

Understanding Untouchability

A Census of Discriminatory Practices in 1655 Villages within Gujarat, India

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Untouchability (an ancient form of discrimination based upon caste) is an extremely sensitive issue within India. It is, at once, *lived* by all who live there – as victims and challengers (approximately 170 million Dalits, four percent of the world’s population by conservative estimation) as well as beneficiaries, perpetrators, bystanders and witnesses (approximately 830 million); *justified* by the most important texts of Hinduism (e.g., the Vedas and Manusmriti); *banned* within some of India’s most important legislation (respectively, the Indian Constitution and Atrocity Act of 1989); and, *viewed* as one of the most divisive issues in the country’s history, bringing into conflict two of the most important political leaders – Mohandes K. Gandhi and Dr. Bhimrao Ramji Ambekdar. Indeed, it is almost impossible to experience or even think about India without some aspect of untouchability being involved – so infused is it into the very essence of the country.

Untouchability is also an extremely important issue outside of India. Not only does the practice put the country in violation of a wide variety of international laws and norms of acceptable behavior but, given the growing importance of the Indian state in the world, it also undermines or has the potential to undermine the political, moral and legal credibility of the country – this is especially significant as India is the world’s largest political democracy and one of the most important economies.

At the same time that untouchability is central to India, however, it is a topic that *is* and *is not* addressed all the time. For example, at all levels of government (from State assembly to the Parliament) political “reservations” were introduced in order to assist Dalits¹ (Scheduled castes) as an equalizing measure to ensure that deep-rooted caste discrimination could be eliminated – in proportion to their population. At the time of introducing electoral reservation, however, it was stated in the Parliament that this system of redress should not be required after 10 years since it

was expected that by that time the desired social equality would have been achieved. Today, nearly six decades after the introduction of the electoral reservations, all political parties still deny the existence of untouchability and other forms of caste discrimination but, routinely (every 10 years or so), they accept and vote for continuation of electoral reservation for the Scheduled caste. Similarly, religious institutions publicly deny the existence of untouchability practices but continue segregation within their places of religious worship according to touchable and untouchable caste. Neither Christianity, Islam nor Sikhism (in their institutional forms on Indian soil) are exceptions to these trends and, in fact, they are in no way different than Hinduism although the intensity may differ. Finally, the judiciary of India is not expected to either publicly accept or deny the existence of untouchability practices. Unless and until such activities are manifested through a criminal offence or a public interest litigation is filed, the judicial system is not expected to address the issue at all. Indeed, during six long decades of Indian national independence one would hardly find a *suo moto* action on the part of the judicial institution that has inquired into the status of untouchability. The law is equipped to handle a crime but not the prejudices associated with it.

Exactly how bad is untouchability within India? In line with the discussion above, we do not really know the answer to this question. Although banned by the constitution there was initially no definition and/or measurement provided. Accordingly there could be no assessment or attempt to address abuses. Later, some definition, measures and monitoring bodies were provided within the Atrocity Act of 1989 but attention was only given to the most egregious, most violent, offences – atrocities (i.e., torture and murder). If one looks elsewhere, however, it is possible to find a wider variety of practices. For example, within religious texts such as the Vedas or Manusmriti diverse social sanctions are mentioned and within principally

anthropological research one can identify a diverse number of activities that are associated with untouchability (e.g., Ambekdar [see Thorat and Kumar 2008 for review]; Deliege 1999; Dumont 1971; Scott 1985; Gupta 2000). An even greater number of practices are found within the Dalit community itself (e.g., in its homes, tea houses, literature and music). Here, one can identify activities and conditions which are violent as well as non-violent, extending into politics, economics, religion and the smallest aspects of everyday life (i.e., eating, walking, talking and dressing).

Unfortunately, the broader conception of untouchability is never included within popular discussion of the topic or within periodic evaluations that are undertaken by those responsible for monitoring such behavior. To date, there has been no rigorous examination of untouchability undertaken in a way that captures the complexity of the problem across distinct practices as well as geographic locale. The implications of this limitation are significant. Because of the lack of information and discussion, there is systematic underestimation of untouchability within Indian life, the perpetuation of a wide variety of abuses is allowed to continue with impunity, there is a generally lack of awareness as well as sensitivity to the pervasiveness of the problem and, following from this, there is limited political will to address as well as change the situation. In addition to these problems, the lack of rigorous examination precludes an assessment of how untouchability is structured as well as what factors contribute to the reduction and/or end of caste discrimination. While the second issue is obviously important to victims, human rights organizations and those concerned with social justice, the first is interesting because there are a wide variety of arguments concerning exactly what untouchability is. For example, there are scholars like Dumont (1971) who argue that untouchability is fixed, uniformly adhered to and practiced throughout India; there are scholars like Gupta (2000) who argue that untouchability is

so highly variable that there are likely no patterns that hold across the country; finally, there are scholars like Ambekdar who argue that untouchability is structured but that it evolves in line with local context. Still others focus on the dimensions of untouchability: i.e., whether it is gender or subcaste specific, whether it is fundamentally about exploitation, humiliation and exclusion or whether it is oriented wholly around the issue of touch and impurity. A systematic evaluation of untouchability and the development of accurate measures would go a long way to advancing both of these agendas.

Within the current research, we present the results of a 4-year research effort into 1655 villages in Gujarat which yielded over 8,000 forms and responses from about 27,400 individuals. This study was undertaken between 2005 and 2008, involving members of Navsarjan Trust, researchers from The Kroc Institute at the University of Notre Dame and Dartmouth College/University of Michigan and human rights advocates from the Robert F. Kennedy Center for Social Justice (formerly known as the Robert F. Kennedy Memorial). Within this paper, we will discuss how untouchability has generally been conceived, how others have approached measurement of this phenomenon, what we have done to measure caste discrimination, what we found with regard to one aspect of untouchability (“religious discrimination”) as well as a first look at the dimensions underlying it. We conclude with a discussion of what our research will do in the future as well as what the broader field regarding discrimination and social control/repression should address in the future.

Conceiving Untouchability

Although there are numerous ways to think about this topic, we have relied upon one of the foremost scholars on caste and caste-based discrimination – B.R. Ambekdar. According to

Ambekdar, traditional untouchability is denoted by four general characteristics where, in effect, a socio-economic order is made sacred.

First, different groups are designated whose membership is initially affixed by class and/or birth.

Briefly, the *varna* system divided the ancient Hindu society into initially four, later five, distinct *varna* (castes), that are mutually exclusive, hereditary, endogamous and occupation specific: *Brahmins* (priests and teachers), *Kshatriya* (warriors and royalty), *Vaisya* (traders, merchants, moneylenders) and *Sudras* (those engaged in menial, lowly jobs), and those doing the most despicable menial jobs, the *Ati Sudra* or the former “untouchables” (Deshande 2000, 383-4)

While most familiar to outsiders, Deshande quickly adds that

(t)he operative category that determines the contemporary (Indian) social code... is the *jati*. (Traditionally), (t)here exist 2–3000 *jatis*, that are also called castes (and share the basic characteristics of the *varna*), and it is tempting to think of *jatis* as mere subsets of *varna*. However, *jatis* follow a much more complex system of hierarchy and rules of conduct towards each other. A one to one correspondence between *jati* and *varna* (note the uncertainty in the number of *jatis* as opposed to the certainty in the number of *varnas*) does not always exist and thus, it is not unusual for a given *jati* to claim a coveted *varna* status nor for this claim to be disputed by other *jatis*.

Second, group reproduction is sustained through endogamy. There has historically been a degree of hypergamy, as individuals attempt to marry at their level or higher, but generally the practice of endogamy is followed.

Third, occupations, rights and obligations are hierarchically allocated across castes from “pure” (representing the best that humankind has to offer) to “impure” (representing the worst). Indeed, the latter is believed to be so far from the former that it is commonly viewed as inhuman and outside the system of relations between “civilized” beings. Relevant to this aspect of untouchability concerns the intricate relationships between castes. Although seemingly isolated, different castes are highly connected, so much so in fact that the rights of one directly involve the obligations and deprivations of another. For example, for one group to participate in a specific ritual another group has to play a specific role.

Fourth, in order to assure adherence to the relations identified above, a detailed system of social control was created. This involved a wide variety of sanctions from boycotting (leaving someone completely alone within the community for varied amounts of time) to murder (physically removing someone from the community and world permanently).

Now, it must be clear that although these comprise the elements of untouchability,² opinion was quite mixed regarding how variable they were adhered to throughout India at any one point in time and across time. For example, Dumont (1971) falls on the side of strict uniformity and Gupta (2000) falls at the other extreme, maintaining that each locale is unique. Ambekdar’s work falls somewhere in between these two, noting that there is extensive variation throughout India but each evolves as a function of local context. Additionally, scholars have noted a change in this system over time; specifically, this concerns the movement from the varna to the jati system. As is discussed quite extensively within the literature, the system of relationships identified within the former is associated with a feudalistic political-economic context. As this system changes, however, and there is greater flexibility in economic activities, there are some changes in untouchability. For example, as the political-economy changes not all

individuals in the warrior-caste end up in the military. Moreover, as different parts of India take advantage or suffer from distinct natural endowments, diverse parts of the country develop somewhat uniquely influencing the structure and practice of caste discrimination.

