

CERTIFICATE

This is to certify that the work incorporated in this report titled "Stepping into Patan: A Case Study of Gentrification in Tier III Cities." submitted by the undersigned Research Team was carried out under my mentorship. Such material as has been obtained from other sources has been duly acknowledged.

Sr. No	NAME OF THE STUDENT	DESIGNATION	SIGNATURE
1	Muskaan Pal	Group Representative, Content Writing, Qualitative Analysis	
2	Adithya Nair	Documentary	
3	Ananya Pujary	Documentary	
4	Bavadharini Manohar	Content Writing, Qualitative Analysis	
5	Devi Dang	Documentary	
6	Isha Tophkhane	Photography, Logistics	
7	Krisha Kamdar	Finance, Logistics	
8	Ovee Karwa	Photography, Content Writing, Qualitative Analysis	
9	Prachi Agarwal	Content Writing, Quantitative Analysis	
10	Rhea Shah	Finance, Quantitative Analysis	
11	Ria Dabhade	Photography, Logistics	
12	Saaniya Padaria	Content Writing, Qualitative Analysis	
13	Saanya Verdia	Content Writing, Qualitative Analysis	
14	Tanmay Devi	Finance, Quantitative Analysis	
15	Vanshika Surana	Quantitative Analysis	

Mentor: Dr. Shivakumar Jolad **Name:** Dr. Shivakumar Jolad

Signature: Date:

TABLE OF CONTENTS

Acknowledgement	V
Abstract	vi
List of Figures and Maps	vii
Ch 1: Introduction	1
What is Gentrification?	1
Gentrification in India.	2
Patan	2
Geographical Location	3
History of Patan	4
Research Question	
Methodology Participants Materials and Equipment Sampling and Data Collection Procedure. Process of Analysis	6 7 7
Ch 2: Literature Review	10
Cultural Symbols Temples Rani ki Vav	10
NRGs and Investments	12
Industries	
Housing	16
Conclusion	16
Ch 3: Demography	18
Conclusion	20
Ch 4: Migration	21
Conclusion	26
Ch 5: Cultural Symbols	28
Pani ki Vay	28

Temples	30
Local Crafts	33
Patola	33
Mashru	
Clay Toys	
Conclusion	38
Ch 6: Settlements	41
Market Spaces	41
Housing	44
Gulshan Nagar	45
Rani ki Vav Settlements.	46
Jain Settlements	47
Hemchandracharya North Gujarat University	
Development Plan	50
Conclusion	51
Ch 7: Industries	53
Ch 8: Conclusion	55
Limitations	58
Recommendations for future research	59
References	60
Appendices	66

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Abstract

The concept of gentrification has been studied extensively in urban agglomerations and tier-I

and tier-II cities. However, there is a significant lack of research of the same in tier III cities,

especially those located in semi-urban talukas. Patan city, located in the taluka and district with

the same name in Gujarat, was chosen as the location of study due to its rich cultural heritage

and UNESCO World Heritage Site, Rani ki Vav. Participants of the study were interviewed

based on a semi-structured questionnaire and data was collected from the District Collectors

Office and District Statistics Office. The study shows that Patan is in the second stage of

gentrification. The Jain and Patel communities contribute significantly towards the society,

especially in the fields of education and healthcare. Therefore, they are seen as facilitators of

gentrification to a certain extent.

Keywords: Patan, gentrification, migration, development

vi

List of Figures and Maps

Number of figures	Title of Figure	
Figure 1.1	Map of talukas in Patan District	
Figure 2.1	List of Industries in the District	
Figure 3.2	Decadal Change in Growth Rate in Rural and Urban Areas	
Figure 4.1	Growth Rate of Jains as Compared to the Total Population of the Taluka from 2001-2011	
Figure 4.2	Reasons for Migration in Patan District	
Figure 4.3	Migration from other states in India to Patan.	
Figure 4.4	Migration from Other Countries to Patan, Continent and country-wise	
Figure 5.1	Heritage Trail - Mapping Jain Temples in Patan	
Figure 5.2	Picture Collage of Exterior of the Sri Panchasara Derasar; Interior Renovation at the Derasar; Style of a Newer Jain Temple; and Construction of a New Jain Temple	
Figure 5.3.	Picture collage of Real Patola and Fake Patola	
Figure 5.4	Picture of a Shop Selling Plastic Toys versus A Shop Selling Clay Toys and Other Items	
Figure 6.1	Picture collage of the different kinds of settlements in Patan (Gulshan Nagar settlement, Kanasano Pado settlement & Rani ki Vav Settlements)	

Figure 6.2	Picture of changes in the settlement around Rani ki Vav from 2014 to 2019
Figure 6.3	Screenshot of Google Earth for Hemchandracharya North Gujarat University in 2009 and in 2019
Figure 6.4	Town planning schemes for Patan in 2010 and 2014
Figure 7.1	Screenshot of the Google map route from Limbdi to Kandla

Ch 1: Introduction

First observed in London, and other cities in Europe, the concept of gentrification has slowly diffused over to the Indian subcontinent trickling down from the major urban agglomerations to the semi-urban sub-districts. It could have been the opulence of Khan market, Lodhi colony, and Meherchand market in Delhi (Brown, 2017), which are starkly different to rag-picking grounds in Seemapuri or the conspicuous presence of the slums of Dharavi among the most valuable lands of Mumbai (Chatterjee, 2013), but gentrification in India has attracted the attention of many a researcher to add their own two cents about its causes and impacts. Gentrification has been largely studied in Tier I and Tier II cities of India (Chatterjee, 2013; Kumar, 2014; McGaffey, 2018; Swain & Walicki, 2016; Vidhate & Sharma, 2017), leaving the tier III cities and semi-urban spaces a largely unexplored area. The presence of a newly anointed UNESCO World Heritage site and a rich architectural and cultural heritage led to a study of the city of Patan, in Gujarat, to determine if gentrification is taking place. This study aims to examine the changes occurring in the area and determine if it could be termed as gentrification.

What is Gentrification?

The term gentrification was coined by British sociologist Ruth Glass to explain the modifications made in society through housing (Brown-Saracino, 2013). It is defined as the "process of repairing and rebuilding homes and businesses in a deteriorating area (such as an urban neighbourhood) accompanied by an influx of middle-class or affluent people and that often results in the displacement of earlier, usually poorer residents" (Gentrification, 2020). London, in particular Barnsbury and Islington, saw the first instances of the use of the term gentrification in the late 1960s. They were characterised primarily by the displacement of working-class tenants by middle-class members of societies who owned the property (Legg & Allen, 1984). Legg and Allen (1984) also noted that the agents of gentrification were specific to each case as opposed to a general cause. This suggests that while every case of gentrification may have similar motives of maximising revenue and increasing development, the cases in themselves are unique with respect to the channels through which it occurs (Legg & Allen, 1984), with changes in settlement patterns being a strong common theme.

Gentrification in India

The past decade saw a considerable amount of literature looking into the phenomenon of gentrification in India (Chatterjee, 2013; Kumar, 2014; McGaffey, 2018; Swain & Walicki, 2016; Vidhate & Sharma, 2017), particularly in the big cities. Mumbai, especially, has been in the spotlight since the closure of textile mills in Parel and Dadar (Chatterjee, 2013) and the proliferation of Dharavi, one of Asia's largest slums (Wienstein, 2014). Socio-cultural, political and economic impacts have been explored in these studies along with the pervasive phenomenon of displacement of people. The wave of gentrification has spread from the major cities and other urban agglomerations to tier III cities and towns with comparatively smaller populations (Kumar, 2014). This led to the focus shifting from the major cities to the subdistrict spaces like talukas and the tier III cities within them.

Patan

While gentrification in Tier I and Tier II cities has been long since happening, it is less researched in semi-urban sub-districts (taluks and tehsils) and their cities. Patan was the capital of Gujarat around the twelfth century and has a rich Jain heritage due to the patronage of Chalukya kings Siddharaja and Kumarpala (Cort, 2001). The strong cultural presence of Jains in the district increases the significance of the tradeoff between economic development and traditional symbols of a long-standing culture. In 1997, the district of Patan was formed from parts of Mahesana and Banaskantha Districts. This new district of Patan has seven talukas within it with the district headquarters in the Patan taluka (Government of Gujarat - Patan, 2019). With the new government headquarters, Patan received more funds for various town-development related works (Government of Gujarat - Patan, 2019). This may be seen as an influx of capital. Besides, the presence of a UNESCO World Heritage Site (Rani ki Vav) is liable to increase the influx of people due to tourism. These factors make Patan a favourable subject to study if gentrification has happened or not.

The demographics of the Patan district as per Census 2001 and 2011 are given in table 1.1.

Year of Data Collected	2001	2011	Percentage Change
Population	11,82,709	13,43,734	13.6%
Males	6,12,100	6,94,397	13.44%
Females	5,70,609	6,49,337	13.8%
Population Density	204	232	13.73%
Sex Ratio	932	935	0.32%

Table 1.1. Census data from 2001 and 2011 (Office of the Registrar General & Census Commissioner, India, 2001 & 2011).

Geographical Location

Patan district is situated in the northern part of Gujarat state. The district was carved from Banaskantha and Mahesana district in 1997 (Government of Gujarat - Patan, 2019). The district occupies 5792 square kilometres between 23°55' and 24°41' north latitudes and 71°31' and 72°20' east longitudes. Its headquarters is the taluka of Patan. It is bound by Banaskantha in the north, Little Rann of Kachchh in the west, Mahesana district in the east and by Surendranagar and Ahmedabad districts in the south. (Gujarat Social Infrastructure Development Society, 2016)

With a temperate climate and moderate proportions of heat and cold, it has three distinct seasons: monsoon (from mid-June to October), winter (from mid-October to February) and summer (from March to mid-June) (MSME, n.d.). The major minerals identified by the Oil & Natural Gas Commission of India in Patan are white clay, boll clay, and china clay; while the minor ones are ordinary sand and clay. There is not much forest cover in the district and the little cover spanning 465.26 sq.km. produces gum and forest wood (MSME, n.d.). Major food crops, oilseeds, and fruits produced in the district include wheat, guava, pomegranate, bajra, pulses, cereals, cotton, mustard, citrus fruits, ber, castor, rapeseed and papaya (Industries Commissionerate, 2007). Vegetable crops such as potato, brinjal, cabbage, cowpea, tomato,

cauliflower, and cluster bean are cultivated in the district. Citrus fruits have the largest share of the fruit crops produced (Industries Commissionerate, 2007).

History of Patan

Patan was founded by Vanraj Chavda in 746 AD. It is an ancient fortified town, situated on the banks of the Saraswati River (GSIDS, 2016). Patan was the capital of Gujarat from 746 AD to 1411 AD (approximately 600 years), after the centre of power moved from Saurashtra around the same time and before being invaded and taken over by Mahmud of Ghazni in 1024 (GSIDS, 2016). Being the capital of Gujarat, it held great administrative importance. It prospered under the Chavda rule and reached its zenith in the Solanki period. Anahilvada, as Patan was earlier called, was known as a centre of trade, learning, and architecture under the Solanki rule 942-1244 AD. The rulers were great patrons of fine arts and architecture and constructed various religious and historical places in the Patan. It was also a thriving centre for Jainism (GSIDS, 2016). However, after this period Patan was in a state of steady decline, and therefore became a disinvested area (GSIDS, 2016). This was until Patan became a district in 1997(Government of Gujarat - Patan, 2019).



Figure 1.1. Map of talukas in Patan District (District Court in India, n.d.).

Research Question

Having tried at understanding Patan and the factors of gentrification such as migration trends, settlement patterns, cultural symbols and changes in levels of investment, the following research question was formulated:

'Accounting for the various factors that indicate gentrification, can the migration, industrial, cultural and settlement changes in Patan in the last 20-25 years be termed as gentrification? Does a particular community play a major role in it?'

Gentrification, as discussed previously, can manifest in multiple ways and its causes and effects are subject to the area it is studied in. This framework consists of three main indicators of gentrification: historic conditions, investment and policy decisions and community impacts (Gentrification Explained, n.d.). These three make up the various factors explained in the research question. Moreover, the time frame of 20-25 years was chosen as Patan was declared a district in 1997 (Government of Gujarat - Patan, n.d.). The changes studied in Patan were categorized into four main themes: migration, industrial, cultural and settlement changes. The purpose of the study is to determine whether these factors indicate gentrification or not, in tandem with the changes in migration, industries, cultural symbols and settlements which are unique to Patan.

Research Objectives

To answer the questions mentioned above, the following objectives have been ascertained based on the identified gaps in the existing literature:

> To examine whether there is a trade-off between economic development in Patan and the maintenance of its cultural heritage.

Patan has a rich cultural heritage which may be significantly impacted by the changes initiated by economic development. A study of such a trade-off is a part of understanding if the given location has been gentrified or not.

> To determine the role (if any) of a particular community in these changes.

In line with the research question, the research aims to understand that if gentrification has occurred, does a particular community play a major role in it?

> To understand how the Jain community has affected or has been affected by gentrification in Patan in terms of migration, settlements, investments and cultural symbols.

Based on the pre-field work and on-field interviews, it is suggestive that the Jains played a big role in shaping Patan and therefore, initiating gentrification. Thus, the research aims to understand if the changes occurring may be attributed to the Jain community.

> To understand how and why Jains have been able to establish major cultural symbols, educational and healthcare facilities in the city of Patan.

The secondary literature indicates that the Jain community continues to invest in Patan even though they have migrated out of Patan. They invest in temples, schools and healthcare facilities. Thus, the report looks for other indicators that verify if Jains have been able to establish cultural symbols that impact the economic changes in Patan.

> To understand the growth (or lack thereof) of the industries in and around Patan.

The presence of industries is an important indicator of gentrification. Therefore, the research looks into the existence of neighbouring industries and their probable impact in Patan.

