented by myself at the Board Game Studies Colloquium XIX in Nuremberg in 2016 (Schmidt-Madsen 2016).

same format. ¹⁶⁶ They consist of an 8 x 6 grid topped by five gradually diminishing rows with six, four, three, two, and one square, respectively, for a total of 64 squares. Play proceeds *boustrophedon* from the bottom left square, indicating birth, to the top square, indicating *golok dhām*, or the heaven of Kṛṣṇa, according to the throw of cowries. There are no snakes and ladders, but various forms of promotion and demotion are activated if a player throws certain numbers when beginning his turn in certain squares. The criteria for being promoted and demoted are written in the relevant squares as in *sa lam rnam bzhag*, and several squares also carry small and finely executed woodcut illustrations. What makes the game something more than a mere hybrid of *gyān caupaṛ* and *sa lam rnam bzhag* is the popular motifs which include famous pilgrimage and sightseeing sites, such as Varanasi and Taj Mahal, as well as everyday secular locations, such as schools and bars. ¹⁶⁷ *Golok dhām* never seems to have spread outside Bengal, and perhaps not even outside Kolkata, but it still bears witness to the continuous development of *gyān caupaṛ* through experimentation and hybridization.

A final example that deserves mention is that of Mahārāja Kṛṣṇarāja Oḍeyar III (1794-1868). Kṛṣṇarāja ascended the throne of the Princely State of Mysore just short of his fifth birthday on 30 June, 1799, but the sovereignty of the British prevented him from enjoying any real power, and from the time the British took direct control of the state in 1831 he was merely a figurehead. Though he acquired the reputation of being a suggestible spendthrift lacking in administrative abilities (Rice 1897: 418-37), the artistic and literary legacy he left behind speaks of a mind both gifted and learned. He devoted his considerable spare time to the study of "religious philosophy, mathematics, numerology, and astrology" (Topsfield 2006d: 155), and wrote numerous works on a

¹⁶⁶ Two types are in a private collection in London which includes multiple prints of each in both blue and red color. A third type is in the Ramakrishna Museum at the headquarters of the Ramakrishna Math and Mission in Kolkata. It has been published in Bengali in Sarkar 1999, and again in an English translation in Sarkar 2002.

¹⁶⁷ A similar tendency could apparently be seen in some later *sa lam rnam bzhag* charts, such as the one played by Thubten Jigme Norbu (1922-2008), the eldest brother of the 14th Dalai Lama, during his childhood in the 1930s: "Amongst the favourable spots was [*sic*] Lhasa, various pilgrimage centres in India, and a number of mythical centres such as Devachen and Shambala" (Norbu & Harrer 1961: 93).

¹⁶⁸ For biographical details about Kṛṣṇarāja, see, for example, Gopal & Prasad 2010.

great variety of subjects, including several treatises on games and puzzles.¹⁶⁹ The treatises are richly illustrated with designs of his own inventions, many of which were printed as lithographies and fashioned in wood or on copper plates. He even had the walls of an entire room on the top floor of the Jaganmohan Palace in Mysore painted with a wide selection of them (Finkel 2004d: 127). Several of his games carry legends similar to those found in *gyān caupaṛ*, and also use mechanic of pro- and demotion as an expression of karmic fruition, but no comprehensive study of them has as yet been undertaken.¹⁷⁰ Most of his writings only exist in manuscript, and many of the games kept in the Sri Jayachamarajendra Art Gallery are in desperate need of restoration.¹⁷¹ It can only be hoped that they will be saved in time, so the story of how Kṛṣṇarāja combined elements of existing games to create his own highly inventive and artistic hybrids can one day be written in full.

Uses and Users

The careful integration of formal system and representational value in *gyān caupaṛ* indicates that the game was intended for a wider range of uses than most other traditional board games. This is also borne out by several references to the religious associations of the game in primary and secondary sources alike. Unfortunately, it is rarely possible to speak of such uses in anything but general terms since no continuous tradition of playing *gyān caupaṛ* survives in India or elsewhere. The uses to which the game is put today may provide us with a glimpse of the uses to which it was put in the past, but it would be misleading to conclude anything definite from such observations. It should also be kept in mind that secondary sources describing the game as it was played around the turn of the 20th century do not necessarily reflect the ways in which it was played when it first appeared more than a century before. The popular appeal of the game toward the end of the 19th century, as attested by several publications on the

¹⁶⁹ Vasantha lists the following manuscripts written in mixed Sanskrit and Kannada: *Caturaṅgada baṇṇada mane*, *Caturaṅgacamatkṛtacakramañjarī*, *Caturaṅgasārasarvasva*, *Keṃpu kitābu*, *Saṃkhyāśāstra*, Śrīkṛṣṇarājacaturaṅgasudhākara, and the *Kautukanidhi* section of the Śrītattvanidhi (Vasantha 2006b: 144). Wakankar adds the *Caturaṅgavihāra* to the list (Wakankar 1986: 298-99).

¹⁷⁰ Vasantha was in the process of preparing a book on his games and puzzles when she passed away, leaving only a brief introduction which asks more questions than it answers (Vasantha 2006a). Also see Vasantha 2002 and 2006b, Finkel 2004d, and Topsfield 2006a (pp. 173-74) and 2006d.

¹⁷¹ An unpublished catalogue of the games kindly provided by the gallery shows several wooden and paper boards severely damaged by water.

subject and the availability of cheaply printed charts, seems to have emphasized the role of play above that of religion. An example of this is provided by Devdhar's illustrated book of Marathi games from 1905 which describes an Advaita Vedānta chart (Ad108#1b) as a game pure and simple, with only a footnote informing the reader that it is meant to familiarize players with the $j\bar{n}\bar{a}n$ $m\bar{a}rg$, or path of higher knowledge (Devdhar 1905: 207).¹⁷²

Modern Traditions

Today the only traces of a living tradition of playing gyān caupar is found in the Jaina communities of western India and during certain religious festivals in south India. 173 During my visits to Jaina temples and religious centers in Ahmedabad and Bhavnagar in the fall of 2013, I was gifted with two modern charts used to familiarize children and young adults with the basic tenets of Jaina doctrine. 174 One chart entitled moks śrenī, or ladder to liberation, was made with the blessing of Acharya Shri Hem Surishvar, and Prabh forms part compendium of three games made exclusively

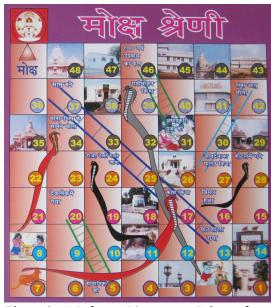


Fig. 42: Modern 50-square Jaina chart from Mumbai.

¹⁷² As a counter-example one might point to the early 20th-century chart (Va285#1) designed by Gulābrāv Mahārāj as a tool for religious instruction and practice. The booklet accompanying the chart explicitly states that [y]ah khel vedānt-kathit mokṣ prāpti ke liye ek prakriyā mārg hai [this game is a process route for the attainment of liberation according to Vedānta] (Gulābrāv 1981: 3). The narrow scope of the game, however, makes it unlikely that it ever traveled beyond the community of Gulābrāv's own followers.

¹⁷³ A living tradition of playing the related game of *sa lam rnam bzhag* can also be found among Tibetan Buddhist monks in north India, Nepal, and Tibet. Though Lama Jampa Losel described the game primarily as a mnemonic device when I visited him at the International Buddhist Academy in Boudha, Kathmandu, in the winter of 2016, the student monks that I talked to, some of whom had also played it at the Central Institute of Higher Tibetan Studies in Sarnath, Varanasi, were obviously invested in it primarily as a game. Some even accused it of robbing them of their sleep and impacting negatively on their studies (pers. comm.). Also see Bell 1928 (p. 269) and Ngai 2011 (pp. 336-37).

¹⁷⁴ Since then several similar charts produced within Jaina communities have come to my attention, indicating that the charts gifted to me are not stand-alone examples.

for children (fig. 42). 175 It has 50 squares, five snakes, and four ladders. Only a third of the squares carry legends, while the remaining squares are either blank or illustrated with photos of religious buildings or cartoonish drawings of animals, demons, and hellish tortures. Some of the legends, such as *devlok mem gayā* (gone to heaven, sq. 20) and $astprakarī pūjā k\bar{i}$ (eightfold worship, sq. 31) are reminiscent of the original charts, while others, such as $p\bar{a}ths\bar{a}l\bar{a}$ gayā (gone to school, sq. 13) and $t\bar{i}$. $v\bar{i}$ dekhte dekhte $kh\bar{a}y\bar{a}$ (watching too much television, sq. 24), are modern innovations more closely related to snakes and ladders ($s\bar{a}mp\ s\bar{i}rh\bar{i}$). The other chart is entitled $siddhsil\bar{a}$, or abode of the perfected ones, and was made under the instruction of Muni Amityash Vijay (fig. 43). 176 It consists of 90 squares, ten snakes, and eleven ladders. Most squares carry legends written in Gujarati, and many are illustrated with photos of especially animals, or drawings of religious figures and scenes, though one square in particular



Fig. 43: Modern 90-square Jaina chart from Gujarat.

¹⁷⁵ Published as 3 in 1 by Shri Prabhav Hem Sanskar Shibir.

¹⁷⁶ Printed by Parshva Computer Graphic. No further publication details given.

diverges by including an airplane (sq. 67). While still attractive to children, the length and complexity of several legends indicate that it was probably aimed at young adults, or perhaps even families looking for an educational form of home entertainment. According to the people who gifted the charts to me, they were not made for commercial purposes, but intended to be circulated among the Jaina communities as a means of keeping especially the younger generations within the fold of the religion. This is certainly a far cry from the more lofty ambitions evidenced by the original charts, but supports the argument presented below that the Jaina tradition of playing the game was educational in nature.

The festivals of Vaikuṇṭh Ekādaśī (Dhanu, Dec-Jan) and Mahāśivrātri (Phālgun, Feb-Mar), as celebrated in south India, provide an example of a more ritualized living tradition of playing *gyān caupaṛ*. Both festivals take place over the course of a single day, and include staying awake all through the night in praise of either Viṣṇu (Vaikuṇṭh Ekādaśī) or Śiva (Mahāśivrātri). One of the means of achieving this is by playing *parampad sopān* in one of its many Vaiṣṇava and Śaiva incarnations (Balambal 2005: 86). No study of this practice has as yet been conducted, and it is therefore impossible to say how widespread it is, but in my own limited experience *parampad sopān* charts do indeed become more readily available in temple shops in the days and weeks leading up to at least Vaikuṇṭh Ekādaśī. It is unlikely that the popular tradition of playing the game during festival nights existed prior to the late 19th century when the charts began to be printed, but it is certainly possible that wealthy families who had their own handmade charts would have taken them out to play on such occasions. The well-established practice of playing *caupaṛ* during

¹⁷⁷ Modern charts published by other religious communities, such as Ṣūfīs, Sikhs, and the International Society for Krishna Consciousness (ISKCON), appear to serve the same purpose, but the examples are too few to constitute an actual tradition of playing the game.

¹⁷⁸ I am thankful to Venkatasubramanian Balambal for relating her own childhood experiences of playing *parampad sopān* on Vaikuṇṭh Ekādaśī in mid-20th century Tamil Nadu. She emphasized that back then she had no idea about the religious meaning of the game, except that it was associated with certain festival days. Surprising as it may sound, considering the numerous illustrations of saints and deities found on the charts, it shows that the mere act of playing the game, whether one understood it or not, was considered auspicious.

¹⁷⁹ I have not been able to verify an often repeated claim that the original Jaina version of the game is played during the important Śvetāmbara festival of Paryuṣaṇa (Bhādoṁ, Aug-Sep), and neither have leading specialists John Cort and Mary Whitney Kelting (pers. comm.). The claim can be traced back to a catalogue description from the late 1970s when it may to some extent still have been true (Jain &

the festival of Dīvālī (Kārttik, Oct-Nov) to secure the blessings of Lakṣmī (Raghavan 1979: 163), and may even have been inspired by it.

A third contemporary use of gyān caupar which cannot be said to constitute a living tradition, but deserve mention nonetheless, is the adoption of for of charts purposes selfexploration in Western religious movements inspired by ideas of Eastern spirituality. The phenomenon can be traced back to the publication of Leela: The Game of Self-Knowledge by Harish Johari in 1975. 180 The book provides a detailed commentary to a modern redesign of a 72-square Vaisnava chart (Va72#26a) with legends translated into English and given a pan-religious, non-



Fig. 44: 72-square Vaiṣṇava chart (Va72#26a). Modern redesign of early 19th-century chart from Uttar Pradesh (Johari 2007: 2).

denominational spin (fig. 44).¹⁸¹ Johari claims that the game "was designed by the seers and saints as a key to the inner states and to learn the principles of *dharma* - usually called Hinduism" (Johari 2007: 1). It allows players to go beyond their everyday roles and identify with the source of their being, revealing their true self at the core of existence (*ibid.* 1-2). Reasonable as this might sound to a student of South Asian religious practices, the claim cannot be corroborated by evidence, and seems at best a

Fischer 1978: 43).

¹⁸⁰ Republished in a boxed set with a game board in 1993, and again in 2007 as *The Yoga of Snakes and Arrows*. It has been translated into Dutch (Amsterdam, 1979), German (Basel, 1991), Spanish (Santiago de Chile, 1993), and Czech (Praha, 2008). Other examples of similar publications include Bharany 1993, Zaraev 2000, and Moskalev 2014. A follower of the German-born Svāmī Sadānand Dās (1908-77), who was one of the first non-Asians to be initiated into the Gauḍīya Vaiṣṇava tradition back in the 1930s, tells me that she and her fellow disciples play on a Nepalese chart (Va72#21) for purposes similar to those described by Johari (pers. comm.).

¹⁸¹ The three central squares in the top row provide a good example. Johari gives the traditional readings "Brahma-loka" (sq. 69), "Vaikuntha-loka" (sq. 68), and "Rudra-loka" (sq. 67), associating the squares with the realms of Brahmā (sq. 69), Viṣṇu (sq. 68), and Śiva (sq. 67), but translates them as "absolute plane," "cosmic consciousness," and "plane of cosmic good" (Johari 2007: 126-29). See the full transcription of the chart in Appendix C1.

loose approximation of how the charts might originally have been used. The earliest chart known to have been used for similar purposes of self-exploration is Gulābrāv Mahārāj's chart (Va285#1) from the early 20th century, but this presents an even more radical diversion from the original Vaiṣṇava charts, and cannot be used to generalize from (fig. 45).



Fig. 45: 285-square Vaiṣṇava chart (Va285#1). Modern redesign of early 20th-century chart by Gulābrāv Mahārāj. Amravati, Maharashtra, 1981.

Early Traditions

In our search for the historical uses of gyān caupar, the first thing to note is the intentionality of its design. Contrary to other traditional Indian board games, the religious meaning of which is solely a matter of interpretation, gyān caupar was clearly invented with a specific religious meaning in mind. This is evident not only from the legends in the playing grid, but also from the inscriptions added outside the playing grid on many charts. The inscriptions consistently interpret the game as a religious metaphor, describe it as containing a secret meaning, 182 and mention the spiritual benefits to be gained from actively engaging with it. 183 This would seem to indicate that whoever invented it meant for it to be understood and used in a certain way. Whether this was also the way in which it actually came to be understood and used is an altogether different question. As anyone who has played a themed game will know, the theme rarely survives more than the first few turns, after which the mechanics more or less completely overtakes it. In the game of goose, for example, a player who lands on the square illustrated with a drawing of an inn has to pay a stake to the kitty and lose a turn. Thematically, this translates into breaking up the journey with a meal or a drink and paying for it at the bar, but in the heat of the game players will tend to focus solely on the mechanical effect of paying a stake and losing a turn rather than playing out the narrative in their heads. Similarly, in a 72-square Vaisnava game of gyān caupar, players might quickly forget that they have arrived at the virtue of compassion (dayā, sq. 17) and consequently ascended to the realm of Brahmā (brahmlok, sq. 69), and instead focus on the fact that they have landed on sq. 17 and jumped ahead to sq. 69. While a strong theme can attract players to a particular game, it cannot guarantee that they will keep it in mind as they play along.

We do not possess any concrete evidence that contemporary uses of *gyān caupaṛ* for purposes of education, ritual, or self-exploration reflect the original uses of the game. The charts and the contexts in which they appear do, however, provide us with several

¹⁸² A text passage found on two Vaiṣṇava charts (Va72#6,28) speaks of the secret or mystery (*bhed*) of the game, while a verse found exclusively on Vaiṣṇava charts from the Punjab Hills speaks of its message (vāṇī) (see Appendix E1, verse #1). Also see the verse on a 163-square Vaiṣṇava chart (Va163#2) which seems to speak of the secret or mystery (Raj. *gujh*) of the game (see Appendix E1, verse #5, stanza no. 2).

¹⁸³ A verse found on nearly half of all Jaina charts says that the game "reduces sin, tears apart delusion, and increases knowledge" (pāp ghaṭāraṇ moh vidāraṇ jñān vadhāraṇ) (see Appendix E2, verse #1a).

clues as to who might have played them and for what purposes. As we have already seen, the charts were mostly produced for three different audiences: courts, religious institutions, and private individuals. The latter category probably included noblemen and wealthy merchants who patronized professional artists to paint the charts, as well as people of more moderate means, such as village brahmins, astrologers, and yogic and tantric practitioners, who prepared the charts themselves. While courts and religious institutions appear to have been mostly associated with Vaiṣṇava and Jaina charts, respectively, the affiliations of charts associated with private individuals would obviously have varied depending on the religious observations of those individuals.

We know that board games were a common pastime at the Rajput courts of Rajasthan (Sharma 1968: 130-32), and while miniature paintings usually show people playing chess or *caupar*, *gyān caupar* is said to have been popular among the women in the zenanas and elsewhere (Topsfield 1985: 205, fn. 6). ¹⁸⁴ As previously mentioned (fn. 158), south Indian Muslims from the upper echelons of society also appear to have been fond of *gyān caupar*. This suggests that the Ṣūfī version of the game was more widespread than evidenced by the few surviving charts, none of which derive from south India, or that the game was sometimes played as a purely abstract race game without paying attention to the legends in the squares. The popularity of the game among Muslims might also explain why some Vaiṣṇava charts were inscribed in both Devanāgarī and Nastalīq scripts (Va72#7), and some even translated into Ṣūfī terminology (Va72#8). The conclusion, however, seems to be that whatever other purposes Vaiṣṇava charts might have been used for, they were perhaps more than anything else used for purposes of pure entertainment, even if clothed in the garbs of religion.

It is far less likely that Jaina charts associated with temples and religious centers were used primarily as games. While the nature of the charts might have served a legitimizing function for lay followers wanting to indulge in a pastime which was otherwise frowned upon, it is difficult to imagine Jaina monks and nuns whiling away time with a game no matter how pious. We know that charts would sometimes be copied for purposes of study (Ja84#17,23,56), and it therefore seems evident that they

¹⁸⁴ Topsfield received this information in a private correspondence with G. N. Sharma, but it is not repeated in the section on games and amusements in his otherwise authoritative *Social Life in Medieval Rajasthan:* 1500-1800 A.D. (Sharma 1968: 130-142).

were considered as having a strong didactic component. This can also be seen from the composition of the charts which models traditional cosmographical paintings, emphasizes structural organization and enumeration, and often uses a technical vocabulary beyond the grasp of the lay follower. In fact, Jaina disciples would not even have to play the game in order to learn from it. Much more so than its Vaiṣṇava counterpart, the Jaina version of *gyān caupaṛ* can be read as a map of doctrinal knowledge, detailing the layout of the cosmos and the various paths that can be traced through it in pursuit of final liberation. Today, modern charts closely resembling the earlier charts can be found hanging (Ja84#31b) or painted (Ja84#31c) on the walls of Jaina temples, confirming that they are to be studied as images rather than played as games. Whether this was also the case with earlier charts is impossible to say, but some of them are certainly so beautifully executed and well preserved (e.g. Ja84#18) that it is hard to believe they were ever played on.

If the more elaborate Vaiṣṇava and Jaina charts produced for courts and religious institutions were mainly used as pastimes and educational tools, the less accomplished charts drawn by private individuals for personal use may have served altogether different purposes. One of the many ways in which Vaisnava charts differ from Jaina charts is in their more selective and less comprehensive approach to describing the cosmos envisioned by them. Except for the hierarchical ordering of the rows of the charts according to different cosmographical realms, legends appear less oriented toward a specific goal, and enumerations of cosmic principles are sometimes left incomplete. This makes the charts poorly suited for teaching the specifics of any given doctrine, 186 but opens them up to a much wider range of possible interpretations than the Jaina charts. It therefore seems only natural that they would have been used for purposes of self-exploration, such as Johari suggested in the 1970s, but given the supposed context of local priests, astrologers, and mendicants, we might also expect them to have been used for purposes of divination or similar services offered for a fee. Curiously, the only charts that directly associate themselves with divination are two Jaina charts, which may indicate that divinatory uses were more widespread than

¹⁸⁵ Anil Kumar Jain suggests that Jaina *gyān caupaṛ* charts were made by mendicants (*sādhu*) during the rainy season to teach young disciples (*dīkṣārthī*) about religious doctrine (Jain, A. K. 1997: 214).

¹⁸⁶ An exception to this is the 342-square charts from the Punjab Hills and the 500-square chart described by Harikṛṣṇa Śarmā, both of which would appear to have directly based their understanding of karmic fruition (*karmavipāka*) on Purāṇic and other sources.

might otherwise have been suspected.¹⁸⁷ Only among yogic and tantric practitioners are they likely to have been used for strictly personal purposes, such as self-exploration, visualization, and meditation.¹⁸⁸ This would also have been true of the Jaina charts, which include the same mystical undercurrent as the Vaiṣṇava charts, albeit in a more subtle and perhaps only partly recognized way.¹⁸⁹ The more common use of privately drawn Jaina charts would likely have been for purposes of playful study or as objects of curiosity.

The discussion of Vaiṣṇava and Jaina charts begun in this section anticipates the following two chapters which are devoted to a detailed analysis of the charts both as they appear (chapter four) and as they are played (chapter five). We will therefore have more to say about uses and users later when the intricacies of the charts have been examined in full, and we can begin to glimpse some of the cultural forms and practices other than games which may ultimately have inspired their invention (chapter six).

¹⁸⁷ An inscription on the 19th-century Ja84#12a instructs users to read omens (Guj. sukan, Skt. śakuna) from the chart (see Appendix C2), while a verse on the late 18th-century Ja84#56 refers to the chart as an "omen of worldly actions" (saṃsārīk kāṁmnā śūkan, see Appendix E2, verse #11). Unfortunately, the reading on especially the latter chart is not fully clear to me, and requires further investigation by scholars trained in reading 18th- and 19th-century Gujarati. A further reference to divination is found on a museum plaque attached to a Ṣūfī chart (Ṣū100#3). The plaque describes the chart as being used for "casting nativities, forecasts concerning chances of a sick man's death or recovery, and probabilities of success or defeat of military expedition.". The related Tibetan Buddhist game of sa lam rnam bzhag is also reported to have been used for divination around the turn of the 19th century (Waddell 1895: 471-73). For a description of a 19th-century Indian game explicitly used for divination, see Ex. 3: Astrological Chart in chapter six.

¹⁸⁸ A Vaiṣṇava chart (Va72#34) clearly exhibiting tantric and yogic influences claims that the die falls "according to the fate" (*bhāg anusāre*) of the players (see Appendix E1, verse #3).

¹⁸⁹ A Jaina chart (Ja84#56) directly compares the success or failure of the players to the weight of the karmic matter holding them down (see Appendix E2, verses #10,11).

Chapter 4

Critical Reading and Analysis

The formal system underlying gyān caupar does not have any meaning in and of itself, and can therefore be interpreted to mean just about anything. This, however, changes when the system is manifested in the form of a game chart. The structure of the grid, the organization of the legends, and the positions of the snakes and ladders not only express the formal properties of the system; they also add an interpretational layer to it, indicating that it was meant to be understood in a certain way. The main purpose of the present chapter is to find out more exactly what that way is. The difference in design between various groups of charts, and between individual types within those groups, tells us that whatever the way is, it is not a single but rather a multitude of ways. Still, for all their variety, the charts may have more in common than the mere representation of different religious world-views. This is certainly true of the 72square Vaiṣṇava and 84-square Jaina charts analyzed below. Three main themes seem to run through all levels of their design. The first is the representation of a hierarchically structured cosmos which extends from the lowest to the highest realms of existence; the second is the representation of karmic forces which bind and control living beings within the cosmos; and the third is the representation of religious practices which allow the incorporeal selves of beings to escape bondage and enjoy ultimate liberation. This is true of both Vaisnava and Jaina charts regardless of their sectarian differences.

The main focus of the analyses is the legends which set *gyān caupaṛ* apart from most other traditional board games and allow us to consider the charts with much less recourse to speculation than would otherwise have been the case. The legends provide direct access to a detailed understanding of the representational value of the charts which can then be used as a guiding principle for interpreting formal elements of structure and design. The laying out of the unidirectional game track in the form of a grid takes it beyond its inherent linearity, and allows not only for a sequential, but also for a spatial, organization of the legends within it, resulting in a more complex and

comprehensive representation of the cosmos.¹⁹⁰ Similarly, the snakes and ladders not only connect squares, but also karmically related legends, lending a strong sense of theme to one of the key mechanics of the game. In these and other ways, an inherently meaningless formal game system becomes invested with a meaning which, unlike the meanings invested in many other traditional board games, is still available to us today.

It should, however, be remembered that there is a fine line between interpretation and over-interpretation. The legends offer a unique insight into the original intention of the charts, but at the same time run the risk of obscuring that intention if we forget the game that lies at their root. The inscriptions are not an attempt at an exhaustive description of the cosmos, nor do the mechanics offer an accurate simulation of its inner workings. The charts are approximations whose main function is to stimulate the imagination of the players, and allow them to experience a simple game as a profound meditation on self and cosmos. Interpretations would have varied from artist to artist, and from player to player, reminding us that the scope of our analysis is limited to opening up an interpretational space and pointing out some of the more obvious ways in which it might have been engaged with.

The analyses are based on the critical readings of 72-square Vaiṣṇava charts (type *a*) and 84-square Jaina charts (type *1a*) as presented in Appendix D. Diagrammatic representations of the preferred readings and positions of snakes and ladders can be seen in figs. 46 and 54 at the beginning of the introductions to the respective critical readings. Snakes are indicated with red arrows, ladders with green arrows, and footprints with small green squares. For the sake of readers not acquainted with the terminology of the legends, the diagrammatic representations have been translated into English in figs. 47 and 55, also at the beginning of the introductions to the respective critical readings. Due to the often technical nature of the terminology, the translations should not be considered exhaustive of the underlying concepts, but merely used as a reference aid. It should also be restated that the critical readings are not attempts at reconstructing hypothetical ur-charts, but rather tools for analysis and discussion ensuring that idiosyncratic minority readings do not attract undue attention. While a single main reading has been chosen as representative of each

¹⁹⁰ Compare, for example, the 17th-century astronomical goose game *Le Jeu de la Sphere ou de l'Univers selon Tycho Brahe* (Paris, 1661) which confines itself to a sequential organization of legends, ignoring the spatial properties of the universe that it is trying to represent (Seville 2016b).

square, significant variant readings have been commented upon in the relevant sections of the analyses. Finally, the analyses are followed by a discussion comparing the two types of chart with each other.

72	71	70	69	68	67	66	65	64
tamoguņ	rajoguņ	satoguņ	brahmlok	vaikuṇṭh	śivlok	ānand	durati	prakṛti
			1			V		
55	56	57	5 8	59	60	61	62	63
ahaṃkār	ākāś	vāyu	tej	satyalok	subuddhi	dur- buddhi	sukh	tāmas
54 bhakti	<i>53</i> jal	52 himsā	51 pṛthvī	50 taplok	49 gaṅgā	48 yamunā	47 Sarasvatī	46 vivek
briaker	Jui		bitti	tupion	Surigu	yumum	Siravun	VIVER
37	38	39	40	41	42	43	44	45
jñān	prāṇ	apan	vyān	japlok	agni	manuşya- jarıma	avidyā	suvidyā
36	35	34	33	32	31	30	29	28
śabd	narak	ras	gandh	maharlok	sparś	uttamgati	adharm	sudharm
19	20 —	21	22	23	24	25	26	27
karmyog	dān	samān	dharm	svarglok	kusaṅg	susaṅg	śok	param- ārth
18	17	16	15	14	13	12/	11	10
harș	dayā	dveș	nāglok	bhuvarlok	antarikș	ī y ṣyā	gandharv- lok	tap
1	2	3	4	5	6	7	8	9
janma	māyā	krodh	lobh	bhūlok	moh	mad	matsar	kām

Fig. 46: Diagrammatic representation of critically read 72-square Vaiṣṇava chart (type a).

72 quality of inertia	71 quality of activity	70 quality of goodness	69 realm of Brahmā	68 Viṣṇu's heaven	67 realm of Śiva	66 bliss	65 hidden	64 primor- dial matter
55 egoity	56 space	57 air	58 fire	59 realm of truth	60 intelligent	61 foolish	62 happiness	63 darkness
54 devotion	53 water	52 injury	earth	realm of austerities	49 Gaṅgā	48 Yamunā	4x Sarasvatī	46 discrimi- nating judgment
37 know- ledge	38 vital bodily wind	39 disposing bodily wind	40 circulat- ing bodily wind	realm of men	42 digestive fire	43 human birth	44 ignorance	right know-ledge
36 sound	35 hell	34 taste	33 smell	realm of majesty	31 touch	30 best course	un- righteous ness	28 righteous- ness
discipline of action	20 charity	21 equal disposition	22 religion	23 heaven	24 bad company	25 good company	26 sorrow	27 highest truth
joy	com- passion	16 hatred	15 realm of nāgas	14 atmo- sphere	inter- mediate space	envy	11 realm of gandhar- vas	10 austerity
1 birth	phenomenal reality	3 anger	4 greed	5 Earth	6 bewilder- ment	7 intoxication	8 jealousy	9 desire

Fig. 47: Translation of critically read 72-square Vaiṣṇava chart (type a). Cf. fig. 46 above.

72-Square Vaiṣṇava Charts (Type a)¹⁹¹

The critical reading of the 72-square Vaiṣṇava type a charts reveals a high degree of consistency in grid design, legends, and placement of snakes and ladders. Most variations can be accounted for by the sectarian leanings of individual artists, the use of synonymous expressions, the accidental switching around of readings, the blind copying of mistakes from other charts, and the ambiguous placement of snakes and ladders in the border area between squares. Only a few readings seem to have been in serious dispute and caused artists to interpret them at odds with each other. The most radical diversions are found on two charts (Va72#3,17) affiliated with the charts from Nepal (type c), and may represent a transitional stage between western Indian and Nepalese charts. A few charts include one or more additional squares above the main grid, but since this feature appears to be a later borrowing, 192 it is not included in the critically read chart which forms the basis of the analysis.

While the exact religious affiliation of the charts is difficult to determine, the overall affiliation is clearly one of Vaiṣṇava *bhakti*. This is indicated by the designation of Viṣṇu's heaven Vaikuṇṭha (sq. 68) as the winning square, by its location in the top row directly above the seven cosmographical realms of the central column, and by the ladder leading up to it from *bhakti* (sq. 54). Three charts invoke the name of Śrī Rām which is widely used as a reference to the supreme being in *bhakti* poetry, especially among the Rāmānandīs of northern and western India (Schomer 1987: 4-5). Two of the charts (Va72#2,31) add the name in a separate square directly above the winning square, while the third chart (Va72#10) identifies itself as *śrī rāmjī gyān caupaṛ* in the first square at the bottom left. Va72#2 provides further hints about its sectarian affiliation by replacing the reading *suvidyā* (right knowledge, sq. 45) with the reading *sevābhakti* (devotion through service), and expanding the reading *bhakti* (sq. 54) to *bhakti śrī prabhujī kī* (devotion to Śrī Prabhujī). The practice of *sevābhakti* and the use

¹⁹¹ Cf. figs. 46-47 on the previous pages.

¹⁹² The architectural superstructures added above the main grid on charts such as Va72#2,6,28 may have been inspired by 84-square Jaina charts which include similar superstructures as a standard feature.

¹⁹³ A verse found on 342-Vaiṣṇava charts directly states that understanding the message $(v\bar{a}n\bar{i})$ of the $gy\bar{a}n\ caupar$ is akin to mastering the discipline of bhakti (see Appendix E1, verse #1).

¹⁹⁴ The reading *sevā* (service) also appears in sq. 26 on Va72#31.

of Prabhu as a reference to the supreme divinity is especially associated with the followers of the western Indian Puṣṭimārga sect established by Vallabhācārya in 1494 (Barz 1976: 17). Since the charts generally abstain from using sectarian terminology beyond the broadest sweeps of that associated with Vaiṣṇava *bhakti*, we should probably regard the above examples as attempts by individual artists at impressing their own biases upon the charts.

The *Bhagavadgītā* and the *Bhāgavatapurāṇa* are considered scripture by Vaiṣṇava *bhakta*s, or devotees, and together constitute the most easily identifiable textual basis for the charts. Other texts were probably consulted as well, but the general nature of the charts makes it impossible to determine such texts with any accuracy. The best clue is offered by Harikṛṣṇa's description of his own 500-square Vaiṣṇava chart (*KK* 246-55). No copies of the chart are known to have survived, but the list of square inscriptions provided by him, although incomplete, makes it clear that the chart adhered to the key concepts of smaller Vaiṣṇava charts while at the same time expanding upon them:

```
janmasthānaṃ mānavasya prathamaṃ parikīrtitam //
tato mohamayī sṛṣṭiḥ saptaprakṛtayas tathā /
caturdaśātra lokāś ca vāyūnāṃ daśakaṃ tathā //
indriyāṇi ca tanmātrā bhaktijñānādikam tathā / (KK 250cd-252)
```

The first (square) is called the place of human birth. Then (comes) delusional creation, the seven forms of primordial matter, the fourteen realms (of existence), the ten (bodily) winds, the (five) sense and (five) action capacities (*indriya*), the (five) subtle elements, devotion, knowledge, and so forth.

Harikṛṣṇa concludes his description of the chart by listing the titles of several texts instrumental to its making:

```
dṛṣṭvā karmavipākārkaṃ purāṇaṃ gāruḍaṃ tathā /
śātātapasmṛtiṃ mātsyaṃ śrīmad bhāgavatādikam //
kṛto mayā karmapaṭṭo harikṛṣṇena dhīmatā /
satkarmaṇi pravṛttyarthaṃ tyāgārthaṃ ca kukarmaṇām // (KK 254-5)
```

Having consulted the *Karmavipākārka*, the *Garuḍapurāṇa*, the *Śātātapasmṛti*, the *Matsyapurāṇa*, the *Śrīmad Bhāgavatapurāṇa*, and so forth, the *karmapaṭṭa* (i.e. game board of karma) was made by me, the learned Harikṛṣṇa, for the furthering of good actions and the abandonment of bad actions.

The *Karmavipākārka* and the *Śātātapasmṛti* are concerned with the description of actions and their results. Taken together with the designation of the game as *karmapaṭṭa*, they indicate Harikṛṣṇa's emphasis on the concept of *karmavipāka*, or karmic fruition, which will also emerge as a major theme in the analysis presented below. The three Purāṇas mentioned are oriented toward Vaiṣṇavism, and the inclusion of the *Bhāgavatapurāṇa* seems to confirm our previous suggestion that it formed an important part of the textual basis of the charts. This is rendered even more likely when we consider the widespread popularity of the text in the formative period of the charts which coincided with the production of several vernacular adaptations from the end of the 16th century onward (McGregor 1984: 156).

72	71	70	69	68	67	66	65	64
tamoguņ	rajoguņ	satoguņ	brahmlok	vaikuṇṭh	śivlok	ānand	durati	prakṛti
			1	V		V		
55	56	57	5 8	59	60	61	62	63
ahaṃkār	ākāś	vāyu	tej	satyalok	subuddhi	dur-	sukh	tāmas
		\				buddhi		
54	53	52	51	50	49	48	47	46
bhakti	jal	hiṃsā	pṛthvī	taplok	gaṅgā	yamunā	sarasvatī	vivek
		/ /		/				
37	38	39	40	41	42	43	44	45
jñān	prāṇ	apan	vyān	janlok	agni	manusya- janma	avidyā	suvidyā
		/				Janna		
36	35	34	33	32	31	30	29	28
śabd	narak /	ras	gandh /	maharlok	sparś	uttamgati	adharm	sudharm
				-				
19	20 —	21	22	23	24	25	26	27
karmyog	dān	samān	dharm	svarglok	kusaṅg	susaṅg /	śok	param- ārth
	V			/				artii
18	17	16	15	14	13	12/	11	10
harș	dayā	dveș	nāglok	bhuvarlok	antarikș	īrṣyā	gandharv- lok	tap
							TOK	
1	2	3	4	5	6	7	8	9
janma	māyā	krodh	lobh	bhūlok	moh	mad	matsar	kām

Fig. 48: Reference chart for Realms of Existence (chapter four) with relevant squares highlighted in yellow.

Cosmos

Realms of Existence¹⁹⁵

The main structuring element of the critically read chart is the vertical arrangement of worlds or realms (*loka*) in the central column. It is the only series of squares which cuts across the entire chart, and thus carries with it a sense of holding the chart together and layering it into a hierarchy of individual rows. The layering, however, is only loosely adhered to by the remaining squares of the chart, and only in a few cases can a square be said to relate directly to the square in the central column of its row. The realms merely provide a skeletal structure for a less rigid representation of key concepts in the universe. This can also be seen from the fact that the central column, together with the bottom and top rows defining the extremities of the chart, tend to provide the most stable readings. The ladders add a sense of scaffolding by mostly leading inward from the outermost columns toward the central column or squares associated with the central column, such as the realms of Brahmā (sq. 69) and Śiva (sq. 67) flanking the top central square of the chart. In essence, the chart can be seen as a map of the cosmos, complete with instructions on how best to ascend to its pinnacle.

The realms in the central column represent traditional Vaiṣṇava cosmography as described in the *Bhāgavatapurāṇa* and related sources. The bottom three squares represent the earth (*bhūlok*, sq. 5), the atmosphere (*bhuvarlok*, sq. 14), and the sky or heaven (*svarglok*, sq. 23) which is said to extend from the sun (*sūrya*) to the pole star (*dhruva*) (Kirfel 1920: 128). This threefold division of the world reaches back to early Vedic times, and is associated with the three mystical utterances *bhūr*, *bhuvar*, and *svar* ritually pronounced by Brahmins and famously included at the beginning of the *gāyatrī* mantra (Gombrich 1975: 113). In later Vedic literature, four higher realms were added above the heavens, all of which came to be a regular fixture of Purāṇic cosmography (*ibid*. 117). They are represented on the charts in the fourth to the seventh square of the central column as the realms of majesty (*maharlok*, sq. 32), men (*janlok*, sq. 41), austerity (*taplok*, sq. 50), and truth (*satyalok*, sq. 59). According to the *Viṣṇupurāṇa*, the realm of majesty is inhabited by the *kalpavāsin*s who live for the duration of a *kalpa*, defined as one day and one night in the life of Brahmā; the realm

¹⁹⁵ Cf. fig. 48 on the previous page.

of men is inhabited by the sons of Brahmā, such as the Sanandanas and others; the realm of austerity is inhabited by a class of beings known as Vairājas; and the realm of truth, confusingly also known as the realm of Brahmā (*brahmaloka*), is inhabited by those who have realized their identity with the supreme being (*brahman*), and will never again experience death (*VP* 2.7.12-15). During the dissolution of the world at the end of a *kalpa*, only the earth, atmosphere, and heaven are destroyed, though life in the realm of majesty becomes so intolerable that its inhabitants flee up into the realm of men (Kirfel 1920: 142).

The eighth and final square of the central column represents Vaikunṭha (sq. 68) in accordance with the sectarian tendency to add a further realm dedicated to one's own deity of choice on top of the realm of truth (Gombrich 1975: 130). Thus it is said in the *Bhāgavatapurāṇa* that while ascetic practices lead to the four higher realms, only *bhakti* leads to Vaikunṭha.¹⁹⁶ Vaikunṭha is flanked on either side by the realms of Brahmā (sq. 69) and Śiva (sq. 67) which led Dampier to conclude that the charts were non-sectarian in nature (Dampier 1895: 25), but as argued above there can be little doubt that the charts were oriented toward a Vaiṣṇava *bhakti* audience. The presence of the three deities side by side rather invokes the syncretic concept of *trimūrti* which perceives Brahmā, Viṣṇu, and Śiva as a divine trinity responsible for the creation, preservation, and destruction of the world. This aspect is further highlighted by illustrations of the three deities in the top panels of several Vaiṣṇava charts.¹⁹⁷

The cosmographical elements of the chart emphasize the hierarchical arrangement of the seven upper realms to the near exclusion of the seven continents ($saptadv\bar{t}pa$) of the earth, the seven netherworlds ($p\bar{a}t\bar{a}la$), and the variously enumerated hells (naraka). This is contrary to the emphasis of the Purāṇic literature which has precious little to say about the realms of majesty, men, austerity, and truth, but devotes

¹⁹⁶ Yogasya tapasaś caiva nyāsasya gatayo 'malāḥ / mahar janas tapaḥ satyaṃ bhaktiyogasya madgatiḥ // (BhP 11.24.14) [the untainted destinations maharloka, janaloka, tapoloka, and satyaloka (are reached) through yoga, austerity, and renunciation; my destination (i.e. vaikuṇṭha) (is reached) through the discipline of bhakti].

¹⁹⁷ Only a few charts included in the critical reading are decorated with top panel illustrations, among them two charts (Va72#1,11) showing Brahmā, Viṣṇu, and Śiva side by side. Similar illustrations are found on all 72-square Vaiṣṇava charts from Nepal (Va72#19-25), on all 342-square Vaiṣṇava charts from the Punjab Hills (Va342#1-7), and on several 84-square Vaiṣṇava charts from Rajasthan, Maharashtra, and the Punjab Hills (Va84#1ab,6,7,11,12).

considerable space to the other realms, especially the grueling tortures suffered in the various hells.¹⁹⁸ The eclectic approach of the 72-square chart is partly due to its size since, for example, the 342-square charts include a total of twenty-eight hells, similar to the number found in the Bhāgavatapurāṇa (BhP 5.26.7) and the Viṣṇupurāṇa (VP 2.6.2-5). However, it also seems to reflect a concern with higher spiritual progress above and beyond that of the layman who merely stays the path by conforming to social and religious norms. This will become apparent later in the analysis when we turn our attention to the microcosmic aspect of the charts which identifies the seven realms with the seven cakras of yogic meditation. The hells, which are usually counted in multiples of seven, and named after the tortures one undergoes in them, are represented by just a single non-specific square (narak, sq. 35). Surprisingly, the square is located in the middle section of the chart, sharing the same row as the realm of majesty (sq. 32) just above the row of heaven (sq. 23). Furthermore, the square interrupts a series of other squares enumerating the five subtle elements (tanmātra, sqs. 31,33,34,36), and might therefore more logically have been inscribed with the missing subtle element of form $(r\bar{u}pa)$. This is in fact the case on several Nepalese charts (Va72#19,21,22,23), and on the two western Indian charts (Va72#3,17) affiliated with them, but since the reading is not consistent across the Nepalese charts it cannot be concluded that it was original to them. Available evidence overwhelmingly points to narak as the original reading, and though its position is indeed unexpected, it finds support in the snake leading down to it from *himsā* (injury, sq. 52).

A similar, if less acute, uneasiness surrounds the placement of the realm of $n\bar{a}gas$ ($n\bar{a}glok$, sq. 15) in the same row as the atmosphere (sq. 14). $N\bar{a}gas$, or snake-people, are said to inhabit a subterranean realm accessible through bodies of waters, such as lakes, rivers, and oceans. The realm is known as Pātāla, which can either refer to the seven netherworlds collectively or to the lowest of them specifically (Gombrich 1975: 128). In any case, we should expect the placement of the realm of $n\bar{a}gas$ below rather than above the earth (sq. 5). However, given the association of $n\bar{a}gas$ with illusory wealth and pleasure, 200 it is possible that their realm should not merely be understood

¹⁹⁸ See, for example, *BhP* 5.26.8-36 and *VP* 2.6.7-29.

¹⁹⁹ A single chart (Va72#6) reads netherworld ($p\bar{a}t\bar{a}l$) instead of Earth ($bh\bar{u}lok$) in sq. 5, but still places the realm of $n\bar{a}gas$ next to the atmosphere above.

²⁰⁰ See, for example, BhP 5.24.7-31 and VP 2.5.

as a cosmographical realm, but also as a metaphorical realm of allurement that the incorporeal self would do best to avoid on its journey toward liberation. The same applies to the realm of gandharvas (gandharvlok, sq. 11) which occupies the same row as the realm of nāgas. Gandharvas constitute a class of semi-divine beings often referred to as celestial musicians who, like the *nāgas*, albeit in a more positive sense, bring forth images of luxury and leisure. Though their realm is said to be located between the atmosphere (antarikşa) and the sun (āditya) (Kirfel 1920: 6), which might explain its position on the chart cosmographically, the nearby presence of two interchangeable terms denoting the atmosphere (antariks, sq. 13; bhuvarlok, sq. 14) indicates that something more than a literal interpretation may be called for. A clue for how to interpret the reading *antariks* is provided by two Nepalese charts (Va72#21,22) which illustrates it with a person reclining on a bed, his head propped up by a pillow. The illustration conveys a sense of dreaming or fantasizing associated with the conception of antariksa as a pleasure-ground for various classes of ghostly and semidivine beings.²⁰¹ The modern commentator Johari seems to arrive at a similar conclusion in glossing *nāglok* as the "plane of fantasy" (Johari 2007: 49-50), gandharvlok as "entertainment" (ibid. 45-6), and antariks as "nullity," which he explains as a temporary loss of meaning brought about by over-indulgence in sensual pleasures (ibid. 47-8).

²⁰¹ Tato 'dhastād yakṣarakṣaḥpiśācapretabhūtagaṇānāṃ vihārājiram antarikṣaṃ yāvad vāyuḥ pravāti yāvan meghā upalabhyante // (BhP 5.24.5) [and below that, as far as the wind blows and the clouds are seen, is antarikṣa, a pleasure-ground for the hordes of yakṣas, rakṣas, piśācas, and pretas].

72 tamoguņ	71 rajoguņ	70 satoguņ	69 brahmlok	68 vaikunth	67 śivlok	66 ānand	65 durati	64 prakṛti
tamogaņ	Tujoguņ	satogui	# _	Valkajijii	SIVIOR		durati	prakiti
55 ahaṃkār	56 ākāś	57 vāyu	tej	59 satyalok	subuddhi	61 dur- buddhi	62 sukh	63 tāmas
54 bhakti	53 jal	52 h i rņsā	51 pṛthvī	50 taplok	49 gaṅgā	48 yamunā	47 sarasvatī	46 vivek
37 jñān	38 prāņ	39 ap a n	40 vyān	41 japlok	42 agni	43 manusya- jantma	44 avidyā	45 suvidyā
36 śabd	35 narak	34 ras	33 gandh	32 maharlok	31 sparś	30 uttamgati	29 adharm	28 sudharm
19 karmyog	20 dān	21 samān	22 dharm	23 svarglok	24 kusaṅg	25 susaṅg	26 śok	27 param- ārth
18 harş	17 dayā	16 dveş	15 nāglok	14 bhuvarlok	13 antarikș	12 īvşyā	11 gandharv- lok	10 tap
1 janma	2 māyā	3 krodh	4 lobh	5 bhūlok	6 moh	7 mad	8 matsar	9 kām

Fig. 49: Reference chart for Evolution and Involution (chapter four) with relevant squares highlighted in yellow.

Evolution and Involution²⁰²

The cosmographical realms rising up through the central column of the chart are complemented by a representation of the evolutionary process which brought them into being. The terminology is derived from the philosophical system of Sāṃkhya which enumerates 25 principles (tattva) underlying the cosmos and all its manifestations.²⁰³ The two main principles are those of pure consciousness (*puruṣa*) and primordial matter (prakrti) which exist in and of themselves without having been generated by any other principles. The remaining 23 principles are inherent in primordial matter, and evolve from it during the process of creation. The first principle generated by primordial matter is intellect (mahat, buddhi) which in turn generates egoity (ahaṃkāra). At this point, evolution takes two different paths related to the three qualities (guna) which constitute primordial matter and exist in different states of equilibrium throughout all aspects of the manifested universe. Egoity dominated by the quality of goodness (sattvaguna) generates mind (manas), the five sense capacities (buddhīndriya), and the five action capacities (karmendriya), while egoity dominated by the quality of inertia (tamoguna) generates the five subtle elements (tanmātra) which in turn generate the five gross elements (mahābhūta). This completes the process of evolution as set in motion by pure consciousness and primordial matter.

Similar to the representation of the cosmographical realms, which leaves out the netherworlds and collapses the hells into a single square, the representation of Sāṃkhya on the chart is only partial.²⁰⁴ This does not mean that we should regard the representations as faulty, but merely as examples of how the chart expresses totalities by invoking whatever it considers to be their most significant parts. In the case of

²⁰² Cf. fig. 49 on the previous page.

²⁰³ As a curiosity, it should be noted that the earliest known exposition of the system found in Iśvarakṛṣṇa's *Sāṃkhyakārikā* (c. 4-5th cent.) contains 72 verses equal to the number of squares on the chart. The same number of verses is found in several later commentaries, such as the *Yuktidīpikā*, the *Jayamaṅgalā*, the *Tattvakaumudī*, and the commentary by Gauḍapāda (Larson & Bhattacharya 1987: 150-1), as well as in the chapter of the *Bhāgavatapurāṇa* explaining the system (*BhP* 3.26). There is, however, no evidence to suggest that the number of verses influenced the number of squares beyond, perhaps, a common predilection for 72 as an auspicious number.

²⁰⁴ A more complete representation of Sāṃkhya is found on the 84-square Vaiṣṇava type c charts which include all 25 principles except pure consciousness (puruṣa).