Conceived in this manner, researchers interested in untouchability are guided to operationalize specific types of behavior within Indian society. Taking the different elements of Ambekdar's argument, one could look at distinct aspects of the problem. For example, one could look at the placement of caste on birth certificates or advertisements for marriage. This is not largely done. Rather, individuals have tended to ignore the establishment and production phase, instead focusing on the enforcement of group separation. One could highlight whether or not specific castes are forced to engage in specific occupations – eliminating their right to choose employment. Here, it would be noted if Dalits are forced to perform duties for public gatherings like playing drums or leading processions and if they are restricted from changing jobs. Alternatively, one could highlight whether or not the different interactions between castes are policed in some manner. For instance, some (like the federal government of India) highlight whether or not sanctions are imposed for intermarriage. Here, it would be noted if the couple is ostracized within the community, cast away, physically assaulted or murdered. Others highlight whether Dalits are refused access to temples, public wells and tea shops or subject to other forms of discrimination like sitting on the floor in the presence of higher-caste Hindus and removing shoes while moving through specific parts of town.

While many of the sanctions here should be familiar to anyone that has read James Scott's book *Weapons of the Weak*, the sheer number of practices relevant here is staggering (discussed below).

Previous Research on Caste Discrimination

While there is a large body of anthropological and historical work on untouchability in one or a few locales throughout India (e.g., Dumont 1971; Deliege 1999), there have been only a handful of scholarly investigations of the practices involved with caste discrimination that attempt to clearly define the concept and then systematically compile data across practices and locales. These efforts draw and improve upon one another, in part attributed to the relatively small community engaged in this type of work. Our study sits as the latest, most comprehensive and largest of these efforts. This research sits in stark contrast to the relatively large amount of effort undertaken to catalog untouchables themselves, something that has a somewhat longer as well as contentious history (Charsley 1996).³ We provide a sampling of the relevant literature below.

(Insert Table 1 About Here)

By most accounts, one of the earliest and most important efforts to measure the practices of untouchability was conducted by I.P. Desai in 1971 (published in 1976). This study was interested in gauging how much caste discrimination had changed in “public” (i.e., those that were government controlled) and “private” spheres (i.e., those controlled by non-governmental actors like shops and homes) following increased government efforts to control such behavior. To examine the topic, Desai examined 69 villages in Gujarat.⁴ These locales were selected randomly by size, excluding those that did not have Dalits and those where tribals were predominant.⁵ Within this study, 24 different aspects of untouchability were identified:

Public

- 1) Sitting with Panchayat
- 2) Sitting at primary school

- 3) Use of water facility
- 4) Eating at primary school
- 5) The relationship between Savarna and untouchables teacher
- 6) The relationship between Savarna teacher and untouchable
- 7) The relationship between Savarna and untouchable student
- 8) Housing an untouchable teacher in a village
- 9) Buying stamps at the post office
- 10) Delivering letters by post
- 11) Traveling on a bus/public transportation

Private

Drinking

- 12) Facilities common source
- 13) Facilities separate
- 14) Entry into temple
- 15) Entry into Savarna house
- 16) Entry into shop
- 17) Giving/receiving money in shop
- 18) Service of barber
- 19) Buying pots
- 20) Tailor taking measures
- 21) Paying wages
- 22) Untouchable working with Savarna in field
- 23) House construction work

24) Movement on road

Interestingly, Desai is not clear on exactly why he selected these manifestations of untouchability. One could draw upon important religious texts which discuss the topic (e.g., the Vedas or Manusmriti) or explicitly reference field work and focus groups but none of these sources are provided. Data on the relevant practices were compiled from answers that were provided to a series of questions about the practices identified above undertaken within Dalit communities in conjunction with direct observation of the most readily observable activities.⁶

Following this study, there was a rather extensive effort put forward by Parvatharma (1984). While this effort considered more villages than Desai and added 38 urban centers (yielding 3330 respondents), it is not yet clear exactly how many distinct aspects of untouchability were explored, what method was employed or how the sample was selected.

More typical of this area of research are the works of Venkateswarlu (1990), Tripathy (1994) and Khan (1995). These scholars explored fewer locales (Khan is the exception here) with smaller numbers of respondents and with less clear methodologies.

In 1995, Ghanshyam Shah (1996) returned to Desai's villages and replicated his analysis. This was done to see what had changed in the twenty years in between the two efforts. Shah employed the same approach to sample design and data collection. Similarly Jodhka (2002) engaged in a largely comparable effort in terms of scope and methodology.

Five years later (between 2001-2002), Shah joined by Harsh Mander, Sukhadeo Thorat, Satish Deshpande and Amita Baviskar (2006) engaged in the most ambitious effort to assess untouchability yet undertaken. Here, in an effort to provide "a comprehensive and accurate picture of the indignities and violence that continue to be perpetrated on a substantial segment of the Indian citizenry" (Shah et al. 2006, 10), they examined 565 villages – 50 from 11 of the 17

states in India at the time. These locales were selected initially by the presence of a specific organization that was going to assist them with collecting data (ActionAid and affiliated institutions). Locales were further selected by a complex methodology where random samples were drawn at first the state, then district and then taluka. They did this while also being attentive to the size of the Dalit population. This study increased the number of distinct untouchability practices under examination from 24 to 31 types/64 forms.

Limitations and a New Direction

While these efforts are clearly important for advancing our understanding of what untouchability is and how it should be studied, there are certain limitations with this work that influenced how we constructed and carried out our study.

First, different from Shah et al. (clearly the most advanced of those undertaken) we confined our study to one locale – Gujarat. Differing from the earlier work of Desai, Shah and Shah et al. who all focused on the same locale, however, we significantly increased the number of villages that were examined. This allows us to explore variation within the state and estimate a more representative sample approaching 10% of all villages within Gujarat (1655 out of 18,000 in the period of interest to the study).

Second, the studies identified above tend to focus on a small number of untouchability practices. We identify a larger number of activities through a combination of reading relevant catalogs, extensive field research and numerous focus groups. This allows us to be more comprehensive than previous efforts and explore the variation as well as complexity that many argue exists. Finally, we attempt to move beyond discussing individual practices and attempt to examine the structure of untouchability, gauging exactly how the different individual practices relate to one another.

Third, the earlier studies suffered from a limitation of consistent presence within the relevant villages. Specifically, from what we can determine, each study team employed by the different efforts was only in place for a matter of days before they departed. This is problematic when the principle means of data collection are community-level meetings whereby a series of questions are answered and direct observation of untouchability is undertaken. It is possible within such a circumstance for individuals to be hesitant to answer the questions posed (in an honest manner) and it is possible that villagers are simply on their best behavior while the strangers are in town. By relying upon personnel within a social movement organization that is already present in the villages in question on a regular basis (in some context over twenty five years), we feel that it is even more likely the case that honest and open answers would be provided.

Fourth, within the current research, we have deviated from earlier approaches and relied exclusively upon community discussions as our data source. This avoids the conflation of that which is discussed with that which is observed, a problem that plagues prior research. In addition to community level discussions, we also engaged in household level meetings of a randomly selected population (some in the same villages but the majority in other villages). This was done to explore how much/how little people were willing to speak in a public setting. This is the first household examination of the topic. Finally, we explored other potential biases in reporting by stratifying both community and household discussions by age, gender and in the case of community meetings subcaste. This was done because it was believed that that in certain contexts (e.g., all female or all young people) one would be more inclined to say certain things. Again, this is the first time that such an examination has been conducted.

While we only report the results of the census that we conducted in the current paper, we are not reliant upon this method exclusively. Members of our research team have just completed their direct observation of a large number of untouchability practices. Additionally, we are currently in the process of adding a third component that has not previously been attempted: an international committee of observers (like election monitors) in order to assess caste discrimination within a randomly selected set of villages. This information will be incorporated within our research in the future.

Toward an Understanding of Caste Discrimination

From our evaluation of religious scriptures, legal and political documents, ethnographic work as well as village focus groups, we identified eight different categories of untouchability: 1) water for drinking, 2) food and beverage, 3) religion, 4) touch, 5) access to public facilities and institutions, 6) caste based occupations, 7) prohibitions and social sanctions and 8) private sector discrimination, as well as ninety-eight distinct conditions/practices. For convenience and easy consultation, these are listed in the table below and defined in Appendix 1.