Methodology

Due to the broad scope of gentrification and the different methods of data collection which were employed (interviews, reports from the Patan Statistics Office and maps and reports from the Hemchandracharya North Gujarat University), a mixed (both quantitative and qualitative) methodology was adopted.

Informed consent was taken from every participant before conducting all interviews through a verbal or written account of the scope of the research, upon which they agreed to a video or audio recording. If the participant did not consent for audio/video recording, the interviewers would write down the information provided in the interview as notes after seeking permission for the same.

Participants

The interviewees were selected based on convenience and their knowledge (purposive) about cultural symbols, migration and industries, investments and settlement changes in Patan. No differentiation was made on the basis of gender or education level. While only adults were chosen for the study, no further differentiation was made on the basis of age. However, it was ensured that the sample included residents of Hindu, Jain and Muslim communities. On the basis of occupation, shopkeepers, homemakers, the district collector, government officials,

lawyers, librarians, priests, tour guides, tourists, students, professors, temple trustees, weavers, security guards, restaurant owners and waiters were chosen for the interviews (see Appendix A).

Materials and Equipment

DSLRs, lenses, tripod stands, lapel mics, mobile phones, laptops, headphones, DaVinci Resolve 16, Adobe Premiere Pro CC, FL Studio and Audacity were the equipment and software used. DSLRs, lenses, tripod stands and lapel mics were rented for documentary-making and recording of interviews. A questionnaire with generic questions was employed by the interviewers while interviewing, along with specific questions related to each topic.

Sampling and Data Collection

The interviewees were selected by different sampling methods such as snowball sampling, convenience sampling and purposive sampling. Purposive sampling was the main method used because information about multiple determinants like migration, settlements, industries and cultural symbols was to be collated. In this method of sampling, the interviewees were chosen based on their knowledge about the foci of the study (Palinkas et al., 2015). Convenience sampling was also used as current participants helped to recruit future participants on the basis of their traits, knowledge or expertise (Bhat, n.d.). Snowball sampling, a subset of convenience sampling, was also a large part of contact-building as further participants and locations were procured through new information on-field (Stephanie, 2018).

The interviews were semi-structured and face-to-face that focused on exploratory research. The questions were both open and close-ended. A common question for all interviewees was to explain the changes witnessed by them over a period of a decade or so. In terms of documentary planning, apart from the filming of interviews, data (images and videos) was collected to capture Patan as a city and identify and contrast old from new architecture and infrastructure.

Procedure

Every day, in accordance with the agenda, the group met and split into smaller subgroups. Each sub-group included one documentary member and one Gujarati speaker along with the other members. Before going on-field, a semi-structured questionnaire was created which was employed in every interview (see Appendix B). In order to build a rapport with the interviewees, the Gujarati speakers first introduced themselves and the group. The interviewees were informed of the study and its objectives and informed consent were sought before asking them any questions. While the interviewer asked questions as per the questionnaire, the other members of the group took notes, highlighting all the major points. If the interviewers found the information given by the interviewees relevant or important, an audio or video recording was taken after seeking their permission for the same. At the end of each day, the whole group met to discuss the important information collected during the day. This was followed by ascertaining the important points which resulted in the modification of the itinerary to accommodate the new information.

Data was also collected from maps, documents and contacts made on-field which were used to trace the settlement patterns and the expansion of Patan over the last few decades. The maps helped in understanding the nature and direction of this expansion. The documents, which include reports such as the District Human Development Report aid in understanding the socio-economic context of Patan and the impact of various government policies addressing the challenges Patan faces. Visual data, like photographs and videos, were sorted based on necessity.

Process of Analysis

Primary data collection on-field largely consisted of audio and video interviews and notes. Succeeding on-field research, all interviews that were taken were translated and transcribed verbatim and categorized according to the date on which they were taken. With the completion of all transcriptions, each was analyzed to draw inferences. The transcriptions and on-field notes then went through a process of extracting inferences by three people to ensure inter-rater reliability of the inferences. An excel workbook was made unto which all inferences were categorized according to the four factors studied: migration, industries, cultural symbols and settlements. Broader themes and patterns were then extracted from them to which a general stance on gentrification was reached. With regards to quantitative data analysis, the data analyzed was taken from the 2001 and 2011 Census and the UNDP report of Patan, 2016. Furthermore, settlement and progress plans and a slum redevelopment presentation collected

from the Hemchandracharya North Gujarat University, alongside screenshots from Google Earth and Google Maps were used to analyze spatial changes in Patan over time.

Ch 2: Literature Review

Each instance of gentrification has a specific cause instead of a general instigator (Legg & Allen, 1984). It is possible to isolate certain factors in each case which play a significant role in the changes occurring in the area of study (Legg & Allen, 1984). In the case of Patan, a variety of changes could indicate gentrification.

Cultural Symbols

Temples

Though the Jain population is a very small part of Patan's population, its cultural influence is massive. One of the most prominent historical and cultural symbols of Patan are the Jain temples scattered in numbers across the district and the town, some of which date back to the Chalukyan era (Cort, 2001). The most revered is the Panchasara Parshwanath Jain Derasar in the town-centre, dating back to 746 CE (Cort, 2001). Although this temple has claimed to have preserved idols and manuscripts dating back to 7th CE, there is evidence of repeated displacements and renovations throughout the time of its existence (Shri Panchasara Parshwanath Mandir - Travel Info, 2015). An example of such a renovation was when the renovated Jinalaya was reconstructed with stone, instead of the traditional wood after the temple was destroyed by Muslim invaders (Shri Panchasara Parshwanath Mandir - Travel Info, 2015). The temples in Patan, built by King Kumarapala in the Chalukya period, represented the rapid spread of Jainism and an effort by the royals to convert to Jainism (Cort, 2001). Among the temples, there were twenty-four specific temples in Patan built to symbolize the Tirthankaras of Jainism and were designed with a particular kind of architecture that developed near the end of the tenth century - the Maru-Gurjara style - which soon became the hallmark of religious Jain spaces (Leclère, 2017). Although the principal purpose of a Jain temple was to serve as a place of worship for Jain devotees, it also served as space for communities to provide Jain monks with shelter and a place for imparting religious knowledge (Leclère, 2017). It is through this gradual development of the land and use of space around Jain temples that neighbourhoods and localities surrounding Jain temples have developed to cater to a certain set of the population in terms of Jains devotees, monks and families.

Therefore, there seem to be likely indicators of gentrification in the renovation and upkeep of temples, spaces around temples to accommodate for the devotees that visit Patan to worship. The cropping up of smaller temples in various localities in Patan might also indicate the growing need for community spaces to accommodate a place of worship which could lead to the development of nuclear settlements around the temples like before.

Rani ki Vav

The Rani ki Vav, also known as the Queen's stepwell, is better known as the icon on the new 100 Rupee notes. As a recently declared UNESCO World Heritage Site, it is a major attraction in Patan (UNESCO World Heritage Convention, n.d.). With the label of a World Heritage site since 2014, it has become a site of heritage tourism. This benefits the surrounding regions in terms of attracting potential investors and land developers, which could, in turn, lead to the displacement of current residents and industrialisation. According to Meskell (2018), it can be seen as "a global brand that can often be used against local people, and a sometime harbinger of dispossession" (p. 1).

In 2015, finance minister Arun Jaitley proposed the development of Rani ki Vav in the budget plan. Consequently, the Salvi family, weavers of the Patola sarees, further expected that an influx of tourism to the Rani ki Vav would result in an increase in sales and worldwide recognition of the art (Ganguly, 2015). In fact, plans to increase tourism are also underway. 'Gujarat Tourism Opportunity', a joint venture between Tourism Corporation of Gujarat and development finance company Infrastructure Leasing & Financial Services (IL&FS), plans to make 360-degree live action and virtual reality videos of the Rani ki Vav alongside the Indus Valley ruins of Lothal and Dholavira, with the aim of promoting these destinations for tourists (Sangani, 2016). Moreover, the Rani ki Vav won the "Cleanest Iconic Place" award in 2016. Since 2014, maintenance and development activities have been in line with the Swachh Bharat Mission, and the Archaeological Survey of India (ASI) has managed to provide drinking water and sanitation facilities for tourists (Gujarat world heritage site, 2016). Therefore, efforts have been made to increase tourism in the region. This subsequently transforms the monument into a facilitator of gentrification as it invites investors, migration and new settlement formation into Patan.

Multiple cases studied suggest that the area around the heritage sites undergo rent and property value hikes, capital appreciation and replacement of traditional trades and residents (Foo & Krishnapillai, 2018; Hayes, 2020; Meskell, 2018). Hence, it is worthwhile to study how the land around the site is being used and whether there is any noticeable upliftment in terms of contemporary settlements. Moreover as previously stated, the dangers of a UNESCO label could lead to segregation within locals and even distance them from the site (Meskell, 2018). Furthermore, the Sahasralinga Talav, a medieval reservoir is positioned north of Rani ki Vav and it is interesting to see differences in maintenance and tourism between the two sites as Sahasralinga Talav doesn't seem to have entry-tickets like Rani ki Vav does nor is it as globally recognized ("Sahasralinga Talav", n.d.).

NRGs and Investments

Amongst those who went overseas, Non-Resident Gujaratis' (NRGs) migration out of Patan is largely prompted by the desire for lucrative careers, entrepreneurship and education abroad (Pal, 2015). This emerged post-independence because of unemployment, poverty and scarcity of resources in Patan at the time. However, the Non-Resident Gujaratis have invested back into Patan leading to community upliftment within Patan. With respect to investments, it spans across education, socio-cultural and health sectors but contributions are massive in the religious sector (Pal, 2015).

NRGs, of which the Patels are a significant population, are known to have massively contributed to the religious, medicine and education sectors in Patan (Rajput, 2015). They are described as a middle-ranking and upwardly mobile peasant caste strongly connected to the sense of family and community (Pal, 2015). Grand donations have been made in the construction, maintenance and facilitation of temples across Patan, and the construction of Hindu temples particularly has become a popular practice amongst NRGs (Pal, 2015). The Patels inhabit many villages in the Patan district, such as Balisana, Sander, Der and Anavada amongst many others (Pal, 2015). With the influx of investments, community upliftment can be interpreted as a factor facilitating gentrification as even though there is no significant inmigration, there is incoming capital that is being used for the upliftment of the general community. Akin to the Patels, Patan has seen Jains emigrating from Patan with much smaller in-migration from surrounding villages of Banaskantha district and northern Mehsana district

in the twentieth century (Cort, 2001). Many Jains from Shankeshwar that have migrated to Surat, Mumbai as well as abroad have donated plenty to the religious and education sector (Pal, 2015). Moreover, HNGU received property worth 10 lakhs through donations by the Gramodhyog Mandal in Patan (Result Center Team - HNGU, 2017).

This suggests that even though people have migrated out of Patan, a lot of money is being invested back into Patan because of the community sentiment. Therefore, it is important to factor in the impact of private incoming investments as a potential driver of gentrification in Patan. Furthermore, because there is a considerable amount of private investment in the religious sector, it is important to gauge at neighbourhood changes that would occur as a result if any, such as potential exclusive ownership of religious property and community and settlement segregation. Furthermore, in terms of public investments, there have been efforts to improve livelihood conditions, such as "20 Point programmes" in 2006, to eradicate poverty and minimize socio-economic imbalances in the district (Collectorate - District Patan, n.d.). This could be investigated in-depth with respect to the implementations on-field and upcoming such plans that may spur gentrification.

Industries

Post-independence, Patan district suffered from lack of adequate electrical power and water and hence had not developed as an industrial centre which posed as a major obstructive factor to gentrification (Cort, 2001). Also, the emergence of new cities like Mehsana and Ahmedabad left Patan behind in the development race.

NIC CODE	TYPE OF INDUSTRY	NUMBER	INVESTMENT	EMPLOYMENT
NO.		OF UNIT	(Lakh Rs.)	
20	Agro based	45	4180.29	898
22	Soda water	01	9.25	05
23	Cotton Textile	40	4369.90	1133
24	Woolen, silk & artificial Thread based clothes	02	9.30	11
25	Jute & Jute based	00	0.00	00
26	Ready-made garments & embroidery	08	50.60	34
27	Wood/Wooden based furniture	10	90.68	50
28	Paper & Paper products	08	469.24	68
29	Leather based	00	0.00	00
31	Chemical/Chemical based	14	908.89	210
30	Rubber, Plastic & Petro based	09	278.20	60
32	Mineral based	10	1009.29	160
33	Metal based (Steel Fab.)	08	90.29	85
35	Engineering units	20	326.29	150
36	Electrical machinery and transport equipment	03	49.40	28
97	Repairing & servicing	19	226.50	87
01	Others	57	4156.58	471
	Kachori Making	00	0.00	00

Figure 2.1. List of Industries in the District (MSME, n.d.)

Figure 2.1 shows a table which states that Agro-based industries and textiles dominate investment and employment. These are the industries that require a lot of manual labour. Spinning mill, textiles industries, surgical cotton or bandage making industries, petrochemicals, cement and gypsum show positive growth trends suggesting an increase in industrial activity which could facilitate gentrification. High rates of electricity, easy finance and labour were the general issues raised by the industrial association (MSME, n.d.; Industries Commissionerate, 2007). This industrial data is up to 2011.

According to the Industrial Extension Bureau, the economy of Patan is mostly agrarian (Industries Commissionerate, 2007). Major small scale operations such as vegetable & vanaspati, paper & pulp industry and food & processing industry are the supporting pillars of the district economy. Food processing has been the main sector for investment and employment in the Patan district since the late 1980s to 2007 (Industries Commissionerate, 2007). The food processing industry of Patan is well developed because of the proximity to agricultural districts such as Mehsana, Banaskantha etc. (Industries Commissionerate, 2007). The textile sector also contributes largely to the district economy. Patan Patola is one of the finest handwoven textile materials produced. Besides this, Mashru, a mixed fabric, woven with a combination of cotton and silk is also traditionally produced in Patan (Industries Commissionerate, 2007). The industries have also been supported by the transportation sector

for the movement of raw materials and finished goods. National Highway 14 and 15 and State Highway 7, 8 and 10 run through the district connecting it with major cities of Gujarat and the rest of India. The manufacturing and service sectors employ 5,393 and 1,326 people respectively (Industries Commissionerate, 2014).

