



ANIMA Critical Race Studies Otherwise A series edited by Mel Y. Chen and Jasbir K. Puar

JUGAAD TIME

Ecologies of Everyday Hacking in India

/// AMIT S. RAI ///

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Printed in the United States of America on acid-free paper ∞ Designed by Courtney Leigh Baker Typeset in Warnock Pro and Scala Sans Pro by Copperline Book Services

 $Library\ of\ Congress\ Cataloging\mbox{-in-Publication}\ Data$

Names: Rai, Amit, [date] author. Title: Jugaad time : ecologies of everyday hacking in India / Amit S. Rai.

Description: Durham : Duke University Press, 2018.

Series: ANIMA | Includes bibliographical references and index.

Identifiers: LCCN 2018027897 (print)

LCCN 2018037764 (ebook)

ISBN 9781478002543 (ebook)

ISBN 9781478001102 (hardcover : alk. paper)

ISBN 9781478001461 (pbk. : alk. paper)

Subjects: LCSH: Technological innovations—Social aspects—India.

Economic development—Social aspects—India. | Digital media—Social

aspects—India. | Technology—Social aspects—India.

Classification: LCC HC440.T4 (ebook) | LCC HC440.T4 R34 2018 (print) |

DDC 338/.0640954—dc23

LC record available at https://lccn.loc.gov/2018027897

Cover art: The 6th Floor Collective, untitled landscape from the series "we're lovin' it," 2017. Acrylic on canvas, 100 \times 160 cm. Image courtesy of the artists.

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$\begin{array}{c} {\sf FABLES} \ {\sf OF} \ {\sf THE} \ {\sf REINVENTION} \ {\sf III} \\ {\sf A} \ {\sf Series} \ {\sf of} \ {\sf Minor} \ {\sf Events} \end{array}$

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Preface

A well-performed jugaad (hack) never fails to bring half-admiring, halfdisapproving, and half-curious (it doesn't add up!) smiles to people's faces. Following what William James once said of fear and running, we smile before we admire. There is a certain intuition of the porosity of connectivity with the world that jugaad practice activates and makes ecological, even joyous. Today, perhaps uniquely in history, jugaad is a joyous passion. What is the time of that proleptic smile? It is, strictly speaking, the duration of a certain passage from affection to affection: jugaad's affective passage. Where are the spaces of and for jugaad practices? They operate within and against the plasticity—both neural and spatial—of India's "smart cities." Together, these space-times, plastic and durational, express the variable powers of emergent properties of nonlinear but feedbacked assemblages of affect, matter, policy, culture, biology, perception, value, force, sensibilities, practices, and discourses. Jugaad, as a practice of postcolonial practical reason and in its very timeliness, forms one way into and out of these assemblages.

This book emerged out of the changing political and personal landscapes shaping a set of collaborative researches into the politics of neoliberal technologies in India, the UK, and the US. In September 2010 I left a tenured position in an English department at a large state university in the US to take up a position as Lecturer in New Media and Communication at a then left-leaning business school in London. By then I had just finished a year-long research project on gender dynamics in India's fastgrowing mobile phone ecologies, focusing on how to pose effectively questions of embodiment and perception in the contexts of cultures of pirated workarounds (jugaad) in digital technologies. Developing the concept of ecologies of sensation drawn from my study of new media in *Untimely Bollywood*, I was following an intuition that new political structures were emerging at the level of the body's habits, understood as always multiply situated processes of (dis)ability, control, and becoming, and that central to the story of this emergence was the then-nascent mobile phone ecology exploding differently throughout India, changing how people were relating to each other and to their so-called smart cities.

Jugaad Time constructs a heterodox interdisciplinary perspective to consider the potentialities and actualities of pirate digital cultures in India. This construction proceeds through a paratactical assembling of experimental diagrams of a commonly appreciated, but also suspect social practice, one that happens always and only at the volatile intersections of vectors of power and inequality. Jugaad is a Punjabi word that means workaround, hack, trick, or make do; today in ultranationalist, globalized India, it is both hailed and derided as a characteristically nationalist form of frugal innovation and also a possibly mediocritizing habit for shortcuts (see Mashelkar 2014; Radjou et al. 2012). The ethos of jugaad has become the dominant framework for economizing (or, more to the point, squeezing) labor power in neoliberal India, and it is pervasively used in emergent digital cultures. While contemporary neoliberal discourse has focused on jugaad as innovation, Jugaad Time seeks to develop a political philosophy of jugaad as an embodied ethics of becoming in India's caste- and genderstratified smart/data cities.

This study begins with questions that are crucial to affective ethnography: in contemporary digital practices, what is the ontology of a jugaad event, and how can one practically understand its material effects and processual histories? This question leads, through a series of experimental parataxes, to what I will call a hacking empiricism. By empiricism I mean to refer back to the history of American pragmatism and British empiricism highlighted in Gilles Deleuze's work on the history of philosophy; in Deleuze's active creation of concepts buggered from this minor philosophy, a more nuanced understanding of perception in ecologies of sensation has begun to emerge. By hacking I understand a global but inchoate movement of workaround, informal (or "disorganized"—see Athique et al. 2018), extralegal, democratic, subaltern, collective repurposing of found materials shifting ecologies from relative stasis to absolute flux, at times and usually in the interests of narrow class segments, in innovative and "gamechanging" ways. Together, hacking empiricism is a self-reflective prac-

tice of linking a problem—for instance, the problem of "why hack?"—to both its ecology of sense and sensation and to its processes and dimensions of change. Affective ethnography, as I will argue in the introduction, experiments with the critical capacities to affect and be affected by lines of flight and countergenealogies in and of India's City-with-No-Rights. Affective ethnography poses the transcendental conditions of possibility for radical and revolutionary action-potentials meshed in ecologies of work-around practices. Clearly, through this paratactic network of rhizomes, the works of Gilles Deleuze and Félix Guattari will also form crucial nodes in this construction. Their work on affect and ecology is mobilized in an affirmation of jugaad as the expression of a subaltern and autonomous sensibility besieged, maimed, imprisoned, and controlled by mutually ramifying and contradictory (it doesn't add up!) forms of domination, exploitation, dispossession, commodification, monopoly, and habituation.