Table 2. Untouchability Practices Addressed in Census, by Type

1) Water	4) Caste-based Occupations	7) Public Facilities
Water tap located in ND area	Tying festoons	Burial ground
Water for Panchayat members	Saad/voice calling	Midwife for Dalits
Public pub	Collect kafan in cemetery	Dalit Midwife/nurse
Water pot in school	Melo	Panchayat office
Village wells	Scavenging	Sitting on Chaura
2) Food	Dabhdo	Gauchar land access
Tea for Dalits in ND houses	Datan	Gramsabha participation
Food for laborers in farm	Dhol	Multi-purpose co-op soc.
Community meals in village	Disposal of carcass	Milk dairy
Liquor pub	Indhoni	Washing ghats
Tea for Panchayat members	5) Touch	Public bathing places
At village tea stalls	Touching water pots/utensils	Walk on public road sidestepping

Mid-day meal	Entering ND house	Sitting together in school
Shops	Touching food	Ration shop
Soda pub	Sitting on cot/chair	Equal treatment to Dalit teachers
Vadu for scavengers	Snuff	Postman
Dalit cook in mid-day meal	Shaking hands	Chair for elected Sarpanch
Food for ND beggars	Sprinkle water on home entry	Primary health center
3) Religion	Sprinkle of water from dalit body	Chair for Dalit Talati
Touching worship articles	Eave teasing Dalit women	Bus services
Mata no Madh	Accidental body touch	Halt at Dharmshala
Temple inauguration	Touching vegetables in shop	Dalit postman
Katha/Parayan	Bidi smoke passing towards ND	8) Practices/Social Sanctions
Prasad	D teacher touch ND child	Participating Navratri Garba
Satsang	Sprinkle on money at shop	Calling Babu
Temple entry	Smoking pipe	Touching feet of baa Dalit Bride
Dalit religious places	6) Public/Private Discrimination	Sitting on Horse
Services of Dalit holy women	Hiring cooking pots for wedding	Attending Panchayat Meetings
Religious services by ND priests	Barber	In shirt/orments/goggles
	Potter	Musical Instruments for Wedding
	Tailor	Drive Through the Village in Vehicle
	Drinking water supply	Vacate Seat in Bus
	Street lights	Mundan on Baa's Death
	Pvt doctor service in village	Inter-caste Marriage
	Private owner transport system	Hiring House in ND Locality
	Employment in home-based work	Phuleku
	Dalit as shop owner	Passing ND area with Dead Body

Our research design resulted in the following breakdown:

Individuals Asked Questions

in Community

1) Full Community

Individuals Asked Questions

in Household

1) Full Household

2) Age-wise Stratification

2) Age-wise Stratification

3) Gender-wise Stratification

3) Gender-wise Stratification

4) Subcaste Stratification

Each will be discussed briefly below. The census instrument itself is available on a webpage being developed for the project.⁷

The Community Census

To begin the census, we choose one village per taluka for Community-Level pre-tests (as there are 56 talukas we had 56 forms completed). For these censi, individuals were asked questions in community meetings that brought together the whole Dalit community. This effort took approximately one month with each form taking approximately four days to complete. After these were all finished, enumerators were brought back for a discussion/debriefing (discovering what did and did not work).⁸

Following additional training, enumerators returned to the field for the next round of Community-Level censi. In an effort to address possible issues of censoring and provide us with additional information about what Dalit experienced but might not communicate, some of these meetings involved the full Dalit community whereas others were stratified/separated in some manner. For example, in some villages, the audience was separated by gender, where men and women were separated into two groups and questions were asked. In others, the audience was separated by age and three groups of young (less than 30), middle-age (31 to 50) and older (above 51) were created. In still others, the audience was separated by subcaste. The stratification assignments were determined randomly. All told, it took approximately two months to complete the census in 1,405 villages with 2,151 individual forms.

The Household Census

After the Community-Level, between March 2007 and September 2008, we began to address the Household-Level census. Again, in an effort to address possible issues of censoring and provide us with additional information about what Dalit experienced but might not communicate, some of these meetings involved the full Dalit household whereas others were stratified/separated in some manner. For example, in some households, occupants were separated by gender where men and women were separated into two groups and questions were asked. In others, the household was separated by age and the same three groups as above were created. Once again, stratification assignments were determined randomly. Over the relevant period, the research team checked, scanned and edited 3311 forms from 250 villages.

In total, over a 2 year-9 month period, 1660 villages were examined with 5462 forms. This is provided below.

Community Census			Household Census		
Types of Stratification	Villages	Forms	Types of Stratification	Villages	Forms
No Stratification	752	752	No Stratification	122	1026
Gender	240	444	Gender	62	1033
Age	196	506	Age	66	1252
Subcaste	217	449			
Total	1405	2151		250	3311

Adopting this approach to measurement, we were attempting to address several problems that frequently plague this type of effort. Three are discussed below.

Potential problem 1: Is it possible that there are some aspects of untouchability that were missed that could bias the analysis in some way? In terms of face validity, we are comfortable

that we have identified the most frequently discussed and most commonly understood conditions and practices associated with untouchability. This said: it is a difficult task to measure something that is lived but not generally discussed, measured and/or analyzed. We thus offer the list above as the opening of a discussion and not the last, definitive statement on the issue. Additionally, we were concerned with Dalit telling us what did and did not exist within their locales (cities and villages) and not with their opinions about the various conditions and practices that they were subject to. Accordingly, our research is intended to be a “census” of untouchability and not a public opinion “survey.” We are thus not interested in how Dalit feel about discriminatory activity directed against them. Although this is extremely important, it is not our interest in this research project to evaluate these opinions. Rather, as both domestic and international law have identified untouchability as being illegal, we have focused on what conditions/practices exist as a first step effort toward addressing relevant criminal activity.

Potential problem 2: Is it possible that Dalit would not speak with us? Yes, we wondered about this a great deal and in order to address it we developed a relatively complex research design. Specifically, we focused on several factors. For example, we focused only on locales where one Dalit advocacy organization (Navsarjan Trust or NT) was present and had been active. This focus was necessitated by the fact that Dalit would be more likely to feel comfortable with someone that had been involved and was aware of their community as well as their concerns. To date, NT is present within 3100 villages in the state of Gujarat. Although Navsarjan Trust was active in all of these locales – in some capacity, the organization did not come to be present within them in the same way (e.g., some villages were entered as part of the natural extension of the organization to another locale and some villages were entered because there was some crisis involving the Dalit such as a rape or murder). Additionally, NT was not

equally active in all places to the same degree (e.g., some villages were the site of multiple campaigns whereas others were not). These issues regarding the varying contact that NT has with a specific locale is something that we are consistent attentive to.

We conducted both community-level as well as household-level censi involving the whole Dalit population within a village. We randomly selected which locale would be subject to each type of census. This approach was taken because it is possible that individuals would be more comfortable speaking in a smaller environment and in their own homes. With the adopted research design we can assess whether or not this is the case as well as how much this influences the results. Related to this, we addressed other potential censoring issues as well: e.g., gender, age and subcaste. These divisions were explored because it is possible that individuals would be more comfortable speaking amongst their peers than within a mixed group. Again, we randomly selected which locale would be subject to which type of stratification.

To assess the age-effects, we simply estimated regression models for each of the indices (8 types of untouchability) as a function of the interaction between household-community survey and age-group. Here, though we originally coded five age groups, the youngest three groups (<12, 13-19 and 20-30) were combined because of small numbers of observations on the first two categories. The remaining categories are 31-50 and >50. What we find is, that household surveys often identify significantly lower levels of untouchability. However, we found no effects of age, once the household-community distinction was taken into account. While there could be reason to think that younger or older people might experience untouchability more acutely, there is no evidence supporting hypotheses like these.

To assess gender effects, we engaged in a similar effort to the one used for age. Here, however, we considered the interaction of household-community distinction with respondent

gender. Again, we found no significant effects. Once the household-community distinction was taken into account, there were no significant differences in the scale scores of men versus women.

To assess sub-caste effects, we grouped the sub-castes into four groups – Vankar, Rohit, Valmiki and others (Christian, Garo-Brahmin, Nadiya, Nat, Senma, Tirgar and Turi) . Here, we find significant effects. Specifically, in all cases, the Valmiki report higher levels of untouchability than all other sub-castes. Given the placement of the Valmiki at the bottom of the Dalit hierarchy, this finding seems quite reasonable. The other two identified sub-castes (Vankar and Rohit) seem to behave quite similarly – often identifying higher levels of untouchability than those sub-castes grouped together as “other”. The sole exception to this is the happens with caste-based occupations where the Rohit identify significantly less untouchability than any other group.

Ideally, we would prefer that all of these demographic distinctions produced null findings – meaning that all segments of the Dalit population are unified, on average, in their assessment of untouchability. However, the effects we do find are justifiable and in no way impugn the conclusions made above regarding the index.

Potential Problem 3: Is it possible that the villages we have selected are somehow not biased? Well, there are two ways of addressing this concern. First, we can compare locales where NT is present against those locales where NT is not. Second, we can compare Gujarat against the rest of India. When these comparisons are made, we find that the villages we focus upon are not fundamentally different from those that are not highlighted.⁹

Why create an index?

Once the data were organized in electronic format, there were 98 variables representing untouchability practices directed at the Dalit community from Non-Dalits and 99 variables representing practices directed at the Dalit community from within the Dalit community itself. It is possible to use these 98 and 99 variables to say something interesting about untouchability assessing the villages that experience each of the practices. However, this requires consideration of an enormous amount of data and space to go over each variable individually (something that has been the standard way of presenting thus far). Adopting this strategy, however, assumes that there is no structure in either community or household responses to the questionnaire. It may be the case though that the variables do exhibit some underlying structure. That is to say, there may be interesting inter-relationships between the variables representing untouchability practices. If this structure exists, all of the information in the responses can be summarized with much fewer variables – making the tasks of presenting, interpreting and understanding the data much easier (Jacoby 1991).

How Should an Index be Created?

The objective of the study is to assess the pervasiveness of untouchability in eight different domains in the studied villages (water, food, religion, touch, access to public facilities, caste-based occupations, practices/social sanctions and public/private discrimination). Since there is no such thing as an “untouchability ruler,” it is impossible to measure the true state of untouchability directly. The process that must be undertaken is akin to a sophisticated game of “20 questions”. In this game, one person thinks of an object and the other tries to guess what the object is by asking a series of questions regarding the properties of the object. The idea is that once enough is known about the properties of the object, the player can make a very educated

guess about what the object is. This study seeks to ascertain the pervasiveness of untouchability by asking households and communities a series of questions about the properties of their everyday lives – such as “can you get water from the village well without assistance?”