Inaugurated in 2012, the Charanka solar power plant is one of the largest solar electricity generation hubs in India. Located in the Charanka district, it will span across 5,384 acres of unused land (Gujarat Solar Park, n.d.). With a capacity to generate 500 MW of electricity, the plant is predicted to create temporary and permanent employment for semi-skilled and unskilled workers with the target of employing 30% women to its workforce (Asian Development Bank, n.d.). More than 1500 people have benefitted from it (Prakash, 2016).

The industrial sector has seen considerable growth over the past decades. The data shows a transition from a demand for unskilled and less-skilled to highly skilled labour. This is suggestive of skilled labourers from outside moving in to work at these industries or even set up new factories.

Railway Connectivity

On 4th March 2019, a new rail line between Patan and Bhildi was inaugurated, as a part of the Bhildi Viramgam Gauge Parivartan Vojana (Western Railway- Official, 2019). Multiple studies explore rail/transit-oriented gentrification. By studying 35 quantitative studies based on gentrification due to transit interventions published between 2000 to 2018, Padeiro and da Costa (2019) conclude that there is no definitive or conclusive evidence of the same. Another case study of suburban Portland done by Hongwei Dong (2017) states that conclusive evidence for rail-transit induced gentrification is not found. Research which analyses longitudinal data across 14 United States urbanised areas states that while conclusive evidence of light-rail transit induced gentrification cannot be found, local and regional planning efforts and existing environment lead to changes in transit-station neighbourhoods (Baker & Lee, 2019). The literature about transit-oriented gentrification states that conclusive evidence about the same cannot be found. With the backdrop of all this research, it remains to be seen whether or not the recent changes in Patan railway connectivity can lead to gentrification.

Housing

The town of Patan which was a cultural and economic hub has experienced a steady economic decline in the past fifty years (Kumar, 2015). Along with this, the population has also decreased due to the emergence of other bigger cities like Surat and Ahmedabad aided by globalization. Although the Jains constitute only 0.26% of the population with 80.62% Hindus and 9.91% Muslims in Patan, they still have a big social and cultural influence. (Kumar, 2015). As observed from Google Maps, there are visible indicators of Jain clusters located around the Panchasara and Sankeshwara temples. The UNDP report on Patan states that with the Panchasara Parshwanath temple being the oldest and the most famous one, there are 122 Jain temples which are said to be over 100 years old. They outnumber the Hindu temples and mosques (Bhatt, Lodha, Lodha, Dave & Makhwana, 2016). However, due to a lack of secondary information on the change in the housing patterns of Patan, it has been difficult to connect the concept of gentrification to Patan, as housing is an important indicator. There are a number of housing schemes introduced by the Chief Minister of Gujarat such as the Mukhya Mantri Housing Scheme of 2013 which provides housing at a subsidised price to the middle, lower and poor income groups (Urban Development and Urban Housing Department, 2014).

Since the emergence of bigger cities like Surat, there has been an out-migration of Jains which have led to a decrease in the Jain population of Patan. However, the influence of the Jains still remains in Patan which is observed through the many Jain temples in Patan and Jain dwellings. The retention of cultural heritage can be due to the funding given to these temples by migrant Jains (Rajput, 2015). Since there is a lack of secondary information on the housing patterns of Patan, the on-field research can focus on the changing patterns of settlements and through this try to build a connection with gentrification.

Conclusion

The research discussed indicates that gentrification is occurring in Patan and that the Jain community plays a noticeable role in facilitating it. This can be understood through the lens of migration, settlement patterns, industrial and cultural factors that have been identified. However, when looking at changes in settlement patterns and industries that may have been impacted by major cultural symbols like the Rani ki Vav and when it was titled with a UNESCO Heritage site, it is possible that an immediate effect is not noticed or identified.

Moreover, most of the gentrification studies that have been referred to are set in urban settings. However, Patan is a tier III city and therefore, gentrification may not manifest itself in the same cookie-cutter fashion as with the studies that have been discussed. Nonetheless, existing literature has identified factors unique to the place of study, and hence the focus on cultural symbols and religious groups can be justified by the role of religion in communities across India, especially Patan, a holder of massive cultural and religious heritage. Furthermore, policy patterns are a major indicator of gentrification (Gentrification Explained, n.d.). However, much of the changes brought about by government policies with respect to Patan were not identifiable due to policies having a more generalized approach to all of Gujarat. Though it is a major indicator, it is not an identified change within the scope of research and hence acts as a shortcoming to the study because of the pivotal nature of policies in shaping the economy.

Having reviewed the above literature, the following question has been posed: 'Accounting for the various factors that indicate gentrification, can the migration, industrial, cultural and settlement changes in Patan be termed as gentrification? Does a particular community play a major role in it?'. It is hypothesised, here, that the ongoing migration, industrial, cultural and settlement changes are a part of the gentrification process which is believed to be happening in Patan. Further, the hypothesis narrates that in such a case, the Jain community and its heritage play a significant role in this.

Ch 3: Demography

The population of Patan district as per the 2011 Census data, is 13,43,734, which is a 13.6% increase from the 2001 Census figures. However, there is a 52% increase in the population of Patan taluka which may imply in-migration. This is further discussed in the next chapter on 'Migration'. Another aspect that the chapter on migration looks into, and must be mentioned here is the population sizes of individuals with respect to the religion they follow.

Religion	Number of People	Percentage
Buddhist	66	0.0049
Christian	916	0.0682
Hindu	1194745	88.9965
Jain	3602	0.2683
Muslim	142797	10.6369
Sikh	337	0.0251

Figure 3.1. Population of Patan based on Religion

Figure 3.1 mentions the total number of people in the taluka practicing each religion and that total number as a percentage of the whole population as per the Census data for 2011. Each cell in the table has a shade of grey. A darker shade implies that the corresponding religion has more followers than the cell with a lighter shade. From the table, it is evident that as of 2011, Hindus formed the largest religious group in Patan (approx. 89%) while the Jains (approx. 0.27%) formed a significantly smaller group in Patan. It is important to highlight these two groups specifically as they form a key part of the analysis done in this report.

As found in the on-field interactions, Patan was once a 'Jain Nagri' or a settlement of Jains. This is indicative of the past population size of the Jain community in Patan and that Jains were at one point the majority community in Patan (Cort, 2001). However, over a period of time, the population size of the Jain community in Patan changed. Jains started moving out of Patan. Cort (2001) observed that between 1901 and 1911, there was a 14% reduction in the population of the Jain community in Baroda when Patan was a part of Baroda. Most of the Jain population migrating out of Patan was migrating into Bombay. However, in the 1930s and during the Second World War, many Jains moved back into Patan (Cort, 2001).

Additionally, out-migration from Patan district is supported by evidence from the changes in Census data from 2001 to 2011. Figure 3.2 maps the decadal population growth for Patan and Gujarat as seen in the rural and urban areas. By mapping the population growth, we establish three facts. First, the population growth rate for Patan district (13.6%) is lower than the population growth for Gujarat (19.3%) which implies out-migration from Patan district to other locations within and outside Gujarat. Second, for Patan district, the urban population growth rate (17.9%) is higher than the rural population growth rate (12.5%). This implies that there is rural to urban migration within the district. Moreover, in Gujarat, the urban population growth rate (36%) is significantly greater than the rural population growth rate (9.31%). This too indicates rural to urban migration. Third, by contrasting Gujarat's rural to urban migration with Patan's rural to urban migration, it is found that there is a notable difference which implies that the rural to urban migration rate is higher in Gujarat versus Patan (Office of the Registrar General & Census Commissioner, India, 2001 & 2011).

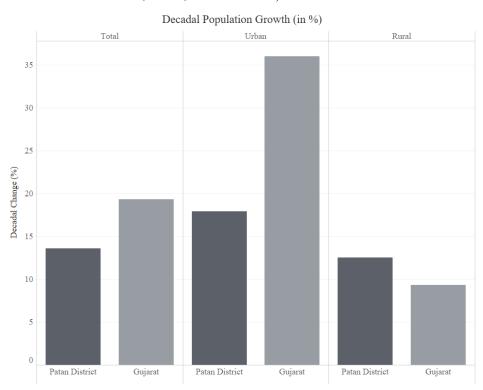


Figure 3.2. Decadal Change in Growth Rate in Rural and Urban Areas (Source: Authors' own presented using Tableau)

Conclusion

By looking at the demography of Patan, it may be concluded that there has been a significant increase in the population of the taluka. Yet, the population of the Jain community has only decreased over time which implies that the community has migrated to other places. The evidence provided here has established the fact that the Jains have migrated out in significant numbers.

Ch 4: Migration

Migration is an important aspect of determining gentrification (Hwang, 2015). As made evident in the 'What is Gentrification?' section of this report, the in-migration of relatively more affluent families into an area may lead to gentrification. Hwang's (2015) research shows that with a unit increase of Asian families, the neighbourhoods have a 14% chance of getting gentrified. With such results, there is evidence of a clear link between migration and gentrification. However, the case for Patan is different. In Patan, the community identified as the primary investor (the Jain community) have migrated out. Despite shifting to other locations, the Jains continue to invest in Patan. The investment by the Jains in educational institutions, healthcare centres and temples leads to temporary migration (L. Visaria, personal communication, February 12, 2020). Thus, there is temporary in-migration coupled with permanent out-migration which is engineered by the behaviour of one community- the Jain community. This will be further explained in this section of the report.

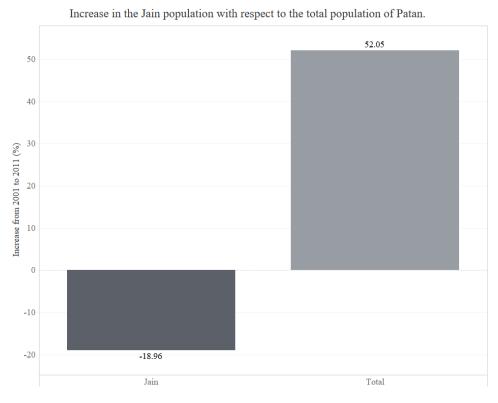


Figure 4.1. Growth Rate of Jains as Compared to the Total Population of the Taluka from 2001-2011. (Office of the Registrar General & Census Commissioner, India, 2001 & 2011) (Source: Authors' own presented using Tableau)

Backed by a trend analysis and visualization of Census data from 2001 and 2011, it can be seen that Jains have been migrating out of Patan (Office of the Registrar General & Census Commissioner, India, 2001 & 2011). As depicted in Figure 4.1, the population of Patan taluka has seen a 52% growth while the population size for Jains in the taluka has seen a negative growth rate of approximately 19%. Previously, a majority of the population in Patan were Jains and Patan was referred to as 'Jain Nagri'- or a township of Jains. However, over time, the Jains have moved out of Patan to bigger cities like Mumbai, Ahmedabad and Kolkata to pursue opportunities unavailable to them in Patan (L. Visaria, personal communication, February 12, 2020). The Jains, predominantly, look for business opportunities, however, the Jain community has diversified its sources of income (L. Visaria, personal communication, February 12, 2020). To elaborate, the Jains no longer limit themselves to trade and commerce alone, as they now work as lawyers, doctors, and engineers among other professions (L. Visaria, personal communication, February 12, 2020). Therefore, to enjoy a large clientele, Jains move to larger cities where the number of clients with higher purchasing power is greater than in Patan (L. Visaria, personal communication, February 12, 2020).

However, even after settling in a new city, the Jains continue to send remittances which fund schools, hospitals, temples and libraries to provide free of cost services to the residents in Patan (L. Visaria, personal communication, February 12, 2020). The temples also have 'dharamshalas' or guest houses which are open to the Jain monks and nuns. These monks and nuns reside here and receive food and shelter free of cost. As explained by Dr. Leela Visaria, the monks temporarily reside in Patan during the monsoon months. To ensure that the monks have the bare minimum for their stay at Patan, the Jains open up their homes. Some Jains return only to provide food and shelter to the monks and nuns, thereby contributing to temporary inmigration (L. Visaria, personal communication, February 12, 2020). A key factor in the instance of Jains migrating is that families collectively migrate to the new city or even if the men first migrate for work, the women move within a very short while (L. Visaria, personal communication, February 12, 2020).

However, if out-migration along the axis of gender is analysed, it is found that more women migrate than men do, the primary reason being marriage (Office of the Registrar General & Census Commissioner, India, 2011a; Office of the Registrar General & Census Commissioner, India, 2011b). Figure 4.2 draws a comparison between the two genders and

their reasons for migration across individuals from all religious groups. It is seen that a greater number of women migrate due to marriage in comparison to men. In contrast to this, a significantly lesser number of women emigrate due to business/ work or education.