Guattari, of course, helped develop a diagrammatic praxis in different domains, from psychology to political organizing. This diagrammatic method, which forms the space-times of what have come to be called affective ethnographies, affirms both the creativity of revolutionary movements throughout history and the struggles involved in their becomings. Jugaad Time paratactically assembles a nonrepresentational diagram of the social, economic, political, and ecological vectors (tendencies, capacities, functions) of jugaad by considering the various sensorial, algorithmic, material, and territorial makeshift infrastructures enabling digital cultures in India today. This is a key focus of Jugaad Time: developing a pragmatic ecology of jugaad. In the context of postcolonial India, in terms of both makeshift capitalist and noncapitalist infrastructures for different supply-chain strategies as well as an implicit pirate ethics of commoning resources against neoliberal dispossession, this method develops a political diagram of patterned but unpredictable becomings within and against ecologies of hacking practices.

This diagrammatic method draws out the functional and potential resonances traversing the health, ecological, and labor conditions for workers and communities in different nodes of algorithmic capital. Hacking and informalized workaround practices of increasingly precarious workers have a material existence in logistical and supply-chain processes that traverse and exceed capital. For instance, the research and development of mobile devices and value-added services, tied to new algorithms and sensibilities of forwarding, while it has provided vast riches to the mo-

bile value-added services industry (a creative industry if there ever was one), have as a condition of possibility the violent and unsustainable coltan mines in the Congo and Brazil. This transcendental empiricism of the value-added affection would also pass through the mobile assembly plants encircled by suicide nets, black-market distribution networks, informal points of sale, smart city/Big Data sensors, back through the new technological innovations in political marketing in, for example, Prime Minister Narendra Modi's digital election campaign machinery, the rise of rightwing Rahstriya Swayamsevak Sangh propagandizing through social media on US and UK university campuses, the Islamophobic co-branding of Israel and India, and so forth.

Considering this far-reaching media ecology as both volatile and value generating, *Jugaad Time* develops a method that aims to take empiricism in the direction of pragmatic experimentations in becoming Other(s). By taking as its primary examples everyday practices for the marketing and hacking of digital cultures, *Jugaad Time* engages contemporary media studies and anthropological and practice-based methodologies, and it affirms the different political projects of queer Marxism, Dalit emancipation, postcolonial workerism, and posthumanist feminism.

Diagrammatic Methodology and Its Sociohistorical Context

As I will elaborate more fully in the introduction, as method, *Jugaad Time* makes the case for an ecological encounter with social practice that is itself best understood as a pragmatic, ad hoc, networked approach to an obstacle. Potential and actual at once, the ecology and social history of the specific pragmatism employed in the practice of jugaad is a mode of sufficient reason proceeding through intuition as much as probability (Ansell-Pearson 2001; Bergson 1988; Deleuze 1988a). More concretely, I have been part of a collective research practice involving colleagues at the Tata Institute of Social Sciences' Centre of Media and Cultural Studies, as well as with the following research assistants: Anisha Saigal (Delhi), Shiva Thorat (Mumbai), and Rachna Kumar (Mumbai). Through mostly what is called "snowball" sampling, we were able to interview and codiagram with different jugaadus in Bhopal, Mumbai, Bangalore, and Delhi. These actants, some of whom shared our left politics of anticapitalist, feminist, revolutionary/ radical, and emancipatory critique, many of whom didn't or were indifferent, became participants in a collective experiment in pragmatizing in

mobile ecologies: what workaround repurposes our relation to technology and technique itself?¹

As a term, jugaad has a wide range of colloquial uses throughout contemporary neoliberal India, and it has been thematized explicitly in South Asian media for decades. In that sense we can understand it as always already doubled: as the idea of an idea (or what Spinoza called method), the sensory motor circuit of jugaad has an intensive and highly mediatized history. More, it is precisely this feedbacked and intensive quality to jugaad that allows for a renewed engagement with a heterodox political economy of contemporary digital capitalist control and its parasitical and autonomous pirate kingdoms (Sundaram 2009). This includes situating a transnational capitalist class of South Asians more and more integrated with the neoliberalizing agenda of the postcolonial state, a state prone to personality cults, family dynasties, trustee capitalism, corrupt bureaucracy, ultranationalisms (and other postcolonial ressentiments), and one that is increasingly invested in global oligopolies based around several core logistical integrators (e.g., Coke, Amazon, or Disney). This political struggle to manage contemporary forms of neoliberal exploitation, capitalist crisis, and social control necessarily produces national, regional, and cultural forms of legitimation and struggle; indeed, jugaad as the figure of the makeshift assemblage of frugal innovation has been unevenly integrated into this multiplicity of processes. Jugaad Time's heterodox political economy of digital control affirms the vibrant ecologies of thousands of pirate kingdoms (Larkin 2008; Sundaram 2009), some of which, some of the time, mutate decisively from events that hack through and queer (or unpredictably and immeasurably intensify) the probable distributions of hypermodernity.

Michel Foucault wrote that knowledge was not made for understanding, it was made for cutting: *Jugaad Time* is written in the spirit of developing pragmatic assemblages that jugaad different ways to exit both capital and the forms of subjectivity that are within and against it. Through the exploration of the everyday potentialities that haunt the habits, events, time-spaces, encounters, sensations, processes, infrastructures, perceptions, and entrepreneurial capture of digital cultures and their hacking in India today, *Jugaad Time* elaborates India's new abstract diagram: what is the force, sense, and value of the habituation of jugaad, and what specifically would effect its actual and potential collective reorganization? Indeed, what has done so historically? Analyzing jugaad at once as an event

in the molecular and molar histories of material processes, and as the name of a contemporary practice of capitalist value creation (known in business and management through the term "frugal innovation"), Jugaad *Time* proposes a new political philosophy of an embodied machinism that variably participates in numerous animal, bacterial, chemical, technoperceptual, and political becomings. Jugaad Time thus takes seriously and yet quite lightly Gilles Deleuze's affirmation of becoming in the potentializing passage between affective states: (de)habituation is nothing other than this negotiated potentialization (see Bhabha 1994; Deleuze 1988b). The specific postcolonial time of jugaad becomes relevant to critical practice as repurposed bodily capacities potentialize affective states on a plane that we can better diagram through connecting relations and functions of force, value, and sense in contemporary digital media infrastructures (both pirated and corporate). In the pages that follow, I develop an understanding of the media assemblages of jugaad, how jugaad knowledge—subjugated and subalternized—proliferates as a countermemory of domination, privatization, and dispossession, even as it gives practical form and revolutionary sense to capitalist value-creation strategies. I begin with an engagement with different practical sites for the emergence and distribution of jugaad media, such as mobile phone memory-card movies, video compact discs, peer-to-peer file sharing, and so on, thus linking together resistant forms of negotiating the digital irreducible to capitalist strategies of value capture. I hope to show that what jugaad affirms is the necessity of a political strategy of exiting the relations of value, sense, and force demarcating both the "moral universe" of capitalist oligopolies globally, and the forms of subjectivity that have developed to critique those systems of reference.