To continue the analogy, there needs to be a system whereby the answers to the 20 questions are used to make a guess about the pervasiveness of untouchability. The answers to the questions need to be aggregated into a single measure of untouchability in each of the eight domains. Often, when scholars want to summarize the information in a number of variables with a single scale or index, they add the variables up. Doing this with the untouchability data would amount to adding up the number of untouchability practices existing in the village. The result would be an estimate of the true, but unobservable, level of untouchability in each village. The extent to which exercise yields a reasonable and useful result is determined by the fit of the data to a statistical model. In essence, if the data fit the model, it is an indication that the questions asked have provided valuable information about the nature of the object (untouchability, here). There are two alternative models that allow us to evaluate hypotheses like these – the “summated rating model” and the “cumulative scaling model.”

The summated rating model (McIver and Carmines, 1981) suggests that each variable is a potentially error-laden realization of true untouchability. Each question gives us a sense of the pervasiveness of untouchability practices, but none gives an error-free estimate of this quantity. This model assesses the inter-relationships between the variables with a measure called Cronbach’s alpha, which relies on pairwise correlations to characterize these inter-relationships. If the data “fit” the model perfectly, then there would be just two types of villages – those that experience *all* of the untouchability practices (in a single domain) and those that experience *none* of the practices (again, in a single domain). While it is not necessarily wrong to use this model,

the idea that the villages would probabilistically fit into one of these two ideal types is not particularly appealing.

The other alternative is the cumulative scaling model (Mokken, 1971; Sijtsma, 1998; van Schuur, 2003). Where the summated rating model can be appropriately used with variables for which correlations are a reasonable measure of association (i.e., ordinal and interval-level variables), the cumulative scaling model is only appropriate for categorical variables and is most often used with a series of binary responses. The cumulative scaling model uses two-way cross-tabulations to assess the inter-relationships between variables. The model assumes that affirmative answers to the questions are cumulative in the underlying trait. That is, the more of the trait that is possessed, the greater the number of affirmative answers to the separate questions. The quintessential example is a math test. Imagine that there are four questions, one each covering arithmetic, algebra, geometry and calculus. If mathematical knowledge is cumulative, in the hypothesized way, a person who correctly answers the calculus question should also be able to correctly answer all of the other questions. A person who fails to correctly answer the arithmetic question is unlikely to get the calculus question right. Someone who gets the algebra question right and the geometry question wrong should get the arithmetic question right and the algebra question wrong. Thus, the questions can be arrayed from “easiest” to “most difficult” and the summary of a student’s math knowledge is the most difficult question correctly answered. Since it is hypothesized that untouchability items accumulate and they are binary (yes/no) answers, the cumulative scaling model is used.

How the Cumulative Scale Works

To illustrate how the scaling procedure works, consider untouchability between non-Dalits and Dalits in the domain of water. There are five items in this domain – 1) village wells,

2) water tap in non-Dalit area, 3) public pubs, 4) water pot in school and 5) water for Panchayat members. Here, it is not intuitive to think of these practices as “easy” or “difficult,” rather we can think of them as more common and less common, the former standing in for easy and the latter for difficult. We can array the water items by the proportion of affirmative answers in the sample of villages. Consider two possible types of patterns in the data (situation 1 and situation 2 in Table 3 below). In situation 1, the responses are not strongly patterned – the affirmative responses do not accumulate. If the variables in situation 1 were summed, the result would indicate the number of untouchability practices experienced; however, knowing that a village experienced three practices *would not provide any information as to which three were experienced*.¹⁰ Implicit in the scale result is that each village with the same scale score is similar (i.e., has a similar untouchability experience). In situation 1, this is not necessarily the case. There are three different villages that experience three practices. Since these villages experience three different practices, it would only make sense to give them the same score if the untouchability practices were all roughly similar in all important aspects – thus any three practices would induce the same experience. In situation 2, the responses to the questions are strongly patterned. For example, those respondents who identified “water for Panchayat members” as practiced, also indicated “village wells” and “water tap in non-Dalit area” as practiced. The responses in situation 1 would not fit the cumulative scaling model very well and those in situation 2 would fit it perfectly. In situation 2, every village that scores a three, will likely experience the *same* three practices. Thus, all of the information in the five variables in situation two can be perfectly summarized with one variable. To put it differently, not only does the number indicate how many practices exist, if the model fits, it also indicates *which* practices are present.

Table 3: Hypothetical Responses to Water Items

Table 3: Hypothetical Responses to Water Items												
	Situation 1						Situation 2					
Respondent	Water tap in ND area	Village Wells	Water for Panchayat	Public Pub	Water Pot in School	Sum	Water tap in ND area	Village Wells	Water for Panchayat	Public Pub	Water Pot in School	Sum
1	1	0	1	0	1	3	1	0	0	0	0	1
2	1	1	0	1	0	3	1	1	0	0	0	2
3	0	1	0	1	1	3	1	1	1	0	0	3
4	1	1	0	1	1	4	1	1	1	1	0	4
5	1	1	1	1	0	4	1	1	1	1	1	5

To understand how the scale works, it is important to look at the cross-tabulation of two variables, for example “water pot in school” and “public pub”. They would look the following way in each of the two situations above. Consider situation two first. Here, there are responses on the diagonal (i.e., “no”-“no” and “yes”-“yes”), but only one of the off-diagonal cells is populated. The one where “Panchayat” is “no” and “public pub” is “yes”. Since “public pub” is the more frequently occurring item, it is reasonable that respondents would experience that practice, but not “Panchayat”. However, it is not reasonable to think the converse would be true, if the data fit the cumulative scaling model. In the first situation, both off-diagonal cells are populated.

Table 4: Cross-tabulation of Hypothetical Responses to Two Water							
Items							
	Situation 1				Situation 2		
		Public Pub				Public Pub	
		No	Yes			No	Yes
Panchayat	No		1		No	3	1
	Yes	1	3		Yes		1

To evaluate whether the data fit the model, we use Loevinger’s H-statistic (Hemker, Sijtsma and Molenaar, 1995; Loevinger, 1948). Without going into details, this is basically a function of the number of cells in the off diagonal represented in situation 2 above as “no” on public pub and “yes” on “Panchayat” – the cell where responses do not make sense if the data fit the model. The H-statistic has an upper bound of one, meaning one is the maximum of the statistic’s range. However, the statistic does not have a constant lower bound. The lower bound is a function of the number of observations in the table. Mokken (1971) suggests a cut-off of 0.3 for each item’s H-statistic and for the overall scale’s H-statistic. That is to say, items with H-statistics greater than 0.3 belong in a cumulative scale together and those with scores lower than 0.3 do not. Further, an overall scale H-statistics of 0.3 or greater suggests that the data fit the model sufficiently well. Greater numbers suggest on average, lower numbers of observations in the unexpected off-diagonal cell.

Now, consider the real data for the five water items. Table 5 shows the proportion of affirmative answers to each question. If the data fit the cumulative scaling model, then those respondents who identify untouchability as being a problem at the village wells will also identify

problems for Panchayat members and for water taps located in non-Dalit areas. However, if the data do not fit the cumulative scaling model, whether or not respondents identify problems at the water tap located in non-Dalit areas will be essentially independent of the respondent's perception of untouchability at the village well.

Table 5: Proportion of Affirmative Responses to Water Items

Item	Pr(Item=1)	H Statistic
Water tap located in ND area	0.714	0.45
Water for Panchayat members	0.627	0.46
Village wells	0.662	0.41
Public pub	0.429	0.46
Water pot in school	0.420	

Table 5 also shows the H-statistics for each item. Those items that have no entry for the final H-statistic are left out of the scale due to H-statistics which were lower than 0.3. The Mokken Scaling Procedure reveals that all items save “village wells” have H-statistics greater than 0.3, so untouchability practiced at the village well does not fit this model, but the other four practices do. To remind, the H-statistics occupy the range from some negative number that is a function of the number of observations to one. Even though these numbers appear to occupy the same range as proportions, they are not and cannot be interpreted as proportions. They are statistics that assess model fit, not pervasiveness of untouchability practices.

Religious-Related Untouchability

Although we have information on eight distinct aspects of untouchability for the purposes of the current paper, we will confine our discussion to one – religious-related caste discrimination. Additionally, although we have information on both higher caste to Dalit discrimination as well as Dalit to Dalit discrimination we will confine our discussion to the

former (vertical caste discrimination). This is the most familiar form, the one exclusively of interest to the Indian government and the one generally of interest to academicians, activists and human rights organizations inside as well as outside of the country.

As designed, there are 10 variables that concern religion. Within this section, we will first discuss the prevalence of the individual practices. Second, we will discuss the nature of the Religious Untouchability Index. Third, we will discuss the spatial distribution of the Index.

Individual Practices

To think about how untouchability is practiced in different villages, it is useful to take a look at the general prevalence of the different forms of caste discrimination (i.e., how likely a particular village is to experience and report a specific form of untouchability). Within the tables below, we have identified these probabilities.

What is immediately clear within from the study is that religious discrimination is almost uniformly reported across most of the villages that were examined. Indeed, with nine out of the ten items with a probability of 90% or greater, it is clear that this form of untouchability is incredibly widespread. Specifically, what do we find?