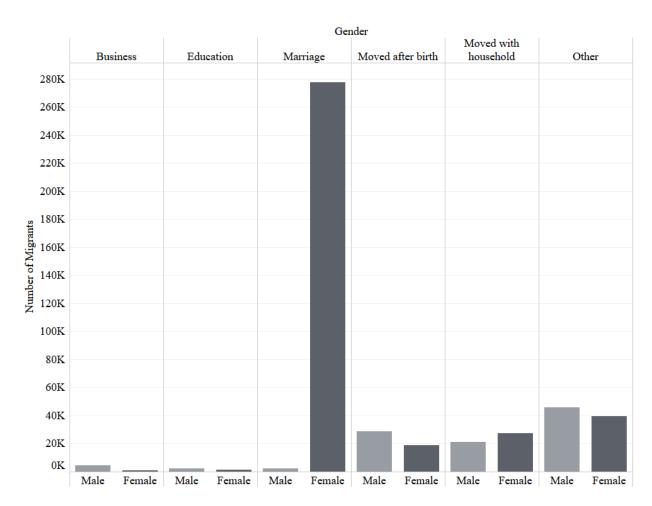


Figure 4.2. Reasons for Migration in Patan District. (Office of the Registrar General & Census Commissioner, India, 2011) (Source: Authors' own presented using Tableau)

In Patan, a large number of men from Gulshan Nagar society left for Saudi Arabia in search of new job opportunities. These men also send remittances home which help in subsistence (Anonymous, personal communication, February 10, 2020). Other than the Muslims in Patan, the Patels have migrated to locations abroad (Europe and USA) and within India (Ahmedabad and Mumbai) in search for better opportunities (T. Chakrabarti, personal communication, February 11, 2020). As their businesses flourish, they send back remittances which are used for maintaining homes, building community centres like schools, clinics,

recreational facilities and temples (T. Chakrabarti, personal communication, February 11, 2020). Since this may be considered as reinvestment into the region, there is a possibility that the Patels play a role in gentrifying Patan. Especially, like the Jains, the Patel community's investment results in temporary in migration (T. Chakrabarti, personal communication, February 11, 2020). However, other field interactions reveal that the Patels invest more in the 'Panch Gaon' region (N. Patel, personal communication, February 13, 2020). Therefore, while the Patels have been investing in Patan after migrating out, their investments result in temporary migration in Patan. Thus, the Patel community also contributes to gentrification to a certain extent. There is, however, no conclusive method of measuring their contribution in contrast to that of Jains. Further, most of the field interactions attributed the investments to the Jains than to the Patels.

However, the Jains aid in establishing and running free of cost health and educational facilities, too. To avail these services, individuals from the neighbouring villages (like Radhanpur, Disa, Siddhpur) and from other districts in Gujarat and Rajasthan move into Patan (L. Visaria, personal communication, February 12, 2020). The interviews conducted on-field revealed that individuals from the previously mentioned locations come into Patan to either pursue a degree at the various colleges in Patan or receive healthcare at the local hospitals in Patan. It can be established that Patan is a centre for seeking medical care as several diagnostics laboratories with ultrasound, MRI and other advanced medical diagnostics services and IVF facilities were found in Patan. With individuals coming in to seek treatment or receiving an education or stay at the derasars for a short period of time, it may be inferred that the investments brought in by Jains has resulted in temporary in-migration in Patan, which has led to further investment in the area. It is important to note that this is different from other instances of gentrification as the 'affluent community' is migrating out rather than moving in. Despite the out-migration, the Jain community's investment has resulted in more individuals from the neighbouring villages being able to avail of the facilities. Therefore, in the case of Patan, instead of forced displacement, there is voluntary emigration.

Figure 4.3 further describes the migration into Patan from other states in India. The dark shade of the state and the size of the pie chart are indicative of the number of migrants from that state/union territory to Patan. Gujarat has been excluded from this visualization and Telangana has no numbers to report as it did not exist in 2011. Rajasthan has the deepest shade

of blue which indicates that most of the immigrants (from within India) come from Rajasthan. A large number of individuals immigrate from Bihar, too. By looking at the pie charts, it is evident that more men have moved to Patan than women from most states except Bihar, Maharashtra and Himachal Pradesh. The in-migration of males may be attributed to migration for work. On the other hand, in-migration of women may be due to marriage as depicted in Figure 4.2.

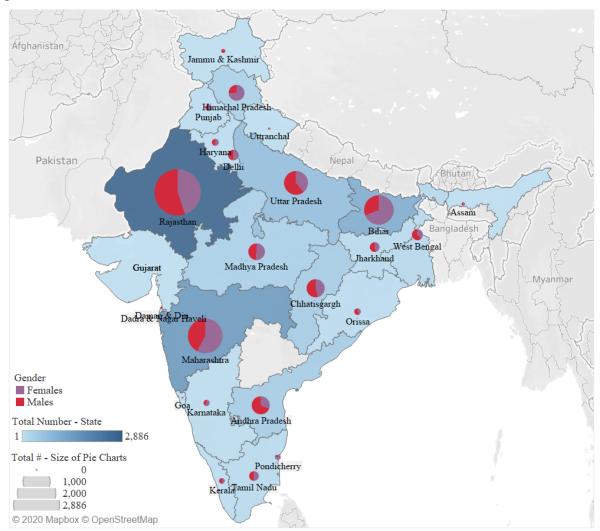


Figure 4.3. Migration from other states in India to Patan. (Office of the Registrar General & Census Commissioner, India, 2011) (Source: Authors' own presented using Tableau)

Often individuals from neighbouring villages and talukas migrate into Patan to earn a living. For instance, due to a shortage of doctors and primary care specialists, hospitals hire doctors from Bihar and other states (Dr Leela Visaria, personal interactions, February 12, 2020). The Census data (as depicted in Fig 4.4) shows the largest international group of

immigrants is from Pakistan (Office of the Registrar General & Census Commissioner, India, 2011a). This was explained by Dr Leela Visaria who said that these immigrants were Hindus, members of the Scheduled Castes and Scheduled Tribes communities and other minority groups who were supported by the Government of Gujarat (L. Visaria, personal communication, February 12, 2020).

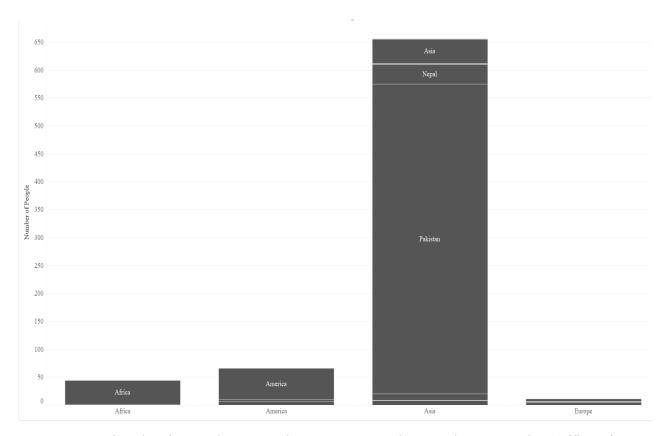


Figure 4.4. Migration from Other Countries to Patan, Continent and country-wise (Office of the Registrar General & Census Commissioner, India, 2011) (Source: Authors' own presented using Tableau)

Conclusion

Individuals in Patan do not receive wages matching their skill-level, so they move to other cities as Patan lacks the infrastructure to attract skilled individuals seeking work (L. Visaria, personal communication, February 12, 2020). Further, the difference in the growth rate of the urban Patan district in contrast to the population growth of urban Gujarat indicates that the job opportunities across Patan have either decreased or stagnated while those in other

parts of Gujarat have increased. Yet, the population of the taluka has seen a significant increase which may be attributed to marriage and individuals from neighbouring lesser developed towns and districts temporarily coming in to seek employment, education and healthcare in Patan. This in-migration may be a result of the investment made by the Jain and the Patel communities. However, only Professor T. Chakrabarti has confirmed that Patels have invested in Patan. Dr Nishaben Patel explained that Patels tend to invest in the 'Panch Gaon' region. Moreover, the Patel community are mostly Hindus which makes it difficult to track their migration patterns based on Census data, This does not confirm the role of the Patel community in causing gentrification in the city of Patan. However, it is verified that there is temporary inmigration coupled with permanent out-migration which is largely engineered by the behaviour of the Jain community. This may lead to a growth in business and commerce in the region.

Ch 5: Cultural Symbols

Rani ki Vav

Rani ki Vav, being one of the major sites of Patan and one to receive increasing attention lately, was a focal point of change noticed on-field and is one of the major sites in Patan to have clearly undergone gentrification. Rani ki Vav and its surroundings can foremostly be understood as a historically disinvested area. According to tourists and college students at the Sahasralinga Talay, Rani ki Vay has grown greatly over time, as "there were no tickets, the new path also did not exist," (Tourist, personal communication, February 9, 2020). Moreover, according to the collector of Patan as well, "before Rani ki Vav became a World Heritage Site, even Gujarati people did not know about it. Now we get about 3 lakh tourists per year which is big for a small town and that is why we increased connectivity because tourists will only come if connectivity is there" (A. Patel, personal communication, 10th February 2020). Additionally, Rani ki Vav lends its popularity to being named a UNESCO World Heritage Site and being printed on an Rs. 100 note. Resultantly tourists have increased as verified by the Collector, the Professor of Jainology at HNGU and the director of Patan Jain Mandal. This suggests that prior to Rani ki Vav's naming as a World Heritage site, it was a generally disinvested area. This could be further supported by Sahasralinga Talav's current stature to be akin to that of Rani ki Vav before its naming, the Talav is not maintained to the extent at with Rani ki Vav is, neither does it have entry tickets, suggesting that this area is still a disinvested area.

When conversing with a member of the Salvi family, Vijay Sevantilal Salvi at the Patola House situated close by to the site, he claimed that there has been an increase in sales of the Patola saree succeeding Rani ki Vav's inauguration as a World Heritage site and with the in-flow of tourists (V. S. Salvi, personal communication, February 9, 2020). Moreover, according to a schoolteacher, "since Rani ki Vav became a Heritage site, new roads have been built. There's a museum nearby that has opened up. There was mainly an agricultural community here and development occurred after 2014, and there was such land that there were no houses/residences present around this area" (Schoolteacher, personal communication, February 9, 2020). In tandem with the efforts of the Tourism Corporation of Gujarat and the Archeological Survey of India as outlined previously, investments into this area have been

made both by the government and through private investments by NRGs which suggests gentrification and can be attributed to the second indicator of gentrification, investment and policy decisions.

This suggests that there has been infrastructure improvement in terms of roads, water supply, sanitation etc. in the area around Rani ki Vav as a result of these investments. Through personal observations, the housing in nearby settlements, migration namely Dwarika Nagri society and Mohan Nagar society also seemed largely contemporary-looking as compared to houses in other settlements visited across the city. Land rates have also increased because this is a new area (B. Patel, personal communication, February 12, 2020). Moreover, the displacement of an agricultural community as a result of the upliftment is further indicative of gentrification.

You must have observed settlements around Rani ki Vav. Earlier there were all fields and agricultural land. That is new development. If you go to these townships that have come up near Rani ki Vav, most of them belong to local Patels. Maybe some people from Ahmedabad have invested money there because Patan is their hometown, but otherwise, it's not like people are eager to settle here (T. Chakrabarti, personal communication, February 11, 2020).

As previously discussed, the NRGs have a great role to play in the upliftment of their communities in Patan and since they are relatively affluent as they are known to invest back into Patan, private investments also manifest as contemporary settlements. Though it is not clear whether those who made this society are NRGs or not, they do belong to the same community, the Patels. Hence at best, it is safe to assume that an affluent neighbourhood is created by a relatively more affluent community. This has also caused movement of members from the same community from the city centre to these newer settlements as testified by one of the residents of Dwarika Nagri Society (B. Patel, personal communication, February 12, 2020). This is indicative of gentrification as well since remittances are financing real estate purchases, renovations and investments. Hence, out-migration allows for an increase in affluent communities which is turning Patan into a remittance economy and facilitating most of the development in the city.

The changes in incoming investments, maintenance, pricing and tourism noticed in this area has led to a realization of various socio-cultural and economic impacts of having a cultural

symbol and its UNESCO label, a sign of gentrification. Displacement is a major negative socio-cultural impact which was largely facilitated by the UNESCO labelling of Rani ki Vav, though much is not known other than the movement of an agricultural community out with the set-up of a more affluent neighbourhood. Additionally, because ticket prices have greatly increased, and currently are priced at Rs. 40 per Indian and Rs. 600 per foreigner. As previously identified on various booking and trip sites as well as in conversation with locals, there has been an increase in pricing from no entry tickets to the current prices for both Indians and foreigners. In conversation with locals across settlements like Gulshan Nagar society, a form of segregation amongst locals has taken place, as those who can no longer afford to pay entry fees cannot access the local cultural heritage site, when they once could. Resultantly, Sahasralinga Talav is a destination for family and friends gatherings as there are currently no entry tickets. This highlights one of the consequences of having a UNESCO site, in-line with how UNESCO sites are trademarks that could be used against locals (Meskell, 2018).

Temples

The Jain temples in Patan are the most prominent cultural symbols of the Jain community, despite the Jain community being a minority. During the on-field research, the significance of the relationship between Jain minority and influence towards the rest of Patan was examined mostly through the temples.

There are about 122 Jain temples in Patan which are more than 100 years old. Apart from them, in comparison, there are 9 Hindu temples and 12 mosques in the city. In the picture of the map below, it can be clearly seen that the Jain temples outnumber the other religious places of worship (GSIDS, 2016). Two students studying architecture at Hemchandracharya North Gujarat University, namely Mokshit Shah and Ronak Jain, took the initiative to cover all 122 Jain temples in the city and pin each temple as and when they visited it using Google Maps (M. Shah, personal communication, February 11, 2020). In this Heritage Trail, they have covered around 80 temples till now (M. Shah, personal communication, February 11, 2020). According to them, not only are the Jain temples very densely populated in Patan, but they are also of a significant size (M. Shah, personal communication, February 11, 2020).



Figure 5.1. Heritage Trail - Mapping Jain Temples in Patan (Google Maps (n.d.). *Patan, Gujarat*. Map Data © 2020. Google. Screenshot by author.)

Figure 5.1 represents a part of their Heritage Trail. The aqua-colour pins with white squares inside them represent Jain temples. From the map, the huge density of Jain Temples in Patan can be seen very evidently.