Sāṃkhya, it is common practice to break down the 25 principles into smaller subsets, and only enumerate various combinations of them (Larson & Bhattacharya 1987: 48-53), which is exactly what appears to have happened on the chart. ²⁰⁵ Reading from the top left in the opposite direction of the sequentially numbered squares, we find the three qualities of inertia (tamogun, sq. 72), activity (rajogun, sq. 71), and truth (satogun, sq. 70) inherent in primordial matter, which itself appears at the opposite end of the same row (prakṛti, sq. 64). The fact that pure consciousness does not appear anywhere on the chart emphasizes that the system of Sāṃkhya represented is not the rationalistic Sāmkhya of the Sāmkhyakārikā, but rather the theistic Sāmkhya developed within Vaiṣṇavism, and expressed through texts such as the The *Sāṃhyakārikā* describes Bhāgavatapurāna.²⁰⁶ the union between pure consciousness and primordial matter as the union between the lame and the blind (SK 21), but does not offer any concrete explanation of how the inherently passive and ungenerative pure consciousness can spark the evolutionary process in the inherently active and generative primordial matter. 207 The Bhāgavatapurāṇa, on the other hand, explicitly identifies the masculine noun puruṣa (pure consciousness) with Viṣṇu, 208 and describes him as actively impregnating the feminine noun prakrti (primordial matter), causing her to give birth to the manifest universe. 209

Viṣṇu is only represented on the chart by virtue of his heavenly paradise Vaikuṇṭha (sq. 68), and it therefore seems likely that the chart should be understood as a representation of the cosmos to the exclusion of its divine cause. It might be argued that Vaikuṇṭha represents the re-absorption of the incorporeal self into the supreme

²⁰⁵ The *Bhāgavatapurāṇa* exemplifies the manifold ways in which the principles may be enumerated (*BhP* 11.22.14-24), and then goes on to conclude: *iti nānāprasaṅkhyānaṃ tattvānām ṛṣibhiḥ kṛtam / sarvaṃ nyāyyaṃ yuktimattvād viduṣāṃ kim aśobhanam // (BhP* 11.22.25) [thus the various enumerations of the principles were made by the sages. All are correct because they are furnished with arguments. How could the learned be at fault?].

²⁰⁶ A single chart (Va72#18) includes pure consciousness ($puru\bar{s}$, sq. 65) next to primordial matter ($prakrtim\bar{a}y\bar{a}$, sq. 64), but still adheres to an overall Vaiṣṇava bhakti orientation.

²⁰⁷ The problem is discussed at length in Larson & Bhattacharya 1987 (pp. 73-95).

²⁰⁸ *Puruṣeśvarayor atra na vailakṣaṇyam aṇv api / (BhP* 11.22.11ab) [there is not the slightest difference between *puruṣa* and *īśvara* (i.e. Viṣṇu)]. Also see Dasgupta 1966 (p. 24).

²⁰⁹ Daivāt kṣubhitadharmiṇyāṃ svasyāṃ yonau paraḥ pumān / ādhatta vīryaṃ sāsūta mahattattvaṃ hiraṇmayam // (BhP 3.26.19) [the supreme man (i.e. Puruṣa or Viṣṇu) deposited his semen in his own womb (i.e. Prakṛti) whose attributes (i.e. guṇas) became agitated by the divine power. She (i.e. Prakṛti) brought forth the principle of intellect (which were as if) made of gold].

being in the form of Viṣṇu which therefore cannot be said to exist outside the chart. This, however, would run counter to the popular belief that Vaikuntha is an actual place where the self enjoys a certain degree of individuality and experience even after attaining liberation from the cycle of rebirth.²¹⁰ The discussion hinges on the larger discussion of whether liberation entails the extinction of the individual self in the merging with a qualityless (*nirguna*) deity, or the survival of the individual self in the deathless paradise of a qualified (saguna) deity.²¹¹ The invocation of the supreme being in the form of Viṣṇu makes Vaiṣṇava bhakti inherently saguṇa, but the influence of nirguṇa bhakti poets, such as Kabīr and Dādū, who included the names of Vaisnava deities among the names for the supreme being (Schomer 1987: 7), is never far off. A saguna interpretation of the 72-square chart is indirectly supported by Harikṛṣṇa whose description of an 84-square chart distinguishes between Vaikuntha (i.e. saguna liberation) and moksa (i.e. nirguna liberation), adding the latter directly above the former, and thus outside the main playing grid and the cosmos as such.²¹² The accuracy of Harikṛṣṇa's description is evidenced by two existing 84-square Jaina type c charts (Va84#5,8) which follow him in adding mokṣa above Vaikunṭha.213 The idea that final liberation - beyond even that attained in Vaikuntha - exists somewhere outside the main playing grid is also adhered to by 84-square Jaina charts which situate the crescent-shaped realm of liberated souls (*īsatprāgbhāra*) above the main grid and its five-square superstructure.

The principle of intellect (*mahat*, *buddhi*) generated by primordial matter at the very beginning of creation is not represented on the chart, but still invoked by the readings *subuddhi* (intelligent, sq. 60) and *durbuddhi* (foolish, sq. 61) which appear close to primordial matter in the second row from the top. At the other end of the same row we

²¹⁰ Dasgupta laments the logical fallacy of regarding Vaikuṇṭha, which he equates with the supreme being itself, as a spatio-temporal construction, but nonetheless admits that this is how it was often perceived by devout Vaiṣṇavas (1966: 15-16). A similar point is argued by Edgerton with regard to final liberation as described in the *Bhagavadgītā* (1972: 125-26).

²¹¹ See, for example, O'Flaherty 1987 and Staal 1987.

²¹² Harikṛṣṇa describes the game track as leading from birth to liberation (<code>janmasthānādimokṣāntam</code>) (KK 244), and explains in his auto-commentary that players would first have to land on <code>vaikuṇṭh</code> (sq. 80), and then roll a "1" in order to proceed up to <code>mokṣ</code> (top sq. 1). Thus, it appears that an element of <code>nirguṇa bhakti</code> was added to an originally <code>saguṇa bhakti</code> chart.

²¹³ The only 72-square chart which reads moks (top sq. 1) above vaikunth (sq. 68) is a modern redesign (Va72#14b) of a 72-square chart (Va72#14a) from Maharashtra. It may therefore have been influenced by the 84-square type c charts from Maharashtra described by Harikṛṣṇa.

find egoity (ahamkār, sq. 55) which evolves from intellect, and shares in the double entendre of subuddhi and durbuddhi. On the one hand, the readings can be understood as referring to evolutionary principles, while on the other hand they can be understood as referring to karmic qualities as indicated by the snakes and ladders associated with them. Another example is the reading tāmas (sg. 63) which can either be understood as "darkness," in the sense of ignorance, or as "relating to the quality of inertia" (tamoguna). One chart (Va72#18) explicitly reads tāmas ahamkār (egoity dominated by the quality of inertia) with reference to the ten principles which evolve from the inertia branch of egoity. Those ten principles, comprising of the subtle (tanmātra) and gross (mahābhūta) elements, are the only other principles which are mentioned on the chart, possibly explaining why sāttvika or sāttvika ahaṃkāra (egoity dominated by the quality of goodness), from which the remaining eleven principles evolve, is not included. While the five gross elements of space ($\bar{a}k\bar{a}s$, sq. 56), wind $(v\bar{a}yu, sq. 57)$, fire (tej, sq. 58), water (jal, sq. 53), and earth (prthvī, sq. 51) appear consistently on the charts, only the four subtle elements of sound (śabd, sq. 36), touch (sparś, sq. 31), taste (ras, sq. 34), and smell (gandh, sq. 33) appear with equal consistency. As already mentioned, the subtle element of form $(r\bar{u}pa)$ only occurs on a few charts, and does not appear to be any more original than the reading *narak* (hell, sq. 35) which sits uncomfortably between sound and taste. 214

In the bottom left, diametrically opposite primordial matter (*prakṛti*, sq. 63) in the top right, we find birth (*janma*, sq. 1), apparently contrasting the genesis of the universe with the genesis of the incorporeal self. This is further indicated by the reading *māyā* (phenomenal reality, sq. 2) in the square immediately following birth. Though it might be tempting to understand *māyā* in the Advaita Vedāntic sense of illusion, it should be remembered that Vaiṣṇavism, though heavily influenced by Vedāntic philosophy, has its own understanding of the term. Gauḍapāda's commentary on the *Sāṃkhyakārikā* (c. 6th cent.) identifies *māyā* with primordial matter (*SKB* 22), and the *Bhāgavatapurāṇa* has Viṣṇu himself wield it as the power of creation (Gail 1969: 50-51). It would therefore seem that the incorporeal self of the player is separated from the supreme

²¹⁴ As a further indication that the reading $r\bar{u}p$ is not necessarily more original than the reading narak just because it fits the context better, it should be noted that the enumeration of the subtle elements is incomplete across all but three 72-square charts (Va72#3,17,21), including one western Indian (Va72#11) and two Nepalese (Va72#22,23) charts which include the subtle element of form but leave out other subtle elements instead.

being and born into existence in sq. 1, whereupon it enters the phenomenal reality of the manifest universe in sq. 2. The idea that sq. 1 does not represent a physical birth, but rather a birth of the spirit, is also indicated by the fact that sq. 1 is the only square in the grid which cannot be revisited during the game, since no snake leads further back than sq. 2. According to this interpretation, the journey through the grid represents the journey through existence, with the square of primordial matter representing a point of transcendence to a purely spiritual existence beyond the confines of materiality. The interpretation is supported, or at least hinted at, by the reading durati (Hi. durnā, dūr, hidden or distant, sq. 65) in the next square after primordial matter (sq. 64). Durati is the least consistent of all the readings on the chart, and at least two charts (Va72#9,27) render it as durit or durgati in the sense of a bad course or rebirth. 215 This, however, fits poorly with its position on the chart, and the fact that no snake leads down from it. A better suggestion is provided by two other charts (Va72#15,29) which render it as duratyay in the sense of "difficult to go beyond." This is exactly how Kṛṣṇa describes $m\bar{a}y\bar{a}$, which we have seen to be equated with primordial matter, in the *Bhagavadgītā*. ²¹⁶ If this understanding of *durati* is correct, it would not only make sense of the juxtaposition between the bottom left and top right squares, it would also explain a difficult reading which appears to have baffled many an artist in the production of the charts.

The above discussion allows us to make an important observation regarding the direction of play. If we consider the overall process of cosmic evolution as it appears on the chart, we find that it begins at the end of the game track and continues in the opposite direction of play. This is, of course, only true in a general sense, since, for example, the gross elements appear before the subtle elements, but, as in most other matters, a general sense is all that the chart is trying to accomplish. As players move their pawns along the track from birth through life toward ever higher planes of existence, they at the same time move against the direction of cosmic evolution toward the point of creation from which it all began. The message seems to be that spiritual

²¹⁵ The *RSK* derives *durat* from Skt. *durita* which may explain the readings on Va72#9,27. However, I have chosen to follow *BBSK*, which equates both *durat* and *durati* with Hi. *durnā* and *dūr*, as this makes better sense in the present context.

²¹⁶ $Daiv\bar{\imath}$ hy eṣā guṇamayī mama māyā duratyayā / mām eva ye prapadyante māyām etāṇ taranti te (BhG 7.14) [this divine $m\bar{a}y\bar{a}$ of mine, composed of the (three) qualities, is difficult to go beyond; those who take refuge with me will cross this $m\bar{a}y\bar{a}$].

progress goes hand in hand with cosmic involution, and that to arrive at a state of liberation is to arrive at a point beyond primordial matter where the universal spirit reigns supreme.²¹⁷ The process of involution is closely associated with tantric practices (Flood 2006: 157-62), and the *Bhāgavatapurāṇa* follows these in describing it as turning the process of evolution on its head, allowing the principles that were once generated forth by each other to merge back into one another in reverse sequence (BhP 11.3.8-15). This mirrors the experience of players moving their pawns forward and upward along the track past the subtle and gross elements, egoity, intellect, and primordial matter to Viṣṇu's heaven Vaikuṇṭha beyond. The same can be said to be represented en miniature by the trinity of Brahmā, Visnu, and Śiva who appear in their usual sequence of creator, preserver, and destroyer, but who are encountered in the opposite and therefore devolutionary sequence by the players as they move their pawns from right to left along the top row. As will become clear in the experiential analysis in chapter five, the brilliance of the chart design is such that what appears as a static representation of the evolved cosmos becomes an interactive involution of the same when engaged through play.

²¹⁷ This is also true of other traditional board games where a counter-clockwise movement around the board is often interpreted as a mystical expression of involution. Brenda Beck, for instance, compares the counter-clockwise movement of pawns in *caupar* to a yogi reversing the downward flow of energies in his body through meditation (Beck 1982: 203), while Don Handelman and David Shulman describe the counter-clockwise distribution of tokens in Indian mancala games as "devolutionary," and as part of a process leading toward the reintegration of the fragmented self in the universal spirit (Handelman & Shulman 1997: 33-35).

72	71	70	69	68	67	66	65	64
tamoguņ	rajoguņ	satoguņ	brahmlok	vaikuṇṭh	śivlok	ānand	durati	prakṛti
55 ahaṃkār	56 ākāś	57 vāyu	tej	59 satyalok	subuddhi	61 dur- buddhi	62 sukh	63 tāmas
54	<i>53</i> jal	52	51	50	49	48	47	46
bhakti		himsā	pṛthvī	taplok	gaṅgā	yamunā	sarasvatī	vivek
37 jñān	38 prāņ	39 ap a n	40 vyān	41 japlok	42 agni	43 manusya- jantna	44 avidyā	45 suvidyā
36	35	/34	33	32	31	30	29	28
śabd	narak	ras	gandh	maharlok	sparś	uttamgati	adharm	sudharm
19 karmyog	20 dān	21 samān	dharm	23 svarglok	24 kusaṅg	25 susaṅg	26 śok	27 param- ārth
18 harş	17 dayā	16 dveş	15 nāglok	14 bhuvarlok	13 antarikș	12 īrṣyā	11 gandharv- lok	10 tap
1	2	3	4	<i>5</i>	6 moh	7	8	9
janma	māyā	krodh	lobh	bhūlok		mad	matsar	kām

Fig. 50: Reference chart for Vices and Virtues (chapter four) with relevant squares highlighted in yellow.

Karma

Vices and Virtues²¹⁸

Popular descriptions of $gy\bar{a}n$ caupar tend to emphasize the theme of vice $(p\bar{a}pa)$ and virtue (punya) to the exclusion of most other aspects of the game. This is probably because it is the most easily explained theme of the game, and the only one reflected in the modern game of snakes and ladders. Furthermore, it is the theme most directly expressed by the visual language of the charts in the form of the emblematic snakes and ladders. Snakes are a common symbol of sexual arousal and worldly temptation in Indian art and literature as exemplified by the netherworldly $n\bar{a}gas$, and ladders are sometimes used as a metaphor of the path to liberation in tantric, yogic, and bhakti literature. In addition to the evidence of the charts themselves, several commentators from the late 19th century link the snakes and ladders to the concepts of vice and virtue, and frame the two within the larger concept of karma. Harikṛṣṇa explains an unidentified 84-square Vaiṣṇava type c chart as follows:

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sopānenordhvagamanaṃ sarpatuṇḍād adhasthitaḥ / satkarmād ūrdhvagamanaṃ kucchite<sup>220</sup> 'himukhaṃ smṛtam // (KK 244cd-245ab)
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One goes up by means of a ladder, and one is placed below because of the mouth of a snake; one goes up on account of a good action, and one finds the mouth of a snake in the case of a bad action.²²¹

He then goes on to describe his own 500-square version of the game:

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ataḥparaṃ pravakṣyāmi karmapaṭṭaṃ suśodhanam / saṃsāriṇāṃ subodhārthaṃ karmapākaprasūcakam //
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²¹⁸ Cf. fig. 50 on the previous page.

²¹⁹ See, for example, the references to *muktisopāna*, or the ladder of liberation, in *Gorakṣaśataka* (*GŚ* 2, 101), and the image of a narrow ladder (*sīḍhī sāṃkarī*) leading to liberation in Kabīr (*KGS* 20.2; translated in Vaudeville 1974: 261).

²²⁰ *Kucchite* does not make sense to me, though the meaning seems clear from the context. In the translation provided below, I understand it as *kucite* from \sqrt{kuc} , i.e. something bend or crooked in the sense of a bad action.

²²¹ Compare the following verse from the *Sāṃkhyakārikā*: dharmeṇa gamanam ūrdhvaṃ gamanam adhastād bhavaty adharmeṇa / jñānena cāpavargo viparyayād iṣyate bandhaḥ // (SK 44) [one goes up on account of merit, (and) one goes down on account of demerit. Liberation is striven for through knowledge, bondage through the reverse].

kena karmavipākena kīdṛśaṃ phalam aśnute / tatsarvaṃ jñāyate yasya khelanān nātra saṃśayaḥ // (KK 246-47)

I will now explain the very splendid *karmapaṭṭa* (i.e. game board of karma) which teaches the ripening of actions for the easy understanding of the inhabitants of the cycle of rebirth. By the ripening of which action does one enjoy which fruit? This is all understood from the playing of this (game); in that there is no doubt.

Harikrsna suggests three things of consequence for the present discussion: that karma is a central subject in gyān caupar, that it is implied by the mechanic of snakes and ladders, and that it is viewed through the lens of karmavipāka, or the ripening of actions. Though he only writes about 84- and 500-square charts, the same is obviously true of the critically read 72-square chart which dedicates around thirty squares to positive and negative actions, such as charity ($d\bar{a}n$, sq. 20) and injury ($hims\bar{a}$, sq. 52), and positive and negative states of being, such as equal disposition (samān, sq. 18) and sorrow (śok, sq. 26). The bottom row contains the six negative tendencies toward anger (krodh, sq. 3), greed (lobh, sq. 4), bewilderment (moh, sq. 6), intoxication or pride (mad, sq. 7), jealousy (matsar, sq. 8), and desire ($k\bar{a}m$, sq. 9), which call to mind the group of six inner enemies (arişadvarga) standing between humans and their spiritual advancement.²²² The enemies are called by slightly different names throughout the literature, sometimes including the terms envy ($\bar{t}rsy\bar{a}$, sq. 12), hatred (dves, sq. 16), and sexual excitement (harş, sq. 18), all of which appear in the second row from the bottom.²²³ Still, the circumstance that six of them occur in sequence right after the player has moved his pawn from birth (janma, sq. 1) to phenomenal reality (māyā, sq. 2) opens up the possibility that they were indeed intended as a representation of the six inner enemies. It should also be noted that the second-row reading hars is alone among the readings associated with the six inner enemies in not having a snake connected to its square, and should therefore probably be interpreted in the positive sense of joy rather than the negative sense of sexual excitement.

²²² An early occurrence of the concept is found in the *Arthaśāstra* which refers to $k\bar{a}ma$, krodha, lobha, $m\bar{a}na$, mada, and harṣa as $\acute{s}atruṣadvarga$, or the group of six enemies ($A\acute{S}$ 1.6.1,11).

²²³ The only text that I am aware of which lists the terms as they appear in the bottom row of the chart is the *Mudgalopaniṣad*, a short medieval Vaiṣṇava text, which only differs from the chart in listing desire first rather than last (*MU* 4; cf. Gonda 1975).

Moving further up the chart, we find four pairs of opposites inscribed on adjacent squares in each of rows three, four, five, and seven: good company (susang, sq. 25) and bad company (kusang, sq. 24), righteousness (sudharm, sq. 28) and unrighteousness (adharm, sq. 29), ignorance (avidyā, sq. 44) and right knowledge (suvidyā, sq. 45), and intelligent (subuddhi, sq. 60) and foolish (durbuddhi, sq. 61). The duality (dvandva) expressed by pairs of opposites is a recurrent theme throughout the religious literature where it serves to exemplify that not only negatives, but also positives, must be overcome in order to achieve spiritual liberation.²²⁴ The pairs of opposites also resonate well with the central mechanic of snakes and ladders as easily perceived contrasts between vice and virtue. The snakes and ladders themselves always originate in squares associated with either a vice or a virtue, except for the snake leading down from the quality of inertia (tamogun, sq. 72) in the top left corner of the chart. Though it might plausibly be argued that inertia should be understood in the sense of a personal as well as a cosmic quality, the more obvious reason for placing the head of a snake in the last square of the game track is to ensure that pawns can fall down and continue back up even if they overshoot the winning square at the center of the top row. Overall, only four squares expressive of karmic qualities remain wholly unconnected to snakes and ladders. 225 The only reasonable explanation for this is that the number of snakes and ladders were more important than making sure that every karmic quality was served by a karmic connection.

As suggested by Harikṛṣṇa, the snakes and ladders are associated with negative and positive actions, and should therefore be regarded as forming karmic links between individual squares across the chart. The majority of snakes lead down to negative states of being in the bottom row, while the majority of ladders lead up to cosmographical realms in the central column and top row. This strengthens the interpretation of snakes and ladders as karmic links, with the points of origination indicating actions (karman) and the points of termination indicating results ($vip\bar{a}ka$). The exact karmic relationship between squares is not always clear, but the overall

²²⁴ Relevant examples include BhG 2.38, 4.22, 5.3, 7.27-8, 15.5 and BhP 3.24.44, 4.1.19, 9.19.19, 11.26.27.

²²⁵ I.e. joy (*har*ş, sq. 18), equal disposition (*samān*, sq. 21), good company (*susaṅg*, sq. 25), and sorrow (*śok*, sq. 26).

²²⁶ The ripening of action (*karmavipāka*) is an important subject in Purāṇic as well as Dharmaśāstric literature, and has even given rise to an entire genre of its own. The *New Catalogus Catalogorum* lists more than fifty texts with the word *karmavipāka* in their title (*NCC*, vol. 3, pp. 206-14).

correspondence usually is. While the ladder from *bhakti* (sq. 54) to Vaikuṇṭha (sq. 68) indicates that a specific religious practice leads to a specific place of liberation, the snake from injury (*hiṃsā*, sq. 52) to hell (*narak*, sq. 35) only indicates that a general kind of action leads to a general place of suffering. Least clear of all is the previously mentioned snake leading down from the quality of inertia to the gross element of earth (*pṛthvī*, sq. 51), but even that might be explained with reference to the gross elements evolving from egoity dominated by the quality of inertia, or simply by ignoring the context of *pṛthvī* and reading it not as a gross element but as the terrestrial plane of existence. One might also question the placement of negative qualities, such as egoity (*ahaṃkār*, sq. 55) and ignorance (*tāmas*, sq. 63), in the topmost rows of the chart, but this should probably just be understood as a reminder that dangers and pitfalls persist all the way to liberation.

72 tamoguņ	71 rajoguņ	70 satoguņ	69 brahmlok	68 vaikuṇṭh	67 śivlok	66 ānand	65 durati	64 prakṛti
			1	~		V		
55	56	57	58	59	60	61	62	63
ahaṃkār	ākāś	vāyu	tej	satyalok	subuddhi	dur- buddhi	sukh	tāmas
54	53	52	51	50	49	48	47	46
bhakti	jal	himsā	pṛthvī	taplok	gaṅgā	yamunā	sarasvatī	vivek
37	38	39	40	41	42	43	44	45
jñān	prāņ	ap a n	vyān	janlok	agni	manuşya-	avidyā	suvidyā
						janma	\	
36	35	34	33	32	31	30	29	28
śabd	narak /	ras	gandh /	maharlok	sparś	uttamgati	adharm	sudharm
19	20 —	21	22	23	24	25	26	27
karmyog	dā <mark>n</mark>	samān	dharm	svarglok	kusaṅg	susaṅg /	śok	param-
				/ -				ārth
18	17	16	15	14	13	12/	11	10
harș	dayā	dveș	nāglok	bhuvarlok	antarikș	ī v ṣyā	gandharv- lok	tap
1	2	3		5	6	7	8	9
janma	∠ māyā	krodh	lobh	bhūlok	moh	mad	matsar	kām
janina	inaya	Riouii	10011	Dituion	IIIOII	muu	matsar	Nulli

Fig. 51: Reference chart for Cycle of Rebirth (chapter four) with relevant squares highlighted in yellow.

Cycle of Rebirth²²⁷

An easily overlooked feature of the chart is the cyclical, or at least semi-cyclical, nature of the game track which sets it apart from the purely linear track of goose as discussed in chapters one and two. The cyclical effect is achieved by placing the winning square before the end of the track, and then adding a snake in the final square, allowing players to overshoot the target and loop back into the track. The final snake leads from sq. 72 to sq. 51, and since there is also a snake leading down from sq. 55 to sq. 2, the only square that cannot be revisited during the game is birth (janma) in sq. 1. The understanding of birth as relating to the incorporeal self rather than any of its physical bodies has already been touched upon, and need not be repeated here. Suffice it to say that the near impossibility of attaining liberation in a single lifetime begun at the lowest rung of the ladder, so to speak, and the presence of human birth (manusyajanma, sq. 43) elsewhere on the chart, add further weight to the argument. The birth of the incorporeal self in sq. 1 and the cyclical nature of the chart as a whole suggest that it does not just represent a journey through a single lifetime, but through the entire cycle of rebirth (samsāra) from entrance to exit. 228 The location of Vaikuntha (sq. 68) inside the cycle of rebirth might be seen as contrary to such an interpretation, but, as previously discussed, the question of whether Vaikuntha should be considered a metaphor for liberation, or an actual resting-place for the incorporeal self, is mostly a theological one.

We have already seen that the snakes and ladders form karmic links between squares, and it would therefore be obvious to focus on them as the main representation of the process of rebirth on the chart. However, in order to land at the head of a snake or the foot of a ladder, one first have to throw the dice or cowries, and these might in fact be said to carry the same meaning. The association between dice and karma is not only assumed by later commentators, but also put into words by the charts themselves, ²²⁹

²²⁷ Cf. fig. 51 on the previous page.

²²⁸ Johari makes this interpretation of the chart explicit by arguing that pawns should begin in Vaikuntha (sq. 68), and only move down to birth (sq. 1) on a throw of "6" with a six-sided die (Johari 2007: 8). Also see his commentary to sq. 1 which carries a similar sense (*ibid.* 28-29).

²²⁹ Examples include a verse on a Vaiṣṇava chart declaring that the die falls "according to the fate" (*bhāga anusāre*) of the players (see Appendix E1, verse #3, stanza no. 6), and a verse on several Jaina charts arguing that "having made a good throw" (*bhala pāsā nikṣepa*) one shall go to liberation (*mokṣa*) without a following rebirth (see Appendix E2, verse #3).

suggesting that every throw of the dice represents an instance of karmic fruition. The movement between squares could therefore be said to represent the transition between different karmic stages, and possibly even between different rebirths. 230 A player who identified his own incorporeal self with his pawn could even take this interpretation one step further, and consider his progress along the track as an expression of past, present, or future births. However, insisting on a direct translation between formal system and representational value might not be the best approach to this particular aspect of the game. Relating the throwing of dice and moving of pawns to concepts of karma and rebirth on a more general level would seem to fit the overall context better. This would also avoid conflicting with readings which address the question of rebirth directly. The reading *uttamgati* (sq. 30), which literally translates as the best course or condition, is sometimes used in the sense of liberation from existence (e.g. DME, p. 93), but since it is located in the middle of the chart and does not have any ladder ascending from it, a better suggestion would be to understand it in the sense of a good rebirth.²³¹ This would also fit well with its location directly below human birth (sq. 43) which is considered the best possible rebirth since no other form of rebirth allows for final liberation.

A few words also need to be said about the position of human birth four rows above the earth ($bh\bar{u}lok$, sq. 5) where one might have expected it to appear. This is reminiscent of the realm of $n\bar{a}gas$ (sq. 15) and hell (narak, sq. 35) which also appear above the earth in spite of being associated with regions below it. The simplest explanation is that the high position of human birth reflects the importance attributed to it. Another possible explanation is that it was placed in the same row as the world of men (janlok, sq. 41) by way of association, even though the world of men is not inhabited by ordinary men, but by the sons of Brahmā. Finally, a third explanation might be that its position was influenced by the 84-square Jaina charts which identify the fifth row with human beings and human rebirth in general. If the latter explanation is indeed the right one, it would be the only instance in which the flow of

²³⁰ As discussed in chapter two, this is indeed the case in the Tibetan Buddhist game of *sa lam rnam bzhag* where the different faces of the die is associated with the different categories of rebirth.

²³¹ Johari suggests the translation "good tendencies," but this seems a little too vague, and ignores the fact that *gati* is often used in the sense of transmigration or rebirth.

²³² Johari describes "janlok" as being inhabited by perfected beings (*siddha*) and saints, but still translates it as "human plane" (Johari 2007: 85-86).

influence from Vaiṣṇava to Jaina charts was reversed, as will be explored in more detail in the discussion at the end of this chapter.

72	71	70	69	68	67	66	65	64
tamoguņ	rajoguņ	satoguņ	brahmlok	vaikuṇṭh	śivlok	ānand	durati	prakṛti
			4	-				
55	56	57	58	59	60	61	62	63
ahaṃkār	ākāś	vāyu	tej	satyałok	subuddhi	dur- buddhi	sukh	tāmas
54 bhakti	<i>53</i> jal	52 kimsā	51 pṛthvī	50 taplok	49 gaṅgā	48 yamunā	47 sarasvatī	46 vivek
37 jñān	38 prāņ	39 apan	40 vyān	41 japlok	42 agni	43 manuşya- janma	44 avidyā	45 suvidyā
36 śabd	35 narak	<i>34</i> ras	33 gandh	32 maharlok	31 sparś	30 uttamgati	29 adharm	28 sudharm
19	20 —	21	22	23	24	25	26	27
karmyog	dān	samān	dharm	svarglok	kusaṅg	susaṅg	śok	param- ārth
18	17	16	15	14	13	12/	11	10
harș	dayā	dveș	nāglok	bhuvarlok	antarikș	ī y ṣyā	gandharv- lok	tap
1 janma	2 māyā	3 krodh	4 lobh	5 bhūlok	6 moh	7 mad	8 matsar	9 kām

Fig. 52: Reference chart for Paths to Liberation (chapter four) with relevant squares highlighted in yellow.

Religious Practice

Paths to Liberation²³³

The main spiritual path represented on the chart, one might argue, is the game track itself. As players move their pawns from square to square, climbing up ladders and sliding down snakes, they gradually ascend the levels of existence and leave behind the dualities of pain and pleasure until they finally arrive in the divine realm of Vișnu. This picture, however, is complicated by the fact that three squares along the way point directly to three separate, yet closely related, spiritual paths one might choose to follow. Foremost among them is that of bhakti (devotion, sq. 54) which sits at the foot of a ladder leading up to Vaikuntha (sq. 68). Since bhakti is the only means by which Vaiṣṇava bhaktas can reach Vaikuntha, we might also have expected it to be the only square from which Vaikuntha could be reached in the game. This, however, is obviously not the case, since players can easily overshoot bhakti and arrive at Vaikuntha by moving sequentially along the squares in the upper rows without the aid of a ladder. Still, we would be wrong to take this as an indication that bhakti is not central to the chart, or that it only represents an optional path to Vaikuntha. Not only does the ladder from bhakti lead up to the winning square, it is also placed higher up on the chart than any other ladder, and *bhakti* itself is placed directly above the two other spiritual paths of knowledge ($j\tilde{n}\tilde{a}n$, sq. 37) and action (karmyog, sq. 19). ²³⁴ Thus the game is clearly a game of bhakti, and the reason that a pawn might reach Vaikuntha without ever landing on bhakti is merely an example of the inherent tension between the formal system and the representational value attributed to it. If anything, it should serve to remind us that gyān caupar is an abstract rather than a concrete simulation of different religious knowledge systems.

²³³ Cf. fig. 52 on the previous page.

²³⁴ This might seem odd considering that the game is called *gyān* rather than *bhakti caupar*. However, the title's emphasis on knowledge above devotion fits well with the overall didactic potential of the game. The game is not as much about the path of devotion (*bhakti*) itself as it is about the knowledge (*jñāna*) which leads to the path of devotion. It is also possible that the title was first suggested by the Jainas, for whom knowledge plays a key role in liberation, and only later adopted by the Vaiṣṇavas who then changed it from *gyān bāzī* to *gyān caupar* in keeping with their own tradition of playing *caupar* at the royal courts.

The three paths of *bhakti*, knowledge, and action are first mentioned collectively in the Bhagavadgītā, and since developed within a Vaisnava context in the Bhāgavatapurāna. While both texts agree that the path of *bhakti* is superior to the paths of knowledge and action, they differ in their opinion about the relative importance of the latter two. The Bhagavadgītā associates the discipline of knowledge (jñānayoga) with the proponents of Sāṃkhya, and the discipline of action (*karmayoga*) with the proponents of Yoga, ²³⁵ and describes the two disciplines as being of the same nature and leading to the same goal.²³⁶ However, it considers disinterested action superior to the renunciation of action, and therefore holds the discipline of action, which itself leads to the attainment of knowledge, to be superior to the discipline of knowledge (Edgerton 1972: 167-68). This is not reflected on the chart by the position of the discipline of action (sq. 19) two squares below knowledge (sq. 37), or by the fact that the discipline of action is alone among the three paths in not sitting at the foot of a ladder. A more convincing case for the superior position of knowledge on the chart is made by the Bhāgavatapurāṇa which promotes a brand of Vaiṣṇavism heavily influenced by ideas from the philosophical school of Advaita Vedānta.²³⁷ According to Advaita Vedānta, the discipline of knowledge is the sole means of overcoming one's ignorance (avidyā) about the illusory nature of existence ($m\bar{a}y\bar{a}$), and realizing one's unity with the impersonal deity brahman. The description of brahman as saccidananda, or truth-consciousness-bliss, is a later development in Advaita Vedānta (Potter 1981: 75) which was adopted by Vaiṣṇava philosophers, and also included among the teachings of Vallabhācārya (Barz 1976: 65) whose Puṣṭimārga sect was a major influence in western India during the formative years of gyān caupar. It is therefore possible that the ladder leading from knowledge (sq. 37) to bliss (ānand, sq. 66) reflects an Advaita Vedānta aspect of

²³⁵ Loke 'smin dvividhā niṣṭhā purā proktā mayānagha / jñānayogena sāṃkhyānāṃ karmayogena yoginām // (BhG 3.3) [in this world there is a twofold foundation, as previously stated by me, O blameless one: the discipline of knowledge of the followers of Sāṃkhya, (and) the discipline of action of the followers of Yoga].

²³⁶ Yat sāṃkhyaiḥ prāpyate sthānaṃ tad yogair api gamyate / ekaṃ sāṃkhyaṃ ca yogaṃ ca yaḥ paśyati sa paśyati // (BhG 5.5) [what place is attained by the followers of Sāṃkhya, that is also obtained by the followers of Yoga. He who sees Sāṃkhya and Yoga as one, he (truly) sees].

²³⁷ Adalbert Gail underlines the influence of Advaita Vedānta on the conception of *bhakti* in the *Bhāgavatapurāṇa*, and agrees with Rudolf Otto in describing it more accurately as *advaita-bhakti* (Gail 1969: 54). The term also occurs as the title of the 10th chapter in Jñāneśvar's *Amṛtānubhāva* which fuses Advaita Vedānta and *bhakti* thought (Machado 1985: 64-66).

Vaiṣṇava theology.²³⁸ This would also help explain the high position awarded the realm of bliss in the top row immediately prior to the divine realms of Śiva (sq. 67), Viṣṇu (sq. 68), and Brahmā (sq. 69).

The addition of a ladder leading up from the discipline of action (sq. 19) on three of the critically read charts (Va72#10,18,33) may indicate a certain uneasiness about the inferior position of the reading. If, however, we read it not only in the context of knowledge and bhakti, but also in the context of other squares, another rationale for its isolated position two squares below knowledge suggests itself. The bottom three rows of the chart reach from the earth (bhūlok, sq. 5) to the heavens (svarglok, sq. 23), and contain an abundance of karmically related readings. Since the discipline of action sits at the far end of the third row, it seems just as obvious to associate it with the karmically related readings as with knowledge and bhakti. This would explain why no ladder leads up from the discipline of action, as one might have expected, since ladders instead lead up from the karmically related squares associated with it in a much more detailed and precise way. This, of course, entails a broader understanding of the discipline of action which goes beyond that of a spiritual path pure and simple, but it makes good sense from a structural point of view, and explains away some of the ambiguity which would otherwise cling to the reading. It would also allow for an understanding of the ladder leading up from compassion ($day\bar{a}$, sq. 17) to the realm of Brahmā (brahmlok, sq. 69) as a spiritual subpath of the discipline of action, just as the

²³⁸ In his auto-commentary to the *Krīḍākauśalya*, Harikṛṣṇa describes an 84-square Vaiṣṇava chart with just two ladders. One of the ladders leads from the discipline of action (karmyog, no sq. number) to heaven (svarg, no sq. number), while the other leads from knowledge (jñān, sq. 56) to Vaikuntha (sq. 80) (KK 241-45, comm.). The description is closely paraphrased by Pārakh, except that he only mentions a single ladder leading from sq. 56 to sq. 80 (Pārakh 1886: 200). The ladder on the corresponding chart (Va84#8) in Pārakh 1886 does indeed appear to lead from sq. 56 (vāyu, wind) to sg. 80 (vaikunth), but neither does this agree with Harikrsna, nor does it make much sense. A more likely square of origin would be the diagonally adjacent sq. 54 (jñānyog, discipline of knowledge). The identification of knowledge with Vaikuntha - as well as the addition of liberation (moks, top sq. 1) above Vaikuntha - may have resulted from the attribution of the charts to Jñāneśvar who borrows heavily from Advaita Vedānta. However, it might also be the result of a simple mistake begun by Harikrsna, and continued by Pārakh whose chart closely resembles two other charts (Va84#4,5) which might easily predate it. None of the latter two charts connect wind or the discipline of knowledge with Vaikuntha, but one of them (Va84#5) connects the discipline of bhakti (bhaktiyog, sq. 55) - positioned directly above the discipline of knowledge (jñānyog, sq. 54) - with Vaikuṇṭha (sq. 80). Whatever the truth of the matter, the only charts that consistently and convincingly promote an Advaita Vedanta agenda are the four charts (Ad108#1ab,2,3) directly affiliated with that philosophy.

ladder leading up from right knowledge (*suvidyā*, sq. 45) to the realm of Śiva (*śivlok*, sq. 67) can be seen as a subpath of knowledge positioned at the opposite end of the same row.

72	71	70	69	68	67	66	65	64
tamoguņ	rajoguņ	satoguņ	brahmlok	vaikuṇṭh	śivlok	ānand	durati	prakṛti
			1	*				
55	56	57	5 8	59	60	61	62	63
ahaṃkār	ākāś	vāyu	tej	satyalok	subuddhi	dur- buddhi	sukh	tāmas
					7			
54	53	52	51	50	49	48	47	46
bhakti	jal	hiṃsā/	pṛthvī	taplok	gaṅgā	yamunā	sarasvatī	vivek
07	20	20	40	11	10	40	11	45
jñān	38 prāņ	39 ap ā n	40 vyān	jandok	42 agni	43 manuşya-	44 avidyā	45 suvidyā
Jitan	pran	арин	vyun	Junok	agin	jarima	\ \	Saviaya
36	35	34	33	32	31	30	29	28
śabd	narak	ras	gandh /	maharlok	sparś	uttamgati	adharm	sudharm
	\ /			→				
19	20 —	21	22	23	24	25	26	27
karmyog	dān /	samān	dharm	svarglok	kusaṅg	susaṅg /	śok	param-
				/ -				ārth
18	17	16	15	14	13	12/	11	10
harș	dayā	dveș	nāglok	bhuvarlok	antarikș	īrsyā	gandharv-	tap
							lok	
1	2	3	4	5	6	7	8	9
janma	māyā	krodh	lobh	bhūlok	moh	mad	matsar	kām
	l	<u> </u>						

Fig. 53: Reference chart for The Subtle Body (chapter four) with relevant squares highlighted in yellow.

The Subtle Body²³⁹

So far we have limited our understanding of the chart to a representation of the cosmos. The cosmos, however, does not only exist outside the body of the individual person; it also exists within it. The identification of the human body with the universe reaches back to the late Rgvedic puruṣasūkta which describes how the world was created from the limbs of the cosmic man (RV 10.90), and finds its fullest expression in the philosophy of the Upanisads which considers the incorporeal self (ātman) to be identical with the supreme being (brahman). A similar view is also adopted in the medical literature which describes the body as coincident with the world, and details how anatomical features, bodily functions, and psychological qualities are analogous to the elements, the gods, and the absolute (Wujastyk 2009: 195-96). In yogic and tantric literature the body is often considered as containing the entire universe within itself (Mallinson & Singleton 2017: 171), and in the tantric Pāñcarātra tradition associated with Vaisnavism the principles (tattva) of Sāmkhya are not only considered the building blocks of the cosmos, but also of the individual person (Flood 2006: 103-4). A common religious practice among Vaiṣṇavas is to map the individual constituents of the universe on to the universal form (viśvarūpa) of Viṣṇu for purposes of visualization and meditation as exemplified by a passage in the Bhāgavatapurāṇa (BhP 2.1.23-37) which associates a wide range of realms, beings, karmic qualities, cosmic principles, and other concepts with different parts of the body (Edelmann 2013: 51-52). Gavin Flood refers to this process as the "entextualisation of the body," and identifies it as fundamental to tantric practices across traditions (Flood 2006: 28). Read in the context of gyān caupar, the passage in the Bhāgavatapurāna, and many others like it, could almost be seen as a blueprint for how to inscribe the squares of a game chart.²⁴⁰

The pervasive homology between body and cosmos in Indian religious traditions means that any map of the cosmos can also be read as a map of the body. It is therefore only a matter of perspective whether one chooses to identify the game chart with the cosmos or the body. The reason that the chart is not explicit about this double entendre is simply that it does not need to be, since it is already implied in the cosmological

²³⁹ Cf. fig. 53 on the previous page.

²⁴⁰ An 84-square Vaiṣṇava chart (Va84#2) is alone in adding a verse descriptive of the universal form of Siva (see Appendix E1, verse #4).

readings themselves.²⁴¹ There is, however, one kind of body that the chart makes explicit reference to, and that is the psychophysical or subtle (sūksma) body which exists separately from, yet coincidentally with, the physical or gross (sthūla) body. The subtle body is especially associated with yogic and tantric traditions which conceive of it as a series of cakras (lit. wheels) situated along its central axis and connected by an extensive network of energy channels ($n\bar{a}d\bar{\iota}$). The number of cakras varies between traditions, but six is the number most frequently encountered from the 12th century onward (Mallinson & Singleton 2017: 175). These are the *mūlādhāra* located at the anus of the physical body, the svādhiṣṭhāna located at the genitals, the maṇipūra located at the navel, the anāhata located at the heart, the viśuddhi located at the throat, and the ājñā located between the eyes. A seventh cakra called sahasrāra is sometimes added at the top of the skull or somewhere above it (*ibid.* 177-78). The energy channels connecting the cakras are responsible for transporting winds (prāṇa) and other energies around the subtle body, and are also numbered differently by different traditions. The number most frequently mentioned is 72.000 which first appears in the Brhadāraṇyakopaniṣad (BU 2.1.19), and later in key tantric and yogic texts, such as the Gorakṣaśatak a^{242} (c. 13th cent.) and the Haṭhayogapradīpik \bar{a}^{243} (c. 15th cent.). The Gorakṣaśataka goes on to say that 72 of the 72.000 nāḍīs are of special importance, and that 10 of the 72 $n\bar{a}d\bar{a}$ are of even greater importance ($G\acute{S}$ 17).

The only chart which allows the representation of the subtle body to take precedence over the representation of the cosmos is a 72-square Vaiṣṇava chart (Va72#34) not included in the critical reading because of its idiosyncratic design and readings resulting from a strong Haṭhayogic influence. The chart replaces the cosmographical realms of the central column with the system of seven *cakra*s outlined above, and adds the reading *kuṇḍalinīśakti* (sq. 23), or the power of Kuṇḍalinī, between the first and the

²⁴¹ The only direct hint toward interpreting the chart as a map of the body is provided by a verse on a 72-square Vaiṣṇava chart (Va72#34) with a strong Haṭhayogic influence which states that the supreme being (puruṣa) is visible in the physical body (piṇḍa), and that the body and the cosmic egg (brahmāṇḍa) should be regarded as one (see Appendix E1, verse #3, stanza no. 2).

²⁴² $\bar{U}rdhvam$ medhrad adho $n\bar{a}bheh$ kandayonih $khag\bar{a}ndavat$ / tatra $n\bar{a}dyah$ samutpannah sahasranih dvisaptatih // $(G\acute{S}$ 16) [above the penis and below the navel is the seat of a bulb like a bird's egg; there the 72.000 $n\bar{a}d\bar{a}$ originate].

²⁴³ Dvāsaptatisahasrāṇi nāḍīdvārāṇi pañjare / (HYP 4.18ab) [there are 72.000 nāḍī passages in the cage (i.e. the subtle body conceived of as a grid of squares not unlike a gyān caupar chart)].

²⁴⁴ Cf. Appendix C1 for a full transcription of the chart.

second cakra. 245 Kuṇḍalinī is often visualized as a coiled serpent lying at or near the first cakra of the series, guarding the entrance to the central energy channel known as Susumnā. When the serpent is awakened through various means of tantric and yogic practices, it rises up through the cakras along the central axis of the subtle body until it reaches the topmost cakra, granting the practitioner either immortality or liberation (Mallinson & Singleton 2017: 178). This process is depicted on the chart in question by a large black snake twisting and turning up through the central column of squares. The other snakes on the chart, however, are not depicted as snakes, and neither are the ladders. Instead they are drawn as simple lines curving between squares, and not always taking the shortest route. This fits well with a verse on the chart which describes it as containing nine energy channels $(n\bar{a}d\bar{t})$ and 72 squares $(koth\bar{a})^{246}$ thereby indicating that the lines, which would normally be identified as snakes, should indeed be identified as energy channels in the subtle body. Furthermore, it is possible that kothā (Skt. kostha) should not merely be understood in the sense of squares, but also in the sense of inner compartments or cavities. In the medical literature the term refers to the bodily cavities in which the viscera lie,247 and in the tantric and yogic literature it refers to the cavities in or between the energy channels where the celestial bodies are said to reside.²⁴⁸ On analogy with the energy channels, the cavities of the subtle body are sometimes said to number 72.000, and sometimes only 72, and it is therefore tempting to understand kothā in the double sense of squares and cavities. This would not only provide a concrete basis for the number of squares in the grid, it

²⁴⁵ The cosmographical realms are still present on the chart, albeit in less prominent positions. The seven netherworlds (*pātāla*) run along the bottom row of the chart (sqs. 1-7), followed by the realm of death (*mṛtyulok*, sq. 8) and the earth (*pṛthvī*, sq. 9). The six remaining upper realms from the atmosphere (*bhuvarlok*, sq. 62) to the realm of truth, here called the realm of Brahmā (*brahmlok*, sq. 67), are found in the top right of the two highest rows.

²⁴⁶ See Appendix E1, verse #3, stanza no. 3.

²⁴⁷ See, for example, the *Carakasaṃhitā* which gives a list of fifteen cavities containing various organs, such as heart, liver, lungs, and stomach (*CS* 4.7.10).

²⁴⁸ See, for example, the *Siddhasiddhāntapaddhati* attributed to Gorakhnāth (c. 11-12th cent.), the alleged founder of the Nāth tradition and original propagator of Haṭhayoga, but dated by Mallinson to sometime around the 18th century (Mallinson 2011: 14): *saptaviṃśatir nakṣatrāṇi dvādaśa rāśayo nava grahā nava lakṣa tārāḥ pañcadaśa tithaya ete 'ntarvalaye dvisaptatisahasrakoṣṭheṣu vasanti (...) || (SSP 3.13)* [the twenty-seven asterisms, the twelve signs of the zodiac, the nine planets, the nine hundred thousand stars, and the fifteen lunar days reside in the seventy-two thousand cavities in the inner enclosure (of the energy channels)].

would also add an almost vertiginous sense of depth as one contemplates the cosmic, gross, and subtle bodies in just a single image.

The chart discussed here only differs from the critically read chart in terms of emphasis, and not in terms of representation. This is evidenced most clearly by a reference to the nine energy channels and 72 squares or cavities on two of the charts included in the critical reading (Va72#5,28). 249 Though both charts include the standard number of ten snakes, one of them (Va72#28) explicitly refers to the snakes as energy channels when listing their positions on the chart. 250 The only charts that include a standard of nine snakes are the 72-square Vaiṣṇava charts from Nepal and the 84square Jaina charts. The Nepalese charts, however, also include six positive snakes substituting for ladders, and the Jaina charts, while also referring to the snakes as energy channels, do not otherwise associate themselves with representations of the subtle body. It is therefore possible that the inscriptions on the two charts refer back to an earlier phase in the development of the charts when they were more closely associated with yogic and tantric concepts, or that they represent a later attempt at adding a further representational layer to the charts. On the other hand, it is also possible that the snakes were indeed intended as representations of the energy channels, and that instead of only including the nine channels which flow through the nine bodily apertures (eyes, ears, nostrils, mouth, anus, and urethra), the tenth channel Suṣumnā, which flows through the aperture at the top of the skull (brahmarandhra), was also added. Against this, and against the identification of snakes with energy channels in general, is the fact that they always lead down, and never sideways or upward. The Nepalese charts overcome this problem by distinguishing between positive and negative snakes, and one might be forgiven for speculating whether this was not the original order of things, only broken up when the game achieved wider popularity and players began introducing ladders to avoid confusing positive and

²⁴⁹ Two verses attributed to Gorakhnāth mention the nine energy channels and seventy-two inner cavities of the subtle body as a standard descriptive pair (i.e. *nau nāṭikā koṭaṛī bahatari* in *GPS* 5, and *nava nāḍī bahotari koṭhā* in *GB* 133). Though the earliest references to Gorakhnāth date from the 13th century, the vernacular verses attributed to him, often showing influence of especially *nirguṇa bhakti*, are believed to be several centuries later (Mallinson 2011: 5).