Table 6: Probability of Non-Dalit to Dalit Untouchability Practices (Vertical Caste Discrimination)		
Category	Item	Pr(Item=1)
Religion	Touching worship articles*	0.973
	Mata no Madh*	0.972
	Temple inauguration*	0.956
	Katha/Parayan*	0.931
	Prasad*	0.923
	Satsang*	0.911
	Temple entry*	0.908
	Dalit religious places*	0.831
	Services of Dalit holy women	0.972

	Religious services by ND priests	0.968
*Items included in the scale as H-statistic is > 0.3, otherwise, when H<0.3, items are not used in constructing the scale.		

Three of the practices relate to temple entry (i.e., who physically can and cannot go into different religious institutions). To address this topic, we asked three questions: Can Dalits enter the village temple (Practice #9 in the Table)? Can Non-Dalits visit and pray in the “Mata no Madh” (Practice #2 in the Table)? This concerns the chief goddess temple in Dalit communities. Can Non-Dalits visit and pray in the other Dalit temples (Practice #10 in the Table)? The answers to these questions suggest that untouchability exists at high levels across all forms. Respectively, the probability of Dalit’s being restricted and/or violated is .908, .972 and .831. In almost all villages questioned, Dalit cannot enter the village temple (.908) and Non-Dalits are freely able to visit as well as pray in one of the most important Dalit temples within the community (.972). In addition to this, Non-Dalits are freely able to visit and pray in the other Dalit-specific temples as well (.831). The imbalance in access is clear.

Another form of religious untouchability concerns participation and the ability of Dalit to fully be included within religious activities. Numerous practices are relevant here.

For example, there are a great many articles that are used to do religious ceremonies (e.g., wood, cloth, utensils, incense). If someone in the temple for the relevant service cannot touch the relevant items, then this individual is not able to fully participate in the specific rituals. Dalit are restricted from doing this in order to prevent so-called “pollution.” To address this question, we asked whether or not Dalits could touch the religious articles that are in use for worship by Non-Dalits? Almost in all villages we find that this form of participation is withheld from Dalit; the score is **0.973** (Practice #1 in the Table) indicating that in almost 100% of the villages Dalit

were not allowed to touch religious items. This variable shows the highest severity of the untouchability practice as against all other variables in this section.

After the religious worship and following an offering to the relevant god, food is distributed among the followers. This is called Prasad. Will Dalits be given Prasad? Will it be given in their hands as it is done in the case of Non-Dalits? These questions were asked by the census. The answers indicate that Dalits are not incorporated into this form of practice either (**0.923**, Practice #7 in the Table).

Organization of the religious practice in the form of Katha/Parayan is an interesting aspect of religious participation. Here, religious teachers come and give spiritual advice to those involved in the relevant service, frequently there is singing exchanged between the teacher and the follower. Discrimination is found here because Dalits are either not invited to such activities or if they are invited they are seated separately.¹¹ To address this issue, we explicitly asked if Dalits would be invited and (if so) seated along with others. Our results show that they are generally not (**0.931**, Practice #6 in the Table).

A religious practice that is outside of the temple but which involves participation concerns what is referred to as Satsang, a relatively new religious discipline within Hinduism. In this practice, followers are motivated to go to houses and teach love as well as compassion. As you could imagine, not all followers will enter a Dalit area and those that do will not eat their food or drink their water – common practices for visitors. Within the census we explicitly asked if Satsang followers drank water or ate food with Dalit families. With a probability of **0.911** (Practice #8 in the Table), we find that this almost never takes place.

Temple inauguration is also relevant here. Whenever a new temple is built within a village, there is a huge ceremony to open it, including a large feast. In this context, Dalit could

be discriminated against because they are either not invited. To address this issue, we asked if Dalits would not be invited to such occasions. The probability of this occurring was **0.956** (Practice #5 in the Table) indicating that almost never were Dalit included in such activities.¹²

Finally, there are two variables that relate to who exactly performs the relevant service, one being a Non-Dalit and the other being a Dalit. Within India, there are a great many practices that must be undertaken for a wide variety of reasons. Many of these occasions involve individuals inviting religious leaders to their homes in order to perform a specific ritual. Where untouchability is practiced it is possible that a religious leader will not service a Dalit for fear of being polluted within their homes or it is possible that a specific Non-Dalit community (lacking a religious leader) will use a Dalit priest. We asked about this explicitly: will Non-Dalit religious priests conduct religious ceremonies at Dalit houses? Will the Non-Dalits use services of the Dalit priests to conduct religious ceremonies at their houses? From our census, we find that (again) Dalits are highly likely to be discriminated against in the religious domain. Non-Dalit priests are not likely to enter a Dalit household to perform any rituals (**.968**, Practice #4 in the Table). In addition to this, we find that Non-Dalits are not likely to use a Dalit priest to perform ceremonies within their houses.

The Religious Untouchability Index

While it is possible, and indeed consistent with earlier research, to consider all 10 practices of untouchability individually, this is both cumbersome as well as potentially inappropriate. Accordingly, we have subjected the various aspects of religious untouchability to a systematic evaluation in an effort to assess the general “fit” of the individual characteristics to something called “untouchability.” It is possible that none of the forms occur at the same time and place. In this context, it is useful to speak of them individually. It is also possible, however,

and we believe more plausible that different forms occur at the same time and place, thereby representing what we refer to as caste discrimination.

Table 7. Understanding Religious Untouchability¹³

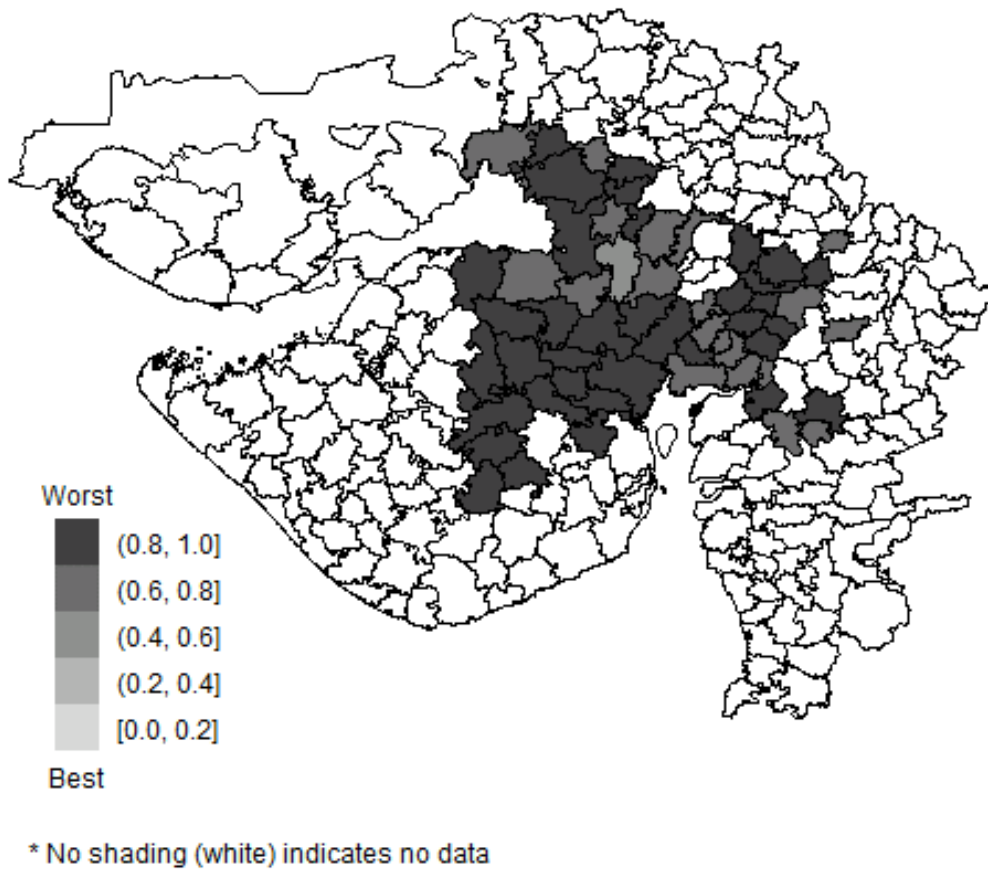
Item	Initial H	Final H
Touching worship articles	0.47	0.55
Mata no Madh	0.4	0.5
Temple inauguration	0.48	0.57
Katha/Parayan	0.42	0.48
Prasad	0.33	0.4
Satsang	0.45	0.53
Temple entry	0.4	0.45
Dalit religious places	0.49	0.48
Services of Dalit holy women	0.16	
Religious services by ND priests	0.3	

When examined with the cumulative scaling model discussed above, we find that eight of the variables fit on one scale. This is important for it suggests that across locales there is a logic to the diverse practices. When several forms of religious untouchability are practiced/reported, it is likely that other forms will be practiced/reported as well. Interestingly, the two variables that do not fit involve specific activities of Dalits as higher-level service providers. These are not systematically related to the other items suggesting that are qualitatively different from the others. The existence of these practices is essentially random.

Spatial Variation in Religious Untouchability

Viewed across space, we find that the religious untouchability index is relative widespread throughout the talukas examined. Indeed, most of the locales examined are more or less comparable on the scale, at the higher end. Of course, there are some exceptions. There are a cluster of talukas in the middle of the map toward the northwest as well as another toward the southeast where religious caste discrimination is somewhat lower.