A jugaad can be extralegal, but it is always multiply within (as embodied subjectivity and relation of production) and usually implicitly against capital (see Berardi 2008; Mandarini 2005; Tronti 2005). In other words, in a jugaad event the boundaries of what is both possible and necessary become plastic through a more or less pragmatic experimentation in habits, capacities, material processes, collective enunciations, and assemblages. The jugaad event presents us with a ready interpretation, and its criticism would show it to be easily adapted to the interests of capital: jugaad would then function as the product (as a fetishized method of frugal innovation) that covers over processes of subalternization, precarity, depoliticization, and dispossession intensifying throughout India. The wager of *Jugaad Time* is that these processes entail both an actual and potential politics.

In other words, queer, feminist jugaads body forth other diagrams for collective practice that effectively differentiate them from a neoliberal jugaad. Thus, as a radical practice, the event of jugaad invites potentializing questions to be posed of what difference queer and feminist assemblages body forth in this force field of potential. Many of today's struggles for democratic, nonhierarchical, and free social space in India work within and against these relations of force, jugaading the future into the present; for instance, as we shall see in chapter 3, in the Why Loiter? movement in Mumbai, initiated by three feminists, Shilpa Ranade, Samira Khan, and Shilpa Phadke, a dispersed collective intervenes practically in transforming political, economic, social, gender, sexual, and kinship relations in India, adopting social network and mobile technology strategies for both general activism and more specific kinds of hacktivism. Why Loiter? poses its question by foregrounding another: whose right to the city?

The ecology of sense and sensation that jugaad events operate through, and happen in, requires specific pirate infrastructures. Thus, in the diagrammatic method of jugaad we proceed first by counteractualizing from product-event to potential process-infrastructure. Again, this moves the method of *Jugaad Time* beyond mere critique, argumentation, explanation, correcting, or demonstration toward an urgent and practical reconsideration of the resources, capacities, and affordances that are necessary to hack into and against contemporary capitalist media ecologies.

The political project of Jugaad Time makes an affirmation of becoming through a counteractualization of the jugaad infrastructures of postdigital cultures. This political project in other words is nothing other than the method on another intersecting plane of value, sense, and force. The measured quanta of this value may already have a very warm home as frugal capitalist innovation, but it references other systems of sense, value, and force shaped by the histories of insurgency, maroonage, mutiny, refusal, the commons, and exit that brought new relevance and new understanding to subaltern agency and the autonomy of the oppressed. Importantly, contemporary media studies and cultural anthropology of information industries (with a renewed focus on rapidly "developing" India) have put new media cultural practices in relation to globalization, mediascapes, embodiment, political and human geography, assemblages, government policy, digital cool, colonial administration, infrastructures, and ultranationalism as an "affective excess marked by a hyperperformative jingoism" (Liang 2009; see also Ajana 2013; Anand 2011; Aneesh 2006; Ash 2010; Birkinshaw 2016; Castells 2015; Dasgupta and Dasgupta 2018; Easterling 2014; Gabrys 2014; Mankekar 2015). The diagramming method followed in *Jugaad Time* traverses these important analyses to pose nonrepresentational and materialist questions of different forms of media power. Thus, I offer up a pragmatic ethnography of a mobile value-added company in the Delhi national capital region through strategic narratives of acts of consumption that become potential sources of new productivity, as Mobile Value Added Service management information systems (MIS) reports correlate fresh data with patterns of use in other data sets. This notion of an ecological and process-oriented historical materialism affirms forms of exiting practices that never cease leaving the court/clinic of commentary and interpretation by thinking through assemblages of action and acting through assemblages of thought. In that sense, *Jugaad Time* is an extended and sustained reflection on collective practices of habituation, informatization, and counteractualization in pirate economies in India.

Given that it is one of the most competitive and fastest-growing mobile markets in the world, India's heterogeneous digital culture bodies forth subaltern diagrams of mobile hacking, neoliberal consumerism, digital control, media piracy, embodied perception, technological habituation, and new media assemblages. This method, as I have suggested, has been guided by the question of how to understand effectively the knots of these technoperceptual relations, their historical emergence, and their various phase transitions. Transdisciplinizing a wide range of research, Jugaad Time moves beyond a social constructivist digital culture where the psychologized digital is never not a scene of representation and the abyssal meaning of bad consciousness, arguing for a pragmatic approach to digital ecologies and their hacking. Far from a mediocritizing workaround, the social practice of jugaad shows the urgency of creating new micropolitics for commoning private property while working around capital and its regimes of control (e.g., peer-to-peer networks). Jugaad Time then presents an untimely practice of diagramming and queering relations of sense, force, and value in technoperceptual assemblages, such as the locationbased data flows of mobile phones.

By taking the affective capacities (the bodily capacity to affect and be affected) as the starting point for understanding the history, mutations, effects, force, value, and sense of digital cultures in India, *Jugaad Time* situates the mediatization of the practice literally at the threshold of a new hypermodernity, understood as both controlled modulation of capi-

talist crisis and the counteractualizing effects of these at-times untimely and queer practices. Throughout the study, I argue for a methodology of affect-as-capacity, which shifts the focus of attention away from language, discourse, and representation toward habituated and emergent sensations in historically specific media assemblages. Thus, in terms of method it brings together a pragmatic empiricism (drawing on the work of the new materialists in social geography, queer studies, and postcolonial studies) with wide-ranging historical diagrams of digital cultures in Mumbai and Delhi, affirming, with Patricia Clough, the "feelings, vibrations, rhythms and oscillations coming up from the streets" (2010, 230). These affective diagrams are coupled with broad archival research on the transformation of telecommunications in colonial and postcolonial South Asia, as well as (non)narrative speculations on the future of potential and the potential futures in/of these ecologies.