This upkeep and density of the Jain temples, in comparison to the other religious places of worship, can be attributed to the donations of the Jains from outside the state, such as Maharashtra; these temples have been given continuous, sustained maintenance and upkeep despite their great numbers throughout the town (M. Shah, personal communication, February 11, 2020). Apart from the external donations, the non-residential Jains also returned to Patan annually to celebrate festivals (A. Patel, personal communication, February 10, 2020). The construction of localities and communities in Patan is also centred around the already existing temples as they built their houses around the temples, narrowing the earlier wide, straight path to the temple into alleyways, therefore indirectly influencing the structure and planning of roads (M. Shah, personal communication, February 11, 2020).



Figure 5.2. (clockwise from the top left) Exterior of the Sri Panchasara Derasar; Interior Renovation at the Derasar; Style of a Newer Jain Temple; and Construction of a New Jain Temple.

A lot of the Jain temples have followed the architecture and styling of Hindu temples, which has further been picked up by the interior designing of the houses in Patan; an example of which is the Nandyavarta design on the ground floor of temples seen implemented in housing settlements (Panchasara Derasar, personal communication, February 11, 2020). An example of refurbishing and development is seen in the Panchasara Derasar when during renovations around 5 years ago, there was colouring on the upper part of the temple and the earlier carvings of wood were remade into marble carvings (Panchasara Derasar, personal communication, February 11, 2020).

As there is funding from both auctions and external donations, there is construction and development of temples all across Patan because of increasing popularity. Both the Bhadrakali temple and the Veer Megh Maya temple, which is a distinguishing temple of the scheduled caste community, are under renovation by the Government as it is in the nearby radius of Rani ki Vav (A. Patel, personal communication, February 10, 2020). Earlier, traditional temples were built in such a manner that natural lighting would suffice and there were enough open

spaces that internal ventilation was not needed whereas modern techniques have been adapted to build the newer temples (M. Shah, personal communication, February 11, 2020). A recently constructed temple in Khetarnarno Pado has a relatively less intricate design than the other older temples but boasts contemporary features such as internal ventilation, artificial lighting and machine-made carvings (M. Shah, personal communication, February 11, 2020). The Archeological Survey of India is developing Behram Khan's tomb as well (A. Patel, personal communication, February 10, 2020). The fundings into temples also are contributed by private trusts such as the Kilachand-Devchand foundation, SP Trust, and Mumbai's Patan Jain Mandal (D. P. Shah, personal communication, February 10, 2020). This increased connectivity suggests the high influence of Jains both inside and outside of Patan towards the places linked with historical, religious or cultural significance.

As Vidhate and Sharma mentioned in their study on gentrification, government policies are a major aspect that drives gentrification (2017). Therefore due to the socio-cultural impact of the Jain temples in Patan with the added popularity gained due to Rani ki Vav, the construction, redevelopment and refurbishing of temples seem to be indicators of gentrification happening in the future.

Local Crafts

Apart from Patan being famous for the Heritage site Rani ki Vav and the numerous Jain temples, it is also well-known for the art it creates in the form of Patola weaving material for sarees, Mashru weaving and the creation of clay handicrafts.

Patola

Patan is very famously known for its unique trademark, the patola sarees. Historically since, the craft is known to have been woven by the Salvi caste, of which 700 silk weavers from Karnataka and Maharashtra moved to Gujarat due to rich trade in the 12th century under the patronage of King Kumarapala of the Chalukya dynasty (Banerjee, 2018; Raniwala, 2019). However, during the Second World War, the trade ceased, weavers preferred to take other jobs with stable earnings and raw material that had to be imported also faced an acute shortage during this period (Banerjee, 2018; National Innovation Foundation - India (NIF), n.d.). Moreover currently, even those within the family are reluctant to earn a living through the

trade, especially after having acquired higher education. Only four families now practice the tradition (NIF, n.d.). Though the shortage of weavers had begun since then, traditional handlooms of India have indefinitely been dying and are on the verge of extinction. The handloom industry, especially with the Patola's renowned fame, should have been a source of employment and a means to protect cultural heritage (Qazi, 2018). For these reasons, the Patola much akin to Rani ki Vav has acted as a facilitator of gentrification.



Figure 5.3. (left to right) (a) Real Patola (b) Fake Patola

According to a person belonging to one of the Salvi families at the Patola House, it takes around four months to create one Patola saree, it is entirely handmade and requires a great amount of intricacy and detail. Moreover, it is historically a family-guarded secret, and hence weavers only come from the Salvi family (Nighoskar, 2017). As a result, it is both short of craftsmen and available to only a select few who can afford the handloom. The Patola which is so famous but historically exclusive may have obstructed gentrification because it cannot be commercialized for the reasons above. Nonetheless, efforts have been made to commercialize the Patola by tweaking the factors that make it exclusive. Firstly, there is a shortage of weavers. In order to create more of the handlooms, Vijay Sevantilal Salvi, a Salvi weaver who currently runs the Patola House and manufactures double ikat Patolas has been teaching locals about the

craft despite having the patola being a culturally guarded tradition that only runs within the Salvi family.

Moreover, other shops and small manufacturing units have obtained geographical identification certificates authorized by the government to create original Patolas. One such example is Madhvi Handicrafts which both trains weavers in the craft and manufactures Patolas, currently there are 20-25 weavers in this unit (About Madhyi Handicrafts, n.d.). Secondly, it made Patolas more accessible in terms of pricing, for instance, making single ikat Patolas rather than the traditional double ikat patola (Raniwala, 2019). The handloom is also promoted and commercialized by increasing the range of items that can be sold, such as creating pocket squares, dupattas, neckties, cufflinks and mobile covers with the design instead of just a Patola saree or dupatta (Madhvi Handicrafts shopkeeper, personal communication, February 13, 2020). Thirdly, counterfeit Patola shops have risen which sell clothing with Patola prints, making it even more accessible for prices in up to a thousand rupees or in thousands of rupees, as compared to the lakhs of rupees that original double ikkat Patolas sell for (Madhvi Handicrafts shopkeeper, personal communication, February 13, 2020). Through these methods, the platform for Patola has expanded and definitely has become more accessible and affordable, though at the cost of going against the economically, culturally and historicallybound nature of the craft.

Nevertheless, the craft is still bound to its exclusive identity and commercialization can occur only to a certain extent. The Patola requires extensive handwork and mechanization is not possible, hence industrialization and mass-production of the handloom is also not possible as explicated by a counterfeit Patola shop owner:

The machine cannot make Patola sarees because the vertical and horizontal wires cannot be pulled out parallelly once the weaving starts. It also requires a pull-push modification that only human minds and hands can understand in order to create the design and also start weaving it. I don't know if there are machines which can duplicate this exact complex process. (Patola shop owner, personal communication, February 13, 2020)

The Patola, a traditional handloom unique to Patan, though it is being commercialized and now is accessible and available to a much larger population than it was post the Second World War, is still bound to its exclusivity due to the cultural, historic and economic

background of the handloom.

Mashru

While the Patola tradition is relatively better known than the Mashru, it has also played a significant role in the cultural history of the art in Patan. Mashru is known in Gujarat as one of the oldest hand-woven art forms that has a unique blend of cotton and silk, catering to both the heat of the environment while maintaining the beauty of the garment (Mashru, n.d.). The art of Mashru arose from the need of the Muslim communities who forbade the use of silken garments as silk was made by exploiting the lives of insects (Mashru, n.d.). Therefore, the mixture of cotton underneath and silk on the surface resulted in the Mashru art, which became popular among Muslim communities and was exported in huge quantities to the Arab countries (Mashru, n.d.). In Patan, Hindu communities have also adopted the style of Mashru due to the innovative blend, however today this art form is gradually diminishing in importance (Mashru, n.d.).

Initially, Mashru as an art form was present in almost every other Muslim house but has become almost non-existent for 20 years, compared to what it was (Anonymous, personal communication, 2020). The machinery required for this art form required a large amount of space in houses, but due to the infrastructure of houses becoming gradually smaller over the years, it has been difficult to make it (Anonymous, personal communication, 2020). There seems to be a decline in the Mashru weaving in favour of the Patola weaving industry and demand as now there are only two families that are maintaining the tradition of the Mashru art form (J. Khatri, personal communication, February 13, 2020). As one of the owners of the Mashru shops said, "35 years ago there were around 250 pit looms in Patan, now there are only 30-35 pit looms. Day by day it is decreasing. Why? Because young generation nowadays, have no interest in weaving work" (J. Khatri, February 13, 2020)."

Therefore, there seem to be three main reasons for the decline of the Mashru art form-lack of demand, lesser supply and very little government intervention (D. Patel, personal communication, February 11, 2020). The demand is low because there is newer, more easily accessible cloth which isn't as expensive, the lack of supply is due to the dwindling interest that the younger generation has with maintaining the art of hand-weaving cloth and most importantly, the discouragement of incentivization of Mashru weavers to have the space to

weave in their own homes due to lesser space (D. Patel, personal communication, 2020). A lack of policies to uplift the craftsmen would have also affected the community and sales and therefore led to demotivation to continue their craft (D. Patel, personal communication, February 11, 2020). There has been greater popularity of the commercialized toys rather than the traditional toys, with the Patola art taking up much of the space in terms of traditional Patan art. Thus, the culture of Patan has been changed due to the fading popularity of the Mashru art as well as the addition of newer crafts coming in to conform to the middle-class tastes, leading to gentrification in art.

Clay Toys

The production of clay toys, which were also famous in Patan, has decreased due to the lack of space and their replacement by plastic toys.



Figure 5.4. A Shop Selling Plastic Toys versus A Shop Selling Clay Toys and Other Items

Earlier a lot of clay toys were sold in Patan. I used to export toys in other cities like Delhi too. The plastic toys have taken over clay toys. We don't have space to make clay toys and the government is not doing anything to revive the art of making clay toys. (Clay Handicraft Seller, personal communication, February 13, 2020)

As other items have replaced the popularity of the clay toys, this has affected the sales of the clay handicrafts industry (Anonymous, personal communication, 2020). Apart from the sales, the clay handicraft sellers have lost the space they needed in their shops to bake their toys; another factor that has contributed a huge blow in the production and sales of this craft

(Anonymous, personal communication, 2020). There was also direct competition between the plastic industry and the clay-making handicrafts as the placement of a plastic toy shop right next to the clay shop affected the sales (Clay Handicraft Seller, personal communication, February 13, 2020). This has led to cease in production of the clay handicrafts for most sellers, and now only three shops in the new market sell clay handicrafts as compared to earlier times (Clay Handicraft Seller, personal communication, February 13, 2020).

The displacement of these shops to the bigger plastic industry can be claimed as an indicator of gentrification, wherein community art and craft forms are being displaced and replaced by industrialized and commercialized art forms. This is reaffirmed by the observation that foreign tourists coming into Patan are coming solely to visit the site of Rani ki Vav and are, therefore, staying for one day. This is not enough time to include, and most often, does not include, the other cultural aspects of Patan such as - the Darwazas, the Patola and Mashru art form, Sahasralinga Talav, the famous Jain temples and the clay handicraft industry.

However, the District Collector acknowledged a general awareness about the decline in these aspects of Patan's culture, which is what the government aims to rectify through the tourism grant they have been recently provided (A. Patel, personal communication, February 10, 2020). Using the tourism grant, they will advertise and commercialize all these overlooked aspects with tours and souvenirs through an upcoming "Patan Haat" project venture (A. Patel, personal communication, February 10, 2020).

This decline in demand and supply of an art form that was once famous seems to be due to a variety of factors: the culture evolving with every generation, the overshadowing of another art form, the exclusion of a community's art and the lack of investment from the government. However, with the increased connectivity, the government is looking to expand on the development of cultural symbols so that there is more inflow of tourists in Patan and gentrification is stimulated (A. Patel, personal communication, February 10, 2020). Therefore, efforts of working towards gentrification are being taken because of the increasing influx of tourists coming into Patan.

Conclusion

Cultural symbols can be seen as both protectors against gentrification as well as facilitators of it, especially within the context of Patan. As clearly established with Rani ki

Vav, gentrification is happening, however, there are many other cultural icons such as the Sahasralinga Talav that have not been developed as much. Succeeding the UNESCO world heritage naming and efforts by the government to promote tourism, there has been an increase in tourists. But because there are not as many cultural icons developed especially for the purpose of tourism, Patan ends up as a temporary place for a visit as it is, among other things, as it is famous for education and healthcare. Due to this, tourists only visit Patan for small periods of time such as a day, and hence tourism gentrification cannot take place which means an increase in business and industries also cannot take place. To tackle this, the Collector of Patan plans to bring all the other artefacts of Patan into limelight such as the Veer Megh Maya mandir, the Bhadrakali temple, the Sahasralinga Talav and Behram Khan's tomb; there are also plans underway to develop things Patan was once known for such as the carrot city of India (A. Patel, personal communication, February 10, 2020). This suggests active effort in developing the entire district in a manner that reduces the temporary character of Patan, at least in terms of tourism, allowing for increased gentrification in the future.

As established earlier, industrial development and connectivity are vital indicators of gentrification. The trade-off between economic development and maintenance of cultural heritage was noticed with respect to Rani ki Vav. First, railway services commenced recently. The National Monuments Authority had initially rejected the original project proposed by Western Railways to repair and renovate the Meter Gauge Railway line near Rani ki Vav as it would negatively impact the site; the proposal was later granted after an alternative was found (Sharma, 2015). This suggests that the presence of cultural heritage offsets infrastructural development as a result of its need for maintenance. Now that railway services have commenced and connectivity to and from Patan has increased, an immediate effect other than an influx of tourists was not noticed, but one can assume to foresee gentrification in the longrun. Secondly, once Rani ki Vav claimed its title as a UNESCO site, the succeeding development as discussed earlier is magnanimous and gentrification, as a result, has clearly taken place. In this case, cultural heritage also acts as a facilitator to gentrification as it invites a budding tourism industry, investments and subsequent economic development in terms of increased employment. A clash between the two can also be expected in coming times, as the plan to revitalize Patan by developing its cultural artefacts could either protect against or facilitate gentrification. Likewise, with the Patola, the exclusive nature of its craft in tandem

with efforts to commercialize it operates as both a protector against and facilitator of gentrification.