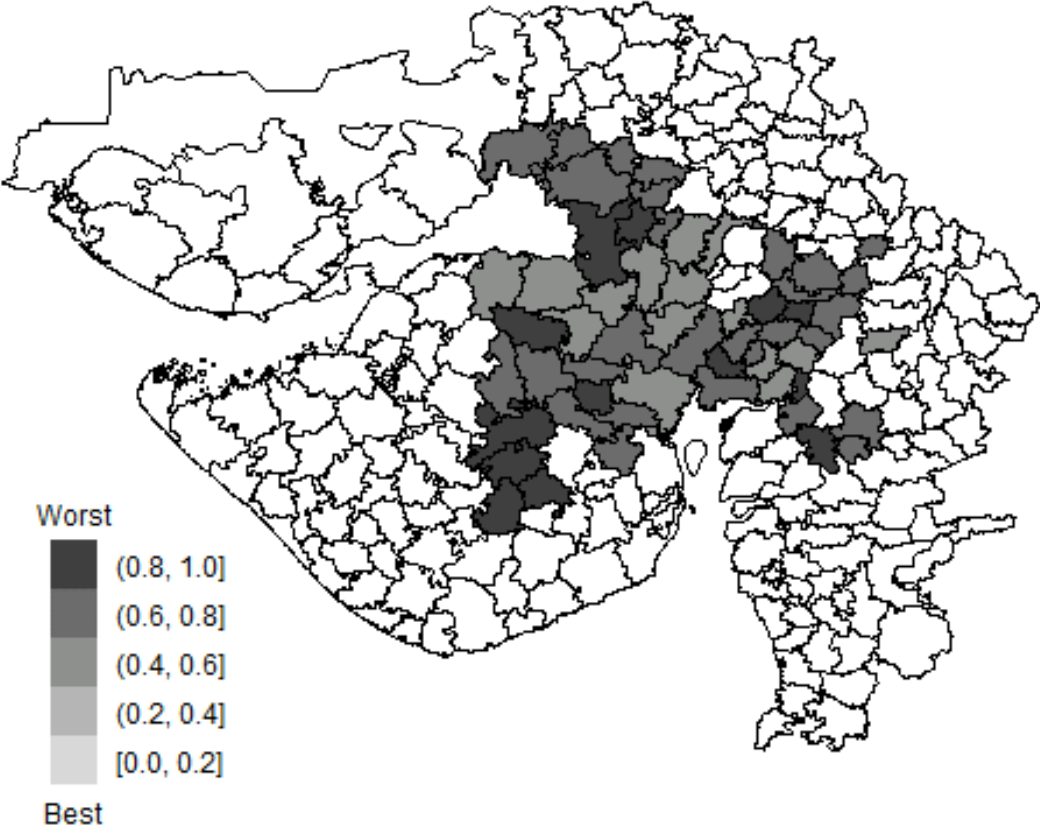
Figure 1. Religious Untouchability Throughout Examined Talukas



This only represents one form of untouchability however. Observing the other spatial distributions of the seven remaining indices, it is clear that they all reveal higher degrees of variation. For example, the results for the touch-related untouchability index (results available

from the authors) reveal a much greater amount of variation across space. This suggests that diverse aspects of untouchability are subject to distinct causal explanations, likely having distinct outcomes as well. Although suggested within existing literature, our research will allow us to explore these issues more rigorously.

Figure 2. Touch-Related Untouchability Throughout Examined Talukas



* No shading (white) indicates no data

Conclusion

Five years ago, the lead author of this article was contacted by two human rights activists (organizations) – Martin Macwan (Navsarjan Trust based in Gujarat, India) and Monika Kalra Varma (the Robert F. Kennedy Center for Justice and Human Rights based in Washington, DC) to assist with a problem confronted by the first. Specifically Navsarjan wanted to know what their efforts had yielded with regard to ending or at least reducing untouchability within the 3100 villages they worked in. Lacking a baseline, we concluded that one was needed and set about trying to measure untouchability across their villages. To do this, we partnered with other scholars: Allan Stam (University of Michigan) and David Armstrong (Oxford University). What is reported here is the initial answer to the questions: how does one measure untouchability and how do untouchability practices vary across villages in Gujarat.

The next phase of the project is to assess the similarities and differences of our direct observations of untouchability undertaken by Navsarjan fieldworkers. We will also convene an international committee to observe and assess caste discrimination – something like international election monitoring.

Following this, we move to what are admittedly the most important issues – theoretically and practically.

First, we will endeavor to explore the dimensions of untouchability. Here, there two issues. One concerns the possibility of identifying relationships at all. Some argue that caste discrimination is uniform and stable across locales, others argue that there is no uniformity and no stability and still others argue that untouchability varies but as a function of local context. While we have found initial support for the argument that there is some structure to the diverse practices, it is not yet clear whether or not spatial variation exists. There are a few different ways

we can do this. The simplest way is just to estimate the model independently for each different taluka or district. A slightly more complicated way is to estimate a single multilevel model that allows some of the model parameters that are currently fixed to vary across regions according to some distributional assumption (usually normal with an estimated variance). This is a compromise between the method we're currently employing and the one mentioned just above. The most complex approach is to treat our data like spatial data and estimate spatially structured random effects that will basically allow some smoothing over space. This is important because it has implications for how individuals think about and try to reduce untouchability. If there are no stable patterns across space, then the struggle to change caste discrimination is going to be highly variable in its approach, complicating the mobilization effort (Gamson 1975). To the degree that there is some structure (i.e., the different variables reveal relationships to one another), then a broader and simpler campaign could be established.

Another issue concerns exactly what dimensions exist. On this point, researchers have highlighted numerous arguments maintaining that untouchability is fundamentally about touch, exclusion, humiliation, exploitation, gender, subcaste or several at once. This also has implications for how we think about and try to reduce untouchability. Indeed, if none or a few of the 98 items examined “fit” together, then it is difficult to argue that caste discrimination is one thing. To the degree that there are relationships between the separate activities, then it will be easier to frame an understanding of what the problem is, generate support and engage in a clear set of activities to remedy the problem. This leads to our other interest.

Second, we will endeavor to examine what explains variation in untouchability. This returns to our initial interest in the topic: assessing what impact diverse strategies (e.g., boycotts, marches, petitions, law suits, lobbying and media campaigns) have had an influence on the

practice of untouchability. Information on activism/advocacy in each village that we studied was compiled in another Navsarjan effort in the last two years. Across the eight types of untouchability we now have information about exactly what has taken place in each village – a communal contentious history, if you will. Of course, we do not simply believe that activism and advocacy are the only factors that have an influence. Indeed, our data provides us with an opportunity to test a commonplace argument within the Indian policy community, academic literature and the popular domain that untouchability is fundamentally attributed to economic backwardness, the old, a lack of migration and geographic isolation from cities. It is to these issues that our project will now turn.

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Appendix 1. Untouchability Practices, Identified and Explained

Practice Type	Definition
Religion	
Temple entry	Prohibition of Dalits (D hereafter) to enter the general public temples
Mata no Madh	Chief goddess temple in Dalit community not visited by non-Dalits (ND)
Prasad	Food as offering to god/ goddess at a temple provided to go to temple you are given a little something to eat (holy) - when D enter - the food is thrown into D's hand without physical touch
Temple inauguration	Whenever new temple is made in the village, huge ceremony to open the village - normally there is a feast - D are invited but they are seated separately and have to carry their own dishes from home
Katha/Parayan	Forms of religious discourse (religious teachers comes and gives spiritual advice; singing in between) - again D invited but there is separated seating area or if D's hold in their own houses, ND will not come (one is prohibition to attend the other is people will not come)
Satang	New religious discipline within Hinduism started by a guru and motivated people to go to houses and teach love and compassion; will enter D area but will not eat their food or drink, but will in ND area
Services of Dalit holy women	within D community, there are religious preachers but will not be asked to give a religious cermeony in ND community
Religious services by ND priests	the ND priests will not come to D community to do ceremonies, etc.
Dalit religious places	Within the community, there are small temples that are there own, the other general population will not come to those locations
Touching worship articles	Lots of articles are used to do religious ceremonies (wood, cloth, utensils, incense); these are segregated, if D touches, they are defiled
Occupations	
Disposal of carcass	Caste-based duty, whenever an animal has died, they will come to the D locality and tell them that there is a carcass and service that you have to give; has to be done by D
Tying festoons	Whenever there are religious occasions, there is Asopalav tree, there leaves are tied into a garland and tied across various places; caste-based duties of the D
Saad/voice calling	Saad - a public announcement to be made; specially given within the D community (take a Rham drum at various places of the villages and gives the announcement PSA)

Melo	The message which is inauspicious; very bad news that anyone wants to hear (only bad can deliver bad); means dirty (many officials names within the community); reach the news to other villages; person will go and deliver the news to all the villages; will spread a towel and he will receive food for his services
Indhoni	Article made of the inauspicious grass, donut woven to support the water pot; caste-based occupation to make the donut and deliver it to all the households in the village; there is purification process
Dhol	The big drum and play it at marriage of upper caste and public ceremonies
Collect kafan in cemetery	when a person dies and the person (in Hinduism - some bodies are burned in funeral pyre or cremated - in either case body is covered in a cloth) bedsheets that covers the dead body; before body is cremated/burned, cloth is removed and hung on a thorny bush, it is expected that D will follow and take it and take it wear it
Scavenging	collection and disposal of human fecal matter; handling of human waste and other dirt without any protective gear and as a forced manual practice
Dabhdo	The grass which is used to make Indhoni, put in the mouth of dead bodies and for solar eclipse, put some on the roofs over every house to protect from the wrath of sun god; scavenger is in danger of the wrath
Datan	Toothbrush of teabranched made out of two kinds of trees; duty of D to go to farm to harvest and supply; caste-based duty of the D
Discrimination in Private Sector	
Pvt doctor service in village	There are Government doctors and private doctor quacks who to village and village; will not physically touch the D to examine
Employment in home-based work	Household services; cooking, cleaning - will not employ D; clean but don't utensils and waterpots
Dalit as shop owner	D who have own shops; but ND will not go or buy on credit; by and large they will not go; public distribution shops will
Potter	services unavailable to D
Barber	services unavailable to D; barbers within D community
Tailor	services unavailable to D; haqve to physically touch you (service to master)
Hiring cooking pots for wedding	Service provides for large utensils for ceremonies, will not hire them to D
Private owner transport system	Rickshaws; etc, will not allow you to use the system
Street lights	very few on D; there are street lights where the bulbs will not be there or not working; better service (government service)
Drinking water supply	Government service; but in D community, not enough water or there not enough taps; leaking etc.