²⁵⁰ See the full passage on the chart in Appendix C1.

negative snakes. While this cannot be ruled out, existing evidence points to an origin in western India of a game with both snakes and ladders.²⁵¹

While the question of the exact representational value of the snakes cannot easily be settled, the legends are less ambiguous in their reference to the energy channels of the subtle body.²⁵² The three sacred rivers Gangā (sq. 49), Yamunā (sq. 48), and Sarasvatī (sq. 47) appear in the same row as the realm of austerity (taplok, sq. 50) which would not make much sense if they were to be understood literally as topographical features. The rivers are said to join together at Prayag in modern day Allahabad (recently renamed Prayagraj), though Sarasvatī is not visible in the landscape but believed to flow underground. The supposed origin of Gangā in the heavens might explain its high position on the chart, but the context of the other rivers would seem to go against such a suggestion. A more likely explanation is therefore that the rivers represent the three main energy channels of the subtle body, known as Ida, Pingala, and Susumna, with which they are associated in tantric and yogic literature. Sarasvatī represents the central energy channel Susumnā, while Gangā represents the energy channel Idā in the left side of the body, and Yamunā represents the energy channel Pingalā in the right side of the body (Vaudeville 1974: 130-1). The vital bodily wind (prāṇa) normally resides in Idā and Pingalā, but through yogic exercises it may be forced out of those channels and into Susumnā, thereby causing Kundalinī to awake and begin its ascent up through the *cakra*s of the body (Mallinson & Singleton 2017: 178). ²⁵⁴ The vital bodily wind (prān, sq. 38) and the related disposing (apān, sq. 39) and circulating (vyān, sq. 40) bodily winds are represented across from the three energy channels on the

²⁵¹ Given the yogic context of the charts, it might be tempting to see a correspondence between the ten snakes and ladders of the critically read chart and the ten dos (*niyama*) and don'ts (*yama*) of yogic practice (e.g. *HYP* 1.17-18), but such an interpretation is not corroborated by the legends associated with the snakes and ladders.

²⁵² Additionally, the grid lines of the charts may also be identified as energy channels. This, at least, is true for the inscribed *vāstupuruṣamaṇḍala* diagrams used as architectural floor-plans for constructing temples and houses (Kramrisch 1980: I, 71).

²⁵³ The relative positions of the legends on the critically read chart do not fit the corresponding positions of the energy channels in the subtle body. The chart (Va72#28) mentioned above, which explicitly identifies the snakes with energy channels, seems to have noticed this and consequently switched around the legends, so Sarasvatī now appears in the center (sq. 48), with Gaṅgā to the left (sq. 47) and Yamunā to the right (sq. 49) when seen from the perspective of the chart itself.

²⁵⁴ A similar practice of ascent through Suşumnā is described in BhP 2.2.24.

opposite side of the central column one row further down.²⁵⁵ The three bodily winds were already identified with inhalation ($pr\bar{a}na$), exhalation ($ap\bar{a}na$), and retention ($vy\bar{a}na$) of breath in the *Atharvaveda* (Zysk 2007: S107), and they should probably be understood in the same sense here, albeit in a more strictly yogic context. Another reading related to the subtle body is agni (sq. 42) whose central location on the chart between the three energy channels and the three bodily winds indicates that it represents the digestive fire said to reside in the center of the body.²⁵⁶

The *cakras* of the subtle body are not mentioned in the legends or the additional text on any chart other than the one mentioned above (Va72#34).²⁵⁷ However, as Gavin Flood points out, the *cakras* only represent one of several systems of mapping concepts on to the body (Flood 2006: 157). Other systems refer to the central axis of the body as the *merudaṇḍa*, or the *axis mundi* in the form of the mythological Mount Meru, and position the cosmographical realms (*loka*) along it.²⁵⁸ The seven upper realms in the central column of the chart could therefore easily substitute for the seven *cakras*, with the eighth realm of Vaikuṇṭha (sq. 68) substituting for liberation through the raising of Kuṇḍalinī. This is indeed how the modern commentator Johari interprets the realms in the central column (Johari 2007: 15). He even goes on to superimpose an image of a cross-legged yogi extending over the first seven squares of the central column of the chart (Va72#26a), leaving the eighth square with nothing but an orb of pulsating light above the yogi's head. A later redesign of Johari's chart, made with tesserae on the surface of a coffee table (Va72#26b), omits the legends in the central column, and

²⁵⁵ At least one chart (Va72#3) seems to have been confused about the fact that five bodily winds are usually enumerated in Sāṃkhya (Larson & Bhattacharya 1987: 54-55). It remedies the situation by emending *dān* (charity, sq. 20) to *udān* (rising bodily wind), and understanding *samān* (equal disposition, sq. 21) in the sense of the identically named digestive bodily wind. One other chart (Va72#17) follows the same approach, but leaves out the disposing (*apān*, sq. 39) and circulating (*vyān*, sq. 40) winds above. Both charts are affiliated with the Nepalese charts, but none of those adopt the reading *udān*, indicating that it originated with a minority of charts in western India.

²⁵⁶ See, for example, $Vasiṣṭhasaṃhit\bar{a}$ 2.8 as quoted in Mallinson & Singleton 2017 (p. 193). It should also be noted that Agni is the deity associated with the central energy channel Suṣumnā (see, for example, $G\acute{S}$ 23).

²⁵⁷ A possible exception is an early 20th-century chart from Gujarat (Va72#1) which reads *sunlok* (realm of emptiness) instead of *satyalok* (realm of truth, sq. 59) in the seventh row of the central column. Vernacular *sun* or *suni* derives from Sanskrit *śūnya* (empty), and is used by *bhakti* poets as a synonym for the highest *cakra* in Haṭhayoga (*DoB*, pp. 2073-4).

²⁵⁸ See, for example, *Amṛtasiddhi* 1.15-19, *Siddhasiddhāntapaddhati* 3.1-5, and *Nādabindūpaniṣad* 1.3 as quoted in Mallinson & Singleton 2017 (pp. 199-200, 271).

replaces them with variously petaled lotuses and mystic syllables associated with the different *cakra*s. The chart also adds two intertwined snakes reaching from the first to the sixth *cakra*, probably representing the double-mouthed Kuṇḍalinī sometimes referred to as Śaṅkhinī (White 1996: 254-55). Continuing in the same vein, one might also suggest that the serpentine movement of the pawns along the game track represents the gradual awakening and uncoiling of Kuṇḍalinī as it rises up through the *cakra*s of the central column.²⁵⁹ This is, of course, pure speculation, but nonetheless a good example of how a yogically inclined mind might approach the chart, and bend it to its own will and interpretation.

²⁵⁹ The coils of Kuṇḍalinī are counted differently in different texts, but one of the more frequent counts is eight, which might then be said to correspond to the eight rows of the chart. See, for example, *Gorakṣaśataka* 30, *Pādmasaṃhitā* 2.16, and *Yogabīja* 93 as quoted in Mallinson & Singleton 2017 (pp. 213, 215).

				1	sphāṭikmay, 4 ṇ, śrī arhatpao					
					top sq. 5 sarvārth- siddhi vimān					
				top sq. 2 vaijayant anuttar vimān	top sq. 3 aparājit anuttar vimān	top sq. 4 jayant anuttar vimān				
					top sq. 1 vijay anuttar vimān					
	76 mohnī karm	77 bhadra graiveyak	78 subhadra graiveyak	79 sujāt graiveyak	80 sumanas & priyadarśan graiveyak	81 sudar san graiveyak	82 amogh graiveyak	83 suprabandh graiveyak	84 yaśodhar graiveyak	
	75 rājas ahaṃkār	74 acyut devlok	73 āraņ devlok	72 ānat & prāṇat devlok	71 devlok kşe- tra, bhavyā- bhavya jīv	70 sahasrār devlok	69 śukra devlok	68 abhīṣṭ siddhi sāgar	67 tāmas ahaṃkār	
56 vaimānik, vyantar, 5 jyotişī	57 saudharm devlok	58 avrat dos kṣetra	īśān devlok	60 asaṃyamī doș	devlok kşe- tra, 400.000 yoni	62 sanatkumār devlok	63 māhendra devlok	64 brahm & lāntak devlok	65 vivek	66 sāmānik, bhavanpati, antariks ka- pāṭ jyotiṣī
	55 12 bhāvnā, 10 vinay	<i>54</i> 5 dān	53 4 śikṣāvrat, 9 brahm- carya	52 pardroh	51 manuṣya kṣetra, 1.400.000 yoni, guṇ- sthān 14	50 5 mahāvrat, śubh kriyā, kevaljñān, śukla leśyā	49 3 guṇvrat, 5 dhyān	48 7 vyasan	47 12 tap, saṃyam, saṃyaktva	
	38 8 jin pūjā, jin bhakti	39 nīl leśyā	40 kāpot leśyā	41 teju leśyā	tiryañc kṣe- tra, 400.000 yoni, guṇ- sthān 13	43 śubh tiryañc bhavya pariṇām	dharm dhyān	45 kṛṣṇa lesyā	46 padma leśyā	
	37 āsrav 5 rodhan, saṃvar	36 200.000 yoni caurindrī	35 200.000 yoni teïndrī	34 200.000 yoni beïndrī	33 vikalendrī kṣetra, guṇ- sthān 10-11- 12	32 śubhāśubh sattā	31 subhāśubh udīrņā	30 śubhāśubh uday	29 dharm ārādhan icchā	
	20 upaśam yog	21 700.000 itar nigod	22 700.000 yoni pṛthvīkāy	23 700.000 yoni apkāy	24 5 sthāvar kṣeṭra, guṇ- sthān 7-8-9	25 700.000 yoni teükāy	26 700.000 yoni vāükāy	27 1.000.000 vanaspati- kāy	28 śubh karm	
	19 nāg- & vāyukumār	18 stanit- & diśākumār	17 5 mithyātva	16 udadhi- & dvīpkumār	15 10 nikāy kṣetra, guṇ- sthān 4-5-6	agni- & vidyut-kumār	13 parjīv spardh	12 suvarņ- & asurkumār	11 vyavahār rāśi	
	kām, 400.000 yoni nārkī	3 krodh	4 ajñān lobh	5 ajñān moh	6 15 paramā- dhāmī, guņ- sthān 1-2-3	7 jñān, miśra, śubh pari- ṇām	8 machar	9 ahaṃkār	10 ajñān māyā	
	1 700.000 yoni nitya nigod									

 $Fig.\ 54: Diagrammatic\ representation\ of\ critically\ read\ 84-square\ Jaina\ chart\ (type\ a1).$

				top sq. 6	ane of liberati	on 🛕				
					top sq. 5 Sarvārtha- siddhi heaven					
				top sq. 2 Vaijayanta heaven	top sq. 3 Aparājita heaven	top sq. 4 Jayanta heaven				
					top sq. 1 Vijaya heaven					
	76 deluding karma	77 Bhadra neck heaven	78 Subhadra neck heaven	79 Sujāta neck heaven	80 Sumanas & Priyadar- śana neck heavens	81 Sudarśana neck heaven	82 Amogha neck heaven	83 Supra- bandha neck heaven	84 Yaśodhara neck heaven	
	75 egoity dominated by activity	74 Acyuta heaven	73 Āraņa heaven	72 Ānata & Prāṇata heavens	heavens, capable and incapable souls		69 Śukra heaven	68 desired attainments for one sāgara year	67 egoity dominated by inertia	
56 vaimānika, vyantara, five jyotiṣī gods	57 Saudharma heaven	fault of not observing vows	59 Aisāna heaven	fault of not practicing restraint	heavens, 400.000 (gods), cap- able and in- capable souls	62 Sānat- kumāra heaven	63 Māhendra heaven	64 Brahmaloka & Lāntaka heavens	ting judg- ment	66 sāmānika, bhavanapati, jyotiṣī gods, roof of inter- mediate space
	twelve contemplations, ten proper conducts	54 five charities	four vows of spiritual discipline, nine chasti- ties	52 injuring another	51 1.400.000 humans, capable mendicant souls, purifi- cation st. 14	50 5 gr. vows, auspicious actions, white kar- mic stain, omniscience	49 five medita- tions, three subsidiary vows	48/ seven vices	twelve austerities, purified re- straint and right view	
	38 eightfold jina wor- ship, jina devotion	39 blue karmic stain	40 gray karmic stain	41 red karmic stain	42 400.000 plants & ani- mals, purifi- cation stage 13	auspicious transformation of capable plant & animal souls		45 black karmic stain	46 pink karmic stain	
	37 five hin- drances of karmic in- flux, stop- page	36 200.000 four-sensed beings	35 200.000 three-sensed beings	34 200.000 two-sensed beings	beings with deficient senses, purification stages 10-12	32 existence of auspicious and in- auspicious karma	31 stirring up of auspic- ious and in- auspicious karma	30 arising of auspicious and in- auspicious karma	desire for loyalty towards religion	
	activity of suppression	700.000 non- permanent basic life- forms	22 700.000 earth-bodies	23 700.000 water- bodies	five station- ary beings, purification stages 7-9	25 700.000 fire bodies	26 700.000 wind-bodies	27 1.000.000 individual plant-bodies	28 auspicious karma	
	19 vāyu- & nāgakumāra gods	18 diśā- & stanita- kumāra gods	five false views	16 dvīpa- & udadhi- kumāra gods	group of ten gods, purifi- cation stages 4-6	agnikum a ra	envious of another soul	12 asura- & suvarṇa- kumāra go d s	specifiable souls	
	desire, 400.000 forms of hell-beings	3 anger	4 greed resulting from ignorance	5 delusion resulting from ignorance	fifteen para- mādharmika gods, purifi- cation stages 1-3	mixed stage, auspicious	8 jealousy	9 pride	deceit resulting from ignorance	
	1 700.000 infinitely existing permanent basic lifeforms									

Fig.~55: Translation~of~critically~read~84-square~Jaina~chart~(type~a1).~Cf.~fig.~54~above.

84-Square Jaina Charts (Type a1)²⁶⁰

The critical reading of the 84-square Jaina type a1 charts reveals a high level of consistency in grid design, legends, and placement of snakes and ladders similar to that of the critically read Vaiṣṇava charts. The main difference lies in the approach taken to the legends. While the legends of the Vaisnava charts usually represent a single concept expressed by a single term, the legends of the Jaina charts often invoke multiple concepts, and often use multiple words to express them. This makes the Jaina charts more detailed and precise, but at the same time results in more textual variations as readings are lengthened or shortened, or even influenced by slightly different terminologies. The biggest challenge in deciding upon a single critical reading for each square has therefore been the decision of which terms to include, and which qualifiers to include for them. A case in point is the enumeration of the four conductdeluding passions in the bottom row (sqs. 3,4,9,10). Though the passion of pride is traditionally referred to as māna, a majority of charts refer to it as ahamkāra, and while all passions are qualified as anantānubandhī (resulting in endless worldly existence) by one or more charts, only greed and pride are qualified as such by a majority of the charts. For the sake of simplicity, I have only kept the key concepts in the diagrammatic representation of the critical reading (fig. 54), and left it for the interested reader to explore the full descriptions further in Appendix D2. Details and variations relevant to the analysis have, of course, been commented upon in the relevant sections below.

The critically read chart paints a general picture of Jaina doctrine without any strong indications of sectarian bias. Anil Kumar Jain - who is the only one I am aware of to have commented upon this aspect of the charts - considers them to be an exclusively Śvetāmbara phenomenon (1997: 214). His assertion would seem to be supported by the enumeration of the *kalpa* heavens in rows seven and eight, which follows that identified as Śvetāmbara by Kirfel (1920: 291-92), and by the enumeration of the *graiveyaka* heavens in row nine, which neither follows that identified as Śvetāmbara or Digambara by Kirfel (*ibid*. 294), but corresponds with that of a finely illustrated

²⁶⁰ Cf. figs. 54-55 on the previous pages.

Śvetāmbara manuscript from 18th-century Rajasthan (Caillat & Kumar 2004: 89).²⁶¹ However, the distinction made by the chart between souls inhabiting basic lifeforms (nigoda) permanently (nitya, sq. 1) and impermanently (itara, lit. other, sq. 2) belongs to the Digambara tradition (Jaini 1980: 225). The equivalent Svetāmbara terms are nonspecifiable (avyāvahārika) and specifiable (vyāvahārika), and - to complicate matters even further - the latter is also found on the chart in the reading vyavahār rāśi (group of specifiable souls, sq. 11). The reference to the plane of the five forms of stationary beings (pāñc sthāvar kṣetra, sq. 24) likewise indicates Digambara influence, as the Digambaras are alone in adding fire- and wind-bodies to the three earth-, water-, and plant-bodies considered stationary by the Śvetāmbaras (Schubring 1935: 143, fn. 5).²⁶² Perhaps the most likely explanation is that the charts originated within one of the communities, and then came to be accepted by the other, resulting in a mixed terminology more or less applicable to both communities. 263 As discussed in the comparative analysis at the end of the chapter, the 84-square Jaina type b charts, which are not included in the critical reading, appear to be more closely aligned with Śvetāmbara than Digambara tradition.

The majority of the concepts found on the critically read chart can be traced back to the foundational *Tattvārthādhigamasūtra* accepted as authoritative by Śvetāmbara and Digambara Jainas alike with only minor variations. Some concepts are also identified with Jaina tantric and yogic traditions, and the verses which often appear outside the main playing grid indicate similar influences. The most valuable contribution of the verses is the clues they provide to the interpretation of the chart. Though they do not always agree on how the chart should be interpreted, they demonstrate the manifold ways in which the chart was approached, allowing us to open up a wider space of interpretation than would otherwise have been possible. An unusually clear verse found on two charts (Ja84#26,36) may serve as an example. The verse is written in

²⁶¹ The only substantial variation between the chart and the manuscript is that they disagree on the sequence of the third and fourth *graiveyaka* heaven.

²⁶² It should be emphasized that the readings discussed here are the critical readings, and that several variant readings are also found (see Appendix D2). The variant readings, however, do not follow a clear pattern across the charts allowing us to distinguish between type *a1* charts with and without Digambara readings.

²⁶³ Today, modern charts can be found both within Śvetāmbara and Digambara communities.

Rajasthani Braj Bhāṣā, and as most other verses on the charts, it includes both variations and corruptions. A tentative reconstruction and translation read as follows:

tagyau nava kaṣāya ke nava sarpa chava hiṃsyā tyāga kī cha ṛāṁṛī grahe / nava tattva ke nava pagatyāṁ laho nigoda meṁ sāra raṣake nikase / eka setī leke chava tāī cāle aṇa vidha jñāna pacīsī ṣelīyai / aṅka pramāṇe anukrame koṭhā chai nigoda kā golāṁ ākāra jīva chai //

He who knows the true nature of reality (Skt. $tattvaj\tilde{n}a$) understands the nine snakes as the nine passions and the six ladders as the six abandonments of injury; he attains the nine footprints as the nine principles of reality. After having placed your pawn among the basic lifeforms (i.e. nigod, sq. 1), you should move out (of that square). You should move between one and six (squares). In this manner you should play $j\tilde{n}an\ pacc\bar{t}s\bar{t}$. The squares appear in sequence according to the numbers (inscribed in them). The souls are in the form of clusters of basic lifeforms.²⁶⁴

The implications of this and other verses are explored in the relevant sections of the analysis below.

²⁶⁴ Also see Appendix E2, verse #7.

					sphāţikmay, 4 ņ, śrī arhatpac					
					top sq. 5 sarvārth- siddhi vimān					
				top sq. 2 vaijayant anuttar vimān	top sq. 3 aparājit anuttar vimān	top sq. 4 jayant anuttar vimān				
					top sq. 1 vijay anuttar vimān					
	76 mohnī karm	77 bhadra graiveyak	78 subhadra graiveyak	79 sujāt graiveyak	80 sumanas & priyadarśan graiveyak	81 sudarśan graiveyak	82 amogh graiveyak	83 suprabandh graiveyak	84 yaśodhar graiveyak	
	75 rājas ahaṃkār	74 acyut devlok	73 āraņ devlok	72 ānat & prāṇat devlok	71 devlok kṣe- tra, bhavyā- bhavya jīv	70 sahasrār devlok	69 śukra devlok	68 abhīṣṭ siddhi sāgar	67 tāmas ahaṃkār	
56 vaimānik, vyantar, 5 jyotiṣī	57 saudharm devlok	58 avrat doş kşetra	59 īśān devlok	60 asaṃyamī doṣ	61 devlok kşe- tra, 400.000 yoni	62 sanatkumār devlok	63 māhendra devlok	64 brahm & lāntak devlok	65 vivek	66 sāmānik, bhavanpat antariks ka pāţ jyotiṣī
	55 12 bhāvnā, 10 vinay	<i>54</i> 5 dān	53 4 śikṣāvrat, 9 brahm- carya	52 pardroh	manuşya kşetra, 1.400.000 yoni, guņ- sthān 14	50 5 mahāvrat, śubh kriyā, kevaljñān, śukla leśyā	49 3 guṇvrat, 5 dhyān	48 7 vyasan	47 12 tap, saṃyam, saṃyaktva	
	38 8 jin pūjā, jin bhakti	39 nīl leśyā	40 kāpot leśyā	41 teju leśyā	tiryañc kṣe- tra, 400.000 yoni, guṇ- sthān 13	43 śubh tiryañc bhavya pariṇām	dharm dhyān	45 kṛṣṇa lesyā	46 padma leśyā	
	37 āsrav 5 rodhan, saṃvar	36 200.000 yoni caurindrī	35 200.000 yoni teïndrī	34 200.000 yoni beïndrī	kșetra, guṇ- sthān 10-11- 12	32 śubhāśubh sattā	31 subhāśubh udīrņā	30 śubhāśubh uday	29 dharm ārādhan icchā	
	20 upaśam yog	21 700.000 itar nigod	22 700.000 yoni pṛthvīkāy	23 700.000 yoni apkāy	24 5 sthāvar kṣeṭra, guṇ- sthān 7-8-9	25 700.000 yoni teükāy	26 700.000 yoni vāükāy	27 1.000.000 vanaspati- kāy	28 śubh karm	
	19 nāg- & vāyukumār	18 stanit- & diśākumār	17 5 mithyātva	16 udadhi- & dvīpkumār	15 10 nikāy kṣetra, guṇ- sthān 4-5-6	agni- & vidyut-kumār	13 parjīv spardh	12 suvarņ- & asurkumār	11 vyavahār rāśi	
	2 kām, 400.000 yoni nārkī	3 krodh	4 ajñān lobh	5 ajñān moh	6 15 paramā- dhāmī, guņ- sthān 1-2-3	7 jñān, miśra, śubh pari- ṇām	8 machar	9 ahaṃkār	10 ajñān māyā	
	700.000 yoni nitya nigod									

Fig. 56: Reference chart for Realms and Beings (chapter four) with relevant squares highlighted in yellow.

Cosmos

Realms and Beings²⁶⁵

The structure of the Jaina chart leaves little doubt that it was designed as a representation of the universe. While the Vaiṣṇava chart can only be identified as such by reading the legends, the Jaina chart includes additional squares at the top, sides, and bottom of main grid which help visualize the formal structure of the inhabited part ($lok\bar{a}k\bar{a}\acute{s}a$) of the ultimately uncreated and infinite universe ($alok\bar{a}k\bar{a}\acute{s}a$). The inhabited part is traditionally conceived of as a stylized human being standing with arms akimbo and legs apart. The upper world ($\bar{u}rdhvaloka$), corresponding to the head, arms, and torso, is shaped like a traditional Indian drum, wide in the middle and

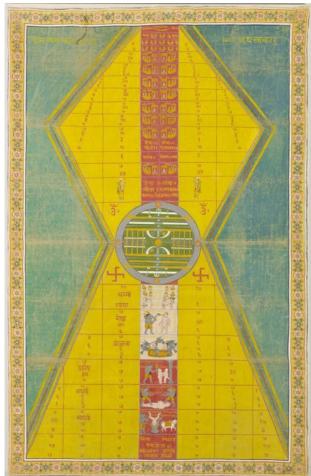


Fig. 57: The inhabited universe (lokākāśa) in Jainism. Rajasthan, 19th century.

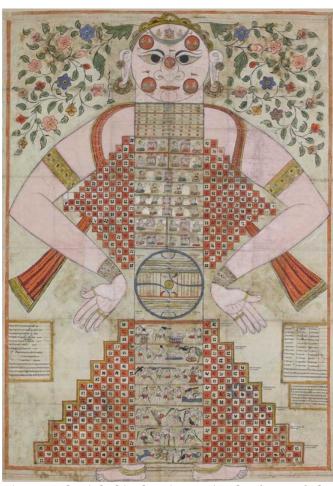


Fig. 58: The inhabited universe in the form of the cosmic man (lokapuruṣa). Rajasthan, 19th cent.

²⁶⁵ Cf. fig. 56 on the previous page.

narrow at the ends; the middle world (*madhyaloka*), corresponding to the waist, is shaped like a horizontally placed disc, though it is usually depicted vertically as if seen from above; and the lower world (*adholoka*), corresponding to the legs and feet, is shaped like the upper world, except that it has been cut in half, and thus left with a narrow top and a wide base (fig. 57). The stylized form of the universe later evolved into a fully anthropomorphic figure which became known as the cosmic man (*lokapuruṣa*) (fig. 58). Depictions of the cosmic man can be found in Jaina art from the 16th century onward (Dundas 2002: 90), and appear to have directly influenced the format of the Jaina chart. The main grid of the chart can be seen as an abstract representation of the stylized body, with the additional top squares indicating the head, the side squares the arms, and the bottom square the feet. As described in chapter three, several charts explicitly add figurative head, arms, and feet to the main grid, leaving little doubt as to how the design should be interpreted. On a more subtle level, the lines of the grid can be said to represent the Jaina view that the universe is made up of rows of atomic units (*pradeśa*) extending upward, downward, and

horizontally like threads in a piece of cloth (Balcerowicz 2011: 140-41).

Contrary to the Vaiṣṇava chart, which only loosely associates the rows with the realms inscribed in the central column squares, the Jaina chart explicitly associates the rows with different categories of realms or beings, and includes several readings related to those categories in the respective rows. It labels the central column squares as the planes (*kṣetra*) of the particular realms or beings with which the rows are associated, and sometimes include additional squares at the far end of the rows identifying them as karmic gateways (*dvāra*) to those same realms and beings (fig. 59).²⁶⁶ The categories of realms and beings

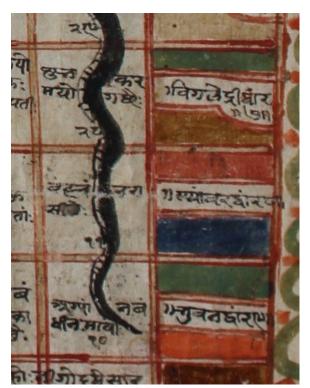


Fig. 59: 84-square Jaina chart (Ja84#26), detail. Rajasthan, 19th century.

²⁶⁶ The additional squares at the end of the rows, referred to as "row titles" in the critical reading (see Appendix D2), are not included on the diagrammatic representation of the critical reading since they

make it clear that the rows of the chart can be further identified with the three worlds of the universe. Rows one and two represent the lower world, rows three through six represent the middle world, and rows seven through nine represent the upper world. The five additional squares arranged in a cross-like formation above the grid represent the anuttara heavens which also belong to the upper world, while the square at the very top represents the *īṣatprāgbhāra*, or the crescent-shaped place of perfection, where the souls ($j\bar{i}va$) reside after attaining liberation from the cycle of rebirth (saṃsāra). The two side squares are inscribed with realms and beings from all three worlds of the universe, which might be explained by the association of the side squares with the arms of the cosmic man which extend all the way from the upper to the lower worlds. This, however, neither conforms to the conventional depiction of the cosmic man as standing with arms akimbo, nor with the traditional view that only singlesensed beings exist in the triangular spaces corresponding to the arms (Jaini 1979: 130).²⁶⁷ The identification of the bottom square with the category of permanent basic lifeforms (nitya nigod, sq. 1) also presents certain difficulties, albeit of a more philosophical nature, since the permanent basic life forms are part of the collective lifeforms in the universe, while at the same time embodying souls which have not yet entered into the cycle of rebirth. Padmanabh S. Jaini has suggested that the idea of souls existing outside the cycle of rebirth, whether in a state of pre-cyclical confinement or post-cyclical liberation, may indicate remnants of a more linear system of evolution from before the adoption of the cyclical system (Jaini 1980: 224-29). Whether this is true or not, the location of the permanent basic lifeforms below the grid and the liberated souls above the stylized head of the cosmic man do indeed seem to indicate an entrance into and an exit from the cycle of rebirth.

Beginning with the lower world, the first row from the bottom is associated with hell-beings ($n\bar{a}rk\bar{\iota}$) which constitute the first of the four categories of rebirth (gati). Hell-

are only found on a minority of the charts. The section on *Jaina Tantra and Yoga* below discusses the concept of karmic gateways further.

²⁶⁷ The inherent tension between the depiction of the cosmic man with arms akimbo and legs apart and the depiction of him in the *kāyotsarga* pose of meditation with arms hanging down and legs straight is further explored in the section on *Jaina Tantra and Yoga* below.

²⁶⁸ The term $n\bar{a}rk\bar{\iota}$ never occurs in the central column square of the row, and only in an additional square at the end of the row on a handful of charts. However, the association between the row and the rebirth category of hell-beings is implied by the reading $n\bar{a}rk\bar{\iota}$ in sq. 2 at the beginning of the row.

beings inhabit the seven realms of the lower world, and are said to be of 400.000 different kinds (cār lākh yoni nārkī, sq. 2). The square in the central column of the first row refers to the fifteen kinds of paramādharmika, or extremely unjust, gods (panar paramādhāmī, sq. 6) inhabiting the three uppermost realms of the lower world (Caillat & Kumar 2004: 68), while the remaining squares of the row are mostly devoted to negative types of karma increasing the chance of rebirth as a hell-being. The second row is associated with the group of ten (das nikāy, sq. 15) in the central column square and with the palace lords (bhavanpati, row title #2) in the additional square at the end of the row. Both terms refer to the same group of ten different kinds of gods residing in luxurious palaces in the jewel-colored hell (ratnaprabhā) in the uppermost realm of the lower world (Kirfel 1920: 262). The row is mainly devoted to enumerating the ten kinds of gods (sqs. 12,14,16,18,19), but also includes the group of specifiable souls (vyavahār rāśi, sq. 11), contrasting with the group of unspecifiable souls (avyāvahārika) identified on the chart as souls permanently inhabiting basic lifeforms (nitya nigod, sq. 1). Though we might have expected the group of specifiable souls in the first row of the grid directly above the souls permanently inhabiting basic lifeforms, specifiable souls exist throughout the inhabited universe and might therefore have been mentioned anywhere in the grid.

Moving up to the middle world, the third row is associated with the five kinds of stationary beings ($p\bar{a}\bar{n}c$ $sth\bar{a}var$, sq. 24) which refer to single-sensed beings incapable of moving at will. They include collective ($s\bar{a}dh\bar{a}ran$ a) plant-bodies, comprising the permanent basic lifeforms (nitya nigod, sq. 1) in the bottom square, and the non-permanent basic lifeforms (itar nigod, sq. 21), the earth-bodies ($prthv\bar{i}k\bar{a}y$, sq. 22), the water-bodies ($apk\bar{a}y$, sq. 23), the fire-bodies ($te\bar{u}k\bar{a}y$, sq. 25), the air-bodies ($v\bar{a}\bar{u}k\bar{a}y$, sq. 26), and the individual plant-bodies (pratyek $vanaspatik\bar{a}y$, sq. 27) in the present row. Except for the individual plant bodies, which are confined to the middle world, stationary beings can be found throughout the inhabited universe (Jaini 1979: 109-10). The fourth row is associated with beings with deficient sense organs ($vikalendr\bar{i}$, sq. 33) which include all beings with between one and four sense organs. Beings with two, three, and four sense organs comprise various forms of animals confined to the middle world, and are mentioned one after the other in sqs. 34-36. The fifth row is associated with the second rebirth category of plants and animals (tiryancc, sq. 42) which includes

all beings other than hell-beings, gods, and humans. Except for basic lifeforms and elemental bodies, which exist throughout the inhabited universe, the rebirth category only includes plant and animal beings in the middle world.²⁶⁹ The row does not offer any examples of such beings, but contains a reference to the auspicious transformation of plants and animals capable of liberation (*śubh tiryañc bhavya pariṇām*, sq. 43).²⁷⁰ The sixth row is associated with human beings (*manuṣya*, sq. 51) which constitute the third rebirth category. Human beings are exclusively found on two-and-a-half out of the altogether forty-five ring-shaped continents comprising the middle world, and only souls embodied as human beings within two-and-a-half regions of the central continent Jambūdvīpa are capable of attaining liberation upon the death of their body (Jaini 1979: 29). As was the case with the previous row, the remaining squares do not exemplify the rebirth category further, but should still be considered related to it as they list various Jaina vows and practices which only human beings are capable of undertaking (sqs. 47,49,50,53,54,55).

The three rows representative of the upper world are associated with the *vaimānika* gods who derive their name from the flying palaces (*vimāna*) they live in (fig. 60). Rows seven and eight enumerate the twelve *kalpa* heavens of traditional Śvetāmbara cosmography referred to as *devalokas*, or divine realms, on the chart. The two side squares (sqs. 56,66) at either end of the seventh row refer not only to the *vaimānika* gods, but also to the *jyotiṣka* (here: *jyotiṣī*),



Fig. 60: 84-square Jaina chart (Ja84#15), detail. Western India, 19th century.

or stellar, gods which inhabit the upper realms of the middle world, and the *bhavanapati* gods which inhabit the upper realms of the lower world. The ninth row is associated with the nine *graiveyaka*, or neck, heavens located around the neck of the cosmic man. Above the *graiveyaka* heavens, and indeed above the main grid, we find

²⁶⁹ Plant and animal beings in the upper and lower worlds are considered to be gods and hell-beings, respectively (Jaini 1979: 109, fn. 9).

²⁷⁰ Jaina cosmology distinguishes between souls which are capable (*bhavya*) and incapable (*abhavya*) of attaining liberation (Jaini 1979: 139-41).

the five *anuttara*, or highest, heavens located in the face of the cosmic man (top sqs. 1-5). Although the *anuttara* heavens also belong to the cycle of rebirth, it seems obvious that the 84 squares comprising the main grid, including the bottom and side squares, symbolically represent the 84 *lākh*, or 8.4 million, potential birth-situations (*yoni*) in the inhabited universe (Babb 2016: 123).²⁷¹ A possible explanation for the location of the *anuttara* heavens above the main grid is that those born into them are assured liberation after a limited number of rebirths, and thus for all practical purposes on their way out of the cycle (Tatia 1994: 110). Another and perhaps more likely explanation is that the cross-like organization of the heavens are meant as an abstract representation of the head of the cosmic man, further indicated by the addition of a sixth square representing the crescent-shaped *īṣatprāgbhāra*, commonly referred to by the charts as the plane of liberation (*mukti kṣetra*, top sq. 6), located at the top of his head. The importance of the 8.400.000 birth-situations for the overall symbolism of the chart can be seen from their enumeration across several squares:

```
700.000 permanent basic lifeforms (sāt lākh nitya nigod, sq. 1)
400.000 hell-beings (cār lākh nārki, sq. 2)
700.000 non-permanent basic life-forms (sāt lākh itar nigod, sq. 21)
700.000 earth-bodies (sāt lākh pṛthvīkāy, sq. 22)
700.000 water-bodies (sāt lākh apkāy, sq. 23)
700.000 fire-bodies (sāt lākh teükāy, sq. 25)
700.000 wind-bodies (sāt lākh vāükāy, sq. 26)
1.000.000 individual plant-bodies (das lākh pratyek vanaspatikāy, sq. 27)
200.000 two-sensed beings (be lākh beïndrī, sq. 34)
200.000 three-sensed beings (be lākh teïndrī, sq. 35)
200.000 four-sensed beings (be lākh tiryañc, sq. 36)
400.000 plants and animals (cār lākh tiryañc, sq. 42)
1.400.000 gods (cār lākh dev, sq. 61)
```

²⁷¹ Cf. Appendix E2, verse #1.

The list corresponds with the established system of enumerating the birth-situations in the universe (e.g. Tatia 1994: 53), although the permanent and impermanent basic lifeforms are sometimes grouped together under the common category of collective ($s\bar{a}dh\bar{a}rana$) plant-bodies.²⁷² An obvious reason for this is not only the problematic position of permanent basic lifeforms partly outside the cycle of rebirth as discussed above, but also the fact that they are held to be infinite in number. The stock of souls for which they serve as bodies is inexhaustible, and souls are only released into the cycle of rebirth at the same rate that other souls are liberated from it, thus keeping the total number of souls within the cycle constant (Jaini 1980: 226).²⁷³ Another distinction often made within the category of collective plant-bodies is that between subtle ($s\bar{u}ksma$) and gross ($b\bar{a}dara$) basic lifeforms. This is reflected on several charts which

either lump the two together in sq. 1 (e.g. Ja84#14) or use one (e.g. Ja84#9) or two (e.g. Ja84#20) additional squares in the bottom panel to invoke the two concepts. Finally, as indicated by the verse quoted at the outset of the analysis, the basic lifeforms tend to join together to form balls or clusters (*gola*) containing an infinite number of souls (Schubring 1935: 133-34). These are often represented on the charts by tiny dots or circles drawn in the relevant squares below the main grid (fig. 61).



Fig. 61: 84-square Jaina chart (Ja84#18), detail. Mandsaur, Madhya Pradesh, 19th century.

²⁷² See, for example, the *Jīv vicār*, a popular treatise on the living beings of the universe (*JV* 46). It should also be noted that several charts which do not refer to the basic lifeforms in sq. 1 as permanent still enumerate them as 700.000, thus implicitly upholding the distinction between permanent and non-permanent basic lifeforms.

²⁷³ Also see Schubring 1935 (pp. 133-34).

					sphāṭikmay, 4					
				namaḥ	ṇ, śrī arhatpac	lebhyo				
					top sq. 5 sarvārth- siddhi vimān					
				top sq. 2 vaijayant anuttar vimān	top sq. 3 aparājit anuttar vimān	top sq. 4 jayant anuttar vimān				
					top sq. 1 vijay anuttar vimān					
	76 mohnī karm	77 bhadra graiveyak	78 subhadra graiveyak	79 sujāt graiveyak	80 sumanas & priyadarśan graiveyak	81 sudaréan graiveyak	82 amogh graiveyak	83 suprabandh graiveyak	84 yaśodhar graiveyak	
	75 rājas ahaṃkār	74 acyut devlok	73 āraņ devlok	72 ānat & prāṇat devlok	71 devlok kșe- tra, bhavyā- bhavya jīv	70 sahasrār devlok	69 śukra devlok	68 abhīṣṭ siddhi sāgar	67 tāmas ahaṃkār	
56 vaimānik, vyantar, 5 jyotişī	57 saudharm devlok	58 avrat dos kșetra	īśān devlok	asaṃyamī doș	61 devlok kşe- tra, 400.000 yoni	62 sanatkumār devlok	63 māhendra devlok	64 brahm & lāntak devlok	65 vivek	66 sāmānik, bhavanpa antarikș k pāţ jyotiṣī
	55 12 bhāvnā, 10 vinay	<i>54</i> 5 dān	53 4 śikṣāvrat, 9 brahm- carya	52 pardroh	51 manuşya kşetra, 1.400.000 yoni, guņ- sthān 14	50 5 mahāvrat, śubh kriyā, kevaljñān, śukla leśyā	49 3 guṇvrat, 5 dhyān	48 7 vyasan	47 12 tap, saṃyam, saṃyaktva	
	38 8 jin pūjā, jin bhakti	39 nīl leśyā	40 kāpot leśyā	41 teju leśyā	42 tiryañc kṣe- tra, 400.000 yoni, guṇ- sthān 13	43 śubh tiryañc bhavya pariṇām	dharm dhyān	45 kṛṣṇa leśyā	46 padma leśyā	
	37 āsrav 5 rodhan, saṃvar	36 200.000 yoni caurindrī	teïndrī	34 200.000 yoni beïndrī	33 vikalendrī kṣetra, guṇ- sthān 10-11- 12	32 śubhāśubh sattā	31 subhāśubh udīrņā	30 śubhāśubh uday	29 dharm ārādhan icchā	
	20 upaśam yog	700.000 itar nigod	22 700.000 yoni pṛthvīkāy	23 700.000 yoni apkāy	24 5 sthāvar kṣe̞tra, guṇ- sthān 7-8-9	25 700.000 yori teükāy	26 700.000 yoni vāükāy	27 1.000.000 vanaspati- kāy	28 śubh karm	
	19 nāg- & vāyukumār	18 stanit- & diśākumār	17 5 mithyātva	16 udadhi- & dvīpkumār	15 10 nikāy kṣetra, guṇ- sthān 4-5-6	agni- & vidyut- kumār	13 parjīv spardh	12 suvarņ- & asurkumār	11 vyavahār rāśi	
	2 kām, 400.000 yoni nārkī	3 krodh	4 ajñān lobh	5 ajñān moh	6 15 paramā- dhāmī, guņ- sthān 1-2-3	7 jñān, miśra, śubh pari- ṇām	8 machar	9 ahaṃkār	10 digital ajñān māyā	
	1 700.000 yoni nitya nigod									

Fig. 62: Reference chart for Theory and Practice (chapter four) with relevant squares highlighted in yellow.

Karma

Theory and Practice²⁷⁴

As has already been demonstrated in the analysis of the Vaisnava chart, the idea of karma is one of the main driving forces behind the game. On the level of interpretation, it is karma which causes the dice to fall as they do, and it is karma which moves the pawns forward along the track, directing them toward the feet of the ladders or the mouths of the snakes. While the exposition of karma on the Vaiṣṇava chart is mostly implicit, and mostly a matter of simple cause and effect, the exposition of karma on the Jaina chart adds several technical terms peculiar to the Jaina theory of karma.275 The theory revolves around the interplay between the soul (jīva), which is considered to be immaterial, and karma, which is considered to be a form of matter (pudgala). The soul attracts karmic matter through activities (yoga) of body, speech, and mind, causing a sheath, known as the karmic body (karmaśarīra), to be formed around it. The karmic body functions as the vehicle of the soul when it transmigrates between bodies, and it is only when the soul has completely shed its karmic body and ceased all activity, both sinful and virtuous, that it becomes perfected (siddha) and ascends to its final resting place at the apex of the universe (siddhaśilā). Though conceptually simple, the intricacies of the theory are inordinately complex, and have been expounded at great length in the large body of scholastic works and commentaries devoted to the subject (Jaini 1980: 217). The game chart only reflects the technical vocabulary developed in these texts to a very limited degree, but enough to indicate that a high level of expertise would have been required in order to fully understand it. Though the concepts invoked are central to the theory, they are by no means exhaustive of it, and would only have been fully grasped by someone well versed in the theory as a whole.²⁷⁷

²⁷⁴ Cf. fig. 62 on the previous page.

²⁷⁵ The centrality of the theory of karma in Jaina doctrine can be seen from the fact that three of the ten chapters in the *Tattvārthādhigamasūtra* deal explicitly with various aspects of it, including the influx (chapter 6), bondage (chapter 8), and stoppage (chapter 9) of karma also referred to on the chart.

²⁷⁶ To be more precise, the liberated souls reside in the non-universe (*aloka*) one *yojana* above the abode (lit. rock) of the perfected ones (*siddhaśilā*) (Kirfel 1920: 301).

²⁷⁷ For detailed treatments of the Jaina theory of karma, see Glasenapp 1915, Schubring 1935 (pp. 112-31), and Tatia 1951 (pp. 220-60).

Karma is divided into the categories of destructive (ghātiyā) and non-destructive (aghātiyā) karmas, each of which is further divided into four main subcategories. The chart only refers to the first subcategory of destructive karmas, known as deluding karmas (mohnī karm, sq. 76), which is itself subdivided into insight-deluding (darśanamohanīya) and conduct-deluding (cāritramohanīya) karmas. Deluding karmas are arguably the most important type of karmas as they not only hinder the soul in achieving liberation, but prevent it from even entering upon the path to liberation (Jaini 1979: 117-18). The insight-deluding karmas cause the soul to hold erroneous views of reality, which in turn cause it to act in ways that are detrimental to its own liberation, thereby attracting conduct-deluding karmas which further strengthen the insight-deluding karmas in a self-perpetuating downward spiral (ibid. 118-19). The five erroneous views are represented in a single square (pāñc bhed mithyātva, sq. 17) containing a snake leading back down to the permanent basic lifeforms (nitya nigod, sq. 1). The four primary conduct-deluding passions ($kas\bar{a}ya$), consisting of the two aversions (dveṣa) anger (krodh, sq. 3) and pride (ahaṃkār,279 sq. 9) and the two attachments ($r\bar{a}ga$) deceit ($m\bar{a}y\bar{a}$, sq. 10) and greed (lobh, sq. 4), are found in the bottom row. The row also includes the negative qualities desire ($k\bar{a}m$, sq. 2), delusion (moh, sq. 5), and jealousy (machar, sq. 8) which are not counted among the four primary or nine secondary passions. The inclusion of these terms, as well as the unconventional grouping of anger with greed (sqs. 3-4) and pride with deceit (sqs. 9-10), may indicate influence from 72-square Vaisnava charts, as will be discussed at the end of the present chapter.

Moving beyond the mere enumeration of various types of karma, the fourth row introduces several technical terms related to karmic processes. Karmic influx and its stoppage (*āsrav* and *saṃvar*, sq. 37) are key concepts in the theory of karma which

²⁷⁸ While it is indeed possible for a soul to be reborn as a basic lifeform, the idea expressed by the chart that it might be reborn as a permanent basic lifeform runs counter to the understanding that such lifeforms are only inhabited by souls which have not yet been released into the cycle of rebirth. Whether this points to an inherent tension between game mechanics and theme, or a less rigid understanding of the concept of permanent basic lifeforms, cannot be decided without further evidence. Jeṭhābhāī's commentary explicitly states that sq. 1 represents 1.400.000 basic lifeforms (caud lākh nigod), thereby conflating permanent and non-permanent basic lifeforms, but this is only supported by a minority of the critically read charts (JBRR 3).

²⁷⁹ The traditional term $m\bar{a}na$ is only found on a small minority of the charts included in the critical reading.

cannot be covered in any detail here. Suffice it to say that karmic influx concerns the process by which clusters of karmic matter (pudgalaskandha) enter into and attach themselves to the soul (cf. Tatia 1994: 151-63), while stoppage of karmic influx concerns the process by which karmic matter is prevented from entering into the soul (cf. *ibid*. 213-47). At the other end of the same row we find the concepts of duration (sattā, lit. existence, sq. 32), premature fruition (udīrņā, lit. stirring up, sq. 31), and period of fruition (uday, lit. arising, sq. 30) which refer to the qualities of individual clusters of karmic matter. Duration denotes the entire period of time in which such clusters exist, from their initial attraction to their fruition and subsequent wearing off; premature fruition denotes the process by which they can be caused to mature and take effect before their natural period of gestation is over; and period of fruition denotes the period of time in which their effect is active (Tatia 1951: 257-59). The chart further qualifies the three terms as auspicious and inauspicious (śubhāśubh, sqs. 30-32), indicating that karma can either be meritorious (punya) or demeritorious ($p\bar{a}pa$). This is important, as all forms of karma, even those that direct the soul toward liberation, are considered a binding force, and must ultimately be shed in order for the soul to achieve liberation. The terms are organized from left to right in their logical order - duration, premature fruition, and period of fruition - and while this follows the direction of reading, it goes against the direction of play, indicating here as elsewhere the tension between game mechanics and theme.

Another technical concept related to karma is represented in six squares spread across the fifth and sixth rows in no particular order. Karmic stains ($le\acute{s}y\bar{a}$) indicate the karmically induced coloring of the soul associated with its current level of spiritual progress (Jaini 1979: 114). The karmic stains come in six different colors, ranging from the predominantly negative black ($kr\dot{s}na$ $le\acute{s}y\bar{a}$, sq. 45), blue ($n\bar{\imath}l$ $le\acute{s}y\bar{a}$, sq. 39), and grey ($k\bar{a}pot$ $le\acute{s}y\bar{a}$, sq. 40) to the predominantly positive red (teju $le\acute{s}y\bar{a}^{280}$, sq. 41), pink (padma $le\acute{s}y\bar{a}$, sq. 46), and white ($\acute{s}ukla$ $le\acute{s}y\bar{a}$, sq. 50). The negative and positive qualities of the coloring can be likened to auspicious and inauspicious karmic matter in that the soul only becomes free from any coloring when it ceases all activity immediately prior to liberation (Tatia 1951: 253). All 84-square Jaina type a2 charts except two (Ja84#14,30) illustrate the concept of $le\acute{s}y\bar{a}$ with a narrative scene from the

²⁸⁰ Listed as pīta (yellow) in *Tattvārthādhigamasūtra* (*TAAS* 4.2; cf. Tatia 1994: 97).

²⁸¹ Sometimes translated as yellow.



Fig. 63: 84-square Jaina chart (Ja84#24b), detail. Mumbai, VS 1959 (1902/03 CE).

popular parable of the rose-apple tree (*jambu*) (fig. 63). The parable tells the story of six men, each representing one of the six colors of the soul, who wanted to pick rose-apples from a tree, and argued about how best to go about it. The black-souled man cut at the base of the tree with an axe, while the blue-souled man cut at a big branch, and the gray-souled man tried to break off a smaller branch. The red-souled man picked

an entire cluster of fruit off a branch, while the pink-souled man only picked the fruit they needed, and the white-souled man remained on the ground picking up whatever fruit had already fallen off the branches by itself (cf. Brown 1941: 48). The scene is accompanied by another scene from the equally popular story of Madhubindu (fig. 64). It shows Madhubindu (lit. honey-drop) hanging from the branch of a banyan tree and drinking drops of honey without noticing the many dangers surrounding him. In fact, he does not even notice the demigod (*vidyādhara*) who has descended from the heavens

to rescue him. In a few moments he will fall to his death as a symbol of the tarnished soul, forgetful of its misery and dismissive of its salvation, all for the transient pleasure of tasting yet another drop of honey (Vijaya 1948: 150-2). The inclusion of the second narrative scene, which is of a much more general nature than the first, and not specifically related to any of the readings on the chart, may have been occasioned by the motif of the banyan tree which serves as a nice contrast



Fig. 64: 84-square Jaina chart (Ja84#24b), detail. Mumbai, VS 1959 (1902/03 CE).

to the rose-apple tree. The narrative scenes are also found one above the other on an 18th-century painting from Rajasthan in the Albert Hall Museum in Jaipur.²⁸²

Finally, the concept of modification (parināma), though not strictly related to karma, needs to be mentioned. Everything that exists is said to be comprised of substances (dravya), and substances are said to possess qualities (guṇa) which constantly acquire new modes (paryāya) through the process of modification. Despite being immaterial, the soul is counted among the substances by virtue of the qualities it possesses (Jaini 1979: 90-91). It therefore seems reasonable to suggest that the two references to modifications on the chart are indeed references to the modification, or perhaps rather transformation, of the soul. The first reference reads subh parinām (sq. 7), or auspicious transformation. The square has a ladder leading up from it, and though it would be tempting to see the ladder - and, indeed, all snakes and ladders - as symbolic of the transformation of the soul, the second reference occurs in a square without any snakes or ladders connected to it. It reads *śubh tiryañc bhavya pariṇām* (sq. 43), or auspicious transformation of plant and animal souls capable of liberation. References also occur in a few variant readings in other squares, but only in one case in a square with a snake or a ladder connected to it. 283 It therefore seems safe to conclude that the concept should be considered in isolation from the snakes and ladders as yet another example of a technical term which might or might not have been understood by those who played the game.