Jugaad Time elaborates a concept developed in conversations with Patricia Clough and Jasbir Puar, and in an earlier work, *Untimely Bollywood:* Globalization and India's New Media Assemblage, namely, ecologies of sensation. Drawing on Guattari's definition of assemblage as a prepersonal practice, or a kind of style, a creative mutation that binds an individual or a group consciously or unconsciously, Jugaad Time shows how technoperceptual habituation in India feeds back into historically variable and also dynamically open ecologies of sensation. Definite but fuzzy ecologies of sensation enable practices of jugaad that make perceptible relations of motion (assemblages) between a body's neurological capacities activated in habituated gestures, perceptions, intensive flows, associations, affect-time-images, sensations, and the distributed kinesis of the postsovereign subject through nonlinear space-time. The changing emergent capacities of digital-human assemblages (distributed networks, evolutionary algorithms, crowdsourcing in social networks, tracking, monitoring, recommendation algorithms, datamining, peer-to-peer file sharing, multimedia platforms, free and open-source computing, value-added marketing strategies, and always-on connectivity) have become a hotly contested domain of struggle helping us to re-pose the question of the (de)habituation of different populations through networked hacking practices. In Jugaad Time, I engage a broad range of digital communication practices to show how specific forms of sexuality emerge from historically variable but always-potential ecologies of sensation, as new forms of digital memory and habitual embodiment mesh together to produce new

forms of value, sense, and force. To work around an obstacle is in some way to reenchant the world through a canny giddiness in the face of its infinite sponginess: working through an intuition animating the method of hacking empiricism involuting of gender, sexual, caste, class, raced, and embodied effects. Thus, *Jugaad Time* takes up and repurposes contemporary academic discourses on the feminist cyborg, antiracist futurism, the politics of affect, autonomous biopolitics, hacking digital media assemblages, the end(s) of social constructivism, and queer assemblage theory. The time of jugaad is the time of sexed and gendered bodies, smart cities, and analog and digital technologies in flux, in and out of tune/resonance, open to their outsides, and increasingly and complexly within and against the logistical machinery of racialized and misogynist capital. Any political ecosophy commensurate with its overthrow will need the methodological panache of the jugaadu.

Acknowledgments

A book of this kind is already quite a crowd: collaborating researchers, jugaadu participants, and all the nonhuman agents whose voices are expressed in formative processes. In terms of humans with names, I would like to thank Shilpa Phadke; Smita Rajan; B. K. Rai; Shail, Sudeep, and Divya Shrivastava; Abhay Sardesai; Sarah Elise Fryett; Stefano Harney; Gerry Hanlon; Ranjit Kandalgaonkar; Vinita Gatne; Tarek Salhany; Polly Phipps-Holland; Nagesh Babu K. V.; P. Niranjana; Anjali Montiero; K. P. Jayasankar; Faiz Ullah; Nikhil Titus; Priya Jha, Gerry Hanlon; Matteo Mandarini; Sadhvi Dar, Yasmin Ibrahim; Hypatia Valourmis; Shiva Thorat; Anisha Saigal; Rachna Ramesh Kumar; Renu Savant; Matteo Mandarini; Liam Campling; Elena Baglioni; Ashwin Devasundaram; Jenny Murphy; Keiko Higashi; Bibi Frances; Gini Simpson; Lois Keiden; Arianna Bove; Erik Empson; Jasbir Puar; Patricia Clough; and Shambhu and Leena Rai. I have been supported by the Fulbright scholars program; QMUL internal grants, the AHRC, and in another but no less material way by the radical collectives at the Common House, Bethnal Green.

Introduction

A POLITICAL ECOLOGY OF JUGAAD

Jugaad and Ecology

Jugaad Time: Ecologies of Everyday Hacking in India emerged out of partisan research into digital media in postliberalization northern and western India. I say "partisan" in the sense of politicizing: in the global North, neoliberal capital as a social and economic formation attempts to exclude "the people," "the masses," or "the multitudes" from political participation in order to separate everyday life in the so-called free marketplace from social and economic emancipation. In postcolonial India, neoliberalism has "progressed" in the contexts of specific caste and class politics, urban/ rural divides, state-centered versus autonomous feminisms and workers' movements, varieties of religious and nationalist chauvinisms, and the emergence of a distinctive and vibrant queer politics. My attempt in this book has been to situate in a postcolonial frame a certain vector of becoming associated in Western criticism with the tinkerer, who in this study takes the form of a preindividually primed and collective subject, within and against the postcolonial cunning of neoliberal reason and embodied in pirated digital social practices. These practices emerge in contested political ecologies themselves within and against capital, authoritarianism,

and static/state identities. My research trajectory was shaped by a yearlong research fellowship in Mumbai and Delhi, during which I began to focus specifically on questions of gender, political ecology, heterodox economics, and mobile phone hacking. Gradually, through research conceptualized and conducted in collaboration with colleagues and students at the School of Media and Cultural Studies, Tata Institute of Social Sciences (Chembur, Mumbai), I began to develop practical genealogies or, what I will call in this book, diagrams of people's media practices in India's huge "informal" sector (around 90 percent of the economy). This sector, and especially in its relation to the emergence of what Athique and colleagues (2018) have called India's media economy, can be understood to have interrelated ecologies of dispersed and noncontractual logistics and organization (commonly referred to as the informal or disorganized economy—see Rajadhyaksha in Athique et al. 2018; Venkatraman 2017). It was in the course of this research, while analyzing corporate Indian media strategy, that I first encountered the Hindi/Punjabi colloquialism "jugaad."