Prohibitions/Social Sanctions	
Inter-caste marriage	not allowed; may have to leave village; violence; taboo that boy and girl cannot intermingle; religious doctrines with punishments
In shirt/ ornaments/ goggles	No allowed to tuck in shirts; decorate with ornaments or where sunglasses; cannot look like upper class
Participating Navratri garba	9 nights of dancing before Diwali, the festival of lights; not allowed to participate in the dancing at the village
Attending Panchayat meetings	Local self government, elected body, there is a law; D reservation in proportion there are a certain number of seats as members and head of the council; forced to sit on the floor; even if head of the council and then there is violence (legal case that Navsarjan)
Hiring houses in ND locality	Example - cannot rent a house, must stay in D community
Drive through the village in vehicle	D have vehicles and prohibitions that when you reach the upper caste area of the town, put down and drag your vehicle
Passing ND are with dead body	When relatives have died, cannot enter the city from the main street; general population walks north, D walk south
Sitting on horse	normally when people get married, the boy sits on the horse, big honor; that is prohibited (CASE) for D (400 armed guards provided by state to protect the boy from being killed)
Phuleku	Small ceremony that takes place just before the wedding, where bride and bridegroom separately walk with friends singing songs behind them; high caste do this on the horse and invited by different houses and given food to congratulate and give some money; D cannot only to their own community and not the village
Musical instruments for wedding	Cannot hire a band to play in wedding
Touch	
Shaking hands	No shaking hands
Accidental body touch	Defilement considered to have taken place
Smoking pipe	you should smoke in the direction opposite the ND; do not defile ND; no one will use D pipe
Snuff	No one will take D snuff
Entering ND house	Prohibited for D
Sitting on cot/ chair	Prohibited for D in the house of the ND
Bidi smoke passing towards ND	Same as pipesmoking - smoke has to go down wind
Touching water pots/ utensils	Same - defilement; happens in farms where you work
Sprinkle of water from dalit body	Water from a D bathing cannot sprinkle - happens at common bathing places at water ponds - be careful sprinkles; when washing clothes, hands

touching vegetables in shop;	go to vegetable shop, you cannot touch and select
Sprinkle water on home entry	if you are traveling on a bus or train, you may have accidentally been defiled; you are carrying this home; if you have been traveling, purify before you walk in
Touching food	prohibition
Sprinkle on money at shop	buying something on shop, the shop owner will sprinkle the money before touching it
Eave teasing Dalit women	Lower caste women; you should take pride in the harassment
D teacher touch ND child	CASE - upper caste boys came to a teacher only in their underwear and insisted in taking pictures with the teacher; prohibition with potential for violence; ND child will tell parents
Food and Beverages	
Shops	whenever you go to buy; prohibition to enter; stand outside
Mid-day meal	state program where all the children are given a lunch at school are children are seated separately and no cooks that are D, because then no one will eat; often, while all children can drink water at school, D children expected to go home to drink water
Vadu for scavengers	Dinner - scavengers are cleaning streets as a caste-service, in lieu of the services, food is given to you; scavengers go looking for food; left over foods from place all is mixed together; thrown from up above
Food for laborers in farm	when you call laborers to work in farm, you give them lunch, cooked separately, food that is untouched will not be used
Communitcy meals in village	Community meals for a special occasion, D will be asked to sit separately, or bring plates from home, or eat last
At village tea stalls	Ever village has tea stall, the cups are kept separately and in certain places, you have to wash own cup and keep separately
Food for ND beggars	ND beggars will come to house to beg but will not take food from you
Tea for Panchayat members	meeting of panchayat members, D member will not be given tea or will be given tea in separate cup
Tea for Dalits in ND houses	Same for D in ND houses; there will be a cup outside the house for D (Story in office)
Dalit cook in mid-day meal	Prohibition for midday meals
Soda pub	every village has a soda pub, but will not get a bottle straight; there is a glass kept for you
Liquor pub	normally after you drink you lose senses, but even after 20 shots they will remember; separate drinking glasses
Access to Public Facilities and Institutions	
Bus services	governement service; your entrance in the bus is last, if you are seating, you have to stand up

Ration shop	the public distribution shop, government controlled, made available at cheaper shop for poor people; D not allowed to enter or they will use up all D ration and sell in black market
Panchayat office	every one has the right, but D not allowed to enter
Milk dairy	every one can contribute milk to the dairy, but many people who come dairy - will sell milk to buyers from milk bought from ND; separate queue and send D milk out of the village
Equal treatment to Dalit teachers	within the teachers, there will be D and ND/ discrimination will exist, even teachers will have separate glasses; normally what will happen - the glasses are coded to hide the discrimination
Chair for elected Sarpanch	elected chair cannot sit
Chair for Dalit Talati	first revenue office of the village - government servant - if you are a D, there will not be a chair for him on a jute bag on floor
Midwife for Dalits	there are midwives that are ND, and will not give services to women during pregnancies
Primary health center	there are primary health centers, government run - between 8-10 villages - Dr will not touch to examine
Public bathing places	government has constructed bathing places that are segregated
Washing ghats	government constructed areas for washing clothes; segregated
Halt at Dharmshala	rooms constructed for religious travelers; charitable thing for pilgrims (Dharmshala - religion) give shelter to pilgrims; prohibition for D use
Postman	will not enter the street of D and will call from there
Dalit postman	if there is D postman, he cannot enter the other streets; have to call to others
Dalit midwife/ nurse	D women who are not called to give services to ND
Burial ground	Separate cremation locations by caste (CASE); state has constructed a funeral pyre, but D cannot use those services, because even dead bodies carry the pollution
Multi-purpose co-op soc.	co-operative societies started under the co-op soc act; they provide multiple services (for farms, micro-credit) - discrimination against D
Walk on public road sidestepping	suppose the ND is walking, the D will step down to save the ND from defilement or the other person will shout at you to step out of the way or the D person will announce arrival
Sitting together in school	Non-segregation of the students
Sitting on Chaura	Chaura is the public square and places to sit, D cannot sit on the chaura
Gramsabha participation	provision within the panchayat act that all the meetings will call an assembly of all villages and express public grievances - D will be seated separately and last
Gauchar land access	Gauchar - grazing land - every land is marked for grazing - everybody has access to that land, but when it comes to gauchar land - prohibitions
Water	

Village wells	Before water was supplied by pipeline, wells were source of drinking water supply and segregated by caste. Today women have to stand with pots down and women from upper caste will not all the d to access the water directly and must wait for someone to fill their well. Sometimes ND will throw a dead animal in the well to contaminate D well.
Water tap located in ND area	Where there is a water tap and is the only source of water in ND area, sometimes causes violence - women tried to fill up water and beaten badly - navsarjan case (one of the first - mithapur); D sometimes have a water pipeline and a social gathering at D place, boy from upper class broke the pipeline in D area and women did not want to to ND area - the water pooled up and the women tried to still get the water from the puddle, straining it through their saris, so then the boys saw this and put their buffalos in the water - 2 dalit women who were teachers thought this is how we will suffer, we will go to the ND area- so they went and were beaten by metal pipes and their husbands' legs were broken - first village where he felt like he was going to be murdered, there was something wrong with his motorcycle and he was stuck - very strong case -
Public pub	drinking water pub, some people as a philanthropy activity - free drinking water for passerbys but will ask your caste - if you are d they will only pour the water in your hand
Water pot at school	in the school there are water pots but they are segregated by caste
Water for Panchayat members	in the panchayat the local self government office, water pots they are meant for office members but if you are D member you cannot access the water
Practices	
Calling Bapu	the feudal caste community - you have to call them Bapu (father) - a 70 year old D would have to call a child father - if you don't, problems
Vacate seatin bus for bapu	vacating seats - if a person from the feudal caste comes you have to vacate your seat
Mundan on baa's death	when you call the man bapu, every women must be called baa mother - when an elderly person is dying - as mark of condolences, grief, the man in the village must shave their heads - if the woman dies, they men must shave off the head
Touching feet of baa dalit bride	when a d man marries and wife comes to visit for the first time, taken to the feudal caste house and touch the feet of all the women in the house of this upper caste.