Ch 6: Settlements

Market Spaces

Located in the heart of Patan, the markets are buzzing with continuous activity. While there are no definite segregations between the old and the new markets, the new market shops are mostly those which sprang up near the railway station and Hemchandracharya North Gujarat University. A majority of the shops sell clothes along with shoes and other accessories like bags, watches etc. Palika Bazaar, a part of the new market, is also dominated by apparels, but there is a drastic difference in both the designs of the shops and the kind of clothing it offers. The shops are new, lit-up and spacious. They mostly sell western menswear. The new market also has shops that sell products like light fixtures of different designs and solar panels. It has multiple beauty and tattoo parlours. The prices of the clothes sold in the new markets are slightly higher than those in the old ones. When asked about why the shop owners decided to set up so many western apparel shops of menswear, they said that western menswear is very popular because young students at HNGU and other universities prefer them (Anonymous, personal communication, February 10, 2020). Sales keep growing and so does competition. Rent prices in the new market have also grown steadily (Anonymous, personal communication, February 10, 2020). When asked about the effect of the declaration of Rani ki Vav as the world heritage site in 2014 on their businesses, most of them said that while tourism has increased manifold, it has not had a huge impact on their business (Anonymous, personal communication, February 10, 2020).

One of the primary reasons for this is that there are not a lot of lodging places or a variety of cuisine for tourists in Patan (T. Chakrabarty, personal communication, February 13, 2020). Hence, they only visit Patan and do not stay for a long time. However, the new markets have recently seen a rise of cafes like the 'Local Junction Cafe and Restro', 'Food Zone' and 'La Pizzeria' which serve pizzas, pasta and continental food as opposed to that of the old market where there are very few shops which serve food (Anonymous, personal communication, February 10, 2020). They also host small-scale fast-food joints like 'Chatkazz' which have outlets in Gandhinagar and Ahmedabad while the old market mainly consists of shops with traditional food options (Anonymous, personal communication, February 10, 2020). The differences in the old and new market point out at the change in

preferences of the new generation of students that come to study in HNGU and other universities.

While most of the shopkeepers in the old market were originally from Patan, some of them had come from nearby villages to set up businesses and settle there. When asked about migration, the shopkeepers said that Patan saw the influx of people coming in for setting up businesses and settling here, because Patan as a city was better off than its surrounding villages (Anonymous, personal communication, February 10, 2020). For the people who lived in those villages, Patan was the place where they could make money and have better facilities (Anonymous, personal communication, February 10, 2020). However, they also stated that people who were originally from Patan did not feel the same and wanted to move out to places like Mehsana, Ahmedabad, Mumbai to earn more money. Hence, according to the shopkeepers who were interviewed, migration in and out of Patan was because of business and education.

The markets also have a lot of hospitals. Most of these hospitals are focused on providing specialized treatment, like dermatology, laser treatments, cardiology, physiotherapy, dentistry etc. As functions of derived demand, the markets have a lot of pharmaceutical retail medical stores. When asked about such a high density of hospitals in Patan, most of the interviewees in the market told us that Patan has known to have a history of good medical and healthcare. People from the nearby villages have always come to Patan for healthcare and hence it has been developing steadily and consistently. Patan is also renowned for its medical education (T. Chakrabarty, personal communication, February 13, 2020). After studying medicine, a lot of people came and set up hospitals in Patan earlier. Now, the existing hospitals are mostly run by the successors of the families which established them (T. Chakrabarty, personal communication, February 13, 2020).

Shopkeepers in the old and new markets talk highly of Anandiben Patel's (former Chief Minister of Gujarat from 2007-2014) and the improvement in water, electricity, transit facilities during her term. At the same time, they were apprehensive of the changes like demonetization that took place in the BJP government's term. A lot of them said that even if sales were going up, business on a general level was slowing down (Anonymous, personal communication, February 10, 2020). They were also hopeful of the trade opportunities that railway could bring (Anonymous, personal communication, February 10, 2020).

The old and new markets are seeing growth in sales but a gradual slowdown in overall business activity. Tourism has shot up after Rani ki Vav was declared a World Heritage site in 2014, but that has not led to any drastic growth in sales on a general level. Hence, tourism driven gentrification is not taking place in the old markets. New markets have seen the emergence of western men's apparel, cafes, pizzerias that cater to tastes of the college-visiting crowd. There has also been a decline in traditional craft such as the clay toys because of the growing popularity of the commercialized plastic industry. This could be understood as a shift from traditional tastes to contemporary westernized ones and can be attributed to Patan increasingly adopting middle-class tastes, a sign of gentrification (Gentrification, 2020). This is in negotiation with the fact that, though Jains and Patels are permanently emigrating and the only in-migration noticed is from nearby villages, there is investment and money flowing into the district and the communities of emigrants. Hence rather than an influx of middle-class people, there is a gradual transformation of locals into middle-class people. According to Beinhocker et al. (2007), westernization is a component of the increasing Indian middle class, where global Indians seem to have tastes corresponding to their counterparts in developed countries. This supports the current scenario observed, as local communities adopt these tastes akin to the Jains and Patels who have emigrated.

Rents in the new market have increased steadily over time. People migrate both in and out of Patan for business purposes. Those who migrate in are people living in nearby villages which see Patan as a business hub where they can earn more money than they do in their villages. Those who migrate out are people from Patan who want to expand their businesses or look for better job opportunities after getting education in Patan. While businessmen and women are hopeful that railways might bring trade opportunities for them, there is only one rail that functions once a day. Any rail-induced gentrification cannot be observed in Patan for now.

Housing



Figure 6.1. Top to bottom: (a) Gulshan Nagar settlement (b) Kanasano Pado settlement (c) Rani ki Vav Settlements

"The settlements here in Patan are based on religion. The core is divided based on religion and high and low caste. Some localities and areas are named according to that too. The core city's higher portion which is a bit elevated is occupied by the Jains. The lower settlements are given to the lower castes and other religions. Though not entirely, some changes in the settlement patterns have taken place. The way people think is transforming slowly. Untouchability was also prevalent then. But now things have changed. The people occupying the core have changed also. This is why people of different religions might be staying together in the core" (M. Shah, personal communication, February 10 2020).

The housing research is based on primary data from visits in Gulshan Nagar, Rajkavado, Mohan Nagar Society, Dhander Vado, Khejada No Pado, Maniyati Pado, and Kanasano Pado.

Gulshan Nagar

Gulshan Nagar is located in the south-west region of Patan. In Gulshan Nagar, Hindus and Muslims cohabitate and all housing is mixed at the periphery but as one goes inside, it becomes more Muslim-dominated. It branches out in smaller mohallas like Kalibazaar etc. There are many vadas here (Anonymous, personal communication, February 10, 2020).

The Gulshan Nagar settlement thins at its periphery into shops. Some of the shops were encroached to make roads. These roads connect the settlements to Kalibazaar and Rajkavado road which are some of the busiest areas of Patan. People don't usually buy new land in Gulshan Nagar. There are 370 Masjids in Patan, and new Masjids are not being built. Rather the old ones are often renovated (Anonymous, personal communication, February 10, 2020). This indicates upliftment of existing cultural icons. The people in Gulshan Nagar complain that there is a lot of underemployment in Patan. People who cannot find jobs migrate out, and the families of the men who migrate out stay back in Patan. Those who stay here cannot find work. The women of most of the houses in Gulshan Nagar make "beedis" at home. They also said that increased tourism since 2014 has not made a difference in employment or businesses in Patan (Anonymous, personal communication, February 10, 2020). Gulshan Nagar also faces a lot of issues regarding the bad quality of water due to high concentration of fluoride despite the Collector stating that water supply has substantially improved since the Narmada project (A. Patel, personal communication, February 10, 2020).

The Gulshan Nagar settlement and the problems faced by the people who live there bring out a stark difference between housing settlements. The people in this area face many water problems and are mostly underemployed or do not work at all (Anonymous, personal communication, February 10, 2020). There isn't much generation of employment after the declaration of Rani ki Vav as a World Heritage site. Even as some mosques are being renovated, Gulshan Nagar has not seen heavy investment which may lead to gentrification and eventually displacement. While the families receive money that people who have migrated out send, it is mostly used for subsistence (Anonymous, personal communication, February 10, 2020). Land ownership is mostly by the residents and hardly any property is on rent. This makes it harder for displacement to occur. Hence, it can be inferred that this area in Patan has not undergone gentrification. In addition to this, the stark differences in terms of infrastructure

and investments in Gulshan nagar vis-a-vis Rani ki Vav settlements allows one to realize that gentrification is taking place in the latter housing.

Rani ki Vav Settlements

Situated close to Rani ki Vav, this is a relatively new settlement emerging since the past 7 to 8 years. It is one of the most elite settlements in Patan. There are societies and gated communities with row houses, bungalows and villas, which boast of expensive interior designs (Anonymous, personal communication, February 10, 2020). The land prices in this settlement are relatively much higher than those of the city. After the area surrounding Rani ki Vav was developed, a few people who lived in the city centre shifted there, increasing the land value. One of the interviewees said that he had to shift from nearby settlements because the rent he paid for his dwelling was very high (Anonymous, personal communication, February 10, 2020). This land was used mostly for agriculture before the settlements cropped up. The entire settlement is constituted of multiple gated communities like Dwarika Nagri Society and Mohan Nagar Society. This settlement is dominated by the Patels. Hindus also constitute a large part of the societies. When asked why they shifted, most of the interviewees say that they prefer the environment near Rani ki Vav to that of the old city of Patan. This community does not face water supply issues at all. The people were in praise of the improved water conditions in all of Patan. Because this settlement is relatively far away from the city centre, two government buses used to ply regularly, but now only one does (Anonymous, personal communication, February 10, 2020).

Figure 6.2 tracks the increase in settlement housing near Rani ki Vav in namely Mohan Nagar Society through the years with screenshots from Google Earth in 2014 and 2019. Settlements have greatly increased in this area especially following 2014, supporting an increase in investment and residence post Rani ki Vav's UNESCO naming.



Figure 6.2. Changes in the settlement around Rani ki Vav from 2014 to 2019 (Figure 6.2. Google Earth. (n.d.). *Patan, Gujarat*. Map Data © 2020. Google. Screenshot by author)

Hence, the areas near Rani ki Vav have seen huge changes in settlements. Previously used for agriculture, this land is now being employed for construction of housing. This has caused displacement of people who lived there because rent prices have shot up (Anonymous, personal communication, February 10, 2020). This emerging housing has expensive modern interior designs and is dominated by the Patel community and the Hindus. The displacement of people by the affluent Hindu, especially the Patel communities, expensive settlements, increased infrastructural facilities show that this area in Patan has undergone gentrification.

Jain Settlements

It has been mentioned earlier that the housing pattern in Patan is based on religion. The Jains and upper caste Hindus reside in the centre of Patan city or Patan Core and Muslims and other lower castes Hindus live along the outer edges of the city. Every Jain settlement or *pol* has a gate with a 'Gadhera' which is used as a resthouse for the *pol* watch guards constructed on top of it. This was the architecture of the Jain *pols* in the olden times. Today, even though the gates are being built with different materials the Gadhera remains untouched. Each Jain locality has at least three carefully planned temples, which are built further inside the locality, such that it is impossible to guess that there are three huge temples built inside the locality (M. Shah, personal communications, February 10 2020). The architectural style of Jain temples includes intricate carvings on walls and a Nandyavarta design. The Nandyavarta is a symbol of prosperity which makes the temples easily identifiable as a Jain temple. The design of the

Nandyavarta was used as a settlement planning grid and this was one of the settlement plans that was used extensively in the Vedic era town planning. The Nandyavarta settlement was intended to accommodate a population of mixed social grades. This type of settlement was called the 'Abode of Happiness' (R. Jain, personal communication, March 11, 2020).

The architecture of the Jain temples have influenced Jain settlements wherein the wall carvings have been incorporated in Jain housings. These temples are built by workers who come to Patan from Rajasthan and Madhya Pradesh and are recruited for a period of two years. Thus, each Jain locality has an Ashrah Bhavan or a guesthouse to house these workers while they work on the temples (P. P. Shah, personal communication, February 9, 2020). Hence, the building of Jain temples also facilitates in-migration. In Kanasano Pado all the Jain houses are empty because most of the Jains migrated to bigger cities like Mumbai and Surat for better economic opportunities. However, every year there is a festival called Ucchav that is observed to celebrate the Jain deraser's establishment (P. P. Shah, personal communication, February 9, 2020). All the Jain families come back to their homes in Patan for this festival and stay there for four to five days. This is the reason why the Jain families living in these localities never sell their houses. Instead they keep renovating it probably as it is seen as a status symbol by some and this is also a mark of their identification with Patan. The Jains come back to Patan every year for this festival and they also donate to temples, different organisations, fund universities and schools and help the members of the Jain community with the business and startups (N. Shah & R. Shah, personal communication, February 10, 2020). This shows that there is a strong community bond and the spirit of community upliftment amongst the Jains. In Khetarnarno Pado, the Jain temples being built have different architectural styles as opposed to the traditional ones (M. Shah, personal communication, February 11, 2020). The architectural style of the earlier temples ensured ventilation and lighting (M. Shah, personal communication, February 11, 2020). However, the new temples have artificial lights installed and the carvings are being done outside the temple by machines (M. Shah, personal communication, February 11, 2020).

Thus, the Jain community had a significant impact on the Patan district which is evident through the number of Jain derasars in the Patan core and their consistent renovation. It is also visible through fundings by the Jain community. These donations to the universities and medical facilities by the Jain community has led to an in-migration of people, mostly students,

from the villages around Patan. While sufficient information was gathered on the Jain community during the field work, there lacks information about the Jain settlements thus commenting on the occurrence of gentrification is not possible. There is no evidence available to suggest that the maintenance and renovation of the Jain derasars have been done to transform the Jain cultural symbols into major hubs of tourism. These temples were funded by Jains to preserve their cultural heritage. The renovations are not a result of investments but a way for Jains to contribute to their own community. Thus, these Jain derasars cannot be linked to gentrification and there is not enough information to corroborate if gentrification is happening in the Jain settlements.