The dry repetition of technical terms related to karmic and other processes lacks the dynamic cause-and-effect approach of the Vaiṣṇava chart, and may point to an increased focus on didacticism. The Jaina chart does, however, also incorporate the concept of karma into the play experience in ways which at times go even further than the Vaiṣṇava chart. As we have already seen, the 84 squares of the chart represent the 8.400.000 birth-situations in the universe, and the snakes and ladders expand on this analogy by forming karmic links between squares similar to those found on the Vaiṣṇava chart. Several snakes and ladders even terminate in squares representing specific heavens or groups of beings, lending an even stronger sense of transmigration

²⁸² Acc. no. 8545.

²⁸³ See sq. 45 in the critical reading in Appendix D2.

and rebirth to the chart.²⁸⁴ The symbolic interpretation of snakes as passions is demonstrated by the verse quoted at the beginning of the analysis, though it is unclear whether this interpretation should be considered general in nature, or taken as a specific reference to doctrine.²⁸⁵ Other verses associate the snakes more generally with negative karma,²⁸⁶ and the most frequent verse of all implies that they should be understood as energy channels $(n\bar{a}d\bar{i})$.²⁸⁷ Obviously, as in the case of the Vaiṣṇava chart, multiple levels of interpretation are in play at once, and it is important that we do not consider them to be mutually exclusive. The same is true of the ladders which not only

invoke of karma concepts and transmigration, but also appear to symbolize the lines (śreni) by which the soul is said to travel from one body to another. This is indicated by the imagery of lines rather than ladders on several Jaina charts, and by the reading *śreni* sometimes found in their squares of origin.²⁸⁸ It also provides a possible explanation for the curious feature that three ladders - originating in sqs. 7, 44, and 50 - appear in sequence without indicating whether a player who moves up one of them is allowed to continue up the next one as well (fig. 65). While a rule discussed in chapter five

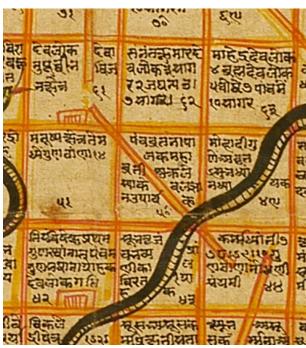


Fig. 65: 84-square Jaina chart (Ja84#1), detail. Gujarat, 19th century.

²⁸⁴ Examples include the fault of not observing one's vows (*avrat doṣ kṣetra*, sq. 58) which leads to the 700.000 non-permanent basic lifeforms (*sāt lākh itar nigod*, sq. 21), and the twelve contemplations and ten proper conducts (*bārah bhāvnā das vinay*, sq. 55) which leads to the fourth and fifth *graiveyaka* heavens (*sumanas graiveyak 4 priyadarśan graiveyak 5*, sq. 80).

²⁸⁵ Since there are nine snakes on the chart, and only four primary passions (*kaṣāya*) in the karmic system, any reference to doctrine would probably have to be to the nine secondary passions (*no-kaṣāya*) (Jaini 1979: 131).

²⁸⁶ See Appendix E2, verses #9-11.

²⁸⁷ See Appendix E2, verse #1a. The interpretation of snakes as energy channels recalls the same interpretation sometimes found on 72-square Vaiṣṇava charts (see *The Subtle Body* above), and will be discussed in detail later (see *Jaina Tantra and Yoga* below).

²⁸⁸ The reading *śreṇi* occurs a total of nine times across all charts included in the critical reading, and always in squares at the foot of a line or a ladder (sqs. 44,47,50,65). The reading is dominant at the feet of the ladders in sq. 7 on 84-square Jaina type *b* charts and in sq. 50 on type *a2* charts.

addresses this particular situation, several charts combine the three ladders into a single line or ladder with two turns (in sqs. 44 and 50), closely resembling the path of a transmigrating soul making two of the maximum three turns allowed between bodies (fig. 66). The only problem with this explanation would be that souls traveling to the place of liberation, as in the present case, always travel in a single straight line (Tatia 1994: 47-50). This, however, seems to be a minor point of objection, though it might have prompted artists to separate the continuous line into three separate parts as evidenced by the majority of charts.



Fig. 66: 84-square Jaina chart (Ja84#53). Western India, 19th century.

					sphāṭikmay, 4 ṇ, śrī arhatpac					
				namaḥ	top sq. 5 sarvārth- siddhi vimān					
				top sq. 2 vaijayant anuttar vimān	top sq. 3 aparājit anuttar vimān	top sq. 4 jayant anuttar vimān				
					top sq. 1 vijay anuttar vimān					
	76 mohnī karm	77 bhadra graiveyak	78 subhadra graiveyak	79 sujāt graiveyak	80 sumanas & priyadarśan graiveyak	81 sudaréan graiveyak	82 amogh graiveyak	83 suprabandh graiveyak	84 yaśodhar graiveyak	
	75 rājas ahaṃkār	74 acyut devlok	73 āraņ devlok	72 ānat & prāṇat devlok	71 devlok kṣe- tra, bhavyā- bhavya jīv	70 sahasrār devlok	69 śukra devlok	68 abhīṣṭ siddhi sāgar	67 tāmas ahaṃkār	
56 vaimānik, vyantar, 5 jyotişī	57 saudharm devlok	58 avrat dos kṣetra	īśān devlok	60 asaṃyamī doș	61 devlok kşe- tra, 400.000 yoni	62 sanatkumār devlok	63 māhendra devlok	64 brahm & lāntak devlok	65 vivek	66 sāmānik, bhavanpat antarikş ka pāţ jyotişī
	55 12 bhāvnā, 10 vinay	<i>54</i> 5 dān	53 4 śikṣāvrat, 9 brahm- carya	52 pardroh	manuşya kşetra, 1.400.000 yoni, guņ- sthān 14	50 5 mahāvrat, śubh kriyā, kevaljñān, śukla leśyā	49 3 guṇvrat, 5 dhyān	48 7 vyasan	47 12 tap, saṃyam, saṃyaktva	
	38 8 jin pūjā, jin bhakti	39 nīl leśyā	40 kāpot leśyā	41 teju leśyā	tiryañc kṣe- tra, 400.000 yoni, guṇ- sthān 13	43 śubh tiryañc bhavya pariṇām	dharm dhyān	45 kṛṣṇa lesyā	46 padma leśyā	
	37 āsrav 5 rodhan, saṃvar	36 200.000 yoni caurindrī	35 200.000 yoni teïndrī	34 200.000 yoni beïndrī	33 vikalendrī kṣetra, guṇ- sthān 10-11- 12	32 śubhāśubh sattā	31 subhāśubh udīrņā	30 śubhāśubh uday	29 dharm ārādhan icchā	
	20 upaśam yog	21 700.000 itar nigod	22 700.000 yoni pṛthvīkāy	23 700.000 yoni apkāy	24 5 sthāvar kṣetra, guṇ- sthān 7-8-9	25 700.000 yoni teükāy	26 700.000 yoni vāükāy	27 1.000.000 vanaspati- kāy	28 śubh karm	
	19 nāg- & vāyukumār	18 stanit- & diśākumār	17 5 mithyātva	16 udadhi- & dvīpkumār	15 10 nikāy kṣetra, guṇ- sthān 4-5-6	14 agni- & vidyut- kumār	13 parjīv spardh	12 suvarņ- & asurkumār	11 vyavahār rāśi	
	2 kām, 400.000 yoni nārkī	3 krodh	4 ajñān lobh	5 ajñān moh	6 15 paramā- dhāmī, guṇ- sthān 1-2-3	7 jñān, miśra, śubh pari- ṇām	8 machar	9 ahaṃkār	10 digital ajñān māyā	
	700.000 yoni nitya nigod									

Fig. 67: Reference chart for Vows and Stages (chapter four) with relevant squares highlighted in yellow.

Religious Practice

Vows and Stages²⁸⁹

As described above, the sixth row of the chart is associated with the rebirth category of human beings (cf. sq. 51), and includes several squares listing vows and practices adhered to by the followers of Jainism. Most important among them are the five great vows (pāñc mahāvrat, sq. 50) of non-injury (ahimsā), truthfulness (satya), non-stealing (asteya), chastity (brahmacarya), and non-possession (aparigraha). The vows are followed by laypeople and mendicants alike, but while laypeople practice them in a limited sense as small vows (anuvrata), only mendicants practice them as the great vows referred to here. The context, however, makes it clear that the vows of laypeople are also implied in the reading, since two other squares in the same row invoke the three subsidiary vows (tīn guṇvrat, sq. 49) and the four vows of spiritual discipline (cār śikṣāvrat, sq. 53) which, together with the five small vows, complete the series of twelve lay vows (Jaini 1979: 170). One of the four vows of spiritual discipline is the vow of charity (dānavrata) which is subdivided into five kinds of charity also invoked by the chart (pāñc prakār dān, sq. 54). In addition to the five great vows, two important practices engaged in by mendicants to stop the influx of karma are also referred to. One is the twelve contemplations of various aspects of life and the universe (bārah $bh\bar{a}vn\bar{a}$, ²⁹⁰ sq. 55), while the other is the twelve austerities divided into six internal and six external austerities (bārah bhed tap, sq. 47). The three squares associated with mendicant vows (sq. 50) and practices (sqs. 47,55) each have a ladder leading up from them, amounting to half the total number of ladders on the chart. Furthermore, the three ladders reach higher than any other ladders on the chart, and include the ladder leading directly from sq. 50 to the place of liberation (moks ksetra, top sq. 6) identified as the winning square. This not only serves to highlight the great importance attached

²⁸⁹ Cf. fig. 67 on the previous page.

²⁹⁰ The twelve *bhāvanā*s are also referred to as *anuprekṣā*s (cf. Tatia 1951: 290, fn. 2).

²⁹¹ It is unclear to me what the ten *vinayas* (*das vinay*, sq. 55), mentioned together with the twelve contemplations, refer to. The term *vinaya* usually refers to the venerations which constitute one of the six internal austerities, but the venerations are only four in number, and it is difficult to see why they should have been placed in sq. 55 rather than in sq. 47 together with the six internal austerities themselves. Perhaps the most likely explanation is that *vinaya* should be understood in the sense of proper conduct, with reference to the ten forms of righteousness (*dharma*) listed in *TAAS* 9.6 immediately prior to the twelve contemplations listed in *TAAS* 9.7.

to human birth as a prerequisite for liberation, but also indicates the very real chance of achieving it if one takes up the path of the mendicant.

In addition to invoking the five great vows and containing the ladder leading up to the place of liberation, sq. 50 also invokes the concepts of auspicious action (śubh kriyā),²⁹² omniscience (kevaljñān), and white karmic stain (śukla leśyā). The actions (kriyā), referred to as "urges" by Tatia, are enumerated as twenty-five, only two of which can be identified as auspicious (i.e. those that cause the ascetic to abstain, and those that lead to an enlightened world-view) (Tatia 1994: 153). Other actions in the form of religious practices are mentioned in the row below where sq. 38 combines the eightfold worship of the spiritual teachers (jin pūjā āṭh prakār) and the devotion toward them (jin bhakti). The reference to the worship of spiritual teachers would seem to preclude associations with the Śvetāmbara Sthānakvāsī and Terāpanthī sects, both of which are opposed to image worship, and it is therefore possible that the minority of charts which omit that particular reading are related to one of those sects. The second reading, devotion toward the spiritual teachers, is interesting because it invokes the concept of bhakti central to the Vaiṣṇava chart, and might therefore be considered a borrowing. This will be explored in more detail at the end of the chapter, but it should be noted that bhakti does indeed figure as a vibrant concept in Jainism. This has been made especially clear by John E. Cort who demonstrates that it forms an integral part of the religion, and cannot be dismissed as a mere imitation of Hindu bhakti traditions (e.g. Cort 2002, 2016).

The concept of omniscience points in a completely different direction than the concept of auspicious actions. Omniscience refers to the state entered into by mendicants on the 13th and 14th stages of purification mentioned in the adjacent sqs. 42 and 51. The stages of purification (<code>guṇasthāna</code>) are often visualized as a ladder with fourteen rungs representing levels of spiritual advancement from false view (<code>mithyādṛṣṭi</code>) at the bottom to omniscience without action (<code>ayogakevalin</code>) at the top. Jaina texts describe the different stages and the complex procedures that govern the movement between them in great detail, and one might be forgiven for suggesting that they constitute an

²⁹² An alternative understanding of *śubh kriyā* would be as the auspicious rites used to mark special occasions in the life of laypeople (Sangave 1959: 258), but this does not fit the context of the other readings in the square.

interpreted formal system of their own.²⁹³ This is, indeed, what seems to have been on the mind of K. V. Mardia when he designed a game about the stages of purification based on gyān caupar for a book on the scientific foundations of Jainism (1990: 107-8). Mardia's game consists of 16 squares organized into a 4 x 4 grid, and includes "lower life" (sq. 1), "higher life" (sq. 2), and the fourteen stages of purification (sqs. 3-16) (fig. 68). The snakes and ladders represent the possibilities of promotion sudden and demotion inherent in the system, and while the imagery of snakes is not traditionally

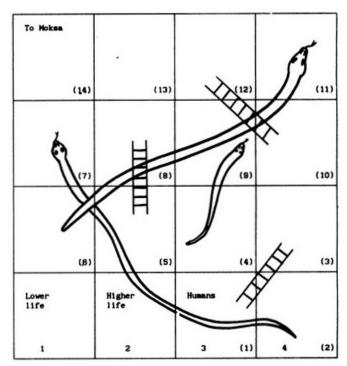


Fig. 68: Untitled game with snakes and ladders. Reproduced from Mardia 1990 (p. 108).

used to represent a soul falling from a higher to a lower stage of purification, the imagery of ladders (*śreṇi*) is in fact used to represent the twin paths of suppression (*upaśama*) and destruction (*kṣaya*) of karma (Tatia 1994: 283-84).²⁹⁴ The word *śreṇi* is identical with the word used to describe the lines of transmigration discussed in the previous section, indicating a shared vocabulary between the processes of transmigration and spiritual advancement. The reference to the stages of purification therefore adds a further layer of interpretation to the chart, allowing players to engage with it on multiple levels.

The enumeration of the fourteen stages of purification occurs in the first six rows of the central column on the critically read chart, together with the different categories of rebirth, thereby adding a second hierarchical system to the rows in question.²⁹⁵ Stages

²⁹³ For a detailed overview of the *gunasthānas*, see Tatia 1994 (pp. 279-84).

²⁹⁴ The ladders of suppression and destruction are mentioned in sqs. 7 and 71, respectively, on the 84-square Jaina type *b* charts, though an actual line or ladder only leads up from sq. 7. A reference to the activity of suppressing karma is found in sq. 21 (*upaśam yog*) on the critically read chart.

²⁹⁵ The stages of purification play a more prominent role on the 84-square Jaina type b charts where they appear as the main readings in several central column squares, and also have a significant presence in squares outside the central column.

one through three appear in sq. 6, stages four through six in sq. 15, stages seven through nine in sq. 24, stages ten through twelve in sq. 33, stage thirteen in sq. 42, and stage fourteen in sq. 51. The fourth stage, known as right view (samyagdrsti), marks the beginning of deeper spiritual understanding, and only appears in the second row after the player has moved past the deluding karmas of the first row. Similarly, the fourteenth and final stage, which marks the state of the soul immediately prior to liberation, appears in the sixth row associated with human rebirth necessary for liberation. Though no ladders lead up from any of the squares enumerating the stages, another game mechanical system of progress is found in the central column of the main grid. This is expressed by the often abstracted footprints (pādukā) connecting the squares vertically, and allowing players to move their pawn one square directly upward on a roll of "1." The verse quoted at the beginning of the analysis identifies the footprints with the nine principles (tattva), but considering their game mechanical function and their position in the central column a more obvious suggestion would be that they represent the stages of purification, even though they number nine rather than fourteen.²⁹⁶ A further possibility, indicated by the reference to the game as *caupar* setrunj, or the caupar of Shatrunjaya, is that they represent the steps one has to ascend at the eponymous pilgrimage site.²⁹⁷

The fourth and final concept invoked in sq. 50 is the white karmic stain which is only attained by those who have entered into the 13th and 14th stages of purification and become omniscient (Jain 1992: 53-54). The reading is widely attested and its legitimacy cannot be doubted, but a few charts (Ja84#3b,5,22,53) replace it with white or pure meditation (śukla dhyān). Pure meditation is the highest of the four forms of meditation traditionally identified in Jainism, the others being anguished (ārta), wrathful (raudra), and virtuous (dharma) meditation (Jaini 1979: 252). 298 Anguished

²⁹⁶ The nine principles include sentient entities (*jīva*), non-sentient entities (*ajīva*), karmic influx (*āsrava*), demeritorious karma (*pāpa*), meritorious karma (*puṇya*), karmic bondage (*bandha*), stoppage of karmic influx (*saṃvara*), wearing off of karma (*nirjarā*), and liberation (*mokṣa*) (Jaini 1979: 151).

²⁹⁷ See the frequently occurring verse #1a in Appendix E2. The implications of the reference to Shatrunjaya will be further explored in the section *Jaina Tantra and Yoga* below.

²⁹⁸ It is unclear to me why the majority of charts number the meditations as five in sq. 49 ($p\bar{a}\bar{n}c$ $dhy\bar{a}n$). The only fivefold enumeration related to meditation known to me is that of the five contemplations ($dh\bar{a}ran\bar{a}$) which constitute the first of four alternative meditations focused on objects (pinda), words (pada), forms ($r\bar{u}pa$), and that which lies beyond forms ($r\bar{u}pat\bar{t}ta$) (Sogani 2016: 168-69).

and wrathful meditation do not appear on the chart, but virtuous meditation ($dharm\ dhy\bar{a}n$, sq. 44) appears in a square with a ladder leading up to sq. 50 where some charts read pure meditation. This makes good sense since religious meditation can only take the practitioner as far as the 12th stage of purification, while pure meditation can take him to the 13th and 14th stages (Tatia 1994: 239-40), the latter of which is represented in sq. 51 next to sq. 50. Though the inclusion of pure meditation would seem to be an obvious choice from a purely analytic perspective, it may not have appeared that way to the artists who were trying to accommodate several partly overlapping systems of spiritual progress in the very limited space of just a few squares.

Jaina Tantra and Yoga

Despite the many idiosyncracies of Jaina doctrine, such as the uncreated nature of the universe and the material conception of karma, it did not develop in isolation from the multitude of other religious world-views with which it came into contact. The incorporation of religious terminology and practices from non-Jaina systems is evidenced throughout the literature, and played a key role in sustaining the community and attracting new followers (Qvarnström 1998). A case in point is the fourfold system of meditation (dhyāna) which Paul Dundas argues may have been developed in response to the omnipresence of similar systems in other South Asian religions (Dundas 2002: 166-9). Considering the previously discussed vogic and tantric influences on the Vaiṣṇava chart, it would therefore make sense to look for similar influences on the Jaina chart. We have already seen that the chart is modeled after the cosmic man (lokapuruṣa), but if we consider the charts which develop the model into a figurative illustration, we notice that in all cases the cosmic man is depicted with his arms hanging down rather than held akimbo as we should expect.²⁹⁹ The resulting pose mirrors that of the $k\bar{a}yotsarga$ (abandonment of the body) pose of meditation which forms one of six obligatory daily actions (āvaśyaka) prescribed for mendicants.³⁰⁰ While it cannot be ruled out that the arms were drawn as hanging down due to the spatial constraints of the charts, the lack of any examples to the contrary would seem to suggest otherwise.

The depiction of the cosmic man in the $k\bar{a}yotsarga$ pose adds at least two new possible layers of interpretation to the chart. First, since the twenty-four spiritual teachers are always shown in this position when depicted as standing, the chart takes on their image, and turns into a possible object of worship (cf. $jin\ p\bar{u}j\bar{a}$, sq. 38) rather than a mere representation of doctrine.³⁰¹ The frequent decoration of the figure on the chart with a crown and various ornaments is reflected in paintings of the cosmic man, but

²⁹⁹ Depictions of the cosmic man with his arms hanging down are attested in Jaina paintings, but they are far less frequent than depictions of him with his arms akimbo. An example from within the Digambara tradition can be seen in Pal 1994 (no. 103b, p. 232).

³⁰⁰ The other obligatory actions include upholding equanimity (*sāmāyika*), praising the twenty-four spiritual teachers (*caturviṃśatistava*), venerating the mendicant teachers (*vandana*), repenting (*pratikramaṇa*), and renouncing (*pratyākhyāna*) (Jaini 1979: 189-90).

³⁰¹ This would run counter to the assertion by Talwar and Krishna that Jaina charts were not considered objects of worship (1979: 84).

also in the image-worshiping ($m\bar{u}rtip\bar{u}jaka$) Jaina traditions which cut across sectarian lines between Śvetāmbaras and Digambaras (Cort 2010: 170-71). Secondly, the multiple identities of the figure as cosmic man, spiritual teacher, and meditating ascetic allow us to adopt a microcosmic perspective on the Jaina chart similar to that adopted on the Vaiṣṇava chart. Though the presence of several readings directly or indirectly related to the subtle body makes the microcosmic aspect more obvious with regard to the Vaiṣṇava chart, a close reading of the Jaina chart reveals that it may have been influenced by similar ideas. This is further highlighted by the fact that the image of the cosmic man in the $k\bar{a}yotsarga$ pose is indeed used as a standard representation of the subtle body in tantric paintings (Khanna 2005: 10-11). Though the study of tantric and yogic traditions within Jainism is still in its infancy, several recent contributions have shown that the influence of such traditions is much greater than previously recognized. The Jaina chart, despite its obvious focus on traditional Jaina doctrine, adds further evidence to this effect.

The clearest indication of the tantric and yogic influences on the Jaina chart does not come from the visual design or the legends, but from the verses added outside the main playing grid. One verse in particular stands out because of the references it makes, and because it features on nearly half of all Jaina charts (see Appendix E2, verse #1a). The frequent occurrence of the verse, and the fact that it usually appears in the bottom panel to the right of sq. 1, suggest that the grid was designed to incorporate this and other verses within it. The verse is written in Braj Bhāṣā, and shows several variations and corruptions across the charts on which it appears, indicating that the artists were not always sure how to understand it, and in some cases ended up completely garbling it (e.g. Ja84#38). One reason for this might have been the unconventional content of the verse which brushes up against a more traditional understanding of Jainism. A tentative reconstruction and translation of the verse read as follows:

lākha corāsīya bhrama mahā nava nārī patana yatana sem tājī copaṭa setruñja kī kahā rāmata eha anāmata brahma kī bājī bājī rame tasa krodha same bhava mām na bhame dila hota hai rājī pāpa ghaṭāraṇa moha vidāraṇa jñāna vadhāraṇa jñāna kī bājī

³⁰² See, for example, Cort 1997, Dundas 1998, Qvarnström 2000, Gough 2012, and Chapple 2016.

With great effort, one is freed from falling down the nine great energy channels and roaming the eighty-four $l\bar{a}kh$ (birth-situations). What is the game of *caupar setruñj* (i.e. the *caupar* of Shatrunjaya)? It is the game of the nameless Brahman.³⁰³ If one plays this game, one extinguishes one's anger and does not roam around existence; one is joyful at heart. The game of knowledge reduces sin, tears apart delusion, and increases knowledge.³⁰⁴

The first thing we notice about the verse is that it associates the 84 *lākh* birth-situations (caurāsī) with roaming around, and the nine energy channels ($n\bar{a}d\bar{l}$) with falling down, clearly indicating that the number of birth-situations and energy channels refer to the 84 squares and nine snakes of the chart. Little is known about the theory of energy channels in the context of Jainism, and Hemacandra's Yogaśāstra (12th cent.), which remains a key text in understanding especially tantric influences on medieval Jainism (Qvarnström 2002: 7), only refers to the three main energy channels Idā, Pingalā, and Suṣumnā, and only in the context of observing the movement of breath for purposes of divination (*ibid*. 111-9).³⁰⁵ However, a reference to the ten energy channels (nāḍīdaśaka) of the subtle body (ātivāhika) can be found in a tantric ritual manual, known as Nirvāṇakalikā, written by the Śvetāmbara author Pādliptasūri in the 11th or 12th century (Sanderson 2015: 10-11). The manual is a thinly disguised adaptation of the Śaiva manual *Siddhāntasārapaddhati* written by Mahārājādhirāja Bhojadeva in the first half of the 11th century (ibid. 3). Sanderson has discussed the widespread influence of Saivite tantric traditions on South Asian religions in a separate work (Sanderson 2009), and David Gordon White has written specifically about the coexistence of Saivite Nath and Jaina traditions at the holy sites of Girnar in Gujarat and Mount Abu in Rajasthan (White 1996: 114-19, 331-34). This is especially interesting in light of the above reference to *caupar setruñi*, or the *caupar* of Shatruniaya, a popular

³⁰³ I am thankful to Siddharth Y. Wakankar for confirming my translation of anāmata as "nameless." The dictionaries generally explain it as a corruption by metathesis from Arabic amānat (pledge, deposit) which does not make sense in the present context. Some charts read bhram instead of brahm, indicating a game of roaming around the cycle of rebirth rather than a game of Brahman. This should probably be attributed to the hesitancy of individual artists in invoking the concept of Brahman on a Jaina chart.

³⁰⁴ Also see Appendix E2, verse #1a.

³⁰⁵ A recent anthology on Jaina yoga does not refer to energy channels outside the context of the *Yogaśāstra* (Chapple 2016), and Sāgarmal Jain's overview of yogic and tantric influences on Jainism notes a similar lack of references to concepts such as *kuṇḍalinī* and *cakras* (Jain, S. 1997: 305-6, 311-12).

Jaina pilgrimage site in Gujarat. Though White does not mention Shatrunjaya as a place of co-existence between Nāth and Jaina traditions, the invocation of the nameless Brahman in the same line clearly suggests Nāth influence on the verse. While the idea of Brahman as a supreme being does not find any place in the atheistic and uncreated universe of the Jainas, the Nāths are known to refer to supreme reality, or Brahman, as the nameless one (anāmā) (Mallik 1954: 35). They also make frequent mention of the nine Nāths and the 84 siddhas, or perfected beings, which might be seen as a further justification for the inclusion of nine snakes and 84 squares (cf. Dasgupta 1976: 204-10).

Returning to the question of energy channels, we find that the 13th-century Gorak \$a \$a \$a t attributed to Gorakhnāth, the alleged founder of the Nāth tradition, mentions the ten main energy channels singled out from the altogether 72.000 energy channels (G \$ 16-19). This concept was to become a fixture of both Nāth and Haṭhayogic traditions, and though its impact on Jaina traditions remains to be studied, it is worth noting that a form of Haṭhayoga was adopted by the \$\frac{1}{2}\$ vetāmbara Terāpanthīs in 18th-century Rajasthan (Mallinson & Singleton 2017: xxi). The centrality of the concept of energy channels among the Nāths can be seen from the fact that the nine foundational Nāths were sometimes identified with the nine bodily apertures $(dv\bar{a}ra)$ connected to nine of the ten main energy channels (White 1996: 91). As previously noted, the Jaina charts sometimes include an additional square at the far end of each row, identifying the rows as $dv\bar{a}ras$, or karmic gateways, to the realms and beings with which they are associated. However, seen from a tantric or yogic perspective, the use of the word $dv\bar{a}ra$ would rather seem to identify the nine rows

³⁰⁶ White has also shown that the Nāths adopted the Jaina spiritual teachers Pārśvanātha and Nemīnātha as Pārasnāth and Nīmnāth, and credited them with founding two Jaina suborders within the Nāth tradition (White 1996: 119).

³⁰⁷ For a detailed discussion of the ten energy channels as they appear in the Nāth tradition, see Banerjea 1962 (pp. 158-62).

³⁰⁸ The tenth energy channel Suṣumnā, sometimes identified as Śaṅkhinī, through which the Kuṇḍalinī energy rises, flows through the aperture at the top of the skull (*brahmarandhra*), also known as the tenth door (*daśamadvāra*) (White 1996: 254). The term *navadvāra*, or that which has nine doors, has been used as a metaphor for the body since Vedic times (*AV* 10.8.43; *ŚU* 3.18), and also appears in the *Bhagavadgītā* (*BhG* 5.13).

³⁰⁹ The oldest extant Digambara commentary on the *Tattvārthādhigamasūtra*, the *Sarvārthasiddhi* by Pūjyapāda (6th cent.), uses the term *āsravadvāra*, or gateways of karmic influx, to describe the thirtynine different causes of karmic influx referred to in *TAAS* 6.6 (*SS* 6.5, comm.). These include the five senses (*indriya*), the four passions (*kaṣāya*), the five forms of vowlessness (*avrata*), and the twenty-five actions (*kriyā*) (Tatia 1994: 152-53).

with the nine bodily apertures. This would then, in turn, identify the entire chart as a map of the subtle body, complete with energy channels and bodily apertures, inside the surrounding image of a Jaina ascetic standing in the *kāyotsarga* pose of meditation.

In support of the above arguments a few additional examples of non-Jaina influences on individual charts deserve to be mentioned. The earliest datable Jaina chart (Ja84#56) includes two verses, each of which is prefaced by an invocation to a spiritual teacher (tīrthankara) and an attendant goddess (yakṣī). The first invocation mentions the 23rd teacher Pārśvanātha together with the goddess Ambikā, while the second invocation mentions the 17th teacher Kunthūnātha together with the goddess Tripurā.³¹⁰ A key function of the goddesses is to preside over the holy sites (*tīrtha*) of the Jainas, and while Ambikā presides over Girnar in Gujarat, Tripurā (identified as Padmāvatī) presides over Shravanabelagola in Karnataka (Cort 1987: 241). As Sanderson has pointed out, the names of these and other goddesses are clearly derived from the tantric goddesses of the Śākta Śaivas (Sanderson 2009: 243), and though this borrowing was already firmly established in medieval Jainism, they still serve as a reminder of the very real possibility of tantric influence on the charts. A verse found on a chart (Ja84#4) dating from the turn of the 20th century is more explicit about its Śaiva influences (see Appendix E2, verse #9). The verse interprets the chart according to Jaina doctrine with the usual emphasis on karma and rebirth, and then goes on to state that whoever plays the game will attain the final state (gati) which is described as arriving at Śiva.311 While this may indeed indicate Nāth influence, it should be noted that the equation of the final state of liberation with the name of a supreme deity is a common feature in *nirgun bhakti* poetry. The influence of such poetry on the Jaina chart is exemplified by a verse adopted from the Rajasthani tradition of songs attributed to Kabīr (see Appendix E2, verse #5). The verse occurs on three charts (Ja84#8,9,23), and derives from a song about the middle path which is sometimes equated with the central energy channel Suşumṇā (Vaudeville 1974: 261, fn. 1).312 The influence of bhakti poets naturally recalls the Vaisnava charts, and the connection is

³¹⁰ This runs contrary to the usual associations of Ambikā with the 22nd teacher Neminātha and Tripurā, commonly identified as Padmāvatī, with Pārśvanātha. For a complete list of the teachers and their associated *yakṣas* and *yakṣīs*, see Alphen 2000 (pp. 46-47).

³¹¹ Stanza no. 9: *copaṛa setuja khelate prāṇīu gati lahanta / bhavi samajata kheliye tāte siva pohocanta* [if one plays *caupaṛ śatruñjaya*, the soul attains the final state; the restrained soul capable of liberation should play; on that account it arrives at Śiva].

further strengthened by a final verse which appears on several Jaina charts (see Appendix E2, verse #3). The verse emphasizes the importance of associating oneself with a true guru (*sadguru*), as in the *bhakti* traditions, though only as a preliminary means to begin following the five great vows (*mahāvrata*).³¹³ This is a good example of how the Jaina charts incorporate other religious traditions as subservient to Jaina doctrine.

³¹² hadda calai so mānava behada calai so sādha / hada behada doū tejai tākara matā agādha // (KGS 20.6) [he who walks between boundaries is a man, he who goes beyond them is a saint, but he who transcends the limited and the limitless, his greatness is unfathomable!] (as translated in Vaudeville 1974, p. 262). For an introduction to Kabīr's use of tantric language and imagery, see Vaudeville 1974 (pp. 120-48).

³¹³ Stanza no. 2: sadaguru ke saṃyoga bhayo vyavahāra rāsī / mahāvratī munīśvara jīva kaika bhaye avināsī [those who associate with the true guru enter the group of specifiable souls (i.e. vyavahār rāsi, sq. 11); the few souls, the chiefs of sages, who follow the great vows, become indestructible].

Comparative Analysis

The above analyses of 72-square Vaiṣṇava type a and 84-square Jaina type a1 charts have shown that the charts concern themselves with many of the same ideas, albeit in accordance with their own particular world-view. They organize the grids hierarchically as representations of a vertically oriented cosmography, incorporate systems of karma linking individual squares across the charts, and emphasize various religious practices ultimately aimed at reaching a state of liberation whereby players can finish and win the game. Additionally, they both hint at a deeper level of interpretation allowing us to change perspective from the macrocosmic to the microcosmic. However, the difference in design is not only a question of conflicting world-views, but also one of conflicting ideas about what and how the game should communicate. The Vaiṣṇava chart only devotes a single column to the cosmographical realms, and distributes positive and negative karmic qualities throughout the entire chart without a clear pattern of integration into the whole. The further presence of terms related to Sāmkhya and yoga gives the overall impression of a somewhat loosely structured chart focused on the individual experiences of its users rather than the exposition of any specific doctrine. This fits well with our earlier observation that the chart may have been used for purposes of meditation, visualization, divination, and self-exploration beyond that of mere play. The Jaina chart, on the other hand, presents a much more detailed view of the universe and the lifeforms which inhabit it. The three uppermost rows and the additional squares above the main grid are almost exclusively devoted to the realms of the upper world, while the rows below mainly focus on the inhabitants of the middle and lower realms, with special attention to the religious practices of lay and mendicant followers of Jainism. This, coupled with several technical terms related to the Jaina theory of karma, provides a much more exhaustive representation of Jaina doctrine, supporting the view that the chart was primarily used as a didactic tool for lay followers and young disciples. A concrete example of this can be seen in the tendency to refer to overall concepts, such as the five false views (sq. 17) and the twelve austerities (sq. 47), without specifying their contents, thereby leaving it for the players to expound on them, possibly in front of a religious teacher presiding over the game.

If we compare the charts more closely, we find several direct correspondences between them, indicating that they borrowed from each other, or, perhaps more likely, that one chart based itself on the other. Both charts have nine columns in the main grid, though the Vaisnava chart only has eight rows against nine rows on the slightly larger Jaina chart. As shown in fig. 69, five snakes and three ladders appear in nearly identical positions within the two grids when adjusting for the additional row on the Jaina chart. Less obvious correspondences can also be found between the remaining snakes, while the remaining ladders on the Jaina chart join together in a three-part structure not found on the Vaisnava chart. The similarities are corroborated by several related readings which fit logically into the Vaiṣṇava chart, but at times appear slightly out of place on the Jaina chart, indicating that it was the latter which borrowed from the former (fig. 70). Similar to the placement of the snakes and ladders, several readings in the upper half of the Jaina chart appear one square above the related readings on the Vaisnava chart, as if the extra row on the Jaina chart had been inserted somewhere in the middle of the chart. While the Vaiṣṇava readings $\bar{t}r$ ṣy \bar{a} (envy, sq. 12), himsā (injury sq. 52), bhakti (devotion, sq. 54), and sukh (happiness, sq. 62) have been translated into the corresponding Jaina readings parjīv spardh (envious of another soul, sq. 13), pardroh (injuring another, sq. 52), jin bhakti (devotion toward spiritual teachers, sq. 38), and abhīst siddhi sāgar (desired attainments for a period of one sāgara, 314 sq. 68) without indicating who borrowed from who, other readings appear more closely affiliated with the Vaisnava than the Jaina chart.³¹⁵

³¹⁴ A *sāgara*, or *sāgaropama*, is an unfathomable measure of time said to equal 10.000.000 x 15.000.000 x 1 *palyopama* years. A single *palyopama* is said to equal the number of years it would take to empty out a hole filled with tightly packed sheep's wool if the hole measured 1 *yojana* (c. 5-10 km) in diameter and 1 *yojana* in depth, and if one only were to take out a single fiber of wool every 100 years (Tatia 1994: 273).

³¹⁵ A possible reason for adopting an only slightly modified version of the readings might have been that they were connected to snakes or ladders which were also adopted. This would have made it more convenient to keep the readings more or less intact since they had to retain an overall positive or negative sense justifying their association with the snakes and ladders to which they were connected. The same reason can be applied to almost all of the adopted readings discussed here. One notable exception is the Jaina reading *jin bhakti* (devotion to spiritual teachers, sq. 38) which is unique in appearing below rather than above the related Vaiṣṇava reading *bhakti* (devotion, sq. 54), and in not adopting the snake associated with the Vaiṣṇava reading. This makes good sense since the Jainas would naturally be interested in deemphasizing the key role played by *bhakti* on the Vaiṣṇava chart.

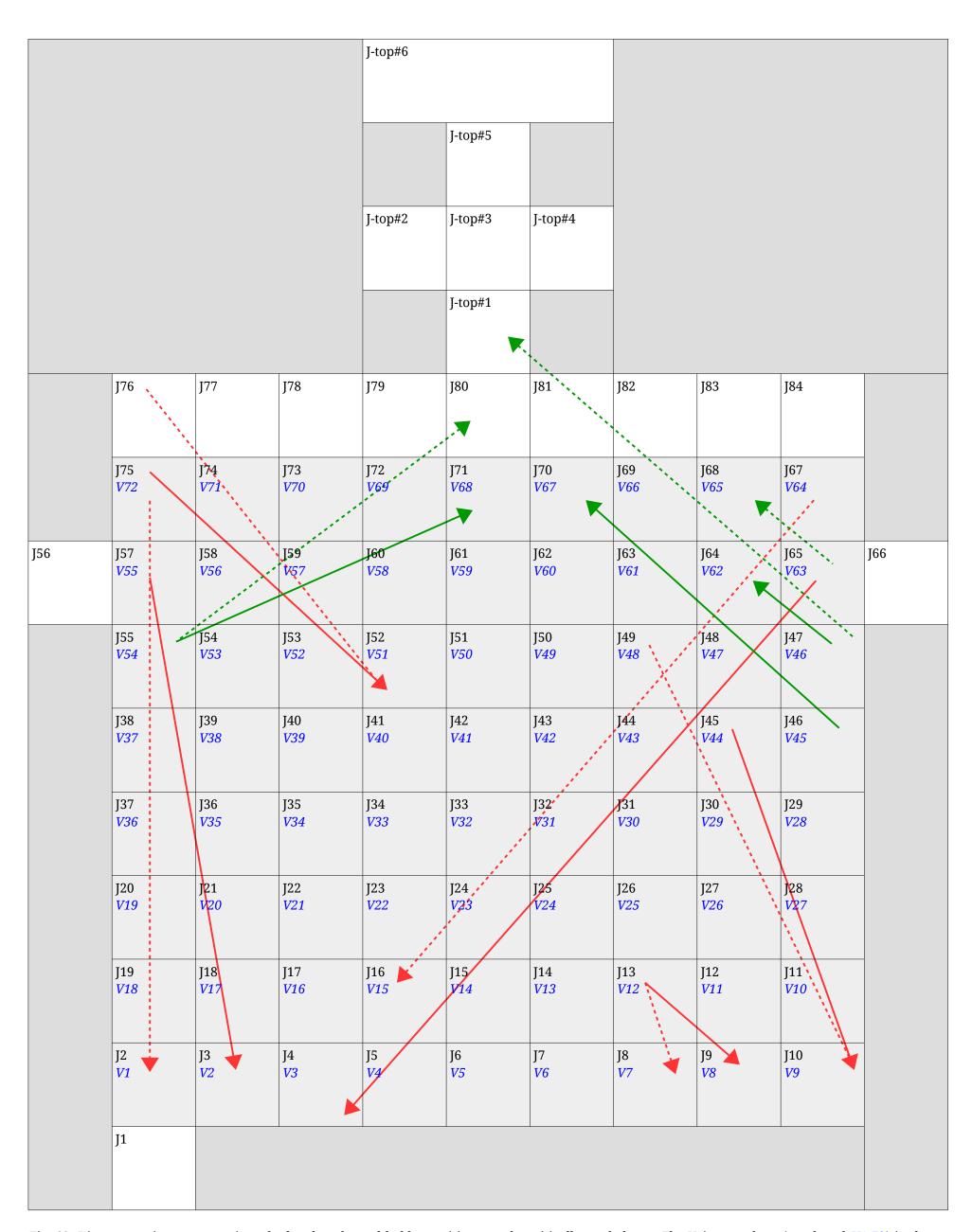


Fig. 69: Diagrammatic representation of related snake and ladder positions on the critically read charts. The Vaiṣṇava chart (numbered V1-72) is shown inside the Jaina chart (numbered J1-84 and J-top#1-6). Vaiṣṇava and Jaina snakes and ladders are shown with continuous and dashed lines, respectively.

				J-top#6						
					J-top#5					
				J-top#2	J-top#3	J-top#4				
					J-top#1					
	J76	J77	J78	J79	J80	J81	J82	J83	J84	
	J75: rājas ahaṃkār V72	J74 <i>V</i> 71	J73 <i>V</i> 70	J72 V69	J71 V68	J70 <i>V67</i>	J69 <i>V</i> 66	J68: abhīṣṭ siddhi sāgar V65	J67: tāmas ahaṃkār V64	
J56	J57 V55: ahaṃ- kār	J58 <i>V</i> 56	J59 <i>V57</i>	J60 <i>V</i> 58	J61 <i>V</i> 59	J62 <i>V60</i>	J63 <i>V61</i>	J64 V62: sukh	J65: vivek V63: tāmas	J66
	J55 V54: bhakti	J54 <i>V53</i>	J53 V52: hiṃsā	J52: pardroh V51	J51 <i>V50</i>	J50 V49	J49 <i>V</i> 48	J48 <i>V</i> 47	J47 V46: vivek	
	J38: jin bhakti V37	J39 <i>V</i> 38	J40 V39	J41 <i>V</i> 40	J42 <i>V41</i>	J43 V42	J44 V43	J45 <i>V44</i>	J46 <i>V</i> 45	
	J37 <i>V</i> 36	J36 <i>V</i> 35	J35 <i>V</i> 34	J34 <i>V</i> 33	J33 <i>V</i> 32	J32 <i>V31</i>	J31 <i>V</i> 30	J30 <i>V</i> 29	J29 V28	
	J20 V19	J21 <i>V</i> 20	J22 <i>V21</i>	J23 V22	J24 <i>V23</i>	J25 V24	J26 <i>V</i> 25	J27 V26	J28 <i>V</i> 27	
	J19 <i>V18</i>	J18 <i>V17</i>	J17 <i>V</i> 16	J16 <i>V15</i>	J15 <i>V14</i>	J14 V13	J13: parjīv spardh V12: īrṣyā	J12 V11	J11 V10	
	J2: kām <i>V1</i>	J3: krodh V2: māyā	J4: lobh V3: krodh	J5: moh V4: lobh	J6 <i>V5</i>	J7 V6: moh	J8: machar V7: mad	J9: ahaṃkār V8: matsar	J10: māyā V9: kām	
	J1									

Fig. 70: Diagrammatic representation of related readings on the critically read charts. The Vaiṣṇava chart (numbered V1-72) is shown inside the Jaina chart (numbered J1-84 and J-top#1-6). Relevant squares have been highlighted in yellow.

				top sq. 6 siddhśilā						
					top sq. 5 sarvārth- siddhi vimān					
				top sq. 2 vaijayant vimān	top sq. 3 aparājit vimān	top sq. 4 jayant vimān	_			
					top sq. 1 vijay vimān					
	76 mahāmohnī karm	77 bhadra graiveyak	78 subhadra graiveyak	79 sujāt graiveyak	80 kṣāyik samyaktva	81 sumanas graiveyak	82 sudarśan & priyadarśan graiveyak	83 amogh & suprati- bandh graiveyak	84 yaśodhar graiveyak	
	75 kṛṣṇa leśyā	74 nîNeśyā	73 5 vişay sevā	72 4 lokpāl	71 anivṛtti- karaṇ, upa- śam śreṇi, kṣāyik śreṇi	70 mahā- mahoday bhavyā- bhavya jīv	69 yaśgrāhī	68 suprati- bandh bhakti kārak	67 bāl tapasvī	
56 saudharm devlok	57 īśān devlok	58 sanatkumār devlok	59 māhendra devlok	60 asaṃyamī	61 brahm devlok	62 lāntak devlok	63 śukra devlok	64 sahasrar devlok	65 ānat & prāṇat devlok	66 āraņ & acyut devlok
	55 14 pūrv- dhārak	54 200.000 beïndrī	53 200.000 teïndrī, 200.000 caurindrī	52 pardroh	51 apūrvkaraņ guņsthān	50 śukla leśyā	49 madhya pariṇām	48 7 vyasan	47 kşayopa- śamik	
	38 vidyamān arhat bhakti	39 sañjñī pāñceñdrī manuṣya	40 sthūlvrat ārādhak	padma leśyā	42 apramatta guņsthān	43 tīn guṇvrat	upaśam moh guṇsthān	45 jīv hiṃsā	46 anivṛtti- karaṇ	
	37 āsrav rodhak saṁvarāt- mak	36 teju leśyā	35 1.000.000 pratyek vanaspati- kāy	34 700.000 vāükāy	gramatta virat guņ- sthān, sarvvratī	32 sādhu sevā, śuddhā- rādhak	31 śubhāśubh sattva	30 dharm ārādhak	29 apūrv- karaņ	
	20 bhāv sādhu saparigrahī	21 700.000 pṛthvīkāy	700.000 apkāy	23 700.000 teükāy	deś virat gunsthān, śrāvakvratī	deś thakī viṣay tyāgī	26 sadā śubh pariņām	27 puṇya prakṛti, śubhoday	28 yathā- pravṛtta- karaṇ	
	19 asurkumār	18 nāg- & suvarņ- kumār	17 mithyātva guņsthān	16 vidyut- kumār, miśra guṇsthān	15 avirat samyaktva guņsthān	14 agnikumār	13 maithun sevā	12 apratyā- khyānī māyā	11 apratyā- khyānī mān	
	2 400.00 yoni nārkī	3 sañjñī pāñcendrī tiryañc, tivra kaṣāy	4 paramā- dhāmī	5 vanaspati- kāy, sañjñī pāñcendrī manuşya	6 diśā-, stanit- & pavan- kumār	upaśam śreņi, viśudh pariņām	8 anantānu- bandhī māyā	9 anantānu- bandhī krodh	apratyā- khyānī krodh	

Fig. 71: Diagrammatic representation of majority readings on 84-square Jaina type b charts. Squares where possible Vaiṣṇava influence can be traced on the corresponding 84-square Jaina type a1 charts have been highlighted for purposes of comparison (cf. fig. 70).

The bottom row contains the greatest overlap between Vaiṣṇava and Jaina readings, and while the negative qualities expressed by them fit well into the context of the Vaisnava chart, only the Jaina readings krodh (anger, sq. 3), lobh (greed, sq. 4), ahamkār (pride, sq. 9), and māyā (deceit, sq. 10) are relevant to the four conductdeluding passions. The readings $k\bar{a}m$ (desire, sq. 2), moh (delusion, sq. 5), and machar(jealousy, sq. 8) are neither counted among the primary nor the secondary passions, and therefore do not accord well with the overall focus on key terms related to doctrine. Even more revealing is the fact that the exact same readings appear on the Vaiṣṇava chart, and that the Jaina chart appears to have copied the adjacency of anger (sq. 3) and greed (sq. 4) despite the doctrinal association between anger (sq. 3) and pride (sq. 9) as aversions, and between greed (sq. 4) and deceit (sq. 10) as attachments. Vaisnava influence also seems to underlie the readings tāmas ahamkār (egoity dominated by inertia, sq. 67) and rājas ahamkār (egoity dominated by activity, sq. 75) on the Jaina chart. 316 Both readings derive from Samkhya where they denote different aspects of the principle of egoity. The Vaiṣṇava chart reads tāmas (darkness, lit. relating to the quality of inertia, sq. 63) and ahamkār (egoity, sq. 55) in the corresponding squares, and since Sāṃkhya does not traditionally play any role in Jainism, and only the Vaiṣṇava chart is concerned with enumerating its principles, again the Jaina chart seems to have adopted the readings from the Vaiṣṇava chart.317 The reason for adopting the readings is not clear, though they might have been used in a mystical sense, as indeed they are in tantric traditions, including the Vaisnava Pāñcarātra tradition (Flood 2006: 103-4). Finally, the reading vivek (discriminating judgment) appears in related positions on both the Vaisnava (sq. 46) and the Jaina (sq. 65) charts. While it fits well with the positive qualities on the Vaiṣṇava chart, and also came to be associated with the means of escaping from the cycle of rebirth in the early history of Sāṃkhya (Larson & Bhattacharya 1987: 5), it seems less convincing in the context of the Jaina chart. The Tattvārthādhigamasūtra identifies it as a subcategory of the first internal austerity, given as penance (prāyaścitta) (Tatia 1994: 232-33), but this

³¹⁶ The readings *tāmas ahaṃkār* and *rājas ahaṃkār* also appear on several 84-square Vaiṣṇava charts from Maharashtra (types *c* and *d* in Appendix D1), but since these appear to be later than the Jaina charts, it is more likely that the 84-square Vaiṣṇava charts derived the readings from the 84-square Jaina charts than the other way around.

³¹⁷ The terms *rajas* and *tamas* is sometimes used to express the concepts of motion (*dharma*) and rest (*adharma*) in Jaina traditions (Jaini 1979: 99), but this does not seem to be the case here.

reads strangely specific on the Jaina chart which usually avoids detailing categories, not to mention subcategories. A more likely explanation is therefore that it was adopted from the Vaiṣṇava chart because of the ladder which leads up to happiness on the Vaiṣṇava chart and to desired attainments for a period of one *sāgara* on the Jaina chart.