That word, repeatedly featured in people's self-presentation of their meshed media practices and work-related strategies in everyday life, is a reference to a sometimes elegant, but always makeshift way of getting around obstacles. Jugaad practice abducts forces to yield a new arrangement or assemblage; indeed, the minimal unit of any jugaad practice is the assemblage (Rai 2009). Consider, as a first approximation, assemblages distributed across two news reports from the Times of India (Mumbai edition), both dated March 24, 2010. The first shocked readers throughout the city: a twelve-year-old victim of serial sexual abuse had come forward to name her assailants. One of the main accused had recorded an MMS (multimedia messaging service) digital video on his mobile phone in which he and another friend raped the twelve-year-old girl. They used the threat of going viral with the MMS to coerce the girl into having sex with them (this use of the mobile's audiovisual function for violence against women has become commonplace in India's digital misogynist rape culture). The second report relates events surrounding another coercive use of the mobile, this time through SMS (short message service). The police detained five suspects, including one accused in a murder case, in Thane (a northern suburb of Mumbai) in order to probe their role in sending threatening SMS texts to the leader of the opposition party, Eknath Khadse (a Bharatiya Janata Party [BJP] member of the Maharashtra Legislative Assembly) and to the Shiv Sena leader Eknath Shinde. According to the report, after initial investigations of mobile phone logs, police found that the person who sent the threatening SMS texts had also telephoned the office of the Thane police commissioner around 1:30 a.m. These are only two disturbing and sensational stories of India's mobile phone ecology. What are the conditions of their possibility? One sense of jugaad that I will return to in my conclusion resonates with misogynist uses of new communication technologies to shame, coerce, torture, and troll women into a generalized and enforced silence. This violent silence central to misogynist lifeworlds has been systematically and effectively addressed in feminist organizing in India, seeking to disrupt its functioning and overthrow the sources of its genesis. Jugaad in this scenario becomes a way to quite literally hack a woman's life. The circulation of these force-images in print, on the internet, on satellite TV, on a mobile phone, or through rumor and word of mouth produces various kinds of sensations, from the violence of sexual assault, or the pornographic titillation of masculinist sadism, to the concern over the sexual risks associated with proliferating communication interfaces. At stake in both stories is the practical use of mobile phones in India today: as weapon, lever of value and force, convergent technology, surveillance device, superpanoptic gaze, and viral sense machine. The mobile, taking over the role of the webcam from the 1990s, has become the instrument of choice in what Paul Virilio presciently called "generalized snooping" (Virilio 2005). Indian populations across caste, class, religion, gender, sexuality, region, and generation vectors are undergoing a rapid and expanding rehabituation in this jugaad of mobile communications. Rehabituation in jugaad time enfolds the multiplicity of different histories, timescales, intensities, durations, potentialities, actualities, vectors of power and performances of identity. A new form of life is emerging in postcapitalist India, and this biopolitical morphogenesis is emerging from a newly potentialized ecology of sensation. In what sense is preindividual, precognitive sensation being potentialized and revalued in India through the mobile phone? In what follows I give specific examples from my field work in Mumbai, New Delhi, Noida (Uttar Pradesh), Seore, and Bhopal (Madhya Pradesh) to indicate some emergent nodes of a speculative diagram through which an experimentation in the force, sense, and value of mobile ecologies of sensation can proceed.

Another parataxis emerges in an interview with a mobile value-added services (MVAS) project manager in North India, excited about the "scope of vas in India." As a project head in his company, he was very excited about the innovations and possibilities for such services and about the scope of mobile telephony more generally. He went quickly through some highlights of the mobile "jugaad revolution" in India: in 2003–2004 Reliance mobile revolutionized the industry by bringing costs down to about Rs. 1,200/month; today, 95 percent of customers are prepaid cardholders. The pattern of communication for most people is to receive calls, which is free in India; most people do not own a handset for more than twelve months. The aim of vas is perceived value—what can be termed self-expression products: callback tunes, wallpapers, mobile accessories, and the like. I wrote afterward, "The vivid sense I got from him was that things are changing rapidly; there is a lot of innovation happening in the industry, and the regulations are coming down. Lots of scope."

The specific problems in delivering MVAS are rooted in the processes that are covered over by this industry-scale, financializable view of adding value. A project manager at another MVAS company in North India is working on developing mobile-ready services for Kriluxe Paints. In the paint cans is a specially covered scratch card through which people can avail themselves of various prizes. One of which is a 50-rupee credit for your prepaid card, or Rs. 10 off your postpaid card. The program will give out other big prizes, a TV and a scooter, as well. Now the problem has been to get credit from different mobile vendors all over India because today the system is malfunctioning due to a virus (not uncommon). Basically the project manager and her team (the entire staff is organized into project-specific teams) have had to enter this information by hand, even though they guaranteed that it would be automated. But overall it has been a success, and even before the official launch of the media blitz a buzz has started so much so that Kriluxe has been able to increase its market share nearly twofold. Such problems, and their financial reverberations, are endemic throughout the MVAS industry, and so it comes as no surprise that the dominant and yet minor practice of tweaking a given service till it works is called jugaad.

Such examples push us to think of jugaad a bit more creatively. We could start with the notions of abduction and experimentation: how do jugaad practices experiment with abduction? C. S. Peirce's notion of abduction can be described as a temporal process of tacking back and forth between futures, pasts, and presents, framing the life yet to come and the life that precedes the present as the unavoidable template for producing the future. For Vincanne Adams and colleagues,

Abduction names a mode of temporal politics, of moving in and mobilizing time, turning the ever-moving horizon of the future into that which determines the present. Abduction is a means of determining courses of action in the face of ongoing contingency and ambiguity. . . . Ideas about how to "move forward" are generated by tacking back and forth between nitty-gritty specificities of available empirical information and more abstract ways of thinking about them. In anticipation, abduction also acquires a temporal form: the tacking back and forth between the past, present and future. Abduction moves reasoning temporally from data gathered about the past to simulations or probabilistic anticipations of the future that in turn demand action in the present. Abduction thrives in the vibrations between the is and the ought, consummately modern yet augmented by anticipation in ways that undermine the certainties on which modernity thrives. (2009, 252)