Hemchandracharya North Gujarat University

Hemchandracharya North Gujarat University (HNGU) established in 1986 has nineteen departments including S.K college of Business Management and BL Jain Academy Educational Research Centre (Hemchandracharya North Gujarat University, 2015). The university like many other universities in Patan are funded by the Jain community of Mumbai. The Kilachand Devchand group which is a part of the Jain community in Mumbai has funded the building up of KD Polytechnic college in Patan, while the S.K group which is a pharmaceutical company has also significantly contributed to the management department of HNGU (D. Patel, personal communication, February 11 2020). Thus, the Jains who migrated to Mumbai from Patan are the primary source of funding that have helped transform Patan into a leading hub of education and medical facilities. As these facilities in Patan developed, it saw temporary in-migration of people from the surrounding villages. Thus, the Jain community had a massive impact on other communities through the funding of educational and medical facilities in Patan. Thus, it is largely due to the massive growth of the HNGU university that led to the development of Patan and converted it into a district. (D. Patel, personal communication, February 11 2020).

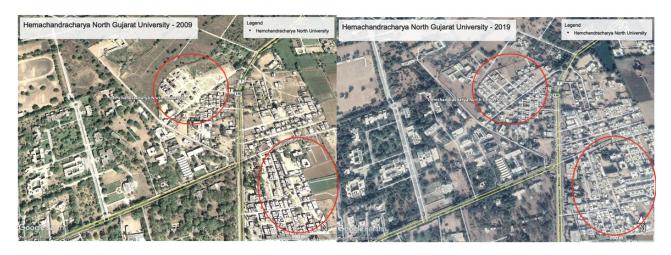


Figure 6.3. (left to right) (a) Hemchandracharya North Gujarat University in 2009 (b) in 2019 (Figure 6.3. Google Earth (n.d.). *Patan, Gujarat*. Map Data © 2020. Google.

Screenshot by author)

Development Plan

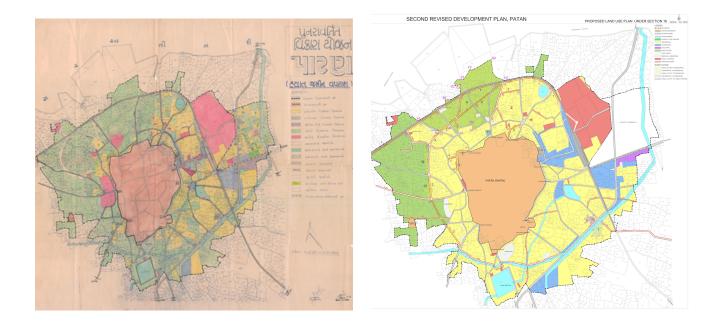


Figure 6.4. Town planning schemes for Patan in 2010 and 2014 (Shah & Jain, 2020)

From the plans, it can be observed that settlements (in yellow) and commercial spaces (in dark blue) near Hemchandracharya North Gujarat University have increased. The area marked in white in the 2014 map is a part of the town-planning scheme of the government

(Science and Technology Park, Pune, Government of India (n.d.). In addition to this, drastic changes are noticeable in the north-west region near Rani ki Vav. The agricultural land (in green) has been replaced by housing (in yellow). This housing is the Rani ki Vav settlement as explored above. From the town-planning scheme of the government, it can be seen that heavy public investment is planned near HNGU by construction of commercial complexes, a primary school and playground, a local market, shopping centres, heath centres and gardens. On-field observation shows that this area had wider and well maintained roads. This could be attributed to the presence of government offices and Hemchandracharya North Gujarat University. This area, like the Rani ki Vav settlement is also far away from the city which makes it relatively free of the hustle-bustle. As stated earlier, one of the major attractions of the residents for settling in the Rani ki Vav settlement was its distance from the city and a more peaceful and greener environment. Commercial complexes and schools, local markets and public amenities like shopping centres and gardens may attract more investment and in-migration in the future. In addition to this, the Patel community owns a major part of this settlement, like the Rani ki Vav housing (Science and Technology Park, Pune, Government of India (n.d.). This shows that an affluent community has already invested in this scheme. While an inference of gentrification cannot be made based on this development plan, it can be seen that the government is consciously trying to urbanize the area near HNGU. Urbanization, investment, amenities that attract more investment, ownership of property by an affluent community might lead to gentrification in the future.

Conclusion

Differences in terms of livelihood and spatial structure amongst neighborhoods visited were noticed. The settlements visited were not a representative measure of the overall scenario across the city considering spatial constraints and the community-wise segregation of the settlements. Nevertheless, there is a stark contrast noticed between the settlements surrounding Rani ki Vav, government offices and the Hemchandracharya North Gujarat University and the settlements in the southwest of the city such as Rajkavado and Gulshan Nagar society. One such difference is the general physical health of the people living in these areas. For instance, water quality and supply seem to be ensured and maintained in a relatively affluent area which

is undergoing gentrification (The settlements around Rani ki Vav and the areas surrounding Hemchandracharya North Gujarat University).

However, such surety is not preserved in the more peripheral settings of the city such as the Gulshan Nagar society and Rajkavado. The settlements near Rani ki Vav and Jain housing are owned by the affluent Patel, Hindu and Jain communities. With the inflow of heavy investment for construction of new houses and constant renovation of Jain derasars, these housings have gated communities with heavy expenditure on interior designs, and celebrations for their religious festivals. The land surrounding Rani ki Vav was gentrified by the new settlements. On the other hand, people in settlements like Gulshan Nagar which is dominated by the Muslim community are facing underemployment and difficulty in making ends meet. Such settlements are not gentrified.

Ch 7: Industries

"There are two transportation routes that start from Rajasthan and which go towards the Kandla port. One port route goes via Limbdi which is a direct route. All goods that need to be exported need a straight road and less time. So, the Limbdi route was popular but it was crooked and took more time. The desert starts 30 kms. towards Rajasthan from the Patan side. The main problem is that the climate is hot and not moderate. Hence, in Patan, it is very difficult to travel after 12:00 PM. The temperature is too high. So, the development of Patan was difficult" (M. Chetwani, personal communication, February 13, 2020).

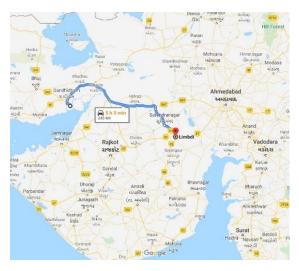


Figure 7.1. *The route from Limbdi to Kandla* (Figure 7.1. Google Maps (n.d.). *Route from Limbdi to Kandla*. Map Data © 2020. Google. Screenshot by author.)

The current and future development of industries in an area leads to a demand for skilled or unskilled labour force. This, in turn, affects the settlement patterns and demography of the region depending on the type of industry and the provisions which need to be made for the workers. According to secondary literature (see Table 1.1), Patan has a lot of small agro based industries. The Patan district is also home to the Charanka solar power plant, which was presumed to be an employment opportunity for the locals in Patan. However, upon speaking to the locals, it was inferred that the plant does not have any significant impact on the development of the city or its residents. Therefore, the primary sources like the power plant were passed over in favour of credible secondary sources like Professor Meera Chetwani, Department head for Urban Planning and Development at Hemchandracharya North Gujarat University (HNGU), and Dr. Leela Visaria, Professor at Gujarat Institute of Development

Research (GIDR). The district collector and other residents were also interviewed regarding the impact of industries in and around the city on its development.

The city of Patan is home to cottage industries like Patola sarees, Mashru weaving and clay handicrafts. It is also surrounded by many small and medium industries like the agro based and textile industries. However, there is no major development with regard to heavy industries which involve large scale production and require heavy transportation. This was largely due to the lack of proper roads to the nearby ports like Kandla (M. Chetwani, personal communication, February 13, 2020). Transport was also limited due to the restricted number of trains which were allowed to pass through the Patan railway station for fear of any structural damage to the Rani ki Vav (M. Chetwani, personal communication, February 13, 2020). Lack of development could also be attributed to inadequate water supply to the taluka for industrial purposes. Patan was also not part of the Golden Corridor of Gujarat (from Mehsana to Vapi) which was the focus for development of transportation and industries (M. Chetwani, personal communication, February 13, 2020).

However, when Smt. Anandiben Patel took up the post of Chief Minister, she commissioned the construction of a four-lane highway to the port of Kandla which made transportation of raw materials and finished goods easy (M. Chetwani, personal communication, February 13, 2020). Also, investments in Bahucharaji and Ambaji, which are popular tourist places close to Patan, have led to a rise in the value of land owned by the villagers at the outskirts of the city (M. Chetwani, personal communication, February 13, 2020). Professor Meera Chetwani who is part of a government panel which approves funds for developmental projects, like the budget allocation for the development of Rani ki Vav, also mentioned the possibility of an upcoming industrial belt in the region (personal communication, February 13, 2020),. The District Collector also mentioned that the industries have grown considerably since the availability of water from the Narmada river.

Currently, the industrial sector in Patan is rather primitive and not at a very large scale. However, steps are being put into motion to rectify the situation. Changes regarding water supply and transport have been made (A. Patel, personal communication, February 10, 2020). These changes are suggestive of development in the industrial sector in the following decade.

Ch 8: Conclusion

The changes investigated on-field, to a large extent, have been mapped onto the generic framework of gentrification to provide the findings of the present study. The generic framework was obtained from the Western model of gentrification which has been largely studied. This simplistic framework consists of historic conditions, investment and policy decisions and community impacts. Patan has already been established as a historically disinvested area post-1244 AD, following the Solanki rule. Investment decisions were reflected in the kind of community impacts observed on-field: migration, industries, cultural and settlement changes. Associating these changes with the gentrification framework has allowed for a set of potential indicators of gentrification in Patan. These include: increase in commercialization of local crafts, increasing shift from traditional dwellings to contemporarystyled ones, increase in westernized commercial establishments like restaurants and shops, increase in tourism, the inflow of investments towards housing, education and healthcare facilities, increase in land prices and increase in connectivity. Moreover, keeping in mind future plans for Patan, as outlined by the Collector of Patan, factors such as increasing popularity or establishment of Patan as a cultural hub and increase in industries would act as drivers of gentrification.

A trade-off between economic development and maintenance of cultural heritage was clearly noticed with regards to Rani ki Vav. Patan carries significant cultural heritage being preserved and maintained by the government to boost the tourism industry, hence in the short-run gentrification may not be noticed, however, with the establishment of more cultural icons (Veer Megh Maya temple, Bhadrakali temple, Sahasraling Talav, Behram Khan's tomb, Patola and Mashru traditions, clay-making handicrafts), gentrification may happen in the long-run.

The Jain community was thought to play a major role in the gentrification of Patan if that were the case, due to their cultural influence and affluent status. Jains in Patan are largely associated with emigration, and play a major role in investing back into their respective communities. Renovations and investments into housing, cultural symbols and of public facilities like school and healthcare have been facilitated. A similar trend is noticed for the Patel community as well. This explains the stark difference between various settlements observed on-field and alludes to the Jains and Patels being a relatively affluent community and possibly as gentrifiers. Instead of an influx of middle-class people, continuous investments into

local communities can be understood as a gradual transformation of Patan locals into middleclass, affluent people. Hence, validating the role of the Jain and Patel community as facilitators of gentrification.

However, this kind of influence in pertinence to investments in cultural symbols such as temples is not indicative of gentrification. This is because, though monetary investments are happening, the purposes of maintenance of cultural symbols and temples are different. The establishment of cultural symbols like Rani ki Vav is preserved for tourism purposes which gives rise to investments and hikes in land prices, hence facilitating gentrification. However, the maintenance is not directed to be preserved for tourism purposes, hence does not facilitate gentrification. Thus, the Jain and Patel community seem to play a role in facilitating gentrification in Patan, but only to a certain extent.

Moreover, with respect to industries, there seems to be a negligible impact of neighbouring industries such as the Charanka solar park on the city. This was investigated by changes in employment and connectivity, of which none has improved as an effect of neighbouring industries. Moreover, since there are no industries within the city as of yet there was no growth established. However, the lack of industries can be understood by Patan's lack of natural resources and it being a holder of cultural heritage that needs to be preserved. However, with plans of attracting industries, in the long-run gentrification may occur across the city by means of an increase in land value and employment. Investment-induced, both public and private would have a more noticeable impact on the city in the future. An inevitable impact would then be the likely displacement of pastoral communities and the shift of Patan from an agrarian society to an increasingly industrialized one.

Gentrification may be categorised into three stages, as cited and explained in the case exploration of Seoul, Korea (Yoon & Park, 2018). However, this explanation is provided in a commercial context. Hence, it doesn't account for the changes in the residential areas. Brian (1985) coined the three stages of gentrification: stage I occurs when small and medium scale stores are found to mushroom in the region of study, stage II is the phase where the small and medium scale shops are scaled up to businesses and increase in number, too and stage III is said to occur when these medium scale businesses turn into large retail stores (as cited in Yoon & Park, 2018). On-field observations described the presence of several small and medium scale shops of clothes, food and beverages, toys, supplies and other things spread over the city with

new food and beverage businesses opening up. There is the Old Market which has street-food hawkers, small tea stalls and various other shops. In contrast to this, the Palika Bazaar and City Point (the 'New market' area) exist which have small-scale fast-food joints. These fast-food joints also have outlets in Gandhinagar and Ahmedabad among other locations in Gujarat. While on-field no large retail stores were visible, new construction around multiple locations in Patan was observed. Armed with the theory and on-field observations, it is safe to say that Patan is in its second stage of gentrification. This implies that Patan must experience further economic growth to be considered in the third stage.