Having established the general flow of influence from the Vaisnava to the Jaina chart, the question of the relationship between the 84-square Jaina types a1 and b charts remains to be answered. The critically read type a1 chart is represented by 29 unique charts, while the type b chart is represented by 11 unique charts. Though the present thesis does not include a full critical reading of the type b charts, fig. 71 shows the majority readings as they appear on the charts in question. If we consider the squares which show traces of possible Vaisnava influence on the type a1 chart, we can see that they have been more or less completely purged of those traces on the type b chart. The problematic readings desire ($k\bar{a}m$, sq. 2), delusion (moh, sq. 5), and jealousy (machar, sq. 8) have been removed or replaced with more fitting readings, and the misleading adjacency of anger (krodh, sq. 3) and greed (lobh, sq. 4), as well as pride (ahaṃkār, sq. 9) and deceit ($m\bar{a}y\bar{a}$, sq. 10), has been abandoned. Similarly, the Sāmkhya-inspired readings tāmas ahamkār (egoity dominated by inertia, sq. 67) and rājas ahamkār (egoity dominated by activity, sq. 75) have been replaced with the non-controversial readings $b\bar{a}l$ tapasvī (child ascetic, sq. 67)³¹⁹ and krsna leśyā (black karmic stain, sq. 75). Perhaps the most obvious example of lingering Vaisnava influence is found in the substitution of the Ānata and Prānata heavens (ānat prānat devlok, sq. 65) for discriminating judgment (vivek, sq. 65). While the substitution itself is not problematic, the retainment of the ladder leading up from the square is, since the heavens are not indicative of the positive actions and inner states usually associated with a square at the foot of a ladder. The only Vaisnava-influenced readings that have been kept are

³¹⁸ The representation of the conduct-deluding passions on the type *b* chart runs into problems of its own because of the attempt at separating them into passions resulting in endless worldly existence (*anantānubandhī*) and passions obstructing partial renunciation (*apratyākhyānī*) (cf. Jaini 1979: 119). While pride lacks the former distinction, greed is not represented at all. This problem, however, is not a result of Vaiṣṇava influence, but perhaps rather a result of trying to deal with such influence.

³¹⁹ I presume that the long snake leading down from this square is indicative of the prohibition against initiation (dik, \bar{a}) of children under eight years of age (Jaini 1979: 244).

vidyamān arhat bhakti (devotion to an existing *arhat*,³²⁰ sq. 38) and *pardroh* (injuring another, sq. 52), none of which are at odds with traditional Jaina doctrine.

The image that emerges of the type b chart is one of a chart which seeks to purge the remnants of Vaiṣṇava influence still visible in the type a1 chart. However, the purge seems to go beyond even Vaisnava influence and direct itself toward Jaina elements which were not considered desirable. Consequently, all references to the tantric and yogic undercurrent of the type a1 chart discussed above are missing on the type b chart. References to meditation (dhyāna) and karmic gateways (dvāra), which might indicate bodily apertures connected with energy channels ($n\bar{a}d\bar{l}$), are missing, and none of the charts include the surrounding cosmic figure standing in the $k\bar{a}yotsarga$ pose of meditation. Furthermore, all the type b charts which include the popular verse referring to the nine energy channels read $n\bar{a}r\bar{i}$ instead of $n\bar{a}d\bar{i}$. While $n\bar{a}r\bar{i}$ is an accepted orthographical variant of nāḍī in western Indian vernaculars (RSK, p. 2784), the fact that it only occurs on type b charts indicates that it represents a conscious attempt at changing the reading "energy channels" $(n\bar{a}d\bar{i})$ to "women" $(n\bar{a}r\bar{i})$. The negative conception of women implied by associating them with downward-leading snakes might be seen as indicative of Digambara tradition which does not admit the possibility of women becoming mendicants and attaining liberation (Jaini 1979: 39-40). However, the more likely scenario that the type b chart represents a Svetāmbara attempt at purging Digambara influence from the type a1 chart is supported by the fact that the type b chart removes references to the Digambara concepts of five forms of stationary beings (pāñc sthāvar in sq. 24 on the type a1 chart) and permanent and nonpermanent basic lifeforms (nitya and itar nigod in sqs. 1 and 21 on the type a1 chart). This does not mean that all type a1 charts should be considered Digambara, since, for example, both the type a1 and b charts follow the Svetāmbara organization of the kalpa heavens in rows seven and eight, but it does suggest a line of transmission from

³²⁰ *Arhat* (lit. worthy) is often used synonymously with *jina* and *tīrthaṅkara* as an epithet of the twenty-four spiritual teachers, but it can also be used more broadly as an epithet of those who have attained omniscience (*kevalajñāna*) (Wiley 2006: 39).

³²¹ See Appendix E2, verse #1a. The only exceptions are Ja84#56, which leaves out the reference completely, and Ja84#6 which reads *narapati* (lord of men, king).

³²² One chart (Ja84#15) removes the exclusive focus on women by reading $nar\ n\bar{a}r\bar{\iota}$ (men and women) instead of $n\bar{a}v\ n\bar{a}r\bar{\iota}$ (nine women). All the charts retain the reading $an\bar{a}mata\ brahma$ (the nameless Brahman) which apparently was not considered controversial by the artists.

the Vaiṣṇava type a chart via the mixed Śvetāmbara-Digambara type a1 chart to the primarily Śvetāmbara type b chart. If this interpretation of the material is correct, the branching off of the type b chart from the type a1 chart must have happened at an early point in the history of the game since, as already pointed out, the earliest datable Jaina chart (Ja84#56) is a type b chart from 1797, while the earliest datable type a1 chart (Ja84#16) is from 1812. While this might lead to the conclusion that the type b chart is earlier than the type a1 chart, and perhaps even earlier than the Vaiṣṇava charts, the arguments presented above seem to preclude such an interpretation. Not only does the influence of readings seem to flow in the opposite direction, it also makes little sense that the type a1 chart would have begun adopting Vaiṣṇava readings if it had been based on the type b chart which does not include Vaiṣṇava readings.

The identification of Nāth influences on the 84-square Jaina type a1 chart may also help us to understand the origins of similar influences on the 72-square Vaiṣṇava type a chart, and bring us closer to the very beginnings of gyān caupar. While the Vaiṣṇava chart clearly expresses its affiliation with Hathayogic ideas and concepts, it remains silent on the subject of what might have occasioned their inclusion. However, since the Nāth influence on the Jaina chart is primarily connected with readings adopted from the Vaisnava chart, it is likely that the Vaisnava chart shared in the same influences. Monika Horstmann has recently described the close relationship between Jaina, Nāth, and nirguna bhakti traditions in 16th- and 17th-century Rajasthan, and demonstrated how a mutual relationship of interdependence existed between especially the bhakti and Nath traditions (Horstmann 2017: 2-3). In an earlier study on the 16th-century bhakti poet Dādū (d. 1604), she has shown how he interweaved saguņa Vaisnava and nirguna Nāth traditions in his songs, and how especially Hathayoga figured prominently in the songs of both Dādū and other bhakti poets (Thiel-Horstmann 1983: 2-3).323 This strengthens the argument that the Vaisnava chart first developed in a Vaiṣṇava bhakti environment influenced by tantric and yogic ideas current in the formative period of the game in the late 17th and early 18th centuries. The identification of these ideas may also have occasioned the later attribution of the charts to the 13th-century poet-saint Jñāneśvar, who was initiated into the Nāth

³²³ An example of a late 18th-century grid map of the subtle body produced by followers of Dādū in Uttar Pradesh is clearly reminiscent of *gyān caupaṛ*, and suggests a possible inspiration for the game charts (see *Anatomical Chart* in chapter six).

tradition, and whose writings on yoga echo those of its alleged founder Gorakhnāth (Mallinson 2011: 5).

If we were to suggest a concrete place and time conducive to the invention of gyān caupar, we might choose the rule of Mahārāja Savāī Jay Simh II (1688-1743) of Amer in the first half of the 18th century. The royal family of Amer had long been associated with Vaisnavism, and until the mid-19th century they patronized a great variety of Vaiṣṇava groups, including the followers of Dādū (Hastings 2002: 60-62). After the Mughal emperor Aurangzeb dismissed all entertainers and artists from his court in 1688, many sought patronage in Amer which was known for its religious and artistic tolerance. This resulted in a period of "experimentation and development by artists, writers, scholars, and religious practitioners" (ibid. 70) which became even more pronounced when Jay Simh founded Jaipur in 1727 and invited "artists, musicians, scholars, pandits, merchants and others" (*ibid*. 71) to join him in the new city. ³²⁴ Jaipur quickly grew to become one of the largest and most important centers in Rajasthan, and though Jay Simh was a traditionalist at heart and remained skeptical of the autonomy of more recently formed bhakti groups (ibid. 81), he succeeded in creating an environment where one might imagine gyān caupar appearing as the latest craze among many others. More research on the games of the period needs to be done in the Rajasthan State Archives, to which I have not had access during my fieldwork, but for now it is worth noting that Jaipur and its surrounding areas are by far the richest in terms of existing gyān caupar charts. 325

³²⁴ Among those invited were several Jesuits who were to assist Jay Simh in his ambitious astronomical program (Maclagan 1932: 133-5). As mentioned in chapter two, Jesuits had been experimenting with religiously themed goose games since the late 17th century, and it is therefore possible that the Jesuits at the court of Jay Simh were instrumental in bringing such games to his attendance.

³²⁵ Unfortunately, many of them are kept in jealously guarded private collections with limited or no access (see the list of reported yet undocumented charts at the beginning of Appendix A).

Chapter 5

Simulation and Narrative

In the late 1990s and early 2000s when the field of computer game studies was in the process of wrestling free from disciplines such as literature and film studies which had until then contained it, a divisive debate was raging over the question of whether games should be considered primarily as representations or simulations. 326 On one side were the narratologists who approached games as engines for interactive storytelling, while on the other side were the ludologists who approached them as formal systems capable of simulating dynamic processes. An important proponent of the ludological side of the argument was Gonzalo Frasca who argued that the capacity for simulation set games apart from traditional media, such as books, movies, and visual arts, and opened up a wide range of possibilities which would only be limited by a narrative approach. He followed existing definitions of simulations in considering games, whether digital or non-digital, as simplified systems modeling other and more complex systems by only retaining "some of the behaviours of the original system" (Frasca 2003: 223). An example of such a simplified system is chess which appears to have been conceived of as a simulation of battle, and continues to be described in similar terms. Likely invented in northern India during the Gupta era (4-6th cent.), the game was referred to as caturanga, or that which has four limbs, adopting the traditional word for the Indian army which consisted of foot-soldiers (pawns), horsemen (knights), chariots (modern day rooks), and elephants (modern day bishops).³²⁷ The earliest known reference to the game is found in the Harşacarita written by Bāṇabhaṭṭa during

³²⁶ See Espen Aarseth's editorial in the first issue of the *Game Studies* journal for a brief but well-informed account of the emerging field of computer game studies during those early years (Aarseth 2001). The study of non-digital games remains underrepresented within the wider field of game studies, but recent years have seen an increased interest in the subject. The launch of the *Analog Game Studies* journal by a group of people from within the field of computer game studies represents an important shift in orientation (Torner *et al* 2016).

³²⁷ The origin of chess has been the subject of much debate among board game historians, and the final word still remains to be said. For an overview of the key arguments, see Mark 2007 who, like many others, leans toward an Indian origin of the game.

the reign of king Harşa in the first half of the 7th century. The work chronicles the life and deeds of the king, and describes his rule as one under which "the arranging of armies (only occurs) on chessboards" (aṣṭapadānāṃ caturaṅgakalpanā). Though it might be argued that chess is not a very good simulation of battle because it cannot be applied to real-life situations with any accuracy, this does not alter the fact that the game does indeed attempt to simulate "some of the behaviors of the original system." It pits two opposing forces against each other, differentiates between powers of individual unit types, and includes rules for advancing, retreating, killing, and capturing. The game is not meant to represent any single battle, but rather to simulate the operations of every battle past, present, and future. As Frasca would argue, though every game of chess generates the story of a battle, the game itself cannot be understood with reference to those stories, but only with reference to the operations that make those stories possible (*ibid.* 224).

A simulational approach to games is also taken by Don Handelman and David Shulman in their study of cosmologically themed games in Indian myth and ritual, such as the game of backgammon ($s\bar{a}r\bar{i}kr\bar{i}d\bar{a}$, $p\bar{a}sakakr\bar{i}d\bar{a}$) played by Śiva and Pārvatī in Purāṇic mythology, and the dice or calculation games played in connection with the Vedic Rājasūya and Aśvamedha rituals. Invoking the concept of analogue models, defined by structural rather than isomorphic resemblances with the modeled (Black 1962: 222-23), Handelman and Shulman identify four key characteristics of a cosmological game: it should present a simplified version of the cosmos, yet retains its relationship with it through structural homologies; it should be governed by rules which allow players to engage with it as if they were engaging with the actual cosmos itself; it should generate

³²⁸ The full passage is found toward the end of the second chapter (*ucchvāsa*), and has been discussed at length by Renate Syed who hypothesizes that chess developed from didactic war room exercises played out with clay figures in sandboxes (2005, 2008).

³²⁹ Later developments in the history of chess reoriented it toward a more realistic portrayal of military operations. The 12th-century *Mānasollāsa* exemplified three different battle formations (*vyūha*), adopted from existing literature on warfare, which the players could choose between as their opening positions (Bock-Raming 1995: 311). The 16th-century *Hariharacaturaṅga* enlarged the game board to a 17x17 grid, and introduced additional pieces, unit types, and battle formations (Bock-Raming 2001). The European tradition of *Kriegsspiele*, or war games, continued the transformation of chess from an abstract representation toward a realistic simulation, culminating in the elaborate interactive models of Georg Leopold Baron von Reisswitz and his son in the first quarter of the 19th century (see, for example, Vego 2012 and Peterson 2012: 203-51).

³³⁰ For further discussions of the game played by Siva and Pārvatī, see Syed 1998 and Soar 2007.

and actualize hypothetical futures already contained within the space of its own possible outcomes; and it should influence that which it models, granting it not only the power of divination, but also that of transformation (Handelman & Shulman 1997: 63-68). This, of course, does not mean that every time somebody sits down to play a game of *caupaṛ*, *sārīkrīḍā*, or something similarly themed, the fate of the universe is perceived as hanging in the balance, but it does indicate the seriousness with which the simulational power of such games were treated in certain contexts.³³¹ It was, for example, the fear of this very power which dictated that the king should never participate in the game played during the Rājasūya ritual. Instead, he should merely receive the spoils from the victor, thus avoiding the risk of losing and unbalancing the cosmos (*ibid*. 63).

In order to fully appreciate the power of simulation inherent in *gyān caupaṛ*, first of all we need to understand how it was played. Only then can we begin to inquire into the experiences afforded by the charts, and the ways in which those experiences might have been interpreted by the users. In this chapter we will therefore begin by attempting to reconstruct the rules of 72-square Vaiṣṇava and 84-square Jaina charts as they were played at the height of their popularity in the 18th and 19th centuries. We will then apply the reconstructed rules to the critically read versions of the charts, and conduct a sample playthrough of each chart for four imaginary players. This will allow us to document the flow of the game, and provide us with a basis for analyzing and discussing play experiences in the final part of the chapter.

Rules of Play

Instructions for playing *gyān caupaṛ* were rarely included on the charts themselves, and never on the 72-square Vaiṣṇava and 84-square Jaina charts under consideration here.³³² This was probably due to the oral transmission of rules between players who did not see the need to commit them to writing. Charts which do pay attention to rules are usually later adaptations which diverge from the original game system, such as a

³³¹ The identification of mundane objects with cosmic forces is a key principle in monist traditions in India, allowing for the manipulation of the former to realize an effect in the latter (Edgerton 1972: 115).

³³² A few of the charts include references to the basic operations of the game, such as the use of dice or cowries and the function of snakes and ladders, but actual rules descriptions are never included.

Hațhayogic (Va72#34) chart and the ladderless 84-square Vaișnava type d charts, none of which are included in the critical readings. A notable exception is the earliest known Sūfī charts (Sū100#1ab) which may have been prompted to include rules descriptions because the game had only recently been adopted by the community. The two charts in question contain a more or less complete description of the rules as they relate to the Sūfī version of the game, which does not appear to have been very different from other versions. As such, they offer a valuable insight into how the game was played at the time of their production in the early 19th century, but the fact that certain details, such as counting a throw of five facedown cowries as a "10," are not reflected in later rules descriptions, should remind us that we can no more hope to find a single original set of rules than a single original chart.³³³ Rules vary over time and between players, and not only are the same games played with different rules, the same components are also used to play entirely different games.³³⁴ In fact, most games historians would argue that this is one of the most important ways in which new games develop.335 The explicit nature of the representational value of gyān caupar makes it a less obvious template for designing radically new games than, say, an uninscribed 8 x 8 grid, but the point remains the same: only by understanding the common rules which relate the different versions of gyān caupar to each other can we begin to understand the particulars which set them apart.

³³³ On Şū100#1b, the rules are written in Persian below the chart, and paraphrased in English above it. The English paraphrase reads: "Directions for playing this Game, which is termed Hazard: Take six cowries in your hand, shake and throw them on the Table, should five fall on their faces, and one on its back, it counts ten, upon which you move your Man to the Square next Annihilation, and until such time as you throw ten your man cannot leave that square. After having left the first square you move on according to the number of Cowries that fall upon their backs, should they fall all on their backs, or faces, it counts six, you thus proceed until you arrive in the ninth or Empyrean Heaven, which ends the Game - On the Road you will meet with much danger, such as Serpents of Avarice, of pride, Heart poisoners, and Devils, who are ready to devour and cast you down, there are also Ladders on the Road to Heaven; should you get to the foot of one, you proceed to the Top, consequently you will have many Ups and Downs eer [sic] you arrive in Arshillah [sic]." (quoted from Topsfield 2006a: 153). Cf. the similar description of Şū100#1a in Topsfield 1985 (p. 209, fn. 30).

³³⁴ For an example from India, see *hastyaśvājagavāṃ krīḍā*, or the game of elephants, horses, goats, and cows, which uses the components of *paccīsī* for a game of placement rather than movement (*KK* 285-87).

³³⁵ See, for example, Murray's suggestion that chess evolved from a race game played on an identical board (Murray 1952: 129-30), or Ulrich Schädler's theory that backgammon evolved from the Roman games of *duodecim scripta* and *alea* (Schädler 1995: 95).

The earliest and most comprehensive secondary sources available for the reconstruction of the rules of 72-square Vaiṣṇava and 84-square Jaina charts are the Krīdākauśalya (KK), written in Sanskrit with a Hindi auto-commentary by Harikrsna Śarmā in 1872, and a chapter on *Jñān bājī ramvānī rīt (JBRR*), or the rules of playing gyān bājī, in an untitled manuscript written in Gujarati by Lallu Jethābhāī in 1877/78. 336 Harikṛṣṇa provides a detailed account of the rules for an unidentified 84-square Vaiṣṇava type c chart, elaborating on the much more rudimentary account found on an existing chart (Va84#4) dated approximately to the same time as the Krīḍākauśalya.337 An account of the rules for a 72-square Vaiṣṇava chart would of course have been preferable, but the one provided by Pārakh adds little of value (Pārakh 1886: 200-1), while the one provided by Dampier gives the impression that he had not fully understood the game, or else had witnessed an otherwise unattested way of playing it (Dampier 1895). We therefore mostly have to rely on the rules for 84square Vaisnava charts to reconstruct the rules of 72-square Vaisnava charts. Jethābhāī describes the rules for an 84-square Jaina chart, but unfortunately his description stands quite alone, and it is therefore impossible to say how widely it was applied. It does, however, provide valuable information on how to understand several features of the Jaina charts which has not been addressed in previous studies. Similar to the rules descriptions found on the charts themselves, most rules descriptions in early secondary sources tend to focus on later adaptations of the game, and are therefore of less importance to the task at hand.³³⁸ Publications beginning from later in the 20th century were written after the charts had ceased to be current, and often include rules and practices that cannot be verified by earlier sources. It should also be noted that the modern children's game of snakes and ladders enjoyed worldwide success throughout the 20th century, and may have influenced later interpretations of the rules for gyān caupar.

³³⁶ As the texts are presented in full in Appendix F, they will only be treated in summary here.

³³⁷ A slightly later description of the rules for another 84-square Vaiṣṇava type c chart (Va84#8) is little more than a translation of the Hindi auto-commentary of the $Kr\bar{\iota}d\bar{a}kau\acute{s}alya$ into Marathi (Pārakh 1886: 200).

³³⁸ Examples include rules for two 108-square Advaita Vedānta charts (Dvivedi 1893, Devdhar 1905: 207), a 285-square Vaiṣṇava chart (Gulābrāv 1981), and a 500-square Vaiṣṇava chart (*KK* 246-55). The manual for a 124-square Vaiṣṇava chart has unfortunately been lost (*AJMR* 5: 85, Pargiter 1916).

Basic Rules

Available evidence makes it clear that *gyān caupar* was conceived of as a simple race game in which two or more players competed to be the first to reach the designated winning square near the end of a track of sequentially arranged squares. The track was laid out in the form of a grid which had to be traversed row by row from bottom to top, and sometimes included additional squares above the grid. Each player had a single pawn which began the game in the first square of the track, and moved forward according to the throw of dice or cowries. Whenever a pawn ended its move in a square showing the foot of a ladder, it was moved up to the square at the top of the ladder. Conversely, whenever a pawn ended its move in a square showing the head of a snake, it was moved down to the square at the tip of the snake's tail. The first player to have his pawn reach the central square in the top row of the grid, or another square somewhere above it, was declared the winner.

While not directly contradicting any of the rules described in our sources, the above outline does not fully explain them either. At first glance, it leaves us wondering about the number of dice or cowries used, and in the case of the former, which kind of dice. It also raises the question of where exactly the winning square was located, and what would happen if a pawn moved beyond it instead of landing on it. On a more subtle level, it fails to address situations in which a pawn would land in the square of another pawn, or move to the top of a ladder which shared its square with the foot of yet another ladder. The answers to these and other questions would have depended on the design of individual charts and the preferences of individual players, and thus cannot be given in a simple straightforward manner. The questions will therefore be addressed one by one in the following sections, with special emphasis on how they might have been answered in the case of 72-square Vaiṣṇava and 84-square Jaina charts.

Randomizing Agents

The two kinds of randomizing agents most commonly referred to in our sources are cowrie shells and four-sided stick dice. Historically, a key difference between Vaiṣṇava and Jaina charts seems to have been that the former were predominantly played with cowries, while the latter were predominantly played with stick dice. Sources disagree

on the exact number of cowries used for the Vaiṣṇava charts, but six and seven are the most frequently mentioned, and it is therefore likely that both counts were used.³³⁹ This would also mirror the number of cowries used in the popular game of paccīsī which is a simplified version of caupar played with cowries instead of stick dice (Murray 1952: 132). Contrary to paccīsī, which had its own particular ways of calculating the fall of the cowries, the result of a throw in gyān caupar was usually arrived at simply by adding together the number of cowries that had fallen faceup. With regard to the Jaina charts, Jeṭhābhāī only mentions the use of a single stick die (Guj. pāso) for playing the Jaina charts (JBRR 1). This is corroborated by inscriptions on three existing charts (Ja84#5,6,23), and by the depiction of a stick die on two modern charts (Ja84#31ac) clearly based on earlier charts.³⁴⁰ The four faces of a stick die are usually configured as 1-2-5-6 or 1-3-4-6 (Lüders 1907: 17), 341 though configurations of 0-1-2-3, 0-1-2-4, and 0-1-3-4 are also recorded for Tamil Nadu (Murray 1952: 134; Balambal 2005: 40-43).³⁴² The only clear indication of which configuration was used for gyān caupar is found in an inscription on the back of a Jaina chart (Ja84#5) stating that it should be played with a single stick die configured as 1-2-5-6. It is uncertain whether the die used with the modern charts mentioned above follows the same configuration since the only visible face shows four pips. This could either indicate that "4" was the highest possible throw of the die, or perhaps simply that the die should have four sides, which might otherwise easily have been overlooked toward the end of the 20th century when the charts were made and stick dice had all but been replaced by cubic dice.

³³⁹ A 99-square Vaiṣṇava chart (Va99#1) states that four, five, six, or seven cowries can be used, indicating the variations that may have existed between different groups of players. Dampier describes a 72-square Vaiṣṇava chart (Va72#13) as being played with nine cowries (Dampier 1895: 25), and while this may indeed have been the case, it should be noted that his observations about the game does not always appear to have been accurate. The most trustworthy source for 72-square Vaiṣṇava charts is Pārakh who says that they should be played with seven cowries (Pārakh 1886: 200).

³⁴⁰ As mentioned in chapter three, the depiction of the die on Ja84#31c is no longer visible, but can be inferred from Ja84#31a.

³⁴¹ The *Krīḍākauśalya* prescribes a configuration of 1-2-5-6 for *caupaṛ* when played with three dice, and a configuration of 1-3-4-6 when played with only two dice (*KK* 160-4). The south Indian version of *gyān caupaṛ* known as *parampad sopān* is sometimes played with two dice configured as 0-1-2-3 and capable of yielding results between 1 and 12 when thrown together (see Balambal 2005: 43).

³⁴² Stick dice configured as 1-2-3-4 are generally not encountered after the Gupta era (4-6th cent.) (Finkel 2004a: 40).

Special Throws

Harish Johari gives the rule for his modern redesign of a 72-square Vaisnava chart (Va72#26a) that the pawns should begin the game in Vaikuntha-loka (translated as cosmic consciousness, sq. 68). Players would then take turns rolling a six-sided die, and only on a roll of "6" would they be allowed to move their pawn out of Vaikuntha-loka and along the bottom row squares to bhu-loka (translated as physical plane, sq. 6) (Johari 2007: 8).343 The rule is not attested in any other sources, and is likely to be of Johari's own invention, as is several other rules given by him, but the requirement of special throws in special situations is not in itself alien to gyān caupar. A rule for an 84square Vaiṣṇava chart given by Harikṛṣṇa, and corroborated by an inscription on a related chart (Va84#4), states that players must throw a specific number in order to advance their pawns from Vaikuntha (sq. 80) to the winning square *mokṣa* (liberation, top sq. 1) above. Harikṛṣṇa gives the required number as one faceup cowrie out of a total of seven cowries (KK 241-5, comm.), while the related chart is more lenient in allowing both one and five faceup cowries out of a total of six cowries. The rule is important because it is not otherwise obvious how pawns should proceed from the main grid to the top square in the case of charts which do not include a ladder connecting the two. Several 72-square Vaiṣṇava charts also include one or more additional squares above the main grid, and we might infer that similar rules applied to them.³⁴⁴ On the whole, however, 72-square Vaisnava charts seem to have avoided rules involving special throws.

According to Jeṭhābhāī, the rules for 84-square Jaina charts introduce several more situations in which special throws are required of the players (JBRR 1-3). The requirement is always a roll of "1" on a four-sided stick die, thus giving players a much better chance of success than the $Kr\bar{\iota}d\bar{a}kau\dot{s}alya$ which requires exactly one out of seven cowries to fall faceup. ³⁴⁵ Jeṭhābhāī describes four situations in which a special throw is required of the players. The first situation is at the beginning of the game

³⁴³ Sergei Moskalev appears to have adopted a variation of this rule for his modern redesign of a 100-square Ṣūfī chart from Turkey. He states that pawns should begin in the winning square *visâl* (Ara. *wiṣāl*, unity, top sq. 1), and that players should roll a "1" on a six-sided cubic die before they are allowed to leave the square and begin the game proper in *rızâ* (Ara. *riḍā*, contentment, sq. 1) (Moskalev 2014: 22-24). Thanks to my former student Natalia Jonny Nielsen for providing me with a translation of the relevant paragraph in Moskalev's book.

³⁴⁴ See Va72#2,6,10,12ab,14b,17,18,20,22,28,31,33,34.

when a roll of "1" is required to move a pawn from nitya nigod (permanent basic lifeforms, sq. 1) to $n\bar{a}rk\bar{\iota}$ (hell-beings, sq. 2). This means that it can take several turns before a pawn leaves the first square and begins its journey along the track. The second situation is when a pawn begins its turn in a square containing the foot of a ladder. Only if the player rolls a "1" is the pawn allowed to ascend to the top of the ladder; any other roll simply moves the pawn forward as usual. 347,348 This means that pawns do not automatically climb ladders when they arrive at their feet, but have to wait a full turn, and then only succeed on a roll of "1." The importance of this rule cannot be overstated as it solves the inherent ambiguity of the Jaina charts which include two squares (sqs. 44,50) containing both the top and the foot of a ladder. Using Jethābhāī's rule, a pawn which has successfully ascended the ladder from sq. 7 to sq. 44 has to roll another "1" on its next turn in order to continue up the ladder from sq. 44 to sq. 50, and similarly with the ladder from sq. 50 to top sq. 6. Another and less satisfactory solution to a similar situation on 108-square Advaita Vedānta type b charts is given by Dvivedi who says that connecting snakes and ladders must be followed to their conclusion as if they represented a single continuous snake or ladder (Dvivedi 1893: 8).

³⁴⁵ A simple experiment with a set of seven cowries brought home from India showed that each cowrie had approximately 45% chance of falling faceup when thrown, and approximately 55% chance of falling facedown. Using these approximations as exact numbers results in the following statistics for a throw of seven cowries: 0 faceup (1.5%), 1 faceup (8.7%), 2 faceup (21.4%), 3 faceup (29.2%), 4 faceup (23.9%), 5 faceup (11.7%), 6 faceup (3.2%), and 7 faceup (0.4%). In other words, the most frequent result would be two, three, or four cowries falling faceup, while a single cowrie falling faceup would only occur on every eleventh or twelfth throw as opposed to a "1" on every fourth throw of a stick die. Thanks to my colleague Toke Lindegaard Knudsen for carrying out these calculations for me.

³⁴⁶ Ane te jyām sūdhī ek dāmno pare tyām sūdhī nāmsvo ane jyāre ek dāmno pare eṭle prathamnā gharmāmthī nīklī bījā gharmām āvvu (JBRR 1) [and one should keep throwing until one throws a "1," one should move out of the first square and into the second square].

³⁴⁷ Paṇ je gharmāṁ pagathī tathā nīsarni hoy ane ek dāṁṇo paṛe to pagathīe upar ek gharmāṁ tathā nīsarnīe cheṛā sūdhi gharmāṁ caḍhvuṁ (JBRR 1-2) [however, if you throw a "1" in a square with a footprint or a ladder, you should move one square above the footstep or to the square at the top of the ladder].

³⁴⁸ A similar rule is recorded in the margin of an 84-square Vaiṣṇava chart (Va84#5). The rule is written in Marathi next to the ladder leading up from the discipline of devotion (*bhaktiyog*, sq. 55) to Vaikuṇṭha (sq. 80): *ek aṅk paḍe tā bhaktiyogāce (vai)kuṇṭhās jāye* [if you throw a "1," you shall go from *bhaktiyog* to *vaikuṇṭh*]. Since 84-square Vaiṣṇava charts are likely to have been influenced by both 84-square Jaina and 72-square Vaiṣṇava charts, it is likely that the rule was adopted from the Jaina charts.

The third situation described by Jeṭhābhāī occurs when a pawn begins its turn in a square with a footprint. On a roll of "1," the pawn moves one square directly upward from its current position, including from the central square in the top row to top sq. 1 above the main grid. As in the case of the ladders, any other roll moves the pawn forward along the track in the usual manner. The fourth and final situation is when a pawn begins its move in top sqs. 1-5. Similar to the situation at the beginning of the game, a roll of "1" is required for the pawn to advance to the next square, while any other throw leaves it stranded for the turn. The top squares on the Jaina charts are numbered separately from the squares of the main grid, and the sequence most commonly followed corresponds to top sqs. 1-2-4-3-5 on the critically read chart (cf. figs. 46-47). If a pawn begins its turn in top sq. 5, it continues to top sq. 6 on a roll of "1," and wins the game.

Endgame

In the modern children's game of snakes and ladders the winning square is usually placed at the top left which makes for a fairly simple endgame. If pawns are required to land exactly on the winning square, any throw in excess of the number of squares between the pawn and the winning square can either be ignored, or applied by bouncing the pawn back from the winning square (see fig. 72). In *gyān caupaṛ*, however, the situation is a little more complicated since the winning square, or the square leading up to the winning square, is usually located in the central square of the

³⁴⁹ Em ramte sūṛtālīs tathā esīnā gharmāṁ vīṭī āvethī ek dāṁṇo paṛe to upar vīmāṁnmāṁ caḍhe (JBRR 2) [thus, during the game, if a pawn lands in the 47th square (containing the foot of a ladder) or the 80th square (containing a footprint), and one throws a "1," it moves to the vimān (i.e. top sq. 1) above].

³⁵⁰ Below the rule on Va84#5 that a throw of "1" is required to climb the ladder to the winning square (see fn. 346), a second rule states that a role of "1" is also required to move from the discipline of knowledge (jñānyog, sq. 54) to the discipline of devotion (bhaktiyog, sq. 55) directly above: (e)k aṅk paḍe tā jñā(n)yogāce bhaktiyogas jāye [if you throw a "1," you shall go from jñānyog to bhaktiyog]. No footprint or otherwise appears in sq. 54, but it seems likely that this rule, too, was adopted from the Jaina charts.

³⁵¹ *Te caḍhiṁ valī ek ek dāṁṇo paṛe to pānchmā vimāṁnmāṁ sarvārthsidh vimāṁnmāṁ caḍhvuṁ (JBRR* 3) [when one has ascended (to top sq. 1), then every time one throws a "1," one should climb up (one square) toward the fifth *vimān*, the *sarvārthsiddh vimān* (i.e. top sq. 5)].

³⁵² *E pachī ek dāmṇo pare to upar sidhsīlā muktiïm caḍhi jaī bājī pūrī thaī (JBRR* 3) [then (i.e. when one has reached top sq. 5), if one throws a "1," one climbs to *siddhśilā mukti* (i.e. top sq. 6) above, and the game is finished].

top row. This means that pawns can overshoot the target and become stranded on the wrong side of the winning square, so to speak. Different sources propose different solutions to this problem, and it therefore seems likely that no standard solution was applied to the game as a whole, and perhaps not even to individual types of charts.

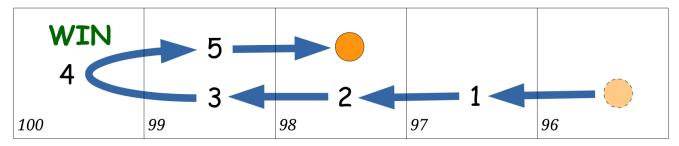


Fig. 72: Modern snakes and ladders endgame. A pawn in sq. 96 throws "6," and ends up in sq. 98.

The only early evidence we have for 72-square Vaisnava charts is Dampier's assertion that pawns moving past the winning square (sq. 68) may either land on the final square of the track (sq. 72), and follow the snake back down to sq. 51, or move past the final square and continue playing from sq. 1 (Dampier 1895: 25). This, however, is not attested for any other known version of gyān caupar. 353 The Krīdākauśalya states that pawns overshooting the top central square (sq. 80) of an 84-square Vaiṣṇava chart should keep moving back and forth between sqs. 80 and 84 until they land on sq. 80 and subsequently throws a "1," allowing them to move up to the winning square (top sq. 1) directly above (KK 245, comm.). Since there is no snake leading down from sqs. 80-84, this effectively means that once a pawn has moved beyond the final snake of the chart in the first square of the top row (sq. 75), it is barred from falling back down the grid (see fig. 73). As this would seem to go against the representational value of the charts, disrupting the sense of cyclical rebirth, and establishing a point of no return well before the attainment of Vaikuntha (sq. 80) and final liberation (top sq. 1), we can hypothesize that the rule was instituted to shorten an otherwise seemingly endless game. If pawns had to land on sq. 80 and throw a "1" with seven cowries (a less than 10% chance), or risk falling back down the grid, the game could easily have gone on for a very long time before anyone actually managed to finish it.

³⁵³ Johari's rule that pawns moving past sq. 68 may either land exactly on sq. 72, and follow the snake back down to sq. 51, or forfeit their turn, is not attested either (Johari 2007: 9-10). It was probably adapted from the modern game of snakes and ladders which sometimes applies a similar rule for landing on the winning square at the far end of the top row.

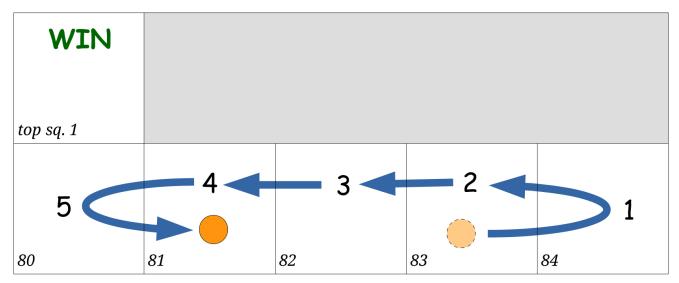


Fig. 73: 84-square Vaiṣṇava chart endgame. A pawn in sq. 83 throws "6," and ends up in sq. 81.

If we were to apply the same endgame rule to the 72-square Vaiṣṇava charts, we would get a thematically more satisfying result. Having moved past the top central winning square (sq. 68), pawns would keep on roaming between sqs. 68 and 72 until they arrived either at the winning square or at the snake leading down from the top left square (sq. 72). This would mean that the cyclical effect would still be in play, and since no additional throw is required after a pawn lands on sq. 68, it would also mean that pawns would have a fifty-fifty percent chance of either finishing the game or falling back into the cycle of rebirth once they had arrived in the leftmost section of the top row (fig. 74). Mechanically, however, the solution does not seem very satisfying. As my own experiments with the rule has taught me, it quickly becomes difficult to keep track of which direction the pawns are currently moving in when they constantly shoot back and forth between the two squares. Furthermore, as discussed below, the narrative flow of the game is dependent upon a sense of progress or regress in each turn, and

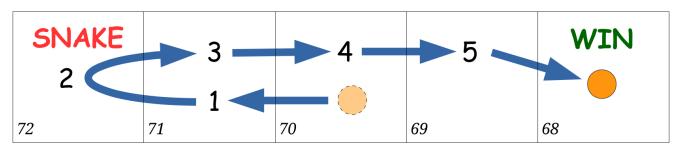


Fig. 74: 72-square Vaiṣṇava chart endgame. A pawn in sq. 70 throws "6," ends up in sq. 68, and wins the game.

this aspect is lost if a pawn spends multiple turns landing on the same squares between sqs. 68 and 72 before finally settling on one of them. For these reasons, I believe that even though the rule may have originated with the 72-square Vaiṣṇava charts, it was not original to them, but only introduced later to make the game quicker and less frustrating for the players. A more convincing solution to what originally happened when a pawn overshot sq. 68 and moved beyond sq. 72 at the end of the track is suggested by Jeṭhābhāī who, however, only prescribes it for the 84-square Jaina charts.

Jeṭhābhāī's endgame rule states that a pawn which overshoots the top central square (sq. 80), or fails to roll a "1" when beginning its turn in that square, should continue forward to sq. 84 at the end of the row, and then move back toward sq. 76 at the other end of the row, where it should follow the snake down to sq. 52. 354 It is unclear whether a pawn which lands in sq. 80 on its way back from sq. 84 is allowed to move up to top sq. 1 on a roll of "1," and what happens if a pawn overshoots sq. 76 when returning from sq. 84. Since Jeṭhābhāī does not mention the possibility of turning back from sq. 76 to sq. 84, or losing any count in excess of what is needed to land on sq. 76, the most logical interpretation would be that the pawn arrives in sq. 76, follows the snake down to sq. 52, and completes any remaining count as usual, i.e. by moving forward from sq. 52 (fig. 75). While this would work just fine for the 84-square Jaina charts, it would in fact work even better for the 72-square Vaiṣṇava charts. Since they position the final snake at the very end of the track beyond the winning square, pawns would never have to change direction, thereby eliminating the possibility of confusion which still remains to some limited degree on the 84-square Jaina charts. All in all, it seems probable that the rule originated with the 72-square Vaiṣṇava charts, and only came to be adopted by the 84-square Jaina charts with the minor addition that pawns would have to change direction when they reached the far end of the track.

³⁵⁴ Paṇ ek dāṁṇo na paṛe to corāsīnā gharmāṁ āvī tāthī sāṁme pāṭopāṭ pāchā corāsīnā pherāmāṁ [read: gharmāṁ?] pharā karvu te phartā chotermā gharthī sarp gale māṭe pāchā bāvannā gharmāṁ uttarī pāchā upar caḍhvu (JBRR 2-3) [however, if one does not throw a "1" (when one is in sq. 80), then, after arriving in the 84th square, one should turn around in the 84th square (and move) back to the opposite end (of the row). After having moved back down from the mouth of the snake in the 76th square to its end in the 52nd square, one should climb up again].

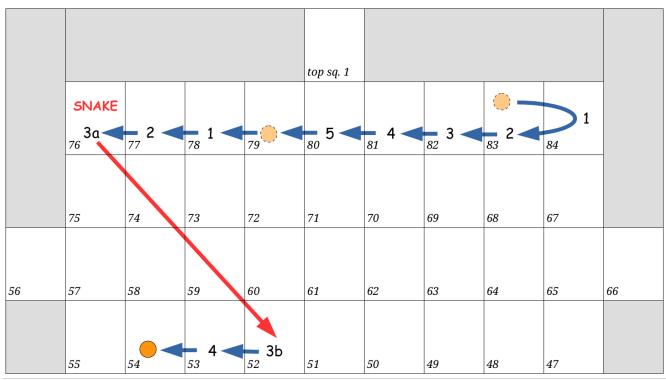


Fig. 75: 84-square Jaina chart endgame. A pawn in sq. 83 throws "6," and ends up in sq. 79, then throws "5," and ends up in sq. 54.

Other Rules

The rules outlined in the previous sections give us a good idea of how the charts and their commentators intended for the game to be played. This, however, does not mean that those were the only rules in circulation, or that players did not ignore, change, or add to them as they saw fit. Adopting rules from one game into another is common practice and a frequent source of variants and hybrids. Related games, such as *caupar* and *aṣṭākaṣṭe*, might have inspired players to experiment with controlling multiple pawns, requiring special throws to enter them on to the grid, sending them back to start when another player's pawns landed on them, creating safe squares for them, etc. Traces of this ongoing process may be found in chart-specific variant rules, such as the special throws of "10" for Ṣūfī charts (Topsfield 1985: 209, fn. 30; 2006a: 153), "14" for Advaita Vedānta charts (Devdhar 1905: 207), and "25" for a 285-square Vaiṣṇava chart (Gulābrāv 1981: 7), as well as Harikṛṣṇa's statement that the game should be played by two or four people (*KK* 241-45, comm.), as if it were a game of *caupar* or *paccīsī*. A further example provided by the Marathi instructions on an 84-square Vaiṣṇava chart (Va84#4) is of special interest because it is the only source which takes up the question

of pawn interaction. It states that a pawn landing in the square of another pawn displaces that pawn and causes it to move backward along the track.³⁵⁵ It is not clear from the text how far back the displaced pawn should be moved, but judging from similar rules in related games, it would either be moved back to sq. 1, or to the square previously occupied by the displacing pawn. The former rule is essential to *caupar* and also attested for the modern game of snakes and ladders (Bell 1969: II, 11), while the latter rule is most commonly associated with the goose games (Parlett 1999: 96), calling to mind the game mechanical similarities between *gyān caupar* and goose discussed in chapter two. Whether the rule of pawn displacement was inspired by *caupar*, goose, or snakes and ladders, all of which were current in the late 19th and early 20th centuries to which the 84-square Vaiṣṇava chart can be approximately dated, it demonstrates that *gyān caupar*, despite its lofty thematic aspirations, existed alongside more widespread and thematically neutral games. While the act of displacing another pawn makes good sense in a purely competitive and wholly secular game, it sits awkwardly with the narrative of spiritual progress through good deeds promoted by *gyān caupar*.

Perhaps the most interesting rules variant in the present context is the one alluded to by Shridhar Andhare in a brief catalogue description of an 84-square Jaina chart (Ja84#29) (Andhare et al 2000: 126). Andhare notes in passing that players would have to "[give] the right answer" before their pawns were allowed to ascend the ladders of the chart, effectively turning the game into a combined race and trivia game with a strong didactic component. Unfortunately, he does not provide any reference for the rule, but a similar idea was conveyed by Param Pujya Acharya Shri Gunaratna Sagar Maharaj Saheb when I visited him at a pilgrim's rest house (dharmaśālā) in Palitana in September 2013. He was 81 years old at the time, and told me that he remembered teachers playing it with their students in his youth, asking them to elaborate on the inscriptions in the squares before they were allowed to advance. He was not clear on whether the rule only applied to the ladders, as suggested by Andhare, but since there are only six ladders on a standard 84-square Jaina chart, we might infer that it also applied to the footprints, and possibly even to the squares as a whole. It is not difficult

³⁵⁵ *Donhī cīnhe yekvaṭ jālī yāṇeṁ pahīle cīnhe māgeṁ sarteṁ* [if two pawns come together (in the same square), then the first pawn (i.e. the pawn that was already there) moves back along the track]. Thanks to Amit Deshmukh for helping me with the translation of this passage. A similar passage is also found on another 84-square Vaiṣṇava chart (Va84#10), but the exact meaning is not clear to me.

to imagine a teacher penalizing an eager student for not properly understanding the inscription in a square by canceling his move, forcing him to lose a turn, or similar.

Other variant rules were not merely superimposed on the charts, but caused actual changes to the design. Though the vast majority of charts number the squares sequentially from bottom to top with little, if any, variation, three 72-square Vaisnava charts present a slightly different route through the grid (see Va72#27,31,32 in Appendix C1). Pawns enter the sixth row at the right end as usual (sq. 46), but only continue as far left as the penultimate square (sq. 53) before changing up to the seventh row above (sq. 56). From there they follow the usual route right along the seventh row and left along the eighth row until the end of the track (sq. 72), except that they skip the winning square (sq. 68), and continue on down from sq. 72 to sq. 54 at the far left of the sixth row. From there a ladder takes them back up to the winning square. Unnecessarily confusing as it may sound, it stresses the connection between *bhakti* (sq. 54) and Vaikuntha (sq. 68), instituting them as the last two squares of the track. Furthermore, the two squares immediately prior to sq. 54 - egoity (ahamkār, sq. 55) and the quality of inertia (tamogun, sq. 72) - both have a snake leading down from them, making the endgame a good deal more hazardous as pawns have to cross two snakes in order to reach the ladder beyond, and probably risk bouncing back to the snakes if they overshoot the ladder. An even more radical redesign of the track, which cannot be gone into here, is found on the 84-square Vaiṣṇava type d charts which abandon ladders all together, and branch off the track in five different directions at sq. 31. Mention should also be made of a 124-square Vaisnava chart (Va124#1) which introduces a dead end from which pawns apparently cannot return, and the 342square Vaisnava charts which divide the grid into two halves, each consisting of 171 sequentially numbered squares, allowing players to begin the game in one half, and cross over to the other half if they land on a connecting snake or ladder.

Sample Playthroughs

Just as the conceptual and formal affordances of the charts help us understand their static mode of representation, so the experiential affordances help us understand what happens when the charts are activated through play and the mode of representation changes from static to interactive. The analysis of experiential affordances at the end

of the chapter is based on a single four-player playthrough of each of the two critically read charts, and should therefore be considered purely heuristic in nature. A statistical survey of thousands of games would likely yield quite different results, and reveal patterns that are not evident from the sparse empirical data provided here. Still, the playthroughs do offer valuable insights into how the game is experienced by the players, and how it might have been interpreted by those trying to draw lessons from it.

72-Square Vaiṣṇava Chart (Type a)

The table below shows the progress of a four-player game of $gy\bar{a}n$ caupar played on the critically read 72-square Vaiṣṇava type a chart (cf. figs. 46-48). The playthrough was conducted according to the following rules established above:

- Each player has a single pawn beginning in sq. 1
- Players take turns throwing seven cowries, moving their pawn forward according to the number of cowries that fall faceup
- If a pawn ends its move at the head of a snake or the foot of a ladder, it automatically moves to the other end of the snake or ladder in question
- The first pawn to end its move on sq. 68 wins the game
- If a pawn overshoots sq. 68, it continues to sq. 72 where it slides down to sq. 51, and continues its move as normal

The table lists the number and title of squares occupied by the pawns of the four players throughout the game. Each turn the pawns move forward by between 0 and 7 squares depending on the fall of the cowries. Snake and ladder movement is indicated by ▼ and ▲ as in the critical reading, and explanatory notes are added in parentheses whenever a pawn overshoots sq. 68, and moves back down the grid from sq. 72. As seen from the playthrough, player #4 won the game in turn 16, player #1 came in second in turn 21, player #3 came in third in turn 22, and player #2 came in last in turn 24. All four results are below the average for the popular version of snakes and ladders published as *Chutes and Ladders* by Milton Bradley in 1943. It has been calculated that it takes approximately 39 turns to complete a game of *Chutes and Ladders* (100 squares, 10 snakes, 9 ladders) when played with a single six-sided die and the rule that pawns

must land exactly on the final square of the track in order to win (Althoen $\it et~al~1993$: 71-3; cf. Audet 2012).