Following on, Thrift notes that it is in fact "abduction or theory construction which is the outstanding characteristic of human intelligence. Abduction is the leap of faith from data to the theory that explains it, just like the leap of imagination from observed behaviour to others' intentions. While most explicit theories or abductions are wrong, our implicit ones about interactional others are mostly good enough for current purposes" (Levinson 1995, 254, qtd. in Thrift 2005, 466). It is this "mostly good enough" theory of abduction that best characterizes the pragmatism of jugaad. Pragmatically the aim in the scenario above is to create a brand-equity buzz among mobile phone subscribers and paint buyers through the perception that Kriluxe can give you good paint and the added excitement/value of a mobile phone-enabled prize drawing. This buzz tacks between the present, the past, and the future in the sense that it draws on current brand equity, associates that with a now-wow gimmick, and projects a future-oriented hype for the brand. This abductive jugaad keeps in play the full semantic range of abduction: guessing and also kidnapping. Despite regional differences, linguistic barriers, and computer viruses, the service will go on by any means, even if that entails the digital-becoming-analogue.2

Thus, jugaad figures forth a supposedly essentially Indian, but now suddenly revitalized style of activating the empiricist idea that "things do not begin to live except in the middle. In this respect what is it that the empiricists found, not in their heads, but in the world, which is like a vital discovery, a certainty of life which, if one really adheres to it, changes one's way of life? It is not the question 'Does the intelligible come from the sensible?' but a quite different question, that of relations. *Relations are external to their terms*" (Deleuze and Parnet 2007, 54–55, emphasis in original; see also Culp 2016, 42).

Jugaad is an everyday practice that potentializes relations that are external to their terms, opening different domains of action and power to experimentation, sometimes resulting in an easily valorized workaround, sometimes producing space-times that momentarily exit from the debilitating regimes of universal capital (Culp 2016, 17; Deleuze and Guattari 1994). In popular usage jugaad can refer to a savings account and its attendant ideology of insurance, the extralegal workaround practices of "informalized" or "disorganized" sector workers, the questionably legal workarounds and patronage deals that the local and central state apparatuses depend on, a pedagogy of empowerment within and between subaltern groups, a way of minimizing the risks of the future, and a way of working around domestic employer expectations by, among other things, digitally curating recipes. As we shall see, its practice can create metabolic imbroglios in ecologies of social reproduction as well.

Jugaad gradually became for me a way of posing better questions regarding media, neoliberalism, and politics in India by tracing relations external to their terms. These terms, which, as Muriel Combes in her forceful elaboration of Gilbert Simondon's transductive ontology shows, are relations of relations (2013, 17), focused attention on questions of value, and performances of gender and sexuality in mobile phone ecologies, and as my own method became ecological, the relations of power and affect within changing gender norms and sexual performativity questioned the fundamental dynamics of capital and accumulation under a Hindutva-driven neoliberalism. Thus, in India today these relations are undergoing several nonlinear phase transitions in terms of habits, and new political forms and social formations are emerging between the paving stones demarcated by the state in its authoritarian, quasi-entrepreneurial march to Hindutva capitalism.

This was in 2009–2010, when I was doing research at an "up and coming" MVAS company in the Delhi-National Capitol Region. It is difficult to describe that dizzying time without getting caught up again in the massive whirl of globalized media events and the often brutal and sometimes obscured forces that were at that time redefining a neoliberal "India shin-

ing." In these same cities that I was now conducting interviews, developing political and research contacts, and participating in old and new media cultures, the processes of masculinist and upper-caste Hindu chauvinisms, elite neoliberal globalization, speculative gentrification, corporate marketing and branding, enforced austerity, environmental degradation, and social and religious segregation had for many years been undermining India's democracy, and ironically, given the resurgence in various kinds of chauvinisms (religious, regional, linguistic, etc.), its local cultures.

But if, as Jacques Derrida once wrote, the future is an absolute monstrosity, and intuiting its patterned but unpredictable forces requires an ecological and collective practice of politicizing our meshed and intuited ontologies (Derrida 2016; Guattari 1995), practical research develops untimely transvaluations of all values (Nietzsche 1966). One mode of this transvaluation will proceed through a "hacking empiricism" that takes as its target and instrument the mystifying dialectic of what Alfred Sohn-Rethel recognized as central to the social synthesis of capitalist exploitation: mental and manual labor (Sohn-Rethel 1978, 4-6). This dichotomy is directly addressed and displaced in the social practice of jugaad. This book will attempt to diagram jugaad, a method that will be defined through a continually intensive and critically recursive paratactical diagramming, or affectively relating the virtual and actual ecology of its various resonances (and, more broadly, following Marx and others, its specific but open web of social and material relations). As I will argue in the pages ahead, the intensification and deterritorialization of capitalist flows of surplus value and profit in neoliberal India help us to situate jugaad's ecology of sensation.

JUGAAD IS THE PRECARIOUS logistical practice of "choice" in India's vast informal, disorganized, pirate, extralegal economy. As Athique and colleagues suggest,

All of these large scale endeavours, public and private, can be collectively referred to as the "organised" sector. They are media structures constructed through acts of policy, regimes of regulation and the monopolisation of bandwidth in one form or another. Given the imperatives of import substitution as the guiding principle of the planning process, organised sectors such as broadcasting and electronics were

considered in terms of productive capacity. Large-scale publishing and the press were somewhat different, in terms of their private ownership and constitutional relationship to the democratic project. Nonetheless, market forces were rarely a driver of media development throughout the organised sector during the mixed economy era. Whilst indisputably important, the centralised and heavily regulated development of the planning era was nonetheless only one part of the story. Much of the development of India's media economy actually took place in an entirely different domain. By this, we are referring to India's informal economy, where a vast field of commercial activity takes place largely beyond the regulatory framework, and often beyond the purview of governance. A strict definition between the organised and unorganised sectors can be attempted on the basis of the number of employees or the existence of formal contractual relationships, but the essence of what Vaidyanathan calls "India Uninc." is probably too complex to capture by any simple measure. But, in general terms, the unorganised sector represents the aggregation of small-scale enterprises, non-contractual labour, reciprocal obligations and cash payments. (Athique et al. 2018, 10-11)

Jugaad is the "ethical" know-how of this (dis)organization in the spatial contexts of what Ananya Roy has termed the insurgent city; writing of the urban planning context of West Bengal, she notes the peculiar complicities of the jugaadu:

The fierce and bloody struggles in Nandigram seem to mark a break with such patterns of political dependence. And yet, they can also be understood as yet another instance of populist patronage, one where insurgent peasants are now bound to the electoral calculus of oppositional politics and the protection of the Trinamul Congress. Such forms of insurgence then do not and often cannot call into question the urban status quo; they can imagine but cannot implement the just city. And most of all, they depend on, and simultaneously perpetuate, the systems of deregulation and unmapping that constitute the idiom of planning. This is the informal city, and it is also an insurgent city, but it is not necessarily a just city. It is a city where access to resources is acquired through various associational forms but where these associations also require obedience, tribute, contribution and can thus be a "claustrophobic game." (Roy 2009, 85; see also Rawat 2015; Rawat and Satyanarayana 2016; Roy 2001, 2005)



FIGURE 1.1. Municipal jugaad in Bangalore (2015).