¹ This is the name that former untouchables have chosen for themselves.

² This situation changes significantly over the course of Indian history. For example, Purane (2000, 22) notes that

(i)n the early Vedic times (the first to sixth millennia BC), different members of the same family used to undertake different occupations of Chaturvarna (four classes) according to their inclination and abilities... It is said that in Vedic times all men were equal and there was no trace of untouchability as we see it today. According to *Rigveda* no man was considered too high or too low in the society. But this healthy spirit of equality resulted, in course of time, to the tradition bound caste system and to the institution of untouchability which divided the Hindus, warped their thinking and eroded the structure of the community. Traditionally, each caste came to be associated with a profession, administration, trade or manual labor, and developed a high degree of exclusiveness among the professional classes. Depending on the nature of one's work, certain (low) sections of the community came to be regarded as untouchables and were kept more or less segregated even within villages. By practicing untouchability, the upper castes kept them at a distance, and gave them a subordinate place within the system.

³ An important effort concerns the national census but this is not without controversy. For example, between 1931 and 2001, cased-based enumeration was not carried out. A rigorous debate began after this point. The faith in the census as a measurement tool is subject to some skepticism. For example, Krishnakumar (2000) argues that

Based on a statistical analysis of the size and spatial distribution of castes in the 1881 Census, (Prof. K. Nagaraj) argued that "there are broad dimensions to the caste structure which make it extremely difficult to capture the phenomenon of caste through a massive, one-time, quick operation like the Census." He said the complexity arose primarily because of the fragmentation, localisation, fluidity and ambiguity of castes.

Fragmentation: Of the 1,929 castes aggregated in the 1881 Census, 1,126 (58 per cent) had a population of less than 1,000; 556 (29 per cent) less than 100; and 275 (14 per cent) less than 10. There are a large number of single-member castes. At the other extreme, three caste groups - Brahmins, Kunbis and Chamars - accounted for more than a crore each. These three accounted for as many people as the bottom 1,848 (96 per cent) castes.

Localisation: Of the 1,929 caste groups, 1,432 (74 per cent) were found only in one locality (out of 17); 1,780 (92 per cent) were spread across four localities; and only two, Brahmins and the so-called Rajputs, had an all-India presence. The pattern of localisation also seemed to vary across space. For example, while the eastern and southern regions had high localisation of the big caste groups, in the northern and western regions they were spatially spread.

Fluidity and ambiguity: Socio-economic and political changes, particularly those since Independence, have introduced a number of ambiguities in the structure and conception of castes, posing enormous problems in enumerating them through a Census-type procedure. For example, the changes in migration patterns and caste agglomerations, the caste-occupation nexus and the mix of sacral and secular dimensions in the nature of the caste groups vary widely across space and castes. This introduces ambiguities in the very perception of caste at various levels - legal, official, local and so on.

(Other scholars) argued that a centralised census operation was not the appropriate way to enumerate castes for several reasons, including change of nomenclature (for instance, Edagai and Balagai, two depressed communities in Karnataka, were entered as Holeya and Madiga respectively until the 1921 Census, while they became Adi Karnataka and Adi Dravida in the 1931 Census); phonetic resemblance in names (for instance, the Gonds of Karnataka's Uttara Kannada district have nothing to do with the Gond tribals of Madhya Pradesh); religious movements and change of faith (the Veerasaiva religious movement in northern Karnataka drew many artisan castes such as the Kammara (blacksmith), Badiga (carpenter),

Kumbara (potter) and Nekara (weaver) into its fold, while not accepting some other artisan castes such as Bestha (fishermen), Machegara (cobbler) and Dhor (tanner), making it difficult to get separate figures for different artisan groups); and encroachment into another community's identity (the Nayaka community of Karnataka got into the S.T. list as there is a Nayaka tribe in Gujarat. Also its numbers swelled from 4,041 in 1931 to 1,37,410 in 1981).

This work concludes that

There is thus the need for a decentralised, multi-disciplinary approach to caste enumeration involving all the stakeholders in the process. Thus the Census, which is centralised on several counts, is not the appropriate agency to enumerate something as complex as castes.

⁴ We are still in the process of ascertaining exactly how many people served as respondents. The information collected was aggregated to the village for descriptive purposes.

⁵ Tribals refer to a group of individuals who have largely been outside of the development of Indian society, physically isolated as they sought to escape the often violent interactions involved with state-building throughout Indian history. As noted within one source (<http://countrystudies.us/india/70.htm>)

Unlike castes, which are part of a complex and interrelated local economic exchange system, tribes tend to form self-sufficient economic units. Often they practice swidden farming--clearing a field by slash-and-burn methods, planting it for a number of seasons, and then abandoning it for a lengthy fallow period--rather than the intensive farming typical of most of rural India (see Land Use, ch. 7). For most tribal people, land-use rights traditionally derive simply from tribal membership. Tribal society tends to be egalitarian, its leadership being based on ties of kinship and personality rather than on hereditary status. Tribes typically consist of segmentary lineages whose extended families provide the basis for social organization and control. Unlike caste religion, which recognizes the hegemony of Brahman priests, tribal religion recognizes no authority outside the tribe.

⁶ It is not clear how these two sources of information are utilized/combined.

⁷ If interested, contact the lead author of this article who will then make it available to you. The form is thirty six pages in length.

⁸ Perhaps the biggest change in the project undertaken after this initial stage is that we moved from an effort where we were going to rely upon a larger number of enumerators to finish the project faster to an effort where we used 100 enumerators (fifty men and fifty women, paired as teams) who received even more extensive training but whose use would slow down the completion of the research.

⁹ The villages in which the questionnaire was completed were sampled randomly from the villages in which Navsarjan is active. Thus, inferences about the nature of untouchability technically are valid only for this population. However, if Navsarjan villages are not interestingly different from other Gujarati villages, then inferences may be made to those villages as well. We undertook a comparison of studied villages to other Gujarati villages (available from the authors) by estimating a series of simple linear regressions where the dependent variable is indicated in the first column and the independent variable is a binary variable where one indicates the village was studied and zero otherwise. If the p-value is less than 0.05, it indicates that the studied villages are significantly different from the non-studied villages. However, one must also consider the "substantive significance" – the extent to which statistical differences translate into interesting observable differences. The variables tested are those available from the Indian Census at the village level. Undoubtedly, there are other interesting hypotheses that could be tested, but the data to examine those hypotheses simply do not exist.

From our examination, the studied villages have significantly more males than other villages, but only 0.004% more on average, so even though this is a statistically significant result, it is not substantively meaningful (i.e., it would not translate into an interesting observable difference in the real world). Those in the scheduled castes are about 3% more of the population in the villages studied than in the villages not studied. To the extent that the pervasiveness of

untouchability is related to the proportion of the population that is in the scheduled castes, this could mean that findings in other villages, if studied, would be slightly different. There are reasonable competing hypotheses about the relationship between proportion in scheduled castes and untouchability, so the nature of this difference is unclear. Literacy rate was slightly higher in the studied villages (about 3%) than in unstudied, but it is likely that this would result in finding lower levels of untouchability than in other villages – at least if current arguments in the literature and popular Indian press are correct. The fact that untouchability is found to be pervasive leads to the conclusion that this was likely not a severe problem. Unemployment is slightly lower in the studied villages, though by only 1%, probably not a substantively significant finding. Finally, there are a 4% more agricultural laborers and 3% fewer cultivators in studied villages than in non-studied villages, but it is unclear that this should have any specific effect on the ability of the questionnaire to uncover untouchability.

¹⁰ The stratification in the household and community surveys had the effect of generating many observations for some villages, but just one for others. For those communities with just one survey, an implicit aggregation process was present. In the community (or household surveys, for that matter), the response recorded was the maximum of all responses registered. Thus, if one person mentioned the presence of a particular practice, the enumerator recorded a positive response. Otherwise, if no one mentioned the presence of a particular practice, a negative response was recorded. This makes a somewhat deeper assumption – that there is some objective reality in the village. The community experiences untouchability if any of its members experiences untouchability. We will investigate later the extent to which different segments of the community experience untouchability differently. To ensure that each village contributes similarly to the construction of the indices, the aggregation method that is implicit in the unstratified community villages was implemented for all communities where multiple surveys were administered. Using questionnaires done at the community level with no stratification as a benchmark, on average, respondents who were surveyed in more homogenous groups (i.e., stratified and/or at the household level) were more likely to identify the presence of untouchability practices. A potential correction to remove the systematic relationship between stratification type and untouchability, produced corrected scales that were correlated with the original untouchability indices at an average value 0.98, ranging from a minimum of 0.97 to a maximum of 0.99. This suggests that the information content is quite similar regardless of method of aggregation, so in the sake of parsimony and simplicity, we present results using the original index.

¹¹ Such exclusion prompts Dalits who wish to engage in the relevant practice to try and hold such rituals in their own houses. Non-Dalits will not come to these events however including the teacher.

¹² In an earlier version of the questionnaire we allowed for the possibility that Dalit would be invited but seated separately and had to carry their own dishes from home. This practice was identified in some of our focus groups and enumerator sessions. When it came to the actual data collection, however, we found that this was hardly ever practiced.

¹³ The Loevinger's H-statistic for the index is statistically significant at **0.49**.