Turn	Player #1	Player #2	Player #3	Player #4
1)	1 janma	1 janma	1 janma	1 janma
2)	4 lobh	5 bhūlok	6 moh	3 krodh
3)	7 mad	9 kām	9 kām	7 mad
4)	10 tap ▲ 23 svarglok	14 bhuvarlok	13 antarikș	10 tap ▲ 23 svarglok
5)	26 śok	18 harş	15 nāglok	29 adharm ▼6 moh
6)	31 sparś	22 dharm ▲ 60 subuddhi	16 dveş ▼4 lobh	9 kām
7)	34 ras	65 durati	8 matsar	14 bhuvarlok
8)	38 prāņ	70 satoguņ	11 gandharvlok	18 harş
9)	45 suvidyā ▲ 67 śivlok	71 rajoguṇ (throws 3, moves 1, slides down the snake to sq. 51, and moves 2)	14 bhuvarlok	23 svarglok
10)	71 rajoguṇ (throws 2, moves 1, slides down the snake to sq. 51, and moves 1)	53 jal	18 harș	26 śok

Turn	Player #1	Player #2	Player #3	Player #4
11)	52 hiṃsā ▼35 narak	56 ākāś	22 dharm ▲ 60 subuddhi	31 sparś
12)	40 vyān	60 subuddhi	64 prakṛti	32 maharlok
13)	43 manuṣyajanma	65 durati	65 durati	36 śabd
14)	45 suvidyā ▲ 67 śivlok	69 brahmlok	67 śivlok	42 agni
15)	70 satoguṇ (throws 3, moves 2, slides down the snake to sq. 51, and moves 1)	72 tamoguṇ ▼51 pṛthvī	72 tamoguṇ ▼51 pṛthvī	48 yamunā
16)	52 hiṃsā ▼35 narak	55 ahaṃkār ▼2 māyā	53 jal	54 bhakti ▲68 vaikuṇṭh
17)	40 vyān	3 krodh	56 ākāś	-
18)	41 janlok	6 moh	60 subuddhi	-
19)	46 vivek ▲ 62 sukh	10 tap ▲23 svarglok	64 prakṛti	-
20)	65 durati	30 uttamgati	67 śivlok	-
21)	68 vaikuṇṭh	33 gandh	71 rajogun (throws 4, moves 1, slides down the snake to sq. 51, and moves 3)	-

Turn	Player #1	Player #2	Player #3	Player #4
22)	-	36 śabd	54 bhakti ▲ 68 vaikuṇṭh	-
23)	-	37 jñān ▲ 66 ānand	-	-
24)	-	68 vaikuṇṭh	-	-

84-Square Jaina Chart (Type *a1*)

The table below shows the progress of a four-player game of *gyān caupaṛ* played on the critically read 84-square Jaina type *a1* chart (cf. figs. 47-49). The playthrough was conducted according to the following rules established above:

- Each player has a single pawn beginning in sq. 1
- Players take turns throwing a stick die configured as 1-2-5-6, moving their pawn forward according to the number shown
- If a pawn begins its turn on sq. 1, it only advances on a roll of "1"
- If a pawn begins its turn at the foot of a ladder, it only ascends to the top of the ladder on a roll of "1"
- If a pawn begins its turn in a square with a footprint, it moves one square directly upward on a roll of "1"
- If a pawn begins its turn in top sqs. 1-5, it only advances on a roll of "1"
- If a pawn ends its move at the head of a snake, it automatically moves down to the tail of the snake
- If a pawn overshoots sq. 80, it continues to sq. 84, and moves back toward sq. 76 where it slides down to sq. 52, and continues its move as normal; if it ends its move in sq. 80 (containing a footprint) on its way back from sq. 84, and subsequently rolls a "1," it moves up to top sq. 1 as normal

• The first pawn to end its move in top sq. 6 wins the game

The table showing the Jaina playthrough reads similarly to the table showing the Vaiṣṇava playthrough except for a few minor differences. The pawns move forward 1, 2, 5, or 6 squares each turn depending on the throw of the die, and movement by ladder or footprint is indicated differently than movement by snake to accommodate for the fact that the former is only activated on a roll of "1." The notation for ladders and footprints is added in superscript after the relevant squares (e.g. 7⁴⁴ and 15^{footprint}), and a subsequent roll of "1" activating a ladder or a footprint is noted in parentheses at the end of the entry for the square in question. Since none of the pawns in the playthrough moved backward in the top row, or climbed through top sqs. 1-6, notations for such moves need not be taken into account.

The biggest difference between the two playthroughs is that the Jaina game is a lot slower and longer than the Vaiṣṇava game. To avoid taking up unnecessary space, it was decided only to record the same number of turns for the Jaina playthrough as for the Vaiṣṇava playthrough. As shown in the table, player #4 won the game in turn 19, while players #1-3 were at sqs. 25, 2, and 22, respectively, at the end of the recording in turn 24. Player #1 would go on to finish the game in turn 75 after spending 20 turns moving through the top squares, player #2 would finish it in turn 120 after spending 32 turns moving through the top squares, and player #3 would finish it in turn 132 after climbing the ladder from sq. 50 to top sq. 6 just like player #4 did in turn 19.

Turn	Player #1	Player #2	Player #3	Player #4
1)	1 nitya nigod	1 nitya nigod	1 nitya nigod	1 nitya nigod
2)	1 nitya nigod	1 nitya nigod (throws 1)	1 nitya nigod	1 nitya nigod
3)	1 nitya nigod	2 kām, nārkī	1 nitya nigod	1 nitya nigod (throws 1)
4)	1 nitya nigod	4 ajñān lobh	1 nitya nigod	2 kām, nārkī

Turn	Player #1	Player #2	Player #3	Player #4	
5)	1 nitya nigod	5 ajñān moh	1 nitya nigod	7 ⁴⁴ jñān, miśra, śubh	
	(throws 1)			pariṇām	
6)	2 kām, nārkī	11 vyavahār rāśi	1 nitya nigod (throws 1)	9 ahaṃkār	
7)	7 ^{▲44} jñān, miśra, śubh pariṇām	13 parjīv spardh ▼8 machar	2 kām, nārkī	10 ajñān māyā	
8)	12 suvarņ- & asurkumār	14 agni- & vidyutkumār	7 ⁴⁴ jñān, miśra, śubh pariṇām	15 ^{footprint} das nikāy, guņsthān 4-6	
9)	13 parjīv spardh ▼8 machar	20 upaśam yog	12 suvarņ- & asurkumār	21 itar nigod	
10)	9 ahaṃkār	26 vāükāy	14 agni- & vidyutkumār	26 vāükāy	
11)	15 ^{footprint} das nikāy, guṇsthān 4-6	32 śubhāśubh sattā	20 upaśam yog	32 śubhāśubh sattā	
	(throws 1)				
12)	24 ^{footprint} sthāvar, guņsthān 7-9	38 jin pūjā & bhakti	22 pṛthvīkāy	33 ^{footprint} vikalendrī, guņsthān 10-12	
13)	33 ^{footprint} vikalendrī, guņsthān 10-12	43 śubh tiryañc bhavya pariṇām	23 apkāy	35 sañjñī teïndrī	
	(throws 1)				
14)	39 nīl leśyā	44^ ⁵⁰ dharm dhyān	25 teūkāy	37 āsrav, saṃvar	
15)	45 kṛṣṇa leśyā ▼9 ahaṃkār	46 padma leśyā	30 śubhāśubh uday	38 jin pūjā & bhakti	
16)	10 ajñān māyā	51 ^{footprint} manuṣya, guṇsthān 14	32 śubhāśubh sattā	39 nīl leśyā	

Turn	Player #1	Player #2	Player #3	Player #4
17)	12 suvarṇ- & asurkumār	56 vaimānik, vyantar, jyotiṣī	33 ^{footprint} vikalendrī, guṇsthān 10-12	44 ⁵⁰ dharm dhyān (throws 6)
18)	14 agni- & vidyutkumār	57 saudharm devlok	38 jin pūjā & bhakti	50 ^{*top#6} mahāvrat, śubh kriyā, kevaljñān, śukla leśyā (throws 1)
19)	16 udadhi- & dvīpkumār	59 īśān devlok	43 śubh tiryañc bhavya pariṇām	top sq. 6 mukti kşetra
20)	18 stanit- & diśākumār	64 brahm & lāntak devlok	44 ^{▲50} dharm dhyān	-
21)	19 nāg- & vāyukumār	65 ⁶⁸ vivek (throws 1)	46 padma leśyā	-
22)	21 itar nigod	68 abhīṣṭ siddhi sāgar	48 sāt vyasan ▼10 ajñān māyā	-
23)	23 apkāy	73 āraņ devlok	16 udadhi- & dvīpkumār	-
24)	25 teükāy	75 rājas ahaṃkār ▼2 kām, nārkī	22 pṛthvīkāy	-

Experiential Analysis

An often repeated distinction between narrative and drama is that narrative takes place in the past whereas drama takes place in the present. Frasca builds on this premise by adding that simulation is "the form of the future" (Frasca 2003: 233). What this means is that a simulation contains within itself a range of possible scenarios and outcomes, all of which only exist hypothetically until one or more of them are realized by the simulation. It would therefore be wrong, or at least severely limiting, to consider the playing of *gyān caupaṛ* primarily as a narrative or a drama. This, however, is not to say that *gyān caupaṛ* is not generative of narrative and drama. On

the contrary, we might say that everything that has happened in the game up until any given point in it is the narrative, while the expectation of what might happen next is the drama. If we take player #4 in the Vaiṣṇava playthrough as an example, we might retell the player's initial turns as the story of someone born into the world (*janma*, sq. 1), struggling through anger (*krodh*, sq. 3) and intoxication or pride (*mad*, sq. 7) until he begins practising asceticism (*tap*, sq. 10) which leads him to heaven (*svarglok*, sq. 23). At the beginning of his fifth turn we find him in great excitement as to whether his new-found positivity in life will last. As he rolls the seven cowrie shells around in the palm of his hand, he carefully inspects the chart, pondering the possible outcomes of his throw. A throw of "4" or "5" would lead him to the highest truth (*paramārth*, sq. 27) or righteousness (*sudharm*, sq. 28), which would take him even further upward on his spiritual quest, while a throw of "1" or "6" would lead him into bad company (*kusaṅg*, sq. 24) or unrighteousness (*adharm*, sq. 29), causing him to fall back down to the life of sin and misery that he thought he had left behind for good. With bated breath, he releases the cowries from his hand, and lets his karmic destiny unfold itself.

Emergent game narratives, such as the one described above, is what Gordon Calleja refers to as alterbiographies. He defines alterbiographies as stories generated in the interpretational space between the formal properties of a game, including its representational value, and the imagination of a player (Calleja 2009: 4). The stories are neither pre-scripted, nor purely a product of the imagination, but the result of a cyclical process where the input of the player and the output of the game reinforce each other and produce disparate narrative units which can then be molded into a coherent whole. Though Calleja specifically applies the concept of alterbiography to video games, his focus on "spatially navigable virtual environments" (ibid. 2) applies equally well to gyān caupar. The inscribed grid diagram, representing the cosmos and the forces at work within it, creates a virtual environment which players navigate by throwing dice or cowries and moving their pawns along the track. It might be argued that players have no real agency in the game, and thus do not control the input that generates the output, but this does not detract from the fact that the game always suggests a narrative, however random or predestined one might perceive it. Another aspect of alterbiography discussed by Calleja is focalization which concerns the mode in which the player experiences the story (ibid. 4). A game will often suggest a certain

mode, but ultimately it is the player himself who makes the choice. In the case of $gy\bar{a}n$ caupar, the single pawn controlled by each player suggests experiencing the alterbiography from the perspective of an individual entity, but whether that entity is conceived of as external or internal to the player himself depends on the mode in which he chooses to play the game. Whereas one player might experience the game as an objective simulation of the workings of the cosmos, another player might experience it as a deeply personal reflection of his own life.

The interpretational space of gyān caupar is framed as a spiritual journey from birth to liberation. The stages in between depend upon the design and religious affiliation of the individual chart, but the exact sequence in which the stages are arrived at is determined by the fall of the dice or cowries, and it is this sequence which generates the story. Reading the squares one by one from beginning to end might leave us with a general sense of progression from lower to higher and worse to better, but the sequential arrangement of the squares can hardly be said to constitute a story in and of itself; and even if it did, the players would probably feel that they were missing out on parts of it as their pawns jumped ahead, skipping across several squares each turn, or even returned to an earlier square. The purpose of the squares, we might therefore say, is not to tell a story, but to facilitate the telling of a story. As players move their pawns between different squares, they are encouraged to form mental connections between them, stringing together narratives that only exist somewhere between the output of the game and the input of their own imagination. This conforms not only to Calleja's concept of alterbiography, but also to Frasca's concept of simulation as something other than narrative. Whether the narratives are dismissed as irrelevant to the game experience, kept in the mind as quaint little fictions, considered revealing of one's own life experience, or even acted upon in the reality outside the simulation, is of no consequence to the simulation itself. It offers players the chance to discover a story beyond the usual one of winning and losing, but whether they choose to accept it or not is for them to decide. In the following we will look at some of the experiences afforded those players who do indeed choose to accept the stories that emerge from the playing of the game.

Entering the Chart

The game begins with a simple gesture: the players take their pawns, and place them in the first square of the chart. Innocent and inconsequential as this may seem, it takes away their attention from the chart as a whole, and focuses it on a single square. They enter into the chart, so to speak, and no longer perceive the cosmos from the outside in, but from the inside out. For the rest of the game, regardless of whether their attention remains fixed on the chart, or periodically drifts away from it, the squares currently occupied by their pawns will determine their outlook on the game both mechanically and thematically. The position of a pawn not only indicates how far the player who controls it have progressed along the game track, but also where he is in relation to the other players, and which squares immediately ahead of him he might possibly land on in his next turn. This kind of engagement is what game scholars refer to as immersion, and though it is a psychologically complex phenomenon which may take place on many different levels, it is always present to some extent when one plays a game. Johan Huizinga famously referred to it as the magic circle (Huizinga 1980: 10-12), but as this gives the impression that players can only be either wholly inside or outside the circle, and that a sharply delineated dividing line exists between games and reality, most modern game scholars prefer a more nuanced approach.³⁵⁶ The debate over the question of immersion cannot be entered into here, but it is worth noting that a player might be deeply immersed in the mechanics of a game without giving any thought to the thematics of it, and vice versa. For an outside observer, it might therefore not be immediately obvious whether a player immersed in a game of gyān caupar is competing to win, constructing a spiritual biography, or both.

The immersion offered, and indeed demanded, by games is reminiscent of that required for meditation and visualization, especially in cases where physical objects serve to focus the attention. An example is provided by Madhu Khanna's study of a tantric scroll from 19th-century Gujarat or Rajasthan. The scroll depicts the heavily inscribed outline of a person standing in the $k\bar{a}yotsarga$ pose of meditation

³⁵⁶ Important contributors to our understanding of immersion in games include Mihaly Csikszentmihalyi and Stith Bennett (1971), who study how flow is maintained in play and games, and Gordon Calleja whose study of presence and immersion in games develops a model highlighting six different kinds of player involvement: kinesthetic, spatial, shared, narrative, affective, and ludic (Calleja 2011: 43-44).

reminiscent of the imagery on several Jaina *gyān caupar* charts (see *Jaina Tantra and Yoga* in chapter four). Thirteen *cakra*s connected by the Suṣumnā energy channel are depicted along the central axis of the body, including the *kuṇḍalacakra* in the form of the thrice coiled Kuṇḍalinī serpent. Khanna identifies the scroll as an instructional chart used for visualizing the subtle body, and hence as an example of the visual language of tantra combining theory and practice (Khanna 2005: 13-14). What this means is that the textual and visual elements of the scroll can either be engaged with intellectually as sources of knowledge, or they can be entered into spiritually as part of a religious practice. Though the extent to which *gyān caupar* formed part of a religious practice remains undocumented, the representational value and interactive nature of the charts certainly afford such usage, and may hint at their ultimate origins in tantric and yogic diagrams.³⁵⁷

Following the Path

The design of *gyān caupar* dictates a steady progress from bottom to top interrupted by sudden advances and setbacks in the form of snakes, ladders, and footprints. Though the 84-square Jaina chart is only slightly larger than the 72-square Vaiṣṇava chart, the pacing of the two games feels very different. This is evident from the very beginning of the playthroughs recorded above where the Vaiṣṇava players rush forward from the first throw of the cowries, while the Jaina players spend between two and six turns in sq. 1 before the required roll of "1" finally allows them to continue to sq. 2. If we compare the position of the pawns at the beginning of the twelfth turn halfway through the playthroughs, we find that three of the Vaiṣṇava players are already in the top row, while the highest positioned Jaina player has only just entered the fifth row in the middle of the chart. Twelve turns later, all four Vaiṣṇava players have reached the winning square as compared with only one Jaina player.³⁵⁸ The main reason for this discrepancy is the restraint on sudden promotion put in place by the Jaina chart which

³⁵⁷ A tantric painting from Nepal dated c. 1700 uses the imagery of dark and light squares connected by snakes as the basis for a depiction of the cosmos presided over by Viṣṇu (Topsfield 2006a: 175). Though clearly not intended as a game, it demonstrates how the visual language of tantra may have inspired the formalized ludic elements of *gyān caupaṛ*. Further examples of this are provided in chapter six.

³⁵⁸ As mentioned above, the Vaiṣṇava endgame adopted in the playthrough is only one of several possible endgames, some of which may have caused the game to go on for several more turn. Still, the automatic ascension of ladders would almost always result in a quicker and more dynamic game.

only gives players a one-in-four chance of ascent after successfully landing on either a ladder or a footprint. Another aspect of pacing is the range of possible outcomes of a player's throw. While the seven cowries of the Vaiṣṇava game can fall in eight different configurations resulting in a score between 0 and 7, the stick die of the Jaina game can only fall in one of four different ways resulting in a score of 1, 2, 5, or 6. The uneven probabilities of the different outcomes of a cowrie throw somewhat mitigates the wider range, but the range itself heightens the drama as the Vaiṣṇava player is confronted with the possibility of landing on the seven squares in front of his pawn, while the Jaina player only has to consider the first, second, fifth, and sixth square.

Despite the many external similarities of the two charts, the playthroughs reveal them to be delivering distinctly different game experiences. Mechanically speaking, the faster pacing of the Vaiṣṇava game, the more frequent shifts up and down the grid, and the wider range of possible outcomes each turn make it more dramatic and less tedious than the Jaina game. Thematically speaking, this translates into two different views of worldly existence and the liberation from it. The Vaisnava chart simulates life as a series of constant revolutions where the speed with which one climbs up is only matched by the speed with which one falls down. Liberation is freely available to everybody, and can in fact be achieved quite quickly if only one turns toward the right path. The Jaina chart, on the other hand, simulates a much more gradual progress through life where the gains are usually small and the losses often big. Because of the patience required to sit through games which can easily last for a hundred turns or more, it even seems likely that many players would have abandoned the game before finishing it. This, however, would probably have been met with approval by Jaina teachers, since the patience required to play the game almost matches that required to attain liberation.

Creating the Narrative

The moves of each of the players in the playthroughs above create a unique sequence of squares and legends which can be strung together as a narrative.³⁵⁹ This is true even of the three Jaina players which did not complete the game in the 24 recorded turns. In

³⁵⁹ Johari suggests that players should write down the sequence on a piece of paper to allow them to review and interpret it after the game (Johari 2007: 10). The method is not documented in earlier sources, but it might have served as a valuable mnemonic aid.

fact, we might easily imagine a situation in which a player was only allowed a predetermined number of moves which would then form the basis for an analysis of that player's karmic situation, or be used to answer a question asked of the chart before the game began. While the sequence of squares is determined randomly by the fall of the dice or cowries, it is also limited by them in the sense that the Vaiṣṇava players can never land on more than the seven squares directly in front of them, while the Jaina players can never land on more than the first, second, fifth, or sixth square in front of them. Furthermore, the positions of the snakes, ladders, and footprints remain fixed in place, ensuring that the same negative and positive qualities always lead to the same results. The design of individual charts therefore have a great deal of control over the narratives they create, ensuring that they do not lead to *non sequiturs* challenging the received notions of the religious knowledge systems that they are trying to emulate.³⁶⁰

The distribution of positive and negative squares across the charts change gradually from a predominance of negative squares in the lower rows to a predominance of positive squares in the higher rows. This means that players in the lower rows are more likely to land on a negative square, while players in the higher rows are more likely to land on a positive square. However, if players in the lower rows could never land on a positive square, and players in the higher rows could never land on a negative square, the snakes and ladders connecting the higher and lower rows would not make sense thematically, and the narrative flow would break down. This explains the presence of squares like austerity (tap, sq. 10) and compassion ($day\bar{a}$, sq. 17) near the bottom of the Vaiṣṇava chart, and squares like breaking vows (avrat doṣ kṣetra, sq. 58) and deluding karma (mohnī karm, sq. 76) near the top of the Jaina chart. These are the kind of squares which uphold the narrative tension of the game by keeping alive the possibility that the karmic fate of the players can be reversed at any moment. In turn 12 of the Vaiṣṇava playthrough, player #3 has just arrived in the top row of the chart, and appears to be well on his way to liberation. Over the next two turns, he edges ever closer to Vaikuntha in sq. 68, but in the third turn he stumbles at the

³⁶⁰ An even greater degree of control is exercised by the Tibetan Buddhist *sa lam rnam bhzag* charts which connect each square with up to six other squares located anywhere on the chart. As demonstrated by Jens Schlieter in his analysis of one such chart, this allows players to either follow the slower but safer *sūtra* path, or the quicker but more dangerous tantra path (Schlieter 2012: 107-10).

finishing line, and is sent back down to a square two rows below. Conversely, in turn 7 of the Jaina playthrough, player #1 is moving through the bottom row full of conduct-deluding passions when he attains a suddens spiritual insight resulting in an auspicious transformation of his soul ($j\bar{n}\bar{a}n$, $mi\acute{s}ra$, $\acute{s}ubh$ $parin\bar{a}m$, sq. 7), promising to send him several rows up the chart on his next turn. Unfortunately, he fails to throw the required "1," but still manages to escape to a realm of bhavanapati gods in the row above (suvannamar 2, asurkumar 1, sq. 12).

An important narrative function of the snakes is that they allow players to revisit the lower rows of the charts, and possibly walk in their own footsteps. This generates a sense of patterning which can be used to identify specific challenges facing the players in their own personal narratives. A good example is provided by player #1 in the Vaiṣṇava playthrough who twice climbs the ladder from right knowledge (suvidyā, sq. 45) to the realm of Śiva (śivlok, sq. 67), and twice falls back down from the quality of inertia (tamoguṇ, sq. 72) through injury (hiṃsā, sq. 52) to hell (narak, sq. 35). This creates a narrative of a person repeatedly approaching liberation, and repeatedly misstepping at the very last moment. Exactly what such a lesson teaches the player in question depends on the purpose with which he plays the game, but it might be interpreted to mean that his thirst for knowledge alone will not serve to liberate him, or that he must not relax his concentration and think that the goal is achieved before he has actually arrived at it. As such, it is not only the narratives that are unique to the players who generate them, but also their interpretation.

Interpreting the Experience

Formal game systems can essentially be reduced to a question of winning or losing. The easiest way to arrive at an answer to such a question is to use a binary randomizing agent to produce one of two results. However, the attraction of games is not only that they produce winners and losers, but that they do so in interesting and challenging ways. Every turn of a game should change the state of the formal system, thereby upsetting the balance between the players and increasing the excitement of what might happen next. *Gyān caupaṛ* adds to the tension by inscribing each square with a legend which can be interpreted on its own or in the context of the previous squares visited by the player. This opens up a vast interpretational space which must

have been explored by the players despite the lack of early sources describing how it was done except in the most general terms. Attempting to reconstruct the methods from the charts alone would lead us too far into the realm of speculation, but a few observations on the subject will serve to highlight some of the interpretational potential inherent in the charts.

The most obvious analogy for interpreting a game of gyān caupar is provided by the systems of divination prevalent in its own day. While the charts lend themselves to a much wider range of uses, including ones that have little or nothing in common with divination, the basic procedure of generating random results and interpreting them in the context of an inquirer clearly reflects the experience of playing gyān caupar. An Indian manual of dice divination known as the *Pāśakakevalī* instructs the inquirer to throw a four-sided stick die configured as 1-2-3-4 three times to obtain a sequence of numbers which can then be translated into one of 64 different results (Weber 1860: 162; cf. Schröter 1900: xiv). 361 The manual provides a brief explanation of each of the results in the intentionally vague and often mystical language of oracle texts, treating of popular subjects such as business, marriage, offspring, travel, and disease (Weber 1860: 165). The exact interpretation of the results depends on the inquirer himself, or perhaps more likely on a diviner consulted to arrive at them. 362 That interpretations were not necessarily based on concrete textual passages, but rather on a more flexible system of associating different throws of the dice with different qualities of answers, can be seen from the fact that some diviners interpreted the results directly from the dice themselves.³⁶³

³⁶¹ The earliest known manuscript of the text forms part of the Bower Manuscript which can be dated to the Gupta era (4th-6th cent.). Numerous later manuscripts are referenced in the *New Catalogus Catalogorum* under the title *Pāśakevalī* (*NCC*, vol. xii, 76-77). Similar manuals are known throughout Asia (Dotson 2015: 1-2), and seem to have been especially popular in Tibet (Ekvall 1963: 32).

³⁶² An alternative method of arriving at the results is exemplified by an early 18th-century manuscript which presents them in the form of an 8 x 8 grid with a result inscribed in each square (Weber 1860: 166). As suggested by Schröter, it is likely that the inquirer was meant to drop an object on to the diagram, and read the result inscribed in the square where the object came to rest (Schröter 1900: xv). This would have closed the gap between divination and game even further.

³⁶³ An example is provided by a travel account of a tour of Rajasthan in 1835. A diviner from Jodhpur trained in the popular system of dice divination known as *raml* spun four dice strung together on a piece of wire, and provided an answer to the inquirer's question after carefully inspecting the dice (Boileau 1837: 181-82).

If we compare the above procedure to gyān caupar, we find that especially the legends on the critically read Vaiṣṇava chart - which are more general in nature than those on the critically read Jaina chart - might easily serve as the basis for an answer to a question posed in the context of divination. However, the method of arriving at the legends would have required more than just a single roll of the die or throw of the cowries, and it therefore seems likely that any interpretation of a game of gyān caupar would have taken into account the entire sequence of squares landed upon. We have already suggested that the number of turns could be fixed before the beginning of the game, and the progress made by the players used as the basis of interpretation, but a more logical modus operandi might be to stop the game whenever the first player arrived at the winning square. In our playthrough of the Vaiṣṇava chart, this would have stopped the game in turn 16 when player #4 reached Vaikuntha in sq. 68. Players #1-3 would then have finished the game in hell (narak, sq. 35), phenomenal reality $(m\bar{a}y\bar{a}, sq. 2)$, and the gross element of water (jal, sq. 53), respectively. In the Jaina playthrough, the game would have stopped in turn 19 when player #4 reached the field of liberation (mukti kṣetra, top sq. 6), leaving players #1-3 stranded among the udadhiand dvīpakumāra gods (sq. 16), in the Aiśāna heaven (sq. 59), and in the process of the auspicious transformation of plant and animal souls capable of liberation (śubh tiryañc bhavya pariṇām, sq. 43), respectively. It is, of course, also possible that the game would have continued until all players had reached the winning square, which would have allowed them to factor in the number of turns spent reaching it when interpreting the game.

Unless further evidence is brought forth, we must content ourselves with concluding that *gyān caupaṛ* affords a great wealth of experiences, and an even greater wealth of interpreting them. On the most basic level, players might simply have considered it a competitive race game with the added bonus that it could generate fun, interesting, and perhaps even memorable stories.³⁶⁴ On more advanced levels, players could have used it to divine their own karmic fate, ask for guidance in their decisions, evaluate their understanding of key religious concepts, or something else entirely. It is also

³⁶⁴ When I played a game with my students on the earliest datable 72-square Vaiṣṇava chart (Va72#7), my supervisor Kenneth G. Zysk joined in, and used his office key as a pawn. The University of Copenhagen was then in the process of shutting down the section of Indology, and it generated a good round of laughs when, in the final turn of the game, the key ended up in hell (*narak*, sq. 35).

possible that the religious connotations of the game were used to legitimize the act of playing it, or, conversely, that the mere act of playing it was considered auspicious and thus generative of positive karma. In the next and final chapter, we will continue our quest for answers by looking into some of the related cultural forms and practices which existed alongside the game, and might even have contributed to its invention.

Chapter 6

Related Cultural Forms and Practices

The question of whether games evolved from related cultural forms and practices, or *vice versa*, is a thorny one which can no more be resolved than the question of the chicken and the egg. The pioneering games historian Stewart Culin, who worked within the fields of museology and ethnography, believed that games originated in divinatory practices (Culin 1895: xvii-xviii), and while this view is still met with today, game scholars have become more careful in presupposing religious origins where they cannot be corroborated by direct evidence. A more fruitful approach to the question would be to look at the shared features of games and non-games, as Johann Huizinga did in his seminal study of the play-element in culture. Huizinga suggested that play is a defining characteristic of man, and that it not only preexists human culture, but acts as a civilizing force which pervades ancient and modern societies alike (Huizinga 1980: 1-5). The ludic, or playful, element, he argued, is shared by a great number of cultural forms and practices, whether classified as games or not.

The form most relevant to the current study is that of the grid diagram which has served as an interface between games and non-games since the time of the Indus Valley civilization where it was used as a means of both city-planning³⁶⁵ and time-pass.³⁶⁶ While the grids of early Indian games, such as backgammon and chess, may have been based on grids originally used for other purposes, the earliest documented example of a game played on a non-game diagram is that of *phañjikā* discussed in chapter two. The 12th-century *Mānasollāsa* describes the game grid of *phañjikā* as a

³⁶⁵ The city-plans of large urban settlements in the Indus Valley civilization can best be described as quasi-grids since only north-south-going streets ran the entire length of the cities, while east-west-going streets merely connected individual north-south-going streets (Ohji 1990: 55-56). The first example of a city-plan forming a perfect grid is Sirkap in modern day Pakistan which flourished from the 2nd century BCE to the 1st century CE (*ibid*. 56).

³⁶⁶ Archaeological evidence of grid-based games can be found scrawled on to terracotta and mud-baked bricks (Rogersdotter 2011: 52-53). Kenoyer also suggests that carved objects made from shell and ivory "may have been used in ritual games or the pastimes of wealthy city dwellers" (quoted in *ibid*. 53).

maṇḍala composed of 6 x 6 squares (MS 5.16.826-27), indicating a maṇḍala of the grid-based bhadramaṇḍala type. Gudrun Bühnemann has written extensively about bhadramaṇḍalas (e.g. Bühnemann 1987, 2007, 2011), and a brief survey will serve to exemplify their ludic properties, and how these might have both influenced and been influenced by games.

The individual squares of a bhadramandala are combined to form differently colored geometric designs suggesting various shapes, such as enclosures (paridhi), wells (vāpī), offsets creepers (vallī), (bhadra), chains (śṛṅkhalā), and crescent moons (khandendu) (Bühnemann 1987: 46). The designs are usually centered around an eight-petaled lotus from which the chain designs extend like the four arms of a caupar board (fig. 76).³⁶⁷ The diagram is outlined in three different colors representative of the inherent qualities (guna) of primordial matter (prakrti),



Fig. 76: Sarvatobhadramaṇḍala. Modern print.

indicating its cosmological nature and association with Sāṃkhya (*ibid*. 48). *Bhadramaṇḍala*s are drawn up with colored grains and powders, and used for a wide range of ritual purposes, the most common of which is the concluding ceremonies ($udy\bar{a}pana$) of religious observances (vrata) (ibid. 49). The ritual involves the invocation of deities into areca or betel nuts ($sup\bar{a}r\bar{\imath}$) which are subsequently placed in different parts of the diagram. ³⁶⁸ The association between deities and squares functions as a

³⁶⁷ As *caupar* boards usually consist of four strips of cloth joined at the center, it cannot be determined whether the proper orientation of the arms is toward the cardinal or intermediate directions. The orientation of the chain designs in *bhadramaṇḍalas* toward the intermediate directions is replicated in two 18th-century *caupar* boards embroidered on square pieces of cloth (Finkel 2004b: 50). Later examples of similar designs are rare in India, but seem to have survived into modern times in the Middle East (Finkel 2002).

³⁶⁸ See plates I, III, and V in Bühnemann 1987 for examples of where areca nuts are placed in different types of *bhadramaṇḍalas*.

mental inscription of the diagram which can also be said to occur when different representational values are assigned to the squares of an otherwise uninscribed game grid. Furthermore, the use of areca nuts and the act of placing them in specific squares are reminiscent of games such as *caupar* and *gyān caupar* where players manipulate pawns, often in the form of areca nuts or similarly shaped pieces, across the squares of the grid. We already know that it was a *bhadramaṇḍala* which suggested the grid of *phañjikā*, and it is therefore possible that ludic elements pertaining to rituals associated with *maṇḍala*s also had a certain bearing on the formal system of the game, especially if the rituals involved acts of randomization and object manipulation.

Topsfield has tentatively suggested that *gyān caupar*, as we know it today, originated with the Jainas from "mandala-like grid diagrams used in doctrinal texts to clarify the interconnections of karmic causation" (Topsfield 2006a: 175). However, the only example he gives is the undocumented karmic diagram reported by Vasantha in an 11th- or 12th-century manuscript of the *Mahānisīhasutta* (see introduction to chapter two). I have already noted my reservations about Vasantha's claim that the diagram constitutes a prototypical Jaina chart, and the comparative analysis at the end of chapter four has shown that *gyān caupar* is more likely to have been of Vaiṣṇava origin. If anything, the design of the Jaina charts would indicate that they originated in cosmographical paintings of the *lokākāśa* and *lokapuruṣa* type, but given the evidence for a Vaiṣṇava origin of the game, I consider it more likely that they were adapted to the format of cosmographical paintings to align them more closely with Jaina religious tradition. At the same time, I agree with Topsfield that cultural forms and practices other than games exerted a strong influence on the invention of *gyān caupar*, and caused it to be described both in terms of a game and a spiritual journey.

Below I present three examples of inscribed grid diagrams dating from between the mid-18th and mid-19th centuries. They originated in different religious communities for different purposes, but share with *gyān caupar* their existence at the interface

³⁶⁹ The history of physically inscribed grid diagrams goes back to the architectural ground-plans known as *vāstupuruṣamaṇḍala*s which first appear in the 6th-century *Bṛhatsaṃhitā* (Meister 2007: 253). *Vāstupuruṣamaṇḍala*s later came to be used for "ritual, astrological, meditational, [and] devotional" purposes (*ibid.* 257), and may have given rise to the drawing of mystical *yantra* diagrams which, in turn, seem to lie at the root of *gyān caupaṛ*.

³⁷⁰ Jeṭhābhāī specifically suggests the use of areca nuts (supārī) as pawns in gyān caupaṛ (JBRR 1).

between a game and something other than a game. The first example is a chart of the subtle body reminiscent of *gyān caupaṛ* not only in its design, but also in its inclusion of snakes connecting squares inscribed with positive and negative qualities. The second example is a cosmographical chart with a strong focus on actions and their results, including two lines or ladders connecting religious practices with squares at the very top of the chart. The third and final example is an astrological chart cross-referencing the zodiacal signs with the planets passing through them, and indicating the corresponding auspicious or inauspicious results. The chart carries an inscription which explains how it can be used either as a game, an instrument of divination, or an astrological table.

Ex. 1: Anatomical Chart

In 1849 the Calcutta Review published a slightly revised version of a prize-winning article written by a young Indian educated in the British mode at the Free Church Institution established in Kolkata in 1843. Bābū Bipin Bihārī Som, written as Baboo Bipin Behari Shome, was born into the lowly śūdra class of traditional Indian society, and presented his article, entitled The Physical Errors of Hinduism, as a polemical attack against the religious world-view of the brahmins whom he described as "the narrow-minded and meanly jealous authors of our national religion" (Shome 1849: 399). Despite the obvious prejudice of the article, it has value as a historical document because it is based on oral testimony rather than scripture, and because it includes a series of rare tantric drawings which speak for themselves. Two drawings depicting the anatomy of the subtle body were sketched from originals which had previously belonged to Gangā Govind Simh (fl. 1750-95).371 Simh was a wealthy and influential revenue administrator in Bengal under the auspices of Governor-General Warren Hastings. Soon after Hastings left India in 1785, Simh came under pressure from his enemies and rivals, and in 1786 he retired from his duties, and lived out the rest of his life as a devout Vaiṣṇava, donating generously to temples, pilgrims, and brahmins. 372 It was likely during this latter period of his life that he had the drawings prepared by a

³⁷¹ A recent book on the history of the *cakra* system in the West devotes its opening chapter to reproducing and discussing the charts, but unfortunately the author is not able to add much to the information already provided by Shome (LeLand 2016: 33-43).

³⁷² See entry on "Ganga Govind Singh" by P. J. Marshall in ODNB (accessed online, 1 Aug, 2018).

group of pandits from Uttar Pradesh who appear to have been followers of the poet-saint Dādū (1544-1603).373 As previously mentioned, the teachings of Dādū, like those of other nirguna bhakti poet-saints, were heavily influenced by the Nāth tradition and the Hathayogic system associated with it (see *The Subtle* Body in chapter four). This influence is in full evidence on the two drawings which take the form of anatomical sketches of the subtle body superimposed on a naked male figure with upraised arms and palms facing outward. One of the drawings is of special interest in the present context because it replaces the torso with an inscribed grid diagram reminiscent of a gyān caupar chart (figs. 77-78).³⁷⁴

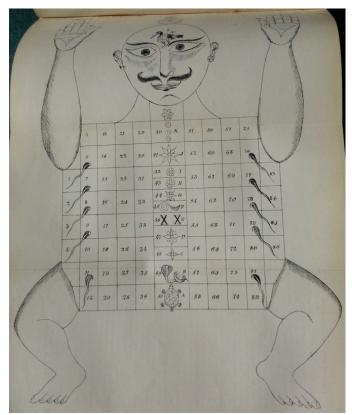


Fig. 77: Anatomical chart. West Bengal, late 18th cent.

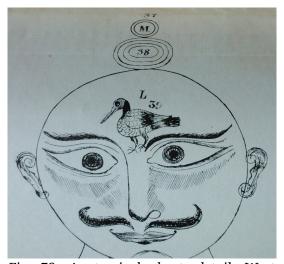


Fig. 78: Anatomical chart, detail. West Bengal, late 18th cent.

The torso consists of an 11 x 8 grid, though two squares each at the top and bottom of the left-and rightmost columns remain uninscribed, and only serve to connect the arms and legs of the figure to the grid. Furthermore, the central column has been divided into eleven rather than eight squares, leaving the grid with a total of 83 inscribed squares, or 84 squares if counting the additional illustrated but uninscribed square above the central column. Three legends also appear in and above the head of the figure, and

³⁷³ The article merely refers to them as being "known by the name of Daudus" (Shome 1849: 438).

³⁷⁴ Topsfield mentions the chart in a footnote, remarking on the similarity between some of the legends with those of *gyān caupar*, but does not discuss it in any detail (Topsfield 2006a: 177, fn. 64).

two more are found above each of the arms. The squares do not appear to have been numbered in the original, and the numbering in the sketch presented in the article is only used to refer to a separate list of corresponding legends. Unfortunately, the majority of the legends have been translated, thereby obscuring the original terminology, but the diagrammatic representation in fig. 79 at the end of the current section indicates a strong focus on the subtle body and its microcosmic properties. The squares in the central column have been illustrated in accordance with the legends which position a tortoise and a serpent as the mythological foundation of the cosmos at the bottom of the column, the *cakras* along the central axis of the body in the squares above, and the aperture at the top of the skull (brahmarandhra) in the square at the very top. Ten short snakes connect adjacent squares at either side of the diagram, with the heads located in positive squares, and the tails in negative squares, creating pairs of opposites, such as "Compassion" and "Envy," or "The love of one's own religion" and "Irreligion, or Impiety." The dualistic nature of the squares connected by the snakes is further highlighted by the legends above the arms which read "The fruits of virtue" above the right arm, and "The fruits of vice" above the left arm.

The lack of sequentially numbered squares and causal relationships between the squares connected by the snakes indicate that the drawing was not designed as a game chart. This is further evidenced by the fact that it was prepared for Simh as an exposition of tantric knowledge, and perhaps even as a tool for meditation and visualization similar to other tantric drawings. However, the affinities with *gyān caupar* cannot be disregarded. Apart from the formal properties of the grid and the snakes, it is the conceptual underpinnings of the drawing which bear the most striking resemblance with *gyān caupar*. While the other anatomical drawing sketched in the article focuses exclusively on the *cakra*s and the energy channels (*nāḍī*) connecting them, the grid-based drawing also shows how various concepts are mapped on to the body in imitation of the cosmos itself.³⁷⁵ According to Shome, who got his information from the Kolkata *paṇḍits* of his day, each of the principles inscribed on the sketch corresponds to a material organ in the human body (Shome 1849: 440). This reminds us of the suggestion found on some Vaiṣṇava charts that the squares in *gyān caupaṛ* should be identified with the visceral compartments (*koṣṭha*) of the physical body or

³⁷⁵ An inscription on the non-grid-based drawing describes the process of mapping concepts on to the body through meditation, but stops short of visualizing it (Shome 1849: 439).

the internal cavities (also *koṣṭha*) of the subtle body. Though the original legends have not been preserved in Shome's sketch, many of them can be easily reconstructed and shown to be closely related to similar legends on 72-square Vaisnava charts. Examples include the three qualities of "Goodness" (satogun, sq. 70), "Passion" (rajogun, sq. 71), and "Ignorance, or Darkness" (tamogun, sq. 72), the three realms of "Bramha" (brahmlok, sq. 69), "Vishnu" (vaikunth, sq. 68), and "Shiva" (śivlok, sq. 67), and several positive and negative qualities, such as "Anger" (krodh, sq. 3), "Egotism" (ahamkār, sq. 55), "Compassion" ($day\bar{a}$, sq. 17), and "Charitableness" ($d\bar{a}n$, sq. 20). The distribution of legends on Shome's sketch does not match that of any known gyān caupar chart, but the overall principles of distribution are much the same. The central column is strictly hierarchical with a double focus on cosmography and the cakras, while the remaining legends are distributed loosely across the chart in groups of twos and threes wherever possible. The exact concepts and their distribution would naturally have varied from tantric drawing to tantric drawing, just as they do from game chart to game chart, with the added concern that the game charts had to function as such, and thus required a general progression from predominantly negative legends in the lower rows to predominantly positive legends in the higher rows.

The similarities in design between the drawing sketched by Shome and the 72-square Vaiṣṇava charts indicate a shared origin in tantric drawings of the subtle body and the process of mapping cosmic principles, presiding deities, karmic qualities, and other concepts on to it. The reason that we only possess one grid-based tantric drawing of this nature that I am aware of, while we possess numerous examples of *gyān caupar* charts, probably has to do with the great secrecy surrounding the tantric drawings.³⁷⁷

³⁷⁶ A further association with the ladderless 84-square Vaiṣṇava type *d* charts, as well as the modern-looking printed Va84#7, is the four stages of liberation (*mukti*), known as *sālokya* (sameness of realm), *sāmīpya* (proximity), *sārūpya* (similarity of form), and *sāyujya* (unity), inscribed in the rightmost squares of the top row on both the charts and the tantric drawing.

³⁷⁷ Shome strongly emphasizes this point in describing the reaction of the *paṇḍits* when he showed them the drawings: "All the Pandits, to whom they were shown, were equally startled at the sight, and, after reading them a little, exclaimed, 'Oh, you have exposed the most secret parts of our Shastras! [W]e have never seen such things before; – better keep them to yourself, and do not show them to the public.' On being asked, why they required such privacy, they answered, 'Because these two maps, as we see by reading them, exhibit the theories on which all the *Bijmantras*, or the principal incantations, are founded[;]' and they pointed out some of the Mantras on the maps, requesting us at the same time, to beware of pronouncing them, on account of our being by caste, a Sudra." (Shome 1849: 437).

Apparently, the secrecy could not be upheld when some clever mind decided to turn them into a game and represent the process of meditation, visualization, or otherwise with a formal system of dice and pawns. This, at least, is how we might envision a gradual or sudden change of usage from one of tantric practice to one of more or less ritualized play, if that is indeed what happened. It is also worth noting that the original from which Shome drew his sketch is contemporary with the earliest known gyān caupar chart (Va72#7) commissioned by Richard Johnson from a local artist in Lucknow between 1780-82. Johnson was employed in the East India Company's revenue administration in Kolkata from 1785-90 (Falk & Archer 1981: 22), and must therefore have known - or, at least, known of - Gangā Govind Simh who served as revenue administrator for Bengal until his retirement in 1786. Simh is likely to have had the original drawings prepared after he retired, and it is not impossible that some connection existed between himself and Johnson who was an avid collector of paintings and manuscripts.³⁷⁸ This, of course, does not tell us anything about the transition from tantric drawing to game chart, but it does leave us with the fascinating possibility that Johnson may in fact have been acquainted with both.

³⁷⁸ Johnson's collection includes numerous manuscripts and miniature paintings from north and north-east India, including Murshidabad, the capital of Mughal Bengal, where Simh returned to his family home after his retirement. For a description and catalogue of Johnson's collection, see Falk & Archer 1981.

					Bramha randra					
					Karpara Chakra					
					[head]					
					The goose					
The fruits					[neck]					The fruits
of virtue [right arm]	The waking state	The dream- ing state	The state of profound sleep	Orjya	Triganti	Sálokya	Sámípya	Sárúpya	Sayujya	of vice [left arm]
	The faculty leading to seek the Supreme Being, or Spirituality	Goodness	Passion	Ignorance, or darkness	Bishunda Chakra	Sohang- pada	Tangpada	Tatpada	Devoted- ness	
Covetous-	Compas-	The vowel	The vowel	The Letter	Anáhata Chakra	Múrddhni	The heart	The helly	Useful	Ignorance
ness	sion	a Drombo	u Vichny	m Chivo	Manasha Chakra	Waraamii	The state	The belly	knowledge	ignorance
, , , , , , , , , , , , , , , , , , ,					Mani pura	State of				Want of
Envy	Good sense	Bramha	Vishnu	Shiva	Gastric fire	childhood	of youthful- ness	Old age	Wisdom	knowledge
				False	The navel					
Wickedness	The love of one's own religion	Pedantry	False ostentation of wisdom	ostentation of bodily accomplish- ments	Adhishtán Chakra	Leanness of body	Obesity	Kárana- deha	Discrimi- nation	Self- conceited- ness
Irreligion, or Impiety	The mind	Intelligence	Attention	Egotism	Adhára Chakra	Happiness	Misery	Birth	Death	The habit of reproach- ing
	Religious penance	The place of the mind	The place of intelli- gence	The place of life	The endless serpent, Ananta	The enjoy- ment of visible objects	The enjoy- ment of imaginary object[s]	The enjoy- ment of optional objects	Charitable- ness	
[right leg]	Anger	Fire	Water	The air	The tortoise	The family state	The state of a mendi- cant	Brahmá- chári	Pride	[left leg]

Fig. 79: Diagrammatic representation of fig. 77 with inscriptions as they appear in Shome 1849 (p. 441). Red lines indicate snakes connecting squares.

Ex. 2: Cosmographical Chart

The third sketch published by Shome is based on a cosmographical chart acquired from "a native gentleman, to whom it was presented by a pandit" (Shome 1849: 422). According to Shome, it "professes to be founded on the description of the mountain [Meru], contained in the Srimat Bhágavata" (*ibid.*), but a closer inspection reveals much that more than a mere description of Mount Meru is at stake.³⁷⁹ The chart consists of 177 squares organized into a diamond-like shape with a central column extending above and below the main grid (figs. 80-81). The bottom part of the grid is embedded within a decorative outline resembling a face with two eyes, and the squares at the top are ornamented with terraces

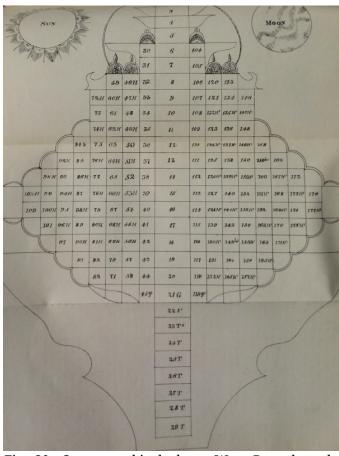


Fig. 80: Cosmographical chart. West Bengal, early 19th century.

and domes. A line and a ladder connect a dome on the left and right, respectively, with two squares at the top of the central column, and the sun and moon shines down from above. As was the case with the tantric chart discussed above, the original legends have been replaced with numbers referring to a separate list in which the majority of the legends only appear in translation (*ibid.* 423). The diagrammatic representation in fig. 82 at the end of the current section shows that the central column can indeed be likened to the *axis mundi* of Mount Meru, beginning with the netherworlds at the

³⁷⁹ The *Bhāgavatapurāṇa* agrees with other Purāṇic descriptions of Mount Meru that it has the shape of an inverted cone likened to the pericarp of a lotus. It has a diameter of 16.000 *yojana*s at the base and 32.000 *yojana*s at the top, and it extends 84.000 *yojana*s above the surface of the earth and 16.000 *yojana*s below it (*BhP* 5.16.7; cf. Ali 1966: 48). The diagram presented here does not conform to this description, though it might be seen as an abstract representation of the four-petaled lotus-shape of the Jambudvīpa continent with Mount Meru above and below its center.

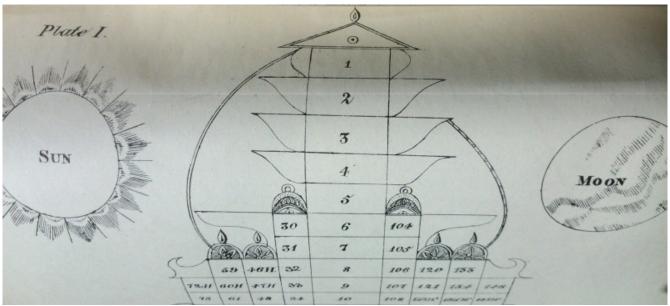


Fig. 81: Cosmographical chart, detail. West Bengal, early 19th century.

bottom, and continuing with the upper realms and the cosmic principles to the realms of Viṣṇu, Vaikuṇṭha, and Goloka at the top. The two columns adjacent to the central column contain the realms of gods, demi-gods, and celestial bodies circling the various levels of the mountain. At the bottom of the two columns we find the gates of heaven and hell, opening into the heavens on the left and the hells on the right. The hells number twenty-eight as in the *Bhāgavatapurāṇa*, though the Mahāraurava hell appears twice, and less than half of the hells carry the same names as in the text (*BhP* 5.26.7). A vice is mentioned in the square above each hell, presumably indicating the various vices leading down to the various hells, but they also do not correspond to the vices given in the text (*BhP* 5.26.8-36). The heavens on the left side of the central column number twenty-nine, with the heaven of Brahmā appearing twice, and while the *Bhāgavatapurāṇa* speaks of the heavens in general terms (*BhP* 5.17.11-13), it does not specify their names. Neither does it mention the virtues leading up to them, though the chart includes a virtue in each square below the heavens.