Jugaad practice often works through or in parallel with this claustrophobic game of associational patronage—some jugaads require a "source" (i.e., someone in power) to be tapped before the jugaad can even take shape. A jugaadu is also the neoliberal "confidence man." The work on the many different unintended, pirate modernities coevolving in the subaltern and Dalit smart city has highlighted the increasingly unequal, informalized, and informatized modalities of this neoliberal assemblage.

This book attempts to extend and broaden that analysis in the direction of the specific affective relations and habituations that have come to dominate the ideologies of the smart city. I wish to show, in other words, that if understood ecologically, and as an ecology in itself, jugaad poses ontological and durational questions for social practice, urban space, political agency, and embodied habit. To be clear, however, jugaad is not presented here as any kind of political program for revolutionary practice or becoming. Indeed, in some sense the revolution will be anti-jugaad. Rather, jugaad is considered from the perspective of duration; one of these durations can indeed be understood as involved in a revolutionary becoming. In terms of habituation and logistics, jugaad experiments.

In this introduction, I first suggest a working definition of jugaad. Through a recent "nudge" marketing campaign for the digital media or-

ganization Sulekha, we will come to situate jugaad practices in a surprisingly volatile social and political field of struggle, one in which the intercalated forces of gender, sexuality, class, religion, and digital technologies in India shift frames of reference in hacking ecologies, and in their practices revalue capitalist systems of sense, sensation, and power. I then try to further explore different ecological dimensions of this practice and its "affective image" in a consideration of a short documentary of a video pirate in Mumbai, *Videokaaran* (2012). I then draw the methodological implications of these sets of analysis and consider their resonance with contemporary postcolonial ecology studies. I conclude by situating the chapters to come in terms of what I consider the "diagrammatic" method of this affective ethnography of jugaad.

In jugaad practices, more or less sustainable ecologies are themselves transvaluated so that their functional connections, synchronicities, and embedded processes become objects of distributed human and nonhuman intervention. Sometimes a new value emerges from this intervention, as when peer-to-peer file sharing and hacker subcultures affirm the once and future freedom of the internet, but often not so much, as usually a jugaad guarantees at least for the short term, more of the same, as when a family in Delhi decides to hire private contractors to establish a direct water or electricity connection because either they have no current access or inadequate access. These kinds of jugaad rarely come out of any radical ecological consideration of the material effects of one's actions, and they are rather geared to money/time saving and/or productivity-obsessed, shortterm self/family-enrichment (Culp 2016). Here, recalling Roy's argument, we mark again a certain danger in the practice of jugaad that will form an ongoing lever to consider the distinction between manual and intellectual labor that jugaad consistently overturns, if only then to generate a new value-added innovation (time savings, speculative currency, reputational rents). While a jugaad is usually shrouded in the mystifying discourse of individual creativity, that is, a labor of intellectualized imagination, as a collective if distributed practice of everyday life, it remains a pragmatic approach to intervening effectively in a volatile and increasingly precarious field of possibilities/probabilities, and unknown, but experimented with, forces, capacities, virtuosities, obstacles, bottlenecks, flows, and connections. An intensive paratactical approach to this subaltern and now increasingly hipster practice proceeds without prejudging its ethics and its politics: this diagrammatics will have dispensed with judgment. Instead, in an affirmative spirit of critical solidarity, I tease out the relations of relations in jugaad's varied becomings, an affirmation of an indomitable, non- and postcapitalist, but complicit creativity distributed and emergent in the millions of pirate kingdoms that have expanded and crisscrossed the neoliberal world, each immense and immeasurable, but susceptible to control (Hardt and Negri 1999).4

This then is the general purview of this study. I focus on the interwoven cultures of jugaad and digital media in India's smart cities. Through the analysis I attempt to link jugaad or hacking ecologies to changing patterns of media prosumption (consumption as productive), gender relations, and class/caste and religious politics. Throughout, I draw on interviews conducted by myself and research assistants (Ajinkya Shenava, Shiva Thorat, Rachna Kumar, and Anisha Saigal) between 2009 and 2017. These interviews were conducted through a kind of snowball sampling, and they were recorded, translated, transcribed, and anonymized. The aim of the interviews was to engage all participants in an open-ended exploration, linking questions of lived gender, caste, and class relations and technology and digital infrastructure. I offer the following as nodes in a critical diagram of neoliberal media ecologies, parataxes relating this relatively old, but newly mediatized practice and discourses of jugaad.

(Anti-)Jugaad and the Innovation Image

The field of struggle in which jugaad ecologies thrive emerges fragmented in contemporary Indian media representations. The overwhelming uptake of neoliberal values across India's media ecologies is one way to consider recent campaigns affirming an "anti-jugaad." Take, for instance, a recent TV advertisement and consumer behavior "nudge" campaign created by Ogilvy and Mather (India) for Sulekha.com.⁵ Sulekha.com, founded by Satya Prabhakar and Sangeeta Kshettry as a platform enabling different forms of monetizable interactions among Indians, raised its initial investment from Indigo Monsoon Group and, later, from the Palo Alto-based venture capital firm Norwest Venture Partners. It is today best known as a web-based search engine and "decision-making platform" for semiorganized, gig-economy local services in India, aggregating databases of service providers that include entries for home care, computer training, service apartments, party catering, babysitting, yoga lessons, and auto repair (similar to Checkatrade.com in the UK). The Sulekha app contains options for both standardized local needs (like pest control) and special requirements (catering or interior design).