The traditional gentrification theory was developed in the West. Moreover, the framework adopted for the present study was too simplistic as a way to negotiate for the differences of an Indian city. This allowed for most of the changes observed in Patan to be flexibly mapped onto this framework. However, due to Patan's unique character as both a tier III city and differently socially, culturally and politically structured than where the theory originally follows, it is very probable that the changes interpreted as indicators of gentrification relied more on the researcher's insight of gentrification than the actual applicability of the theory. Furthermore, due to the scope of the study, the kind of depth needed to explore these factors was not actualized. Hence, a preliminary interpretation of these changes was made. A major issue with extending the gentrification theory is the overgeneralizing of multiple distinct phenomena under the term gentrification, for instance, classifying slum demolition, land privatization and periurban enclosures in India as gentrification (Ghertner, 2014). Analyses made in the present study can be attributed to the fact that many urban processes noticed were in the early stage since Patan will be experiencing greater impacts of the changes implemented only recently. For this reason, instead of being a phenomenon that is 'influential' and an established urban process, it can also be understood as a secondary process accompanying other urban processes. Due to the above-mentioned perspectives, it seems that though the theory has allowed for a broad understanding of the scenario in Patan, applying it to a different context takes away from a profound in-depth analysis that distinguishes urban processes within Patan from gentrification.

Limitations

Most of the gentrification research that this study bases its framework on, comes from the American context. Hence, using this for Patan can limit the lenses one uses for exploring the phenomenon. Since the study relies on convenience and snowball sampling, accounting for representative samples for each religion and gender was not enforced. Thus, the sample may not be representative of the population in the city and hence the findings are also not generalizable. Also, there are few government policies that could link to gentrification. While at the state level, the Gujarat Government does have schemes like 'Apno Taluko Vibrant Taluko', they are barely being implemented in Patan. Due to this lack of information, the on-field exploration could not account for the implications of these policies either. This could hinder the understanding of gentrification in Patan since policy decisions generally play a major role in shaping, leading and enabling gentrification (Zuk & Chapple, 2015).

Gentrification is a gradual process and community impacts reflect the effects of such a process. The present study sought to explore the effects of recent changes in Patan and their connection to gentrification, where in fact the effects of these are gradual and not yet noticeable. For instance, railway connectivity was established in March 2019 and the on-field study was conducted in February 2020. On-field, there were no current significant changes brought on by this establishment, but rather it was something expected in the future. Hence, it could be understood that with such recent changes, effects that were not noticeable enough or subtle at the moment were unable to contribute to a better understanding of gentrification. Considerable amounts of inferences were drawn from notes taken during on-field research. Hence there could be researcher's bias present in both the collection and interpretation of such data. Also, sample interviews taken were not representative enough and hence cannot be accurately generalized. For instance, while the housing section of the settlements focus on religious segregation, the interviews in the old and new market are based on different questions and do not minutely consider similar factors. Census data had comprehensive details for the district but not the city, which made comparisons difficult. Furthermore, the Census data didn't include information for out-migration. To control for this, the migration data for other states were looked at. Here again, the data was stored state-wise and had no mention of Patan.

Recommendations for future research

For future exploration, government policies and their implications over time can be studied in minute detail. This would bring out the nuances of the effects government policies produce economically and socially and see whether or not they lead to gentrification. The District Collector of Patan, Anand Patel, plans to create 'Patan Haat' which is a hub for selling Mashru, Devda and clay toys that Patan is famous for; other cultural symbols like the Veer Megh Maya temple, Bhadrakali temple, Behram Khan's tomb are being developed too (A. Patel, personal communication, February 10, 2020). The effects of what the implementation of these plans have on Patan and whether they can induce gentrification can be explored. The current on-field research states that the Charanka solar power plant in Charanka and the Suzuki Motor Gujarat Pvt. Ltd. plant in Bahucharaji do not have any effect on employment in Patan. However, increased road connectivity to Bahucharaji may bring employment to Patan in the long run. The effects of such changes in infrastructure and whether or not they make a difference in Patan can be studied in relation to gentrification.

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Appendices

Appendix A - List of locations visited and people interviewed

1. Panchasara Derasar (7)

- Temple trustee (1)
- Temple office staff (1)
- Temple devotees (2)
- Temple Guard (1)
- Auto Rickshaw walla (1)
- Saint (1)

2. Settlements around Panchasara Derasar (2)

- Residents near Panchasara Derasar
- 3. Collector's Office (1)
- The District Collector

4. City Point and New Market (18)

- Shopkeepers (3)
- Restaurant Owners (3)
- HDFC employee (1)
- Pharmacist (1)
- Street Vendors (10)

5. Tirupati Plaza (1)

- Tailor
- 6. Palika Bazaar (7)
- Shopkeepers clothes shops, tattoo parlour, light fixtures, solar panels dealer
- 7. Sahastraling Talav (7)
- College students (2)
- Young teacher (1)
- Workers (gardeners + security) (3+1)
- 8. Veer Megh Maya temple (1)
- Pandit
- 9. Patan Jain Mandal (1)
- Trustee

10. Rani ki vav (7)

- Tourists (3)
- Security guard (1)
- Tour Guide (1)
- Vendors outside the Rani ki vav (2)
- 11. Sati Jisma temple
- 12. Patola house (3)
- Employees (Artisans) (2)

- Owner (Salvi family member) (1)
- 13. Patan city museum

14. Settlements around Rani ki vav (17)

- Residents in the nearby settlements
- 15. Hemchandra gyaan mandir (1)
- The librarian

16. Gyaan Sanstha Library (1)

- The librarian

17. Hemchandracharya university (10)

- Architecture students (5)
- Jainology Professor Dr. Dilip Patel (1)
- Social Work Professor Dr. Nishaben Patel (1)
- Urban Planning Professor Dr. Meera Chetwani (1)
- Centre for Indian Diaspora Dr. Adesh Pal, Prof. Tapas Chakrabarti (2)

18. Kanasano Pado (5)

- Residents at the settlement
- 19. Tribhuvan nagar society (4)
- Residents

20. Gulshan nagar society (10)

- Residents
- 21. Khau gali (3)
- Food stall vendors
- 22. GIDR Dr. Leela Visaria (skype conference) (1)
- 23. Madhvi Handicrafts shop (1)
- Owner
- 24. House of Mashru weaver (1)
- Owner
- 25. Diamond Trader Mr. Anand Shah (1)
- 26. Old Market
- Clay Handicraft Seller (1)
- Anand Gruh Owner (1)

Total Sample Size = 112

Appendix B - Questionnaire Used for the Interviews

General questions to all (Patan residents):

- 1. Where are you from?
- 2. When did you come/migrate/move here?
- 3. Where did you stay initially? Any particular reason why you moved here?
- 4. Which residence do you stay in, and if you permit, may we visit your community for research?
- 5. How long have you been living/working here?
- 6. Have you seen any changes in the surroundings in the past 20-25 years?
- 7. What is your occupation? (If a homemaker, have you seen an increase in prices of vegetables? Or local small costs? If a priest, how many donations/visits to the temple do you see per week/month and has there been any increase/decrease?)
- 8. What changes have you noticed in the surroundings? Are there more tourists?
- 9. Can you tell me something about Patan?

Temples: (to the priests and trustees)

- 1. What sect do you belong to? (Shwetambar or Digambar) What is footfall? What's the peak time?
- 2. How old is this temple? When was it made?
- 3. Has this temple ever been renovated? If so by whom, when was it renovated and how many times?
- 4. Do you know if any new temples have been built in Patan and if so, which and how many?
- 5. How far do you live from the temple or do you stay at the temple?
- 6. Are there any specific requirements to become a priest? (for example, caste)
- 7. How many donations do you get every week?
- 8. To passerbys:
- 1. Is there growth of temples of any particular religion in Patan? (timeframe needed)
- 2. Have any housing/development societies replaced the space of a temple?

Settlements:

- 1. Do people in your community have similar occupations? (If not, what occupations do they have? Does your residential community comprise with people of your faith or caste or is it mixed? (In this area, what existed before you moved here?)
- 2. Have you noticed any changes in the drainage system? (specifically exposed drains to a proper underground system)
- 3. How many schools (government/private) are in your area?
- 4. Have you heard of any new housing projects?
- 5. Do you feel like there are many tourists visiting Patan nowadays?
- 6. Do you think this housing area is getting more crowded with buildings?
- 7. Do you own a house/rent it?

Hemchandracharya University:

To students:

- 1. Course pursuing (are you pursuing any courses from outside?)
- 2. Why Hemchandracharya University?
- 3. About parents (occupation, if the family is Jain, did they migrate into/out of Patan?)
- 4. Is your future job going to be in Patan or not?
- 5. What sort of job prospects does Patan offer?
- 6. What do you know about the Jain influence on society?

To professors: Development of University (if they have been here for long, growth of the university?)

- 1. Impact of University on Patan (education demography of students, how many students from Patan)
- 2. Impact of Migration and Urbanisation on Patan (same as the previous question)

Hemchandracharya Library:

- 1. When was it established? By whom?
- 2. Descriptive stats How many books? Oldest books? Do they get new books? What all subjects does it cover? How many books on Patan history, Jain books?
- 3. Who funds? Who uses the library?

VK plaza, Tirupati Plaza, Khao Gali:

1. What is your best-selling product? (what is your speciality?)

- 2. Did you rent this place or buy it? Have prices of land increased over time? If so, how much?
- 3. Have you had to increase the prices of your products? By how much? In one year, how frequently does the price of a product change?

Rani-ki-Vav, Sahasralinga Talav:

To visitors:

1. What made you come to visit the Rani-ki-Vav/ Sahastraling Talay?

If the person is from Patan:

- 2. Is there any specific reason as to why you have shifted?
- 3. Do people in your community have similar occupations? (If not, what occupations do they have? Also, can we interview your neighbours? Can you introduce us to them?)
- 4. Does your residential community comprise with people of your faith/caste or is it mixed? (In this area, what existed before you moved here?)
- 5. How have ticket prices changed over the years? If the person is a tourist:
- 1. How is your experience in Patan?
- 2. Have you visited areas near Patan? Do you find Patan unique?
- 3. Why did you choose to come to this place?

Tour guide:

- 1. If comfortable, how much is your salary?
- 2. What kind of work do you do here?
- 3. What was your occupation before working at this place? (Why did you join this place?)
- 4. How do you commute? (Where do you live now? If faraway, how do you travel? If this person has been working for a long time: did you have transport facilities in the starting? Do you have them now?)
- 5. Have the number of visitors increased or decreased? (Why do you think this change happened?)
- 6. Has the price of tickets increased or decreased?

Patan Patola Heritage:

To the Manager:

1. When and why did the Patola heritage become an important historical artefact of Patan?

- 2. We just saw the Rani ki Vav and saw similar designs on Patola sarees- (conversation continues)
- 3. Did the recent UNESCO heritage declaration of Rani ki Vav lead to a change in Patola sales?
- 4. Have the Patola designs changed/become less complicated over the years? If so, how?
- 5. The revival of Patola is happening in Ahmedabad, etc., what do you think about this?
- 6. How do you think has affected the sales of Patola sarees in Patan?
- 7. What is Patan doing to maintain Patola heritage?

To the artists:

- 1. How long have you been making sarees?
- 2. Is this a family tradition?
- 3. We heard of machines making Patola sarees in Ahmedabad, what do you think about this?
- 4. Where do you get your materials from?
- 5. If design/material is the same, how is it affecting tourism in Patan? (if the design changes are affected/inspired by external factors and how)

Collector's Office, Mayor:

- 1. In your opinion, what is the most significant change which has happened in Patan in X years?
- 2. What do you think is the impact of the following on the residents of Patan and the number of tourists visiting Patan: Rani ki Vav, Hemchandracharya University, Charanka Power Plant, Patola, significant temples such as Shankheshwar.
- 3. In terms of policies which have been made over the past X years, how are the primary locations of implementation (if any) chosen?

Economic Policy:

- PM Mudra Loan Scheme: How many businesses have applied for this? More specifically, how many of them applied for Shish, Kishor and Turun Loans?
- Under the MPLAD Scheme, has the MP rep for Patan sanctioned projects- if yes:
 - a) Which project(s)?
 - b) When is the project due to start and finish?
 - c) The estimated cost of the project?

- What are some of the recent activities completed under the Gujarat Social Infrastructure Development Society?(https://planning.gujarat.gov.in/director-human-resource.htm)
- Under the 20 Point Programme, there is a mention of "development of slums". What has been done towards this?

Appendix C

Table C1

Population in Patan Taluka (Total and Jain)							
Year	Percent/ Total	Total	Total Jains	Males	Jain Males	Females	Jain Females
2001	Total	295621	2432	154429	1200	141192	1232
	Percent	100	0.82	52.24	49.34	47.76	50.66
2011	Total	449480	1971	233211	1008	216269	963
	Percent	100	0.44	51.88	51.14	48.12	48.86
Increase (%)		52.046	-18.956	51.015	-16	53.1737	-21.834

Table C2

Decadal Change in Population				
Region	Type	Decadal Change(%)		
Gujarat	Total	19.3		
	Rural	9.31		
	Urban	36		
Patan	Total	13.6		
District	Rural	12.5		
	Urban	17.9		

Table C3

Migration to Patan by last region of residence					
Region	Persons	Males	Females		
Gujarat*	482,178	117,612	364,566		
Patan district	296,400	75,768	220,632		
Other states	10,178	4,258	5,920		
Other countries	787	385	402		
*excludes Patan district					

Table C4

Migration to Patan by reason for migration						
Reason	Total	Males	Females	Males %	Females %	
Work	22682	17425	5257	76.82	23.18	
Business	5531	4575	956	82.72	17.28	
Education	3614	2383	1231	65.94	34.06	
Marriage	279925	2306	277619	0.82	99.18	
With Family	47716	28936	18780	60.64	39.36	
Other	85447	45710	39737	53.50	46.50	