If we look at the chart from a tantric perspective, the central column does not only represent Mount Meru as a cosmographical feature, but also as the axis (*merudaṇḍa*)

³⁸⁰ *BhP* 5.26.37 says that there are hundreds and thousands of such hells in Yama's abode (*yamālaya*), and that only some of them are described here.

identified with the spinal column of the subtle body (White 1996: 328). 381 This is the axis along which the *cakras* are situated, and around which the central energy channel Susumnā flows (Mallinson & Singleton 2017: 199-200). If we interpret the central column as such, we might further interpret the pyramidal shape of the top half of the chart as the three-dimensional śrī yantra, known as mahāmeru, used in tantric practices (Khanna 2007: 148).³⁸² Whether the reference to *mahāmeru* is valid or not, the common association between the pyramidal shape and a cross-legged yogi facing the observer reminds us that the left-right dichotomy of the chart should be reversed, identifying the heavens on the left side with the right side of the body, and the hells on the right side with the left side of the body. This is further indicated by the sun on the left, identified with the energy channel Pingalā and the right side of the body, and the moon on the right, identified with the energy channel Idā and the left side of the body (Banerjea 1962: 160). Looking at the topmost squares of the two columns adjacent to the central column, we can see that Brahmā and the quality of passion (rajoguṇa) on the left preside over the right side of the body, while Siva and the quality of inertia (tamoguna) on the right preside over the left side of the body. The overall Vaisnava orientation of the chart can be seen from the fact that Viṣṇu and the quality of goodness (sattvaguna) are positioned in the middle, presiding over the central energy channel and the path to final liberation.

The association of the left side of the body with vices and hells, and the right side of the body with virtues and heavens, would seem to indicate a distinction between the left-hand tantric practices ($v\bar{a}m\bar{a}c\bar{a}ra$) of transgression, and the right-hand tantric practices ($dak \sin \bar{a}c\bar{a}ra$) of non-transgression. It is even possible that the reading "Panchata[t]wa" (i.e. $pa\tilde{n}catattva$) in the central column should be understood with reference not only to the five gross elements ($mah\bar{a}bh\bar{u}ta$) and the five aspects of Kṛṣṇa in Gaudīya Vaiṣṇavism, but also to the five tantric essentials, known both as the

³⁸¹ The existence of Mount Meru within the subtle body is mentioned in the 17th-century Haṭhayoga manual known as the Śivasaṃhitā (ŚS 2.1) and in the 18th-century Nāth yogic text known as the Siddhasiddhāntapaddhati (SSP 3.10).

³⁸² In support of the latter suggestion, it should be noted that the part of the grid rising above the two central horizontal rows has exactly 84 squares, corresponding to the 84.000 *yojanas* Mount Meru is said to rise above the surface of the earth (see fn. 377).

³⁸³ Haṭhayoga texts of the Nāth tradition emphasize the importance of the left side of the body as "the locus of the most critical transformations occurring within the subtle body" (White 1996: 230).

pañcatattvas and the pañcamakāras, which include the transgressive partaking of meat (māṃsa), fish (matsya), parched grain (mudrā), spirituous liquor (madhu), and sexual intercourse (maithuna) (White 1996: 460, fn. 148). If we consider the line and the ladder leading up to the topmost squares, it becomes apparent that the chart passes judgment on the practices of the two sides and their respective efficacy in attaining liberation. Each side culminates in a single square which stands outside the dominant scheme of locating vices and virtues above or below their corresponding hells and heavens. The square associated with the left side of the body on the right side of the chart reads "Absorption," which might either have been translated from sāyujya, sometimes identified as the fourth and final state of liberation (see fn. 374), or from samādhi or lāya, often used synonymously to express absorption into the absolute (Mallinson & Singleton 2017: 327-28). From "Absorption" a ladder leads up to "True Light," the original wording of which is less important than the fact that it appears two squares below "Goloka," and that it is separated from it by "The power of ignorance." While yogic and tantric practitioners may advance far on the path to liberation, the chart seems to say, they will always be separated from the ultimate goal by a fundamental ignorance. The only way to overcome the ignorance is by following the path associated with the right side of the body on the left side of the chart where a direct line leads from "Faith" to "Goloka." The reading "Faith" could have been translated from a more general term, such as *śraddhā* or *dharma*, but given the context of Goloka, it seems almost certain that the original reading was *bhakti*. Contrary to the chart of the subtle body discussed in the previous section, the cosmographical chart discussed here should therefore only be considered tantric to the extent that it recognizes the relative efficacy of tantric and yogic practices, and might best be described as being primarily Vaiṣṇava bhakti in orientation.

If we accept the tantric and yogic underpinnings of *gyān caupaṛ*, as demonstrated in chapter four, we can say that the Vaiṣṇava charts appear to have subsumed such traditions under the supreme authority of *bhakti*.³⁸⁴ There are no indications that the cosmographical chart examined here was used for purposes of play, or that it impacted

³⁸⁴ Tantric and yogic traditions, and especially those of the Nāths, were integrated into traditions of both Śaiva and Vaiṣṇava *bhakti* (Vaudeville 1974: 120). A recent doctoral thesis on the formation of *bhakti* identity in early modern north India argues that the rise of *bhakti* was "fundamentally linked to, among other things, a Sufi-inflected critique of tantric religiosity" (Burchett 2012: 14).

directly on the development of *gyān caupar*, but several aspects of it are clearly related to the design and dynamics of the game. While 72-square Vaiṣṇava charts can be said to be divided into a left and a right half by the central column of squares, the demands of the game, which necessitate a mix of positive and negative legends across the entire chart, make it difficult to distinguish conceptually between the two sides. Still, the sequence of the realms of Brahmā (sq. 69), Viṣṇu (sq. 68), and Śiva (sq. 67) in the top central row indicates that the charts were drawn from the perspective of a person facing the players, with Śiva on the right representing the left side of the body, and Brahmā on the left representing the right side of the body. It is even possible that this was the reason that the three paths to liberation - i.e. the disciplines of action (*karmyog*, sq. 19), knowledge (*jñān*, sq. 37), and devotion (*bhakti*, sq. 54) - were located on the left side of the charts identified with the right, and thus non-transgressive, side of the body.

The gyān caupar charts which have the most in common with the cosmographical chart are the 342-square Vaisnava charts (cf. fig. 37). They divide the grid into two halves consisting of 171 squares each, separated by a central column containing the netherworlds, the upper realms, and a few other realms, including the regions of the sun and the moon. Together the two halves list a total of twenty-nine hells, two of which appear twice, connected by snakes leading down from various vices. The charts do not include the heavens found on the cosmographical chart, and they do not make any clear distinction between the two halves, except that only ten hells appear in the left half, while nineteen hells appear in the right half. No further correspondence can be made between the 342-square Vaisnava charts and the cosmographical chart, but the positioning of the legends on the latter does indicate a more general relationship with the design of gyān caupar. Since each vice is placed directly above a hell, and each virtue directly below a heaven, the chart follows a similar procedure of identifying specific negative and positive actions with specific negative and positive states of being. The implied relationship between the squares might also have been expressed with snakes and ladders, but since the squares always appear directly above and

³⁸⁵ The sequence seems to have confused the artist of a 72-square Vaiṣṇava chart (Va72#11) who not only reverses it, but also underlines the reversal by adding the moon (*candralok*, sq. 71) on the left side of the chart, and the sun (*sūryalok*, sq. 64) on the right side.

below each other, no such visual device was necessary.³⁸⁶ This reveals that the concept of directly linking squares conceptually and visually was not exclusive to *gyān caupar*, but also appeared on related charts which were not designed to be used as games.

The above examples have shown that the sketches published by Shome provide substantial evidence for the argument that $gy\bar{a}n$ caupar originated in tantric diagrams of the subtle body and its relation to the foundational principles of the universe. Tantric and yogic traditions had played a major role in the development of bhakti since early modern times, and it therefore seems likely that mystical diagrams originally designed for purposes of meditation and visualization were adopted by bhakti communities, and gradually changed into the less serious and more playful cultural form of a game privileging the practice of bhakti above those of tantra and yoga.

³⁸⁶ The only exception is four rows of three squares each at the bottom of the left side of the chart. Here the two lower rows only include virtues, while the two higher rows only include heavens. This appears to be a mistake which, however, can easily be corrected if one pairs the virtues in the first row with the heavens in the third row, and the vices in the second row with the heavens in the fourth row.

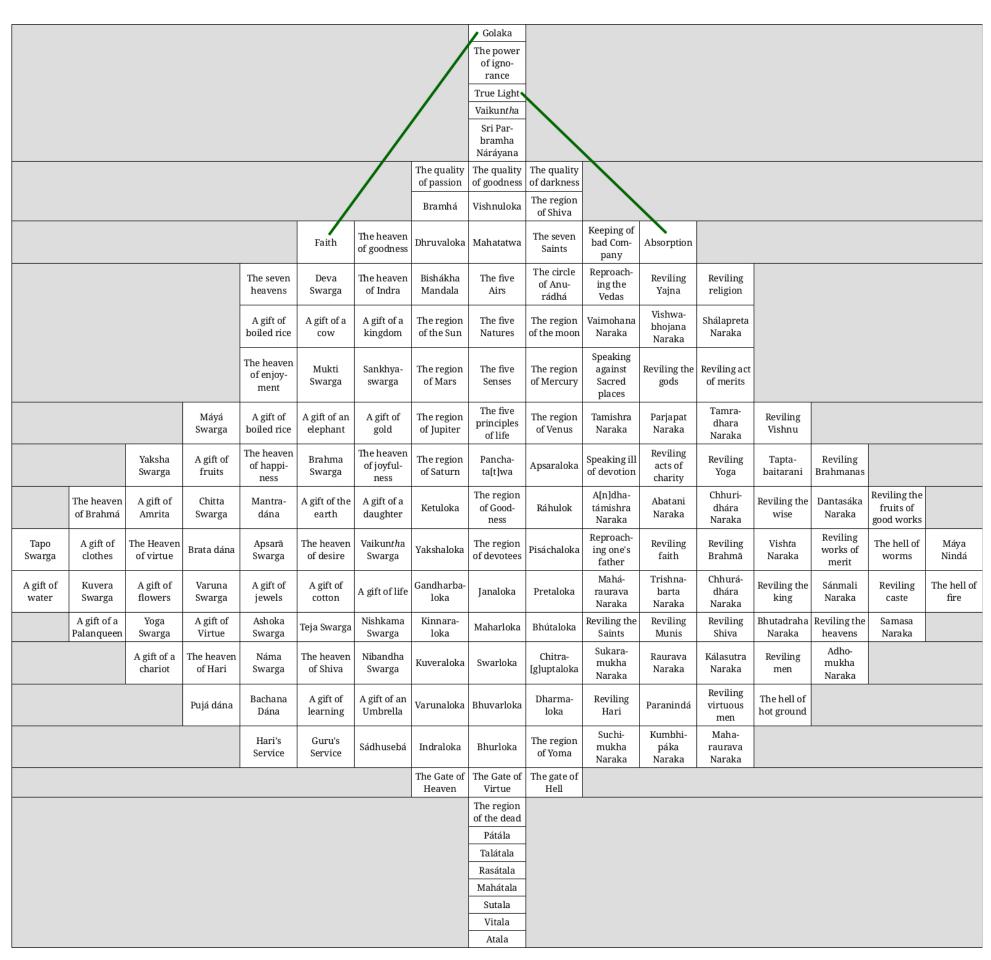


Fig. 82: Diagrammatic representation of fig. 80 with inscriptions as they appear in Shome 1849 (p. 423). Green lines indicate lines or ladders connecting squares.

Ex. 3: Astrological Chart

The third and final example is an elaborate astrological game chart currently held in a private collection in Mysore (fig. 83). According to the current owner, it was formerly in the possession of a Brahmin family employed as *pujārī*s, or priests, at Mysore Palace.³⁸⁷ Considering that the chart appears to date from the 19th century, this would likely associate it with Mahārāja Kṛṣṇarāja Oḍeyar III (1794-1868) who designed numerous games and puzzles during his almost seventy years on the throne of the Princely State of Mysore (see History and Transmission in chapter three). The chart contains a 9 x 12 grid with illustrations above and to the left



Fig. 83: Navagrahapraśnapaṭa. Mysore, mid-19th century.

identifying the columns with the nine planets (navagraha) and the rows with the twelve zodiacal signs ($r\bar{a}si$). A further series of illustrations on the right depicts the guardians of the eight directions ($lokap\bar{a}la$), while illustrations in the bottom corners show two four-armed deities identified as the moon (candra) on the left and, presumably, the sun ($s\bar{u}rya$) on the right. As evident from the diagrammatic representation in fig. 85 at the end of the current section, the squares are sequentially numbered like on a $gy\bar{a}n$ caupar chart, beginning with sq. 1 in the bottom left, and continuing boustrophedon to sq. 108 in the top left. They are inscribed with Sanskrit legends written in Kannada script, and, in addition to the square numbers, they also

³⁸⁷ The current owner allegedly bought the chart from the family in question before they dumped it, together with the rest of their inherited belongings, in the Cauvery River to rid themselves of a curse inflicted by the practice of sorcery sometime in the family's past. Whether the chart was in any way associated with the alleged practice of sorcery cannot be established.

include a second number indicating which other square a pawn landing on them should move to. The legends describe the auspicious or inauspicious effects of having a given planet passing through a given sign relative to one's natal moon sign (see below). The same legends often appear in multiple squares, and revolve around themes such as wealth (*dhana*, *vitta*), good fortune (*sabhāgya*), disease (*roga*), and danger (*bhaya*). Auspicious legends lead to squares higher up on the chart, while inauspicious legends lead to squares farther down, though a few mistakes appear to have crept in, such as death (*maraṇa*) in sq. 66 leading up to loss of wealth (*dhanakṣaya*) in sq. 75, and wealth (*dhana*) in sq. 103 leading down to fortunate (*sabhāgya*) in sq. 19.

An inscription in Kannada below the grid refers to the chart in Sanskrit as navagrahapraśnapata, or board for querying the nine planets, and contains instructions on how to use it. 388 According to the instructions, the game can either be played as a pastime, or as a means of providing a positive or negative answer to a specific query. In either case, the game is played with nine cowries or tamarind seeds as a symbolic representation of the nine planets, allowing for throws between 0 and 9. Each player controls a single pawn which begins outside the grid, and moves sequentially through the squares according to the numbers thrown. Whenever a pawn lands on a square, it subsequently moves up or down the grid according to the second number inscribed in that square.³⁸⁹ The instructions provide two conflicting statements about the end of the game which either occurs when a pawn reaches sq. 108, or when a pawn in sq. 108 throws a "1," thereby allowing it to enter the illustrated row of the nine planets above the grid.³⁹⁰ If the game is played as a pastime, the winner is the first player to fulfill whichever of the two victory conditions was agreed upon. If, however, it is played for the purpose of divination, players who reach sq. 108 in the top left corner will receive a positive answer to their query, while players who land in any other square in the top row (sqs. 100-107) will receive a negative answer.

³⁸⁸ Thanks to Raghu Dharmendra for providing me with a translation of the Kannada text.

³⁸⁹ Two squares do not contain a number linking them to another square on the chart. The lack of an onward link from sq. 1 might indicate that some players would begin the game with their pawns in that square, while the similar lack in sq. 69 is probably a mistake.

³⁹⁰ The south Indian version of *gyān caupaṛ* known as *parampad sopān* includes a similar rule that pawns must enter and travel along a series of illustrations of deities above the grid on successive throws of "1" in order to win (Balambal 2005: 83). The astrological game chart discussed here predates the earliest known *parampad sopān* chart by approximately half a century, possibly indicating that *parampad sopān* existed as far back as the mid-19th century.

The design of the chart is based on similar astrological tables detailing the gocaraphala, or the auspicious and inauspicious effects of planets transiting through particular zodiacal signs in relation to one's own natal moon sign. This is further indicated by the illustration of Candra, or the deity of the moon, below the illustrations of the zodiacal signs on the left. The main difference between this and other gocaraphala charts is that each row is identified with a specific zodiacal sign, whereas normally the rows would be identified with numbers from one through twelve. If, for example, the user of the chart was born with the moon in the eleventh sign of Aquarius, the first row would be identified with Aquarius, the second row with the twelfth sign of Pisces, the third row with the first sign of Aries, the fourth row with the second sign of Taurus, and so forth. The user would then be able to check the effects of different planets transiting through different signs relative to his own natal sign by cross-indexing the planets with their current positions in the signs. The reason for including an illustration of a specific zodiacal sign for each row was probably purely aesthetic, and could easily have been ignored by anyone using the chart as a traditional gocaraphala chart. A gocaraphala chart published in a recent almanac demonstrates the close correspondence with the game chart (fig. 84). Several legends

चन्द्रकुण्डल			लोका	गोच	र (रावि	शफल)	बोधक		
भाव	। सूर्य	चन्द्र	मंगल	बुध	गुरू	शुक्र	शनि	राहु	केतु
?	स्थाननाश	भाग्योदय	भन्तःशेक	व्रनि,भय	अनिष्ट	वुभ, अत्रुनाश	नाश	कब्ट	रोग, हानि
3	भय	धनहानि	भय	धनलाम	लाभ	धनलाभ	हानि	धन	नाश, हानि
3	धन	जय, लाभ	जय	भय	स्थितिनाश	धनवृद्धि	लाभ	आरोग्य	सुख
X	मानहानि	रोग,भय	स्थानभ्रंश	धनलाभ	बन्धुकष्ट	सुख	शत्रुवृद्धि	धत्रुवृद्धि	भय
4	दैन्य	श्रोक	ज्वर	न्त्रीकलह	पुत्रसुख	पुत्रसुख	नाश	शोक	श्रोक
Ę	विजय	आरोग्य	विजय	अलाभ.	रोग,विरोध	कब्ट	लाभ	धनसुख	धनसुख
19	भ्रमण	सुख	स्त्रीकलह	विरोध	यात्रा	-पीड़ा	स्त्रीकब्ट	ह्मनि	दुर्गीत
6	पीड़ा	दु:ख	ज्वर	पुत्रसुख	मार्गक्लेश	सम्पति	शत्रुभय	रोग	राजभय
18	धर्महानि	रोग	दीनता	बिध्न	शुभ	सुख	धर्महानि	did	दैन्य
90	भार्यीसिद्धि	िटसिद्धि	कार्यनाश	सुख	धनकष्ट	कलह	वैर	वैर	श्रोक
??	धनप्राप्ति	प्रसन्नता	लाभ	लाभ	पुत्रसुख	लाभ	भायुवृद्धि	सुख	यश
83	कष्ट	व्यय	माननाश	पराभव	दुःख	अर्थलाभ	हानि	शोक	धनक्षय

Fig. 84: Diagram showing the effects of planetary transits (gocaraphala). Printed in the almanac (pañcāṅga) published by Jyotirved Vijñān Saṃsthān in Varanasi for the year 2017-18.

are identical between the two charts, and those that are not follow the same concept of providing auspicious and inauspicious results relating to worldly matters, such as health, business, and family. The instructions on the game chart explicitly state that it can also be used for traditional astrological purposes in addition to those of enjoyment and divination.³⁹¹ That this was the original purpose of the chart before it was turned into a game can be seen from the fact that sq. 108, identified as the winning square in the game, carries the legend *daridra* (poor) as an indication of the effect of having the sun in one's own natal moon sign. Such a legend would hardly have been considered appropriate for a winning square if the chart had originally been designed as a game.

The chart provides a rare glimpse into the process of how a non-game chart could be converted into a game chart. In the present example, it appears that the formal system of *gyān caupaṛ* was superimposed on an astrological *gocaraphala* chart by numbering the squares sequentially from bottom to top, and interlinking them by a secondary system of numbers similar in function to the usual snakes and ladders. Since it appears likely that the chart was invented by Kṛṣṇarāja, or by someone acquainted with his games, we might speculate whether *gyān caupaṛ* came about in a similar way. We know that Mahārāja Saṃsār Cand of Kangra (r. 1775-1823), at whose court the 342-square Vaiṣṇava charts are likely to have been invented, was much given to games (Topsfield 2006c: 84), and it is not at all unthinkable that another Mahārāja, or one of his attendants at court, first had the idea to convert a tantric grid diagram of the subtle body into the game that came to be known as *gyān caupaṛ*.

³⁹¹ The close relationship between astrology, divination, and games in general is exemplified by the *Krīḍākauśalya* which is a treatise on games embedded within a larger astrological work known as the *Bṛhajjyotiṣārṇava*. The second chapter of the *Krīḍākauśalya* is entirely devoted to divinatory practices for securing victory and defeat in games (*KK* 84-155).

	[sūrya, sun]	[candra, moon]	[maṅgala, Mars]	[<i>budha</i> , Mercury]	[<i>guru</i> , Jupiter]	[śukra, Venus]	[śani, Saturn]	[Rāhu]	[Ketu]
[meṣa, Aries]	108 daridra 91	107 anartha 74	106 ×ra× 104	105 kṛśa 94	104 saṃhāra 10	103 dhana 19	102 nașța 1	101 vināśa 80	100 vināśa 99
[<i>vṛṣabha</i> , Taurus]	91 dhana 108	92 mahādhana 108	93 dhana 107	94 manoratha 108	95 saṃtoṣa 108	96 roga 85	97 lābha 108	98 vitta 108	99 vitta 108
[<i>mithuna</i> , Gemini]	90 siddhi 91	89 iṣṭasiddhi 92	88 ghanaśoka 52	87 tejovrddhi 105	86 pramāda 73	85 bhaya 78	84 p[ī]ḍana <mark>61</mark>	83 kalaha 80	82 kalaha <mark>81</mark>
[karkaṭaka, Cancer]	73 du[ḥ]kha <mark>72</mark>	74 kaṣṭa <mark>61</mark>	75 dhanakşaya 72	76 manakṛśa 69	77 dhanāgama 86	78 vibhūṣaṇa 85	79 dehaśoşaņa <mark>60</mark>	80 saṃtāpa 65	81 saṃtāpa 65
[siṃha, Leo]	72 roga 55	71 bādha 56	70 śatrubādha <mark>4</mark>	69 mana[ḥ]- siddhi	68 dhanahāni 1	67 dhanalābha 78	66 maraņa 75	65 arthakşaya 29	64 arthakṣaya 63
[kanyā, Virgo]	55 vadha 36	56 str[ī]sukha 74	57 anartha 3	58 dainya 56	59 ārogya 77	60 mṛtyu 50	61 mahādainya 5	62 nṛpabhaya 44	63 nṛpabhaya 46
[<i>tulā</i> , Libra]	54 śatrukṣaya 55	53 dhanāgama 56	52 arthasiddhi 70	51 bhūṣaṇa 58	50 kṛśa <mark>32</mark>	49 vittanāśa 40	48 lakşmikara 84	47 mahat- sukham 80	46 mahat- sukham 80
[<i>vṛścika</i> , Scorpio]	37 mahābhaya 18	38 kāryanāśa 37	39 mano- vyāmala(?) 38	40 daridra (3)4	41 saṃpatti 77	42 sutodaya (6)0	43 mitravirodha (12)	44 vittabhramśa 11	45 vittabhramśa 28
[dhanus, Sagittarius]	36 hanabhaṃga 19	35 rogam 20	34 ripuvṛddhi 28	33 śatrukṣaya 40	32 arthanāśa 1	31 atisākhya 50	30 makṣaroga 12	29 āyu[ş]kşaya <mark>26</mark>	28 āyu[ṣ]kṣaya 27
[makara, Capricorn]	19 saṃpatti 32	20 dhanam 35	21 s[a]bhāgya 39	22 ripup[ī]ḍā <mark>19</mark>	23 anartha 5	24 s[a]bhāgya 42	25 saṃpatti 61	26 s[a]bhāgya 44	27 s[a]bhāgya 44
[<i>kumbha</i> , Aquarius]	18 bhaya 1	17 vipatti 2	16 d[u]rbhāgya 3	15 hemalābha 20	14 vittalābha 41	13 bhāgya 30	12 hāni <mark>1</mark>	11 kalaha 8	10 kalaha 8
[mīna, Pisces]	1 bhraṣṭa×	2 kşama 17	3 kṛśa 1	4 baṃdhana 1	5 dehatyāga 1	6 ārogya 24	7 vipatti 1	8 bhaya 3	9 bhaya <mark>3</mark>

Fig. 85: Diagrammatic representation of fig. 83. Green and red numbers indicate the squares to which a pawn is promoted or demoted when it lands on the various squares.

Conclusion

An element of play is woven into the cultural fabric of India with a thread that is sometimes visible from the side of religion, and sometimes from the side of games. A hymn in the tenth book of the *Rgveda* bemoans the fate of a hapless gambler who lost himself and his family to dice (RV 10.34), while the Vedic rājasūya rite of royal consecration speaks of a cosmic dice game played for the benefit of the king (Heesterman 1957: 140-57). The four throws of the dice (kṛta, tretā, dvāpara, kali) lend their names to the four ages (yuga) of mythology (González-Reimann 1989), and the dice game played by Śiva and Pārvatī at the top of Mount Kailāsa holds the universe itself in the balance (Soar 2007: 210-16). A game of dice also stands at the center of the Mahābhārata epic (Shulman 1992), setting in motion the events that lead to the battle of Kuruksetra and the song of the *Bhagavadgītā*. The *Brahmasūtra* argues that manifest existence is nothing but the sport ($l\bar{l}l\bar{a}$) of the supreme deity (brahman) (BS 2.1.33), and the poems of the medieval bhakti saints use dice and games as metaphors of life and liberation.³⁹² On the first day of the month of Kārttika, during the festival of Dīvālī, it is customary to stake money on games in order to attract Lakṣmī, the goddess of wealth, to one's house in the coming year (Raghavan 1979: 163), and in the temple of Śrīnāthjī in Nathdwara, the Brahmin priests manipulate little silver sets of *caupar* when the deity plays the game in the afternoon.³⁹³ The list of examples goes on and on, and that of gyān caupar is no exception.

The story of *gyān caupaṛ*, as it has been told here, begins in late 17th- or early 18th-century western India. It was there that the game first emerged as an adaptation of tantric diagrams of the subtle body within the Vaiṣṇava *bhakti* communities. While the practice of visualization and meditation associated with the tantric diagrams may have suggested the application of a formal game system, it is perhaps more likely that it was suggested by the Tibetan Buddhist game of *sa lam rnam bzhag*, or its Nepalese variant *cībhāḥ kāsā*, played on a grid of inscribed squares similar to that of *gyān caupaṛ*.

³⁹² See, for example, the entry on *caupar* in *DoB* (p. 650).

³⁹³ Personal communication with Ute Rettberg who has done extensive field work on *caupar* in India (cf. Rettberg 2008: 37-39).

However, the history of *sa lam rnam bzhag* cannot at present be traced beyond that of *gyān caupaṛ*, and therefore it might as well have been the format of *gyān caupaṛ* which suggested the format of *sa lam rnam bzhag*. In any case, the formal system adopted by *gyān caupaṛ* was not that of *sa lam rnam bzhag*, but rather that of the European game of goose which had first arrived in western India in the mid-16th century. Goose never succeeded in establishing itself in India, but gave rise to a Mughal variant in the late 17th century, and may also have inspired early versions of *gyān caupaṛ* around the same time. The main structural difference between goose and *gyān caupaṛ* is that the former is played on an ovoid spiral track, while the latter is played on a *boustrophedon* track within a grid. This suggests that the formal system of goose was mapped on to a pre-existing tantric diagram in a fashion which may or may not have been inspired by *sa lam rnam bzhag*.

The game was adopted by the Jaina communities at an early stage, and redesigned in accordance with Jaina doctrine. The main grid of the 72-square Vaiṣṇava charts was expanded with an extra row at the top, and three extra squares were added at the sides and bottom, for a total of 84 squares corresponding to the 84 *lākh* birth-situations (yoni) in the universe. An additional group of independently numbered squares were then added above the main grid like a head to a torso, with the squares at the sides and bottom acting as arms and feet. Remnants of tantric and yogic influences on the group of Jaina charts most directly influenced by the Vaiṣṇava charts indicate that the resulting figure may have been that of a Jaina ascetic standing in the *kāyotsarga* pose of meditation, but considering the widespread tradition of visualizing the universe in the form of a cosmic man (*lokapuruṣa*), that is probably how most players would have understood it. A second group of Jaina charts which developed alongside the first completed the transformation from the Vaiṣṇava charts by replacing all surviving readings, and removing any references to the subtle body and practices of meditation.

We do not know what the earliest form of *gyān caupaṛ* looked like, or how it was played, but when the first charts appear in the historical record toward the end of the 18th century, they have already developed a standard design which continues with little variation throughout the 19th century. We only have a couple of examples of Jaina charts diverging from the 84-square format, but several examples of Vaiṣṇava charts diverging from the 72-square format. However, except for the 84-square

Vaiṣṇava charts in Rajasthan and Maharashtra, and the 342-square Vaiṣṇava charts in the Punjab Hills, none of them managed to establish lasting traditions. Around the turn of the 19th century, the game was adopted by the Ṣūfī communities of north India, but it does not appear to have been very successful until the turn of the 20th century when it reached modern day Turkey where copies are still being printed to this day. *Gyān caupaṛ* also traveled widely within the subcontinent itself, even reaching as far as the Kathmandu Valley in Nepal, but western India always remained the heartland. South India was the only other place where the game took root, but the heavily illustrated and often uninscribed form in which it did so was more popular and less demanding than its parent form in western India. The same was true to an even greater degree when *gyān caupaṛ* went overseas and became a major inspiration for the modern children's game of snakes and ladders. By then, nothing was left of the religious knowledge after which it had been named, and even less of the tantric diagrams on which it had been based.

The ingenuity of gyān caupar lay in its integration of game mechanics and theme which had not previously been seen in the history of Indian games. Similar approaches had been suggested by earlier games of the *caupar* family, but never with such careful attention to detail. In gyān caupar the playing field is the cosmos, and the single pawn controlled by each player an incorporeal soul traveling through the cycle of rebirth. The dice or cowries are the karmic forces at work, and the act of throwing them a sympathetic link between players and pawns. The squares are the various states of existence that the souls may experience on their journey, and the snakes and ladders the vices and virtues that will push them away from or pull them toward the ultimate goal of final liberation. Though the track followed by the pawns is linear and unidirectional, it does not have a beginning or an end. Rather, it continues round and round the grid like the cycle of rebirth it is meant to represent, and the only way to escape from it is to land on a specific square, and sometimes even subsequently make one or more auspicious throws. An important lesson inherent in the design is that no matter how close you are to the goal, you can still miss it and fall back down to a lower state of existence; another, and more hopeful, lesson is that if only you try hard enough, or play long enough, you will always reach it in the end.

Though we can plausibly reconstruct most of the rules of the game, we know very little about the uses to which it was put beyond that of mere play. An analysis of the experiences which the game affords its users shows that the more general and contextdependent readings of the Vaisnava charts lend themselves more readily to interpretation than the readings of the Jaina charts which are more focused on cosmographical hierarchies and doctrinal intricacies. This would seem to suggest that the Vaisnava charts were used as a means of divination, self-exploration, and other forms of consulting and communicating with a higher power. The Jaina charts, on the other hand, would have served well as didactic tools for teaching laypeople and young initiates about the basic tenets of the religion. The same overall uses are evidenced by the communities in which the game is still found today. The Vaiṣṇava chart and commentary published as a pan-religious guide to self-knowledge by Johari in the 1970s found an audience among Westerners in search of Eastern spirituality, and has since inspired several similar publications. The simplified Jaina charts printed in modern India are targeted at a younger audience than the original charts, but may still be seen as forming part of a long-standing tradition of using the charts to impart religious knowledge. The ritual playing of the south Indian version of gyān caupar during the festivals of Mahāśivrātri and Vaikunth Ekādaśī may also hint at similar uses in earlier times, but this cannot be verified beyond reports of Svetāmbara Jainas playing the game during the Paryuşana festival in the 1970s.

Rather than continuing the search for ever more fleeting glimpses of evidence for the origins and early uses of *gyān caupaṛ*, perhaps a better and ultimately more fruitful approach would be to inquire about the function of the grid diagram as an interface between games and related cultural forms and practices. The two often share in the same ludic qualities, whether formalized as a game system or a religious practice, and the difference between them can be difficult to define. While it is often taken for granted that a ludic relationship exists between them, very little actual research has been done on the subject. The present thesis has pointed to the game of *phañjikā*, described in the 12th-century *Mānasollāsa*, as the earliest documented example of a game played on a grid diagram traditionally associated with religious rituals.³⁹⁴ The

³⁹⁴ Other examples outside India include the far earlier games of twenty squares and *senet*. The former may have doubled as a divinatory device in Mesopotamia (Becker 2007), while the latter may have doubled as a ritual object in Egyptian funerary rites (Kendall 1978).

group of grid-based diagrams known as *bhadramaṇḍalas*, to which the diagram in question belongs, might therefore provide a good starting point for future research. The most comprehensive treatise on *bhadramaṇḍalas* is the *Bhadramārtaṇḍa* which appears in the encyclopedic and as yet only partly published *Bṛhajjyotiṣārṇava* (Bühnemann 2007: 73-118). The work was written by the astrologer Harikṛṣṇa in the 1860s and 70s, and also includes the *Krīḍākauśalya* which discusses numerous games, including *gyān caupaṛ*, and the means of divining one's own success or failure in them. It is obvious from the organization of the material in the *Bṛhajjyotiṣārṇava*, which includes astrological tables, ritual diagrams, divinatory practices, and games, that Harikṛṣṇa ultimately considered them to have been cast from the same mold. Though he does not discuss the exact relationship between them, a closer study would likely reveal several correspondences in design, operation, and purpose which have not previously been recognized. This could then, in turn, lead us to a better understanding of how *gyān caupaṛ* came to be, and came to be used.

We began our study among the fairy-tale books and traditional board games of a modern day children's room, and that is where we shall end it as well. There is a good chance that we found our game of snakes and ladders in a compendium with many other classics from all over the world. Several of them, such as chess, ludo, and backgammon, are closely associated with India, just like snakes and ladders, though their exact origins and early usage remain unknown. In another cosmic cycle, where more attention were paid to such matters, this need not have been the case, but we cannot change the past actions of the present cycle, and will have to rely on future ones to adjust our path. The burgeoning field of board game studies is trying to do just that, but passionate and dedicated as most of the scholars who venture into it are, they cannot hide the fact that their numbers are few, and that those who study the games of India are even fewer. Still, as this and other studies have shown, the research materials required can be found if only one looks closely enough, though any living memory of the games is fading fast. During a conversation with my friend Anirban Dash, assistant professor in the Department of Pali at the University of Pune, I asked him whether he had ever played anything remotely like gyān caupar in the village in Orissa where he grew up. He said that he had not, but after carefully going over a game chart together with me, he slowly began to remember that he had in fact played

something like it. His grandmother, he said, would draw a grid on the ground with a stick, and though the squares were neither numbered nor inscribed, she would trace a route through them, and explain what each of them meant. Anirban and his friends would then each put a pebble or a piece of twig in heaven (*devaloka*), and take turns throwing cowries and moving their pawns down to hell (*naraka*), and back up again, through a series of dimly understood realms and concepts. That was all he remembered, but still it was enough to make me happy I asked. And him, too.

Bibliography

Aarseth, Espen (2001) "Computer Game Studies, Year One" in *Game Studies* 1:1. Retrieved 20 Jan, 2019: http://gamestudies.org/0101/editorial.html.

Aarseth, Espen (2011) "'Define Real, Moron!': Some Remarks on Game Ontologies" in Stephan Günzel et al (eds.) *DIGAREC Keynote-Lectures 2009/10*. Potsdam: University Press, pp. 50-69.

Aarseth, Espen, and Gordon Calleja (2015) "The Word Game: The Ontology of an Indefinable Object" in the proceedings of *Foundations of Digital Games* (FDG) 2015. Retrieved 20 Jan, 2019: http://www.fdg2015.org/papers/fdg2015 paper 51.pdf.

Ācārya, Yādavaśarman Trivikramātmaja (1981[1941]) *Carakasaṃhitā*. New Delhi: Munshiram Manoharlal.

Agrawal, Vasudev Sharan (2010) *Padmāvat: Malik Muhammad Jāysī Kṛt Mahākāvya*. Allahabad: Lokbharti Prakashan.

Ahuja, Naman P. (2014) *Rūpa-Pratirūpa: The Body in Indian Art*. New Delhi: National Museum.

Aitken, Molly Emma (2017) "Colonial-Period Court Painting and the Case of Bikaner" in *Archives of Asian Art* 67:1, pp. 25-59.

Alecci, Antonio (1964) "Barletta, Gabriele" in *Dizionario Biografico degli Italiani*. Vol 6. Roma: Istituto dell'Enciclopedia Italiana. Accessed 20 Jan, 2019: http://www.treccani.it/enciclopedia/gabriele-barletta (Dizionario-Biografico).

Ali, S. M. (1966) *The Geography of the Puranas*. New Delhi: People's Publishing House.

d'Allemagne, Henry-René (1950) *Le Noble Jeu de l'Oie en France, de 1640 à 1950*. Paris: Librairie Gründ.

Alphen, Jan Van (2000) "Images of Serenity: The Representation of the Tirthankara in Jainism" in Jan Van Alphen (ed.) *Steps to Liberation: 2,500 Years of Jain Art and Religion.* Ghent: Etnografisch Museum Antwerpen, pp. 43-47.

Althoen, S. C., L. King, and K. Schilling (1993) "How Long Is a Game of Snakes and Ladders?" in *The Mathematical Gazette* 77:478, pp. 71-76.

Andhare, Shridhar (2000) "Jain Monumental Painting" in Jan Van Alphen (ed.) *Steps to Liberation: 2,500 Years of Jain Art and Religion.* Ghent: Etnografisch Museum Antwerpen, pp. 71-75.

Andhare, Shridhar, Chris De Lauwer, Lalit Kumar, and Jan Van Alphen (2000) "Catalogue" in Jan Van Alphen (ed.) *Steps to Liberation: 2,500 Years of Jain Art and Religion*. Ghent: Etnografisch Museum Antwerpen, pp. 77-183.

Andhare, Shridhar and Laxmanbhai Bhojak (2015) *Jain Vastrapatas: Jain Paintings on Cloth and Paper*. Ahmedabad: L. D. Institute of Indology.

Anon. (signed W. G.) (1840) "Chess, without the Chess-Board" in *Fraser's Magazine for Town and Country*. Vol. 21 (Jan-Jun 1840), no. 123 (March), pp. 302-18.

Arundhati, P. (2004) Games and Pastimes in Mānasollāsa. New Delhi: Self-published.

Atil, Esin (1985) The Unity of Islamic Art: An Exhibition To Inaugurate the Islamic Art Gallery of the King Faisal Center for Research and Islamic Studies. Riyadh: The King Faisal Foundation.

Audet, Daniel (2012) "Probabilités et espérances dans le jeu de serpents et échelles à deux joueurs" in *Bulletin Association Mathématique du Québec* 52:4, pp. 28-40.

Aufrecht, Theodor (1877) Die Hymnen des Rigveda. 2 vols. Bonn: Marcus.

Aufrecht, Theodor (1891-1903) *Catalogus Catalogorum: An Alphabetical Register of Sanskrit Works and Authors.* 3 vols. Leipzig: G. Kreysing.

Babb, Lawrence A. (1996) *Absent Lord: Ascetics and Kings in a Jain Ritual Culture*. Berkeley, Los Angeles, and London: University of California Press.

Babb, Lawrence A. (2016) *Understanding Jainism*. Mumbai: Hindi Granth Karyalay.

Bahirat, B. P. (1956) *The Philosophy of Jñānadeva: As Gleaned from the Amṛtānubhava.* Bombay: Motilal Banarsidass.

Bailey, Gauvin Alexander (1999) *Art on the Jesuit Missions in Asia and Latin America*, 1542-1773. Toronto, Buffalo, and London: University of Toronto Press.

Balambal, Venkatasubramanian (2005) *Folk Games of Tamilnadu*. Chennai: C. P. Ramaswami Aiyar Foundation.

Balcerowicz, Piotr (2011) "The Body and the Cosmos in Jaina Mythology and Art" in *Warsaw Indological Studies Series* 4. Delhi: Manohar Publishers, pp. 95-151.

Banerjea, Akshaya Kumar (1962) *Philosophy of Gorakhnath, with Goraksha-Vacana-Sangraha*. Gorakhpur: Mahant Dig Vijai Nath Trust.

Barz, Richard (1976) *The Bhakti Sect of Vallabhācārya*. Faridabad: Thompson Press (India).

Beck, Brenda E. F. (1982) *The Three Twins: The Telling of a South Indian Folk Epic*. Bloomington: Indiana University Press.

Becker, Andrea (2007) "The Royal Game of Ur" in Irving L. Finkel (ed.) *Ancient Board Games in Perspective*. London: British Museum Press, pp. 11-15.

Bell, Charles (1928) The People of Tibet. Oxford: Clarendon Press.

Bell, R. C. (1969) *Board and Table Games from Many Civilizations*. Vols. 1-2. London: Oxford University Press.

Belvalkar, Shripad Krishna (1968) *The Bhagavadgītā*. Pune: Bhandarkar Oriental Research Institute.

Bennett, James (2013) Realms of Wonder: Jain, Hindu, Islamic Art of India, Including Nepal and Pakistan. Adelaide: Art Gallery of South Australia.

Beveridge, Henry (1915a). Letter to Oliver Codrington dated 25 July, 1915. Photographic reproduction kindly provided by the Royal Asiatic Society, London.

Beveridge, Henry (1915b). Letter to Oliver Codrington dated 31 July, 1915. Photographic reproduction kindly provided by the Royal Asiatic Society, London.

Beveridge, Henry (1939) *The Akbar Nāma of Abu'l-Fazl*. Vol. 3. Calcutta: The Asiatic Society.

Bhagwat, Ramchandra Keshav (transl.) (1979) *Sri Jnanadeva's Bhāvārtha Dīpikā*, otherwise known as Jnāneshwarī. Madras: Samata Books.

Bhanawat, Mahendra (1965) "Lokkalā Maṇḍit Rājasthān" in *Times of India: Dharmyug*, 18 Jul, 1965.

Bharany, Chhote (1993) *Game of Life*. New Delhi: Sterling Publishers. [Originally published in Hindi as *Gyān caupaḍ*, New Delhi, 1984.]

Bhatta, C. Panduranga (1985) Dice-Play in Sanskrit Literature. Delhi: Amar Prakashan.

Bhattacharyya, Asoke Kumar (1995) *A Pageant of Indian Culture: Art and Archaeology*. Vol. 1. New Delhi: Abhinav Publications.

Bhattacharya, Gouriswar (1995) "The *bhale* Symbol of the Jainas" in *Berliner Indologische Studien* 8, pp. 201-228.

Bhosle, Akshay (2013) "Śrī Jñāneśo Bhagvān Viṣṇū." Blog post. Accessed 20 Jan, 2019: http://akshaybhosale26.blogspot.de/2013/09/blog-post_13.html.

Black, Max (1962) *Models and Metaphors: Studies in Language and Philosophy*. New York: Cornell University Press.

Blochmann, Heinrich (1873) *The Ain i Akbari by Abul Fazl 'Allami*. Vol. I. Calcutta: Baptist Mission Press.

Blumhardt, J. F. (1909) A Supplementary Catalogue of Hindustani Books in the Library of the British Museum Acquired During the Years 1889-1908. London: British Museum.

Bock-Raming, Andreas (1995) "The Varieties of Indian Chess through the Ages" in *Asiatische Studien: Zeitschrift der Schweizerischen Asiengesellschaft* 49:2, pp. 309-31.

Bock-Raming, Andreas (2001) "Das 8. Kapitel des Hariharacaturaṅga: ein spätmittelalterlicher Sanskrittext über eine Form des 'Großen Schachs': Annotierte Übersetzung und Interpretation" in *Board Game Studies* 4, pp. 85-125.

Bock-Raming, Andreas (2010) "Der *pāśakatrayakrīḍā*-Abschnitt des *Krīḍākauśalya*" in Eli Franco and Monika Zin (eds.) *From Turfan to Ajanta: Festschrift for Dieter Schlingloff on the Occasion of his Eightieth Birthday*. Vol. 1. Bhairahawa: Lumbini International Research Institute.

Boileau, A. H. E. (1837) *Personal Narrative of a Tour Through the Western States of Rajwara*, in 1835. Calcutta: Baptist Mission Press.

Brathwaite, Brenda and John Sharp (2010) "The Mechanic is the Message: A Post-Mortem in Progress" in Karen Schrier and David Gibson (eds.) *Ethics and Game Design: Teaching Values through Play.* Hershey and New York: Information Science Reference, pp. 311-29.

Brown, William Norman (1941) *Manuscript Illustrations of the Uttarādhyayana Sūtra.* New Haven, Connecticut: American Oriental Society.

Brown, William Norman (1964) "The Indian Games of Pachisi, Chaupar, and Chausar" in *Expedition* 6:2, pp. 32-5.

Bühnemann, Gudrun (1987) "Bhadramaṇḍalas in the Ritual Practice" in Wiener Zeitschrift für die Kunde Südasiens und Archiv für indische Philosophie 31, pp. 43-73.

Bühnemann, Gudrun (2007[2003]) "Maṇḍalas and Yantras in Smārta Ritual" in Gudrun Bühnemann (ed.) *Maṇḍalas and Yantras in the Hindu Traditions*. New Delhi: D. K. Printworld, pp. 57-118.

Bühnemann, Gudrun (2011) "Bhadramandalas: Invoking Divinities in Smarta Ritual" in Corinna Wessels-Mevissen (ed.) *Visuality of Indian Rituals*. MARG 63:2, pp. 40-49.

Burchett, Patton E. (2012) Bhakti *Religion and Tantric Magic in Mughal India: Kacchvāhās, Rāmānandīs, and Nāths, circa 1500-1750*. Unpublished doctoral dissertation from Columbia University, New York.

Caillat, Colette and Ravi Kumar (2004[1981]) *Jain Cosmology*. Paris and Chicago: Art Media Resources.

Calleja, Gordon (2009) "Experiential Narrative in Game Environments" in *Breaking New Ground: Innovation in Games, Play, Practice and Theory*. Proceedings of *DiGRA* 2009. Retrieved 20 Jan, 2019: http://www.digra.org/digital-library/publications/experiential-narrative-in-game-environments/

Calleja, Gordon (2011) *In-Game: From Immersion to Incorporation*. Cambridge, Massachusetts: MIT Press.

Callewaert, Winand M. and Bart Op de Beeck (1991) Devotional Hindī Literature: A Critical Edition of the Pañc-Vāṇī or Five Works of Dādū, Kabīr, Nāmdev, Raidās, Hardās,

with the Songs of Gorakhnāth and Sundardās, and a Complete Word-Index. 2 vols. New Delhi: Manohar.

Callewaert, Winand M. (2009) *Dictionary of Bhakti: North-Indian Bhakti Texts into Khaṛī Bolī Hindī and English.* 3 vols. New Delhi: D. K. Printworld.

Chapple, Christopher Key (ed.) (2016) *Yoga in Jainism*. London and New York: Routledge.

Chaudhry, Kalpna (2014) *Depiction of Women in Art and Literature During the Mughal Period*. Unpublished doctoral dissertation from Aligarh Muslim University, Uttar Pradesh, India. Retrieved 20 Jan, 2019: http://hdl.handle.net/10603/63176.

Chaukhamba (publisher; ed. anon.) (2003) *Skandamahāpurāṇam of Shrimanmaharshi Krishnadwaipayan Vedvyasa*. 8 vols. Chaukhamba Sanskrit Series 111. Varanasi: Chaukhamba Sanskrit Pratishthan.

Chong, Alan (ed.) (2013) *Devotion and Desire: Cross-Cultural Art in Asia*. Exhibition catalogue. Singapore: Asian Civilisations Museum.

Cimino, Rosa Maria (1985) *Life at Court in Rajasthan: Indian Miniatures from the Seventeenth to the Nineteenth Century*. Firenze: Mario Luca Giusti.

Coomaraswamy, Ananda (1916) *Rajput Painting*. 2 vols. Oxford: Oxford University Press.

Copisarow, Edward (2010) "Chronologies using British 19th-Century Intellectual Property Records: Agon, Ludo and Reversi" in Thierry Depaulis (ed.) *Of Boards and Men: Proceedings of the XIIIth Board Game Studies Colloquium, Paris, 14-17 April 2010*. Self-published on CD-ROM, pp. 177-239.

Cort, John E. (1987) "Medieval Jaina Goddess Traditions" in Numen 34:2, pp. 235-55.

Cort, John E. (1997) "Tantra in Jainism: The Cult of Ghaṇṭākarṇ Mahāvīr, the Great Hero Bell-Ears" in *Bulletin d'Études Indiennes* 15, pp. 115-133.

Cort, John E. (2002) "Bhakti in the Early Jain Tradition: Understanding Devotional Religion in South Asia" in *History of Religions* 42:1, pp. 59-86.

Cort, John E. (2010) Framing the Jina: Narratives of Icons and Idols in Jain History. New York: Oxford University Press.

Cort, John E. (2016) "When Will I Meet Such a Guru? Images of the Yogī in Digambar Hymns" in Christopher Key Chapple (ed.) *Yoga in Jainism*. London and New York: Routledge, pp. 191-209.

Crist, Walter, Anne-Elizabeth Dunn-Vaturi, and Alex de Voogt (2016) *Ancient Egyptians at Play: Board Games across Borders*. London and New York: Bloomsbury Publishing.

Csikszentmihalyi, Mihaly and Stith Bennett (1971) "An Exploratory Model of Play" in *American Anthropologist*, New Series 73:1, pp. 45-58.

Culin, Stewart (1895) Korean Games, with Notes on the Corresponding Games of China and Japan. Philadelphia: University of Pennsylvania.

Dampier, G. R. (1895) "A Primitive Game" in *North Indian Notes and Queries* 5:2, pp. 25-27.

Dane, Lance (ed.) (1982) *Aditi*. Catalogue of the *Festival of India* exhibition, Barbican Centre, London. New Delhi: Handicrafts and Handlooms Exports Corporation of India.

Dasgupta, Surendranath (1966) *A History of Indian Philosophy*. Vol. 4 (Indian Pluralism). Cambridge: Cambridge University Press.

Dasgupta, Shashibhusan (1976) *Obscure Religious Cults.* Calcutta: Firma KLM Private Limited.

Dash, Siniruddha et al (1949-) New Catalogus Catalogorum: An Alphabetical Register of Sanskrit and Allied Works and Authors. Madras: University of Madras.

Devdhar, Anant Bābājī (1905) *Sacitra marāṭhī kheļāñceṁ pustak.* Mumbai: Times of India Press.

Digambar, Svami and Pitambar Jha (1970) *Haṭhapradīpikā of Svātmārāma*. Lonavla: Kaivalyadhama S. M. Y. M. Samiti.

Digby, Simon (2006a) "Ganj: The Game of Treasure from Mughal India" in *South Asian Studies* 22:1, pp. 69-88.

Digby, Simon (2006b) "Treasure: The Mughal Game of Ganj" in Andrew Topsfield (ed.) *The Art of Play: Board and Card Games of India.* Mumbai: Marg Publication, pp. 107-19.

Dotson, Brandon (2015) "The Call of the Cuckoo to the Thin Sheep of Spring: Healing and Fortune in Old Tibetan Dice Divination Texts" in Charles Ramble and Ulrike Roesler (eds.) *Tibetan and Himalayan Healing: An Anthology for Anthony Aris*. Kathmandu: Vajra Publications, pp. 148–60. [Pre-publication proofs paginated 1-14 retrieved 20 Jan, 2019: https://georgetown.academia.edu/BrandonDotson.]

Duff, James Grant (2011[1826]) *A History of the Mahrattas*. Vol. 3. Cambridge: Cambridge University Press.

Dundas, Paul (1998) "Becoming Gautama: Mantra and History in Śvetāmbara Jainism" in John E. Cort (ed.) *Open Boundaries: Jain Communities and Cultures in Indian History.* Albany: State University of New York Press, pp. 31-52.

Dundas, Paul (2002) The Jains. London and New York: Routledge.

Dvivedi, Manilal N. (1893) "The Game of Knowledge (Jnani Baji)" in *Oriental Department Papers of the American Section of the Theosophical Society* 13, pp. 7-9.

Dvivedin, Vindhyeśvarī Prasāda (1915) *Brahmasūtrabhāṣyam: Brahmasūtra with a Commentary by Bhāskarāchārya*. Chowkhamba Sanskrit Series no. 20. Varanasi: Vidya Vilas Press.

Edelmann, Jonathan B. (2013) "Dialogues on Natural Theology: The Bhāgavata Purāṇa's Cosmology as Religious Practice" in Ravi M. Gupta and Kenneth R. Valpey (eds.) *The Bhāgavata Purāṇa: Sacred Text and Living Tradition*. New York: Columbia University Press, pp. 48-62.

Edgerton, Franklin (1972[1944]) *The Bhagavad Gītā*. Cambridge, Massachusetts: Harvard University Press.

Ekvall, Robert B. (1963) "Some Aspects of Divination in Tibetan Society" in *Ethnology* 2:1, pp. 31-39.

Falk, Toby and Mildred Archer (1981) *Indian Miniatures in the India Office Library*. Delhi and Karachi: Oxford University Press.

Falkener, Edward (1892) Games Ancient and Oriental and How to Play Them, Being the Games of the Ancient Egyptians, the Hiera Gramme of the Greeks, the Ludus Latrunculorum of the Romans, and the Oriental Games of Chess, Draughts, Backgammon, and Magic Squares. New York: Dover Publications.

Finet, Thibault (2012) *Jean Pierron (1631-1700): Missionnaire, Diplomate et Peintre en Amérique*. Unpublished doctoral dissertation from the University of Montreal, Canada.

Finkel, Irving (1995) "Notes on Two Tibetan Dice Games" in Alexander J. de Voogt (ed.) *New Approaches to Board Games Research: Asian Origins and Future Perspectives*. Leiden: International Institute for Asian Studies, pp. 24-47.

Finkel, Irving L. (2002) "Pachisi in Arab Garb" in *Board Game Studies* 5, pp. 65-78.

Finkel, Irving L. (2004a) "Dice in India and Beyond" in Colin Mackenzie and Irving Finkel (ed.) *Asian Games: The Art of Contest*. London: Asia Society, pp. 38-45.

Finkel, Irving L. (2004b) "Round and Round the Houses: The Game of *Pachisi*" in Colin Mackenzie and Irving Finkel (ed.) *Asian Games: The Art of Contest*. London: Asia Society, pp. 46-57.

Finkel, Irving L. (2004c) "The Ups and Downs of Life: The Indian Game of Snakes and Ladders" in Colin Mackenzie and Irving Finkel (ed.) *Asian Games: The Art of Contest*. London: Asia Society, pp. 58-63.

Finkel, Irving L. (2004d) "A Raja's Diversions: Board Games at Mysore" in Colin Mackenzie and Irving Finkel (ed.) *Asian Games: The Art of Contest*. London: Asia Society, pp. 127-33.

Finkel, Irving L. (2006) "The Four-Arm Race: The Indian Game of Pachisi or Chaupar" in Andrew Topsfield (ed.) *The Art of Play: Board and Card Games of India*. Mumbai: Marg Publication, pp. 61-73.

Finkel, Irving L. (ed.) (2007) *Ancient Board Games in Perspective*. London: British Museum Press.

O'Flaherty, Wendy Doniger (1987) "The Interaction of *Saguṇa* and *Nirguṇa* Images of Deity" in Karine Schomer and W. H. McLeod (eds.) *The Sants: Studies in a Devotional Tradition of India*. Delhi: Motilal Banarsidass, pp. 47-52.

Flood, Gavin (2006) *The Tantric Body: The Secret Tradition of Hindu Religion*. London and New York: I. B. Tauris & Co.

Forbes, Duncan (1860) *The History of Chess, From the Time of the Early Invention of the Game in India, Till the Period of Its Establishment in Western and Central Europe.* London: W. H. Allen & Co.

Formanek, Susanne and Sepp Linhart (2002) "Playing with Filial Piety - Some Remarks on a 19th-Century Variety of Japanese Pictorial sugoroku Games" in *Board Game Studies* 5, pp. 39-64.

Frasca, Gonzalo (2003) "Simulation Versus Narrative: Introduction to Ludology" in Mark J. P. Wolf and Bernard Perron (eds.) *The Video Game Theory Reader*. New York and London: Routledge.

Gail, Adalbert (1969) Bhakti im Bhāgavatapurāṇa: Religionsgeschichtliche Studie zur Idee der Gottesliebe in Kult und Mystik des Viṣṇuismus. Wiesbaden: Otto Harrassowitz.

Gharote, M. L. and G. K. Pai (2005) *Siddhasiddhāntapaddhatiḥ: A Treatise on the Nātha Philosophy by Gorakṣanātha*. Lonavla: The Lonavla Yoga Institute.

Gibson, James J. (1977) "The Theory of Affordances" in Robert Shaw and John Bransford (eds.) *Perceiving, Acting, and Knowing: Toward an Ecological Psychology*. New York: Lawrence Erlbaum Associates, pp. 67-82.

Gippert, Jost and Makoto Fushimi (2012) *Taittirīya-Saṃhitā*, on the Basis of the Edition by Albrecht Weber, Die Taittirîya-Saṃhitâ, Leipzig: Brockhaus 1871-72 (Indische Studien, 11-12). Frankfurt: TITUS. Accessed 20 Jan, 2019: http://titus.uni-frankfurt.de/texte/etcs/ind/aind/ved/yvs/ts/ts.htm.

Gippert, Jost and Martin Kümmel (2012) *Vājasaneyi-Saṃhitā*, *Mādhyandina-Recension*, on the Basis of the Edition by Albrecht Weber, The Vajasaneyi-Saṃhitā in the Mādhyandina and the Kānva-Śākhā with the Commentary of Mahidhara, *Berlin 1849 / repr. Varanasi 1972 (Chowkhamba Sanskrit Series, 103)*. Frankfurt: TITUS. Accessed 20 Jan, 2019: http://titus.uni-frankfurt.de/texte/etcs/ind/aind/ved/yvw/vs/vs.htm.

Gippert, Jost, Vladimir Petr, and Petr Vavroušek (2012) *Atharva-Veda Saṃhitā: Śaunaka Recension, on the Basis of the Editions* Gli inni dell' Atharvaveda (Saunaka), trasliterazione a cura di Chatia Orlandi, *Pisa 1991 and* Atharva Veda Sanhita,

herausgegeben von R. Roth und W. D. Whitney, Berlin 1856. Frankfurt: TITUS. Accessed 20 Jan, 2019: http://titus.uni-frankfurt.de/texte/etcs/ind/aind/ved/av/avs/avs.htm.

Girdhārī Lāl (n.d.) [Unpublished mid-19th-century notebook currently in a private collection in Germany. Entries by multiple hands indicate shared ownership or a later compilation of disparate notebooks. Girdhārī Lāl is the only name consistently mentioned in the colophons.]

Glasenapp, Helmuth von (1915) *Die Lehre vom Karman in der Philosophie der Jainas*. Leipzig: G. Kreysing.

Golladay, Sonja Musser (2003) *Alfonso X's Book of Games*. Working translation. Retrieved 20 Jan, 2019: http://www.mediafire.com/file/nenjj1dimtd.

Gombrich, Richard F. (1975) "Ancient Indian Cosmology" in Carmen Blacker and Michael Loewe (eds.) *Ancient Cosmologies*. London: George Allen & Unwin, pp. 110-42.

Gonda, Jan (1975) "The Mudgalopanișad" in *Selected Studies*. Vol. 3. Leiden: E. J. Brill, pp. 499-511.

Gondekar, Gajanan K. (1925) *Mānasollāsa*. Vol. 1. Gaekwad's Oriental Series, no. 28. Baroda: Central Library.

Gondekar, Gajanan K. (1939) *Mānasollāsa of King Someśvara*. Vol. 2. Gaekwad's Oriental Series, no. 84. Baroda: Central Library.

Gondekar, Gajanan K. (1961) *Mānasollāsa of King Someśvara*. Vol. 3. Gaekwad's Oriental Series, no. 138. Baroda: Central Library.

González-Reimann, Luis (1989) "The Ancient Vedic Dice Game and the Names of the Four World Ages in Hinduism" in A. F. Aveni (ed.) World Archaeoastronomy. Selected Papers from the 2nd Oxford International Conference on Archaeoastronomy Held at Mérida, Yucatán, México, 13-17 January, 1986. Cambridge: Cambridge University Press, pp. 195-202.

Goodfellow, Caroline (1998) "The Development of the English Board Game, 1770-1850" in *Board Games Studies* 1, pp. 70-80. [First published in Alexander J. de Voogt (ed.) (1997) *Proceedings: Board Games in Academia: An Interdisciplinary Approach*. Self-published, pp. 1-5.]

Goodfellow, Caroline (2008) *How We Played: Games from Childhood Past*. Stroud: History Press.

Gopal, R. and S. Narendra Prasad (2010) *Krishnaraja Wodeyar III: A Historical Study*. Mysore: Directorate of Archaeology and Museums.

Goren-Inbar, Naama, Michael Freikman, Yosef Garfinkel, A. Nigel Goring-Morris, and Leore Grosman (2012) "The Earliest Matches" in *PLoS ONE* 7:8, pp. 1-9. Retrieved 20 Jan, 2019: https://doi.org/10.1371/journal.pone.0042213.

Gough, Ellen (2012) "Shades of Enlightenment: A Jain Tantric Diagram and the Colours of the Tīrthaṅkaras" in *International Journal of Jaina Studies (Online)* 8:1, pp. 1-47. Retrieved 20 Jan, 2019: https://www.soas.ac.uk/ijjs/archive/2012.html.

Goswami, C. L. (2009) Śrīmadbhāgavatamahāpurāṇam. 2 vols. Gorakhpur: Gita Press.

Guitel, Genevieve (1975) *Historie Comparée des Numérations Écrites*. Paris: Flammarion.

Gulābrāv Mahārāj [1957?] "Śrautakrīḍāviśeṣa" in *Sūktiratnāvalī*. Vol. 18. [Edited by Vedānt Kesrī?] Amravati: Śrī Madhurādvait Sampradāy Maṇḍal. [I have not been able to access the title, hence the entry remains incomplete.]

Gulābrāv Mahārāj (1981) *Śrautkrīḍāviśeṣ yāne mokṣpaṭ kī niyamāvali*. Translated by Rām Vāsudev. Nagpur: Śrī Gulābrāv Mahārāj Janmaśatābdi Prakāśan. [Published together with Patil 1981.]

Gulābrāv Mahārāj (2007) *Mokṣpaṭ yā kheļāsambandhīcī māhitī*. Amravati: Śrī Jñāneśvar Madhurādvait Sāmpradāyik Maṇḍal.

Handelman, Don and David Shulman (1997) *God Inside Out: Śiva's Game of Dice.* Oxford and New York: Oxford University Press.

Harikṛṣṇa Śarmā (1982[1900]) *Krīḍākauśalyam*. Delhi: Nag Publishers.

Harte, Richard (1893) *A New Game and Means or Apparatus for Playing the same*. British patent no. 5586 of 15 March, 1893. Archived at the British Library, London.

al-Hāshimī, Shaykh Muḥammad (1938) *Sharḥ Shatranj al-ārifīn* [commentary on the chess of the wise]. Damaskus: Matba'at al-Taraqqī.

Hastings, James M. (2002) *Poets, Sants, and Warriors: The Dadu Panth, Religious Change and Identity Formation in Jaipur State, Circa 1562-1860 CE*. Unpublished doctoral dissertation from the University of Wisconsin, US. Retrieved from www.proquest.com.

Haugeland, John (1985) *Artificial Intelligence: The Very Idea*. Cambridge, Massachusetts and London: MIT Press.

Head, Raymond (1991) Catalogue of Paintings, Drawings, Engravings and Busts in the Collection of the Royal Asiatic Society. London: Royal Asiatic Society.

Heesterman, J. C. (1957) *The Ancient Indian Royal Consecration*. 's-Gravenhage: Mouton & Co.

Horstmann, Monika and Heike Bill (1999) *In Favour of Govinddevjī: Historical Documents Relating to a Deity of Vrindaban and Eastern Rajasthan*. New Delhi: Indira Gandhi National Centre for the Arts.

Horstmann, Monika (2017) "Nāth and Dādūpanthī Critique of Jains" in *International Journal of Jaina Studies* 13:1, pp. 1-72.

Huizinga, Johann (1980[1949]) *Homo Ludens: A Study of the Play-Element in Culture*. London, Boston, and Henley: Routledge and Kegan Paul.

Hyde, Thomas (1694) De Ludis Orientalibus. 2 vols. Oxford: Theatro Sheldoniano.

Jaffer, Amin (2002) Luxury Goods from India: The Art of the Indian Cabinet-Maker. London: V&A Publications.

Jaffer, Amin (2006) *Made for Maharajas: A Design Diary of Princely India*. New York: Vendome Press.

Jain, Anil Kumār (1997) "Guņsthān tathā unke ārohaṇ-avarohaṇ kā kram" in *Tulsī Prajñā: Jain Vishva-Bharati Institute Research Journal* 23:2, pp. 211-24.

Jain, Jyotindra and Eberhard Fischer (1978) *Jaina Iconography. Part Two: Objects of Meditation and the Pantheon*. Iconography of Religions (eds. Th. P. van Baaren *et al*), vol. 13. Leiden: E. J. Brill.

Jain, S. Appandai (1992) Reality. English Translation of Srimat Pujyapadacharya's Sarvarthasiddhi. Madras: Jwalamalini Trust.

Jain, Sāgarmal (1997) Jaindharm aur tāntrik sādhnā. Varanasi: Pārśvanāth Vidyāpīţh.

Jaini, Padmanabh S. (1979) *The Jaina Path of Purification*. Berkeley, Los Angeles, and London: University of California's Press.

Jaini, Padmanabh S. (1980) "Karma and the Problem of Rebirth in Jainism" in Wendy Doniger O'Flaherty (ed.) *Karma and Rebirth in Classical Indian Traditions*. Berkeley, Los Angeles and London: University of California Press.

Jeṭhābhāī, Lallu (1877/78) *Jñān bājī ramvānī rīt*. Chapter one of an untitled manuscript. L. D. Institute of Technology. Acc. no. 12380/1, pp. 1-16.

Johari, Harish (2007) *The Yoga of Snakes and Arrows: The Leela of Self-Knowledge.* Vermont: Destiny Books. [Originally published as *Leela: The Game of Self-Knowledge* (New York, 1975).]

Johnson, Helen (1931) *Triṣaṣtiśalākāpuruṣacaritra*. Vol I. Baroda: Oriental Institute.

Jośī, Veṇīmāghavaśāstrī and Nārāyaṇa Harī Jośī (1968) *Āyurvedīya mahākośaḥ*, *arthāt āyurvedīya śabdakośa*. Mumbai: Mahārāṣṭra Rājya Sāhitya āṇi Saṃskṛti Maṇḍal.

Kallappa, Mopidi (2006) *History of Indian Sports and Games: A Study with Special Reference to Andhra Pradesh*. Unpublished doctoral dissertation from Sri Krishnadevaraya University, Andhra Pradesh, India. Retrieved 20 Jan, 2018: http://hdl.handle.net/10603/68167.

Kangle, R. P. (1960) *The Kautilīya Arthaśāstra: A Critical Edition with a Glossary*. 3 vols. Bombay: University of Bombay.

Kapadia, Premal (2011) Śrīpāl Rās. Vol. 5. Translated by Sujata P. Kapadia. Mumbai: Harshadray.

Keats, Victor (transl.) (1994) *Chess, Its Origin: A Translation with Commentary of the Latin and Hebrew in Thomas Hyde's* De Ludis Orientalibus (*Oxford, 1694*). Oxford: Oxford Academia Publishers.

Kendall, Timothy (1978) Passing Through the Netherworld: The Meaning and Play of Senet, an Ancient Egyptian Funerary Game. Belmont, Massachusetts: The Kirk Game Company.

Khanna, Madhu (2005) *The Subtle Body: An Illuminated Tantric Scroll.* Ahmedabad: Sarabhai Foundation.

Khanna, Madhu (2007[1979]) *Yantra: The Tantric Symbol of Cosmic Unity*. London: Thames & Hudson.

Khemir, Sabiha Al (2012) *Beauty and Belief: Crossing Bridges with the Arts of Islamic Culture*. Provo, Utah: Brigham Young University Museum of Art.

Kirfel, Willibald (1920) *Die Kosmographie der Inder nach den Quellen dargestellt*. Bonn and Leipzig: Kurt Schroeder.

Klatt, Johannes (1879) "Dhanapāla's *Ṣishabhapañcāśikā*" in *Zeitschrift der Deutschen Morgenländischen Gesellschaft* 33:3, pp. 445-83.

Kopardekar, Sharad (1985) *Gulabrao Maharaj: A Biography*. Bombay: Bharatiya Vidya Bhavan.

Kramrisch, Stella (1980[1946]) The Hindu Temple. 2 vols. Delhi: Motilal Banarsidass.

Ku, Hawon (2014) "Representations of Ownership: The Nineteenth-Century Painted Maps of Shatrunjaya, Gujarat" in *South Asia: Journal of South Asian Studies* 37:1, pp. 3-21.

Kulkarņī, Gaņeśa Raṅgo (1937) *Vilāsamaņimañjarī athava Buddhibalakrīḍāratneṁ āṇi Bālaka-hita-buddhibalakrīḍānam*. Kolhapur: Śrī Jñāneśvara Press. [Sanskrit text with Marathi introduction and commentary.]

Kuvalayānanda, Swāmi and S. A. Shukla (2006) *Gorakṣaśatakam*. Lonavla: Kaivalyadhama S. M. Y. M. Samiti.

Lāļas, Sītārām (2013[1962]) *Rājasthāṃnī Sabad Kos: Rājasthānī Hindī Vṛhat Koś*. 11 vols. Jodhpur: Rājasthānī Granthāgār.

Larson, Gerald James and Ram Shankar Bhattacharya (1987) *Sāṃkhya: A Dualist Tradition in Indian Philosophy*. Encyclopedia of Indian Philosophies (ed. Karl Potter), vol. 4. New Jersey: Princeton University Press.

Leesberg, Marjolein (2015) "*El Juego Real de Cupido*: A Spanish Board Game Published in Antwerp, c. 1620" in *Delineavit et Sculpsit* 39, pp. 23-43.

Leland, Kurt (2016) *Rainbow Body: A History of the Western Chakra System from Blavatsky to Brennan*. Lake Worth: Ibis Press.

Lepsius, Carl Richard (1849-58) *Denkmäler aus Aegypten und Aethiopien*. 6 Vols. Berlin: Nicolaische Buchhandlung. Accessed 20 Jan, 2019: http://edoc3.bibliothek.uni-halle.de/lepsius/tafelw.html.

Lhôte, Jean-Marie (1976) Le Symbolisme des Jeux. Paris: Berg-Bélibaste.

Lhôte, Jean-Marie (1996) Dictionnaire des Jeux de Société. Paris: Flammarion.

Limaye, V. P. and R. D. Vadekar (1958) *Eighteen Principal Upanișads*. Vol. 1. Pune: Vaidika Saṃśodhana Maṇḍala.

Lo, Andrew (2004) "Official Aspirations: Chinese Promotion Games" in Colin Mackenzie and Irving Finkel (ed.) *Asian Games: The Art of Contest.* London: Asia Society, pp. 65-75.

Lobsiger-Dellenbach, Marguerite (1954) *Népal: Catalogue de la Collection d'Ethnographie Népalaise du Musée d'Ethnographie de la Ville de Genève*. Geneva: Musée d'Ethnographie.

Lüders, Heinrich (1907) Würfelspiel im alten Indien. Berlin: Weidmannsche Buchhandlung.

Machado, Felix A. (1985) *Jñāneśvar's Theology of the Three Paths to Liberation*. Unpublished doctoral dissertation from Fordham University, New York. Retrieved 20 Jan, 2019: https://fordham.bepress.com/dissertations/AAI8521394/.

Maclagan, Edward (1932) *The Jesuits and the Great Mogul*. London: Burns, Oates, and Washbourne.

Mallik, Kalyani (1954) *Siddha-Siddhānta-Paddhati and Other Works of the Nātha Yog*īs. Poona: Poona Oriental Book House.

Mallinson, James (2011) "Nāth Saṃpradāya" in Knut A. Jacobsen *et al* (eds.) *Brill's Encyclopedia of Hinduism*. Vol. 3. Leiden: Brill, pp. 407-28. [Pre-publication proofs paginated 1-20 retrieved 20 Jan, 2019: https://soas.academia.edu/JamesMallinson.]

Mallinson, James and Mark Singleton (2017) Roots of Yoga. London: Penguin Books.

Mardia, K. V. (1990) The Scientific Foundations of Jainism. Delhi: Motilal Banarsidass.

Mark, Michael (2007) "The Beginnings of Chess" in Irving L. Finkel (ed.) *Ancient Board Games in Perspective*. London: British Museum Press, pp. 138-57.

Masukawa, Koichi (2004) "Scenic Views: E-Sugoroku" in Colin Mackenzie and Irving Finkel (ed.) *Asian Games: The Art of Contest*. London: Asia Society, pp. 77-86.

McGregor, Ronald Stuart (1984) *Hindi Literature from Its Beginnings to the Nineteenth Century*. Wiesbaden: Otto Harrassowitz.

McGregor, Ronald Stuart (2002) *Oxford Hindi-English Dictionary*. Oxford and New York: Oxford University Press.

McGuire, Beverly Foulks (2014) "Playing with Karma: A Buddhist Board Game" in *Material Religion* 10:1, pp. 4-29.

Meister, Michael W. (2007[2003]) "Vāstupuruṣamaṇḍalas: Planning in the Image of Man" in Gudrun Bühnemann (ed.) *Maṇḍalas and Yantras in the Hindu Traditions*. New Delhi: D. K. Printworld, pp. 251-70.

Michon, Jean-Louis (1998) *Le Shaykh Muḥammad al-Hāshimī et son Commentaire de l'Échiquier des Gnostiques (Sharh Shaṭranj al-ārifīn)*. Collection RATNA - Joyaux de la Tradition Orientale, vol. VII. Milan: Arché.

Millán, José Martínez (1996) "Filosofía Cortesana de Alonso de Barros (1587)" in Pablo Fernández Albaladejo, José Martínez Millán, Virgilio Pinto Crespo, and Quintín Aldea Vaquero (eds.) Politíca, Religión e Inquisición en la España Moderna: Homenaje a Joaquín Pérez Villanueva. Madrid: Autonomous University of Madrid, pp. 461-82.

Mishra, Shiva Shekhar (1966) *Someśvarkṛt Mānasollāsa: ek sāṃskṛtik adhyayan* [*Someśvara's Mānasollāsa: A Cultural Study*]. Varanasi: Chowkhamba Vidyabhavan.

Molesworth, J. T. (1857) *A Dictionary, Marāṭhī and English*. Bombay: Bombay Education Society's Press.

Monier-Williams, Monier (1899) *A Sanskrit-English Dictionary: Etymologically and Philologically Arranged with Special Reference to Cognate Indo-European Languages*. Oxford: Clarendon Press.

Moskalev, Sergey (2009) "Game of Heaven and Hell: Indian Board Game Snakes and Ladders Type Invented by Thiruvenkatacharya Shastri." Blog post. Accessed 20 Jan,

2019: https://sergeymoskalev.wordpress.com/article/game-of-heaven-and-hell-39jofx64dej9f-29.

Moskalev, Sergey (2014) Шахматы мистиков [Chess of the Mystics]. Self-published.

Murray, H. J. R. (1913) A History of Chess. Oxford: Clarendon Press.

Murray, H. J. R. (1952) *A History of Board-Games Other than Chess*. Oxford: Clarendon Press.

Narayanaswami, P. P. (2007) Śrī rudram camakam. Unpublished online document. Retrieved 20 Jan, 2019: http://docplayer.net/23949592-Camakam-in-english-with-vedic-accent-marks.html.

Ngai, May-Ying Mary (2011) From Entertainment to Enlightenment: A Study on a Cross-Cultural Religious Board Game with an Emphasis on the Table of Buddha Selection Designed by Ouyi Zhixu of the Late Ming Dynasty. Unpublished doctoral dissertation from the University of British Columbia, Canada.

Neven, Armand (1976) *Religion et culture de l'Inde: Le Jainisme, art et iconographie.* Brussels: Association Art Indien.

Nikhilananda, Swami (transl.) (1974) *The Gospel of Sri Ramakrishna*. Madras: Sri Ramakrishna Math.

Norbu, Thubten Jigme and Heinrich Harrer (1961) *Tibet Is My Country: The Autobiography of Thubten Jigme Norbu*. New York: E. P. Dutton & Co.

Norman, Donald A. (1990) The Design of Everyday Things. New York: Doubleday.

Ohji, Toshiaki (1990) "The 'Ideal' Hindu City of Ancient India as Described in the *Arthaśāstra* and the Urban Planning of Jaipur" in *East Asian Cultural Studies* 29, pp. 55-73.

Pal, Pratapaditya (ed.) (1994) *The Peaceful Liberators: Jain Art from India.* New York and London: Thames and Hudson.

Panshikar, Vasudev Laxman Shastri (1925) *One Hundred and Eight Upanishads*. Bombay: Nirnayasagara Press.

Pārakh, Baļvant Khaṇḍojī (1886) *Jñāneśvar Mahārājāñcem Caritra*. Mumbai: Nirṇayasāgara Press.

Paranjoti, Violet (1954[1938]) Śaiva Siddhānta. London: Luzac & Co.

Pargiter, F. E. (1916) "An Indian Game: Heaven or Hell" in *The Journal of the Royal Asiatic Society of Great Britain and Ireland*, July 1916, pp. 539-42.

Parlett, David (1999) *The Oxford History of Board Games*. Oxford: Oxford University Press.

Pathak, Anamika (2010-11) "Gyan Chaupar: A Simple Way of Teaching" in *Kala: The Journal of Indian Art History Congress*, vol. XVI. Accessed 20 Jan, 2019: https://asiainch.org/article/gyan-chaupar-a-simple-way-of-teaching/.

Pathak, M. M. (1997-99) Viṣṇupurāṇam. 2 vols. Vadodara: Oriental Institute.

Patil, Maruti (1981) *Mokṣpaṭ: Jñāneśvarkanyā Śrīgulābrāvmahārājkṛt Śrautkrīḍāviśeṣ*. Printed game chart. Amravati: Viśva Sant Sāhitya Pratiṣṭhān. [Published together with Gulābrāv 1981.]

Peterson, Jon (2012) Playing at the World: A History of Simulating Wars, People and Fantastic Adventures, from Chess to Role-Playing Games. San Diego: Unreason Press.

Pingree, David (1981) *Jyotiḥśāstra: Astral and Mathematical Literature*. A History of Indian Literature (ed. Jan Gonda), vol. 6. Wiesbaden: Otto Harrassowitz.

Pirri, Pietro (1960) "Acquaviva, Rodolfo" in *Dizionario Biografico degli Italiani*. Vol. 1. Roma: Istituto dell'Enciclopedia Italiana. Accessed 20 Jan, 2019: http://www.treccani.it/enciclopedia/rodolfo-acquaviva (Dizionario-Biografico).

Poddar, Hanuman Prasad (1956) Śrīrāmacaritamānasa. Gorakhpur: Gita Press.

Potter, Karl (1981) *Advaita Vedānta up to Śaṃkara and His Pupils*. Encyclopedia of Indian Philosophies (ed. Karl Potter), vol. 3. Delhi: Motilal Banarsidass.

Pradhān, Vitthal Ganesh (transl.) and Hester Marjorie Lambert (ed.) (1967-69) *Jnāneshvari (Bhāvārthadīpikā)*. 2 vols. London: George Allen and Unwin.

Pritchett, Frances W. (1985) *Marvelous Encounters: Folk Romance in Urdu and Hindi.* Maryland: The Riverdale Company.

Pritchett, Frances W. (1991) *The Romance Tradition in Urdu: Adventures from the Dāstān of Amīr Ḥamzah*. New York: Columbia University Press.

Qvarnström, Olle (1998) "Stability and Adaptability: A Jain Strategy for Survival and Growth" in *Indo-Iranian Journal* 41:1, pp. 33-55.

Qvarnström, Olle (2000) "Jain Tantra: Divinatory and Meditative Practices in the Twelfth-Century *Yogaśāstra* of Hemacandra" in David G. White (ed.) *Tantra in Practice*. Princeton and Oxford: Princeton University Press, pp. 595-604.

Qvarnström, Olle (2002) *The Yogaśāstra of Hemacandra: A Twelfth Century Handbook on Śvetāmbara Jainism.* Cambridge, Massachusetts and London: Harvard University Press.

Raghavan, Venkatarama (1979) *Festivals, Sports and Pastimes of India.* Ahmedabad: B. J. Institute of Learning and Research.

Rao, Velcheru Narayana and David Shulman (2002) *A Lover's Guide to Warangal: The Krīḍābhirāmanu by Vinukŏṇḍa Vallabharāya*. Delhi: Permanent Black.

Rettberg, Ute (2008) "Chaupad" in *Das Schach und seine asiatischen Verwandten*. Dresden: Museum für Völkerkunde Dresden, pp. 37-59.

Rice, B. Lewis (1897) *Mysore: A Gazeteer Compiled for Government*. Vol. 1. Westminster: Archibald Constable & Co.

Richard, Timothy (1907) *Guide to Buddhahood, Being a Standard Manual of Chinese Buddhism*. Shanghai: Christian Literature Society.

Rogersdotter, Elke (2011) *Gaming in Mohenjo-Daro: An Archaeology of Unities*. Gothenburg: University of Gothenburg.

Rogersdotter, Elke (2015) "What's Left of Games are Boards Alone: On Form, Incidence, and Variability of Engraved Game Boards at Vijayanagara (c. AD 1350-1565)" in *Heritage: Journal of Multidisciplinary Studies in Archaeology* 3, pp. 457-96.

Rollefson, Gary O. (1992) "A Neolithic Game Board from 'Ain Ghazal, Jordan" in *Bulletin of the American Schools of Oriental Research* 286, pp. 1-5.

Rollefson, Gary O. (2012) "La Prehistoire des jeux" in *Histoire Antique & Medievale*, HS 33, Dec 2012, pp. 18-21.

Rossi, Barbara (1998) From the Ocean of Painting: India's Popular Paintings, 1589 to the Present. New York and Oxford: Oxford University Press.

Salen, Katie and Eric Zimmerman (2004) *Rules of Play: Game Design Fundamentals*. Cambridge, Massachusetts and London: MIT Press.

Sanderson, Alexis (2009) "The Śaiva Age: The Rise and Dominance of Śaivism during the Early Medieval Period" in Shingo Einoo (ed.) *Genesis and Development of Tantrism*. Tokyo: University of Tokyo.

Sanderson, Alexis (2015) "The Jaina Appropriation and Adaptation of Śaiva Ritual: The Case of Pādliptasūri's *Nirvāṇakalikā*." Handout from the 15th Annual Jaina Lecture at the School of African and Oriental Studies, London, 19 Mar, 2015. Retrieved 20 Jan, 2019: https://oxford.academia.edu/AlexisSanderson.

Sangave, Vilas Adinath (1959) *Jaina Community: A Social Survey*. Bombay: Popular Book Depot.

Sarkar, Jadunath (1933) Studies in Aurangzib's Reign. Calcutta: M. C. Sarkar & Sons.

Sarkar, Jaladhi Kumar (1999) *Kathamriter Biliyaman Drishyabali: Chitre O Barnanay*. Kolkata: Udbodhan Office.

Sarkar, Jaladhi Kumar (2002) *The World Sri Ramakrishna Knew: Through Narration and Drawings*. Kolkata: Advaita Ashrama.

Śāstrī, Phūlacandra (1997) Sarvārthasiddhi. New Delhi: Bharatiya Jnanpith.

Sastry, R. Sharma (1923) "Dice-Play on the First Day of the White Half of the Month, Kartika" in *The Quarterly Journal of the Mythic Society* 14:1, pp. 117-19.

Schädler, Ulrich (1995) "XII Scripta, Alea, Tabula: New Evidence for the Roman History of 'Backgammon'" in Alexander J. de Voogt (ed.) *New Approaches to Board Games Research: Asian Origins and Future Perspectives*. Leiden: International Institute for Asian Studies, pp. 73-98.

Schädler, Ulrich (2017) "Murray's Classification of Board Games." Unpublished paper presented at the *Board Game Studies Colloquium XX: Models, Metaphors, Meanings*, Copenhagen, 17-20 May, 2017.

Schick, I. C. (2010) "Tarihin Tahrif Edilmesine bir Örnek: 'Osmanlı Satrancı' Yahut Satrancı Urefa" [An Example of the Falsification of History: 'Ottoman Chess' or 'Chess of the Gnostics'] in *Toplumsal Tarih* 194, pp. 12-18.

Schlieter, Jens (2012) "Simulating Liberation: The Tibetan Buddhist Game 'Ascending the [Spiritual] Levels'" in Philippe Bornet and Maya Burger (eds.) *Religions in Play: Games, Rituals, and Virtual Worlds.* Zürich: Pano Verlag, pp. 93-116.

Schmidt-Madsen, Jacob (2016) "*Golok Dhām*: A Late 19th-Century Bengali Promotion Game." Unpublished paper presented at the International Board Game Studies Colloquium XIX, Nuremberg, 13-16th, April.

Schomer, Karine (1987) "Introduction: The Sant Tradition in Perspective" in Karine Schomer and W. H. McLeod (eds.) *The Sants: Studies in a Devotional Tradition of India*. Delhi: Motilal Banarsidass, pp. 1-17.

Schröter, Julius Erich (1900) *Pāśakakevalī: Ein indisches Würfel-Orakel*. Borna: Robert Noske.

Schubring, Walther (1918) *Das Mahānisīha-Sutta*. Berlin: Verlag der Königliche Akademie der Wissenschaften.

Schubring, Walther (1935) *Die Lehre der Jainas nach den alten Quellen dargestellt*. Berlin and Leipzig: Walter de Gruyter & Co.

Schuster, Carl and Edmund Carpenter (1996) *Patterns That Connect: Social Symbolism in Ancient & Tribal Art*. New York: Harry N. Abrams.

Serikov, Nikolai I. (2008) "На пути к высшему блаженству: 'игра-ходилка' 'Приключения Буратино' и ее древнеиндийский оригинал" [On the Way to Beatitude: Snakes and Ladders Boards from the Wellcome Library] in В Индию духа...: Сборник статей, посвященный 70-летию Ростислава Борисовича Рыбакова [То the India of the Spirit ...: A Collection of Papers Dedicated to Rostislav Borisovich Rybakov on the Occasion of His 70th Birthday]. Moscow: Vostochnaya Literatura.

Seville, Adrian (2013) "Distinctive Features of German 'Goose' Games." Unpublished paper. Retrieved 20 Jan, 2019: http://www.giochidelloca.it/storia.php.

Seville, Adrian (2016a) "The Medieval Game of the Goose: Philosophy, Numerology and Symbolism" in Eddie Duggan and David W. J. Gill (eds.) *From Cardboard to Keyboard: Proceedings of Board Game Studies Colloquium XVII*. Lisbon: Associação Ludus, pp. 115-35.

Seville, Adrian (2016b) "The Game of the Sphere or of the Universe: A Spiral Race Game from 17th Century France" in *Board Games Studies Journal* 10, pp. 1-16.

Sharma, Aryendra, Khanderao Deshpande, and D. G. Padhye (2008) *Kāśikā: A Commentary on Pāṇini's Astādhyāyī*. 2 vols. Hyderabad: Sanskrit Academy.

Sharma, G. N. (1968) Social Life in Medieval Rajasthan 1500-1800 A.D: With Special Reference to the Impact of Mughal Influence. Agra: Lakshmi Narain Agarwal.

Sharma, Har Dutt (1933) *The Sāṁkhyakārikā: Īśvara Kṛṣṇa's Memorable Verses on Sāṁkhya Philosophy with the Commentary of Gauḍapādācārya*. Pune Oriental Series no. 9. Pune: Oriental Book Agency.

Sharma, Vijay (2008) Vision of an Enlightened King: A Centennial Bouquet of Himalayan Art from Bhuri Singh Museum Collection. Chamba: Bhuri Singh Museum.

Sharp, John (2015) *Works of Game: On the Aesthetics of Games and Art*. Cambridge, Massachusetts and London: MIT Press.

Shastree, Trevangadacharya (1814) Essays on Chess Adapted to the European Mode of Play: Consisting Principally of Positions or Critical Situations Calculated to Improve the Learner and Exercise the Memory. Bombay: M. D. Cruz.

Shendye, Ganesh Shastri (ed.) (1979) *Rgvedīyabrahmakarmasamuccaya* (Atha ṛgvedīyabrahmakarmasamuccayaḥ). Pune: S. P. Barve Parashuram.

Shimkhada, Deepak (1983) "A Preliminary Study of the Game of Karma in India, Nepal, and Tibet" in *Artibus Asiae* 44:4, pp. 308-22.

Shirreff, A. G. (1944) *Padmāvatī*. Calcutta: The Royal Asiatic Society of Bengal.

Shome, Bipin Behari (1849) "Physical Errors of Hinduism" in *Calcutta Review* 11:22, pp. 397-444.

Shulman, David (1992) "Devana and Daiva" in A. W. van den Hoek, D. H. A. Kolff, and M. S. Oort (eds.) Ritual, State, and History in South Asia: Essays in Honour of J. C. Heesterman. Leiden: Brill, pp. 350-65.

Shurreef, Jaffur and G. A. Herklots (transl.) (1832) *Qanoon-e-Islam or the Customs of the Moosulmans of India*. London: Parbury, Allen, and Co.

Simpson, St. John (2007) "Homo Ludens: The Earliest Board Games in the Near East" in Irving L. Finkel (ed.) *Ancient Board Games in Perspective*. London: British Museum Press, pp. 5-10.

Sircar, D. C. (1952) "The Astrologer at the Village and the Court" in *The Indian Historical Quarterly*, vol. 28, nos. 1-4, pp. 342-9.

Slusser, Mary Shepherd (1982) *Nepal Mandala: A Cultural Study of the Kathmandu Valley*. 2 vols. Princeton: Princeton University Press.

Smith, Horatio (1851) "Bengali Games and Amusements" in *Calcutta Review* 15:30, pp. 334-50.

Snell, Rupert (1991) *The Hindi Classical Tradition: A Brāj Bhāṣā Reader.* London: The School of Oriental and African Studies.

Soar, Micaela (2007) "Board Games and Backgammon in Ancient Indian Sculpture" in Irving L. Finkel (ed.) *Ancient Board Games in Perspective*. London: British Museum Press, pp. 177-231.

Sogani, Kamal Chand (2016) "Ethics and Mysticism in Jaina Yoga Spirituality" in Christopher Key Chapple (ed.) *Yoga in Jainism*. London and New York: Routledge, pp. 155-81.

Sotheby's (1981) Catalogue of Islamic, Indian, Tibetan, Nepalese and South-East Asian Decorative and Other Works of Art, also Antiquities. 16-17 Feb. London: Sotheby's.

Staal, Frits (1987) "The Ineffable *Nirguṇa Brahman*" in Karine Schomer and W. H. McLeod (eds.) *The Sants: Studies in a Devotional Tradition of India*. Delhi: Motilal Banarsidass, pp. 41-46.

Stover, Leon E. (1974) *The Cultural Ecology of Chinese Civilization: Peasants and Elites* in the Last of the Agrarian States. New York and Scarborough: The New American Library.

Strouhal, Ernst (2015) *Die Welt im Spiel: Atlas der spielbaren Landkarten*. Vienna: Brandstätter.

Sutton-Smith, Brian (1997) *The Ambiguity of Play*. Cambridge and London: Harvard University Press.

Syed, Renate (1998) "Śiva und Pārvatī beim Spiel: Eine Untersuchung literarischer und bildlicher Quellen" in *Berliner Indologische Studien* 11/12, pp. 389-433.

Syed, Renate (2005) "*Aṣṭāpadānāṃ Caturaṅgakalpanā*: Bāṇas Erwähnung des Schachspiels im *Harṣacarita*" in *Asiatische Studien: Zeitschrift der Schweizerischen Asiengesellschaft* 59:2, pp. 581-91.

Syed, Renate (2008) "War, Peace and Chess: Bāṇa's References to 'Terracotta Chessmen' and 'Discourses on War' in the *Harṣacarita*" in *Asiatische Studien: Zeitschrift der Schweizerischen Asiengesellschaft* 62:2, pp. 563-73.

Talwar, Kay and Kalyan Krishna (1979) *Indian Pigment Paintings on Cloth.* Ahmedabad: Calico Museum of Textiles.

Țaṇḍan, Premnārāyaṇ (1974) *Brajbhāṣā Sūr-Koś*. 2 vols. Lucknow: Lucknow University.

Tatia, Nathmal (1951) *Studies in Jaina Philosophy*. Varanasi: Jain Cultural Research Society.

Tatia, Nathmal (1994) Tattvārtha Sūtra: That Which Is. San Franscisco: HarperCollins.

Tatz, Mark and Jody Kent (1978) *The Tibetan Game of Liberation: Rebirth.* London: Rider & Company.

Temple, R. C. (1884) *The Legends of the Panjāb*. Vol 1. London: Trübner & Co.

Thiel-Horstmann, Monika (1983) *Crossing the Ocean of Existence: Braj Bhāṣā Religious Poetry from Rajasthan: A Reader*. Wiesbaden: Otto Harrassowitz.

Thwaites, Reuben Gold (1899) *Travels and Explorations of the Jesuit Missionaries in New France*, *1610-1791*. The Jesuit Relations and Allied Documents, vol. 53 (Lower Canada, Iroquois: 1669-1670). Cleveland: The Burrows Brothers Company.

Topsfield, Andrew (1985) "The Indian Game of Snakes and Ladders" in *Artibus Asiae* 46:3, pp. 203-26.

Topsfield, Andrew (2002) Court Painting at Udaipur: Art under the Patronage of the Maharanas of Mewar. Zürich: Artibus Asiae Publishers.

Topsfield, Andrew (2006a) "Snakes and Ladders in India: Some Further Discoveries" in *Artibus Asiae* 66:1, pp. 143-79.

Topsfield, Andrew (2006b) "Dice, Chaupar, Chess: Indian Games in History, Myth, Poetry, and Art" in Andrew Topsfield (ed.) *The Art of Play: Board and Card Games of India*. Mumbai: Marg Publication, pp. 11-31.

Topsfield, Andrew (2006c) "Instant Karma: The Meaning of Snakes and Ladders" in Andrew Topsfield (ed.) *The Art of Play: Board and Card Games of India*. Mumbai: Marg Publication, pp. 75-89.

Topsfield, Andrew (2006d) "Some Mysore Games in British Collections" in Andrew Topsfield (ed.) *The Art of Play: Board and Card Games of India.* Mumbai: Marg Publication, pp. 153-65.

Torner, Evan, Aaron Trammell, and Emma Leigh Waldron (2016) "Reinventing Analog Game Studies: Introductory Manifesto" in *Analog Game Studies* 1, pp. 1-5.

Ueda Gallery (1979) Tantora-Ten. Tokyo: Ueda Gallery.

Vasantha, Rangachar (2002) "Deciphering the Board Games Invented by the Raja of Mysore" in Jean Retschitzki and Rosita Haddad-Zubel (eds.) *Step by Step: Proceedings of the 4th Colloquium Board Games in Academia*. Fribourg: Editions Universitaires Fribourg, pp. 147-162.

Vasantha, Rangachar (2004) "Board Games: A Metaphor for Spiritual Growth." Lecture given at the Oxford Centre for Hindu Studies on 28 Oct, 2004. Audio recording retrieved 20 Jan, 2019: http://www.ochs.org.uk/lectures/by-name-sorter/Professor%20Vasantha%20Rangachar.

Vasantha, Rangachar (2006a) *Maharaja's Games and Puzzles*. Kelkheim: Foerderkreis Schach-Geschichtsforschung.

Vasantha, Rangachar (2006b) "Games and Puzzles of Maharaja Krishnaraja Wodeyar of Mysore: 'Broadcast Them to the World'" in Andrew Topsfield (ed.) *The Art of Play: Board and Card Games of India.* Mumbai: Marg Publication, pp. 143-51.

Vasu, Śrīśa Chandra (1914) The Siva Samhita. Allahabad: Indian Press.

Vaudeville, Charlotte (1974) Kabīr. Vol. 1. Oxford: Clarendon Press.

Vaudeville, Charlotte (1987a) "Sant Mat: Santism as the Universal Path to Sanctity" in Karine Schomer and W. H. McLeod (eds.) The Sants: Studies in a Devotional Tradition of India. Delhi: Motilal Banarsidass, pp. 21-40.

Vaudeville, Charlotte (1987b) "The Shaiva-Vaishnava Synthesis in Maharashtrian Santism" in Karine Schomer and W. H. McLeod (eds.) *The Sants: Studies in a Devotional Tradition of India*. Delhi: Motilal Banarsidass, pp. 215-28.

Vego, Milan (2012) "German War Gaming" in Naval War College Review 65:4, pp. 106-47.

Victoria & Albert Museum (1982) *The Indian Heritage: Court Life & Arts under Mughal Rule*. London: Victoria & Albert Museum.

Vijaya, Muni Ratna Prabha (1948) *Sthavirāvalī*. Ahmedabad: Śrī Jaina Siddhānta Society.

Villa, Emilio (1981) *Pittura dall'India tantrica: Mantra Mandala Yantra*. Roma: L'attico esse arte.

Voogt, Alexander J. de (1995) "Introduction" in Alexander J. de Voogt (ed.) *New Approaches to Board Games Research: Asian Origins and Future Perspectives*. Leiden: International Institute for Asian Studies, pp. 9-15.

Vrajlāl, Paṇḍit (1928) *Jīv vicār*. Agra: Satyavrat Śammī Śānti Press.

Waddell, L. Austine (1895) *The Buddhism of Tibet, or Lamaism, with Its Mystic Cults, Symbolism and Mythology, and in Its Relation to Indian Buddhism.* London: W. H. Allen & Co.

Wakankar, Siddharth Y. (1986) "A Survey of Sanskrit Works on the Game of Chess" in *Journal of the Oriental Institute*, vol. 25, nos. 3-4 (March-June), pp. 293-303.

Wakankar, Siddharth Y. (2007) "Mok[s]apata of Jñānadeva: The Origin of the Games of Snakes and Ladders" in *Sambodhi* 29:1. Ahmedabad: L. D. Institute of Indology, pp. 85-90.

Wang, Lu, Zhichang Sun, and Ti Huang (1985) 西蔵唐卡 [Bod kyi thang ga]. Beijing: Wenwu Chubanshe.

Weber, Albrecht (1860) "Über ein indisches Würfel-Orakel" in *Monatsberichte der Königlichen Preuss. Akademie der Wissenschaften zu Berlin. Aus dem Jahre 1859*, pp. 158-80.

White, David Gordon (1996) *The Alchemical Body: Siddha Traditions in Medieval India*. Chicago and London: The University of Chicago Press.

Whitehill, Bruce (1999) "American Games: A Historical Perspective" in *Board Games Studies* 2, pp. 116-41.

Wiley, Kristi L. (2006) The A to Z of Jainism. New Delhi: Vision Books.

Williams, Robert (1998[1963]) *Jaina Yoga: A Survey of the Mediaeval Śrāvakācāras*. Delhi: Motilal Banarsidass.

Wujastyk, Dominik (2009) "Interpreting the Image of the Human Body in Premodern India" in *International Journal of Hindu Studies* 13:2, pp. 189-228.

Yatīndranāth Mahārāj (2015) "*Gorākh prāṇ saṅkalī*" in *Gorakh vāṇī aur Gorākh yog*. Haridvar: Raṇdhīr Prakāśan, pp. 86-90.

Yoshizaki, Kazumi (2003) "ネパールの 仏塔 双六 について [The Nepalese Caitya Game of Karma]" in *The Mikkyo Bunka Journal of Esoteric Buddhism*, vol. 211, pp. L36-63. Retrieved 20 Jan, 2019: https://doi.org/10.11168/jeb1947.2003.211 L36. [English abstract available in Kazumi Yoshizaki (2006) *The Kathmandu Valley as a Water Pot: Abstracts of Research Papers on Newar Buddhism in Nepal*, pp. 68-70. Retrieved 20 Jan, 2019: http://www.jn-net.com/yoshizaki.]

Zaraev, Alexander V. (2000) Шахматы мудрых [Chess of the Wise]. Moscow: Sirius.

Zelliot, Eleanor (1987) "Eknath's *Bhāruḍ*s: The Sant as a Link between Cultures" in Karine Schomer and W. H. McLeod (eds.) *The Sants: Studies in a Devotional Tradition of India*. Delhi: Motilal Banarsidass, pp. 91-109.

Zysk, Kenneth G. (2007) "The Bodily Winds in Ancient India Revisited" in *The Journal of the Royal Anthropological Institute* 13, pp. S105-15.