The ad is set in a nameless Northwest India, perhaps Rajasthan, Maharashtra, or Gujurat, and the aesthetic is neo-indie, low-budget Bollywood comedy (e.g., Finding Fanny, Pipli Live, Hera Pheri, Ishqiya); a lilting, festive Indi-pop song gives an upbeat rhythm to the scenes and its editing. Nikhil (Nitin Ratnaparkhi), in his late thirties, bears all the marks of a lower-middle-class shopkeeper or bookkeeper—he is Hindu, seemingly educated in "Hindi-medium" (i.e., studied in a nonglobalized local dialect), hair neatly combed, dressed casually but sensibly. He stops his modest motor bike by the side of a village road where four mixed-generation, "traditional" rural women are trying to hail a ride. They skeptically size up Nikhil's ride, and turn away in frustration: there's four of them and only one seat. The jugaadu's "light-bulb" expression flickers on through a close-up, and suddenly we cut to the four women sitting precariously and anxiously on a sofa strapped to the back of the moped; Nikhil grins as he drives them all away. Cut next to a hot and muggy restaurant, where two men fight over the direction of the ancient water-cooled fan, both wanting to provide comfort (sukh) to his family; Nikhil, our man jugaadu (pronounced joo-ghar-roo), springs to life, takes off his polyester slacks, and attaches them to the cooler, suddenly giving both families their very own stream of air, one from each pant leg. One of the families leaves, seemingly in disgust. But Nikhil once again grins from ear to ear. Then we cut to the scene of a "kanya dhaan" (the marriage ritual in which the bride leaves her father's home). Nikhil is marrying Urmila, when one of the back tires on the car that is supposed to whisk the two away punctures and breaks. The jugaadu worries through a momentary lapse in confidence, but then the light-bulb expression flickers again, and we cut to the married couple driving away, as the tire has been impossibly replaced by a cart's wheel and axle. Urmila's father throws flowers at them in disgust and worry. The couple is greeted at home by Nikhil's family; Urmila, the new bride, quickly spies all the decrepit, cost-saving fixes that Nikhil has deployed to keep his home in some semblance of hanging-by-a-thread order (uneven plastered walls, stacks of old books for cabinet legs, a repurposed metal pail as a showerhead, etc.). And then the lights go out (at which point the music scratches off, as if the turntable's energy were cut). However, this is only an occasion for the jugaadu's internal light bulb to flicker on: hacker time again. Nikhil rewires the flat's lights through his moped, but on starting the motor, not only does the electricity blow out but also the water main busts (municipal water and the electricity grid are the two key "public" utilities that separate legal from illegal homes). His new bride says without ceremony, and in colloquial Hindi, "Look, don't show off all these jugaads in my home; otherwise I'll install someone else." She takes out her smartphone and opens the Sulekha app, and we see a final cut to a close-up of Nikhil, fearful and worried. The voice-over says, "Sulekha. Just click and get reliable service partners who understand that work doesn't happen through jugaad. Sulekha: Go Anti-Jugaad!"

Throughout the ad, a smooth-voiced man lilts carefree lyrics to an upbeat, guitar strummy, Indi-pop theme song ostensibly in celebration of the jugaadu in us all.

I go along, giving the gift of peace of mind I will fill your life with advantages
I'll make a broken heart healthy again. . . . I can make a flop a hit
What can't be done, I can do
I can lift the fallen
Give rest to the tired
My name is Jugaadu!

The song humorously screeches to a halt when Urmila rejects Nikhil's jugaad attempts at social reproduction. In Nikhil's impermanent if frugal world, makeshift technology is continuously facilitating and sometimes disrupting the flows connecting his ecology to local and global feedbacks (pirate and monopolistic logistics) and feedforwards (e.g., preemptive and algorithmic control). In each instance, his jugaads are trying to "help gendered subalterns"—the women hitchhikers, the wives and children of the brawling men, and finally Urmila. For her part, Urmila seems to articulate brand Sulekha's sustainable orientation to the domestic sphere: get it fixed professionally, or risk the home space collapsing. There is an ambivalence here as her demand comes from the empowered and networked women jugaadu of the heterosexual home, as well as from the desire to have a formally organized and managed space for social reproduction. The sense is that the jugaadu's seeming concern for the suffering, gendered Other is naive, selfish, and superficial. Nikhil's miserliness and his autonomous technological fetish must be domesticated, his jugaads overturned by the table of values of elite consumption. Commenting on the theme of the nudge campaign, Tithi Ghosh, a senior vice president and head of advertising at Ogilvy and Mather, articulated the cornerstone of the campaign as "the thought to go anti-jugaad. The inconvenience and the pain involved [in finding] a suitable service provider lead[s] to procrastination and temporary, imperfect fixes or makeshift solutions. We decided to use the very Indian cultural phenomenon of jugaad as the springboard for the creative. By dramatising the ill-effects of jugaad at home, we deliver the message that home owners can avail expert help on Sulekha" (Anon. 2016).

Now, jugaad's intimate if uncomfortable relation to neoliberal forms of measure and risk mitigation should be carefully diagrammed. These capitalist values articulate a chain of common sense central to the dogmas of the neoliberal free market: consumption, convenience, satisfaction, profit, creativity, relative surplus value, time management, gig economy, monopoly ownership, spectacularizing risk, and digital crowd-sourced solutions. Already, a fairly wide but distinct range of sense-making is legible in jugaad discourses performed in India today. The digital and the mobile are key to the "perverse implantation" of neoliberalism. Thus, Soumendu Ganguly, the head of marketing at Sulekha.com, says, "Sulekha is one of India's largest digital brands. People know about us and that's why we get close to 20 million visitors every month. But, we were considered to be a classified website. With an explosive increase in India's digital population, upwardly mobile Indians are looking online for all their needs. Sulekha being an early mover in this category with its vast network of trusted service professionals, wanted to appropriate this space by going on mass media and claiming the category" (Anon. 2016). Sulekha offers differential access to the elite, upwardly mobile consumption of services in India; it is operating on the model of Uber, AirBnB, Gumtree, and other crowdsourced digitally networked service-gig aggregators; indeed, these kinds of networked, sharing economy platforms are themselves understood as kinds of digitally networked jugaads. At Sulekha what's on offer are trust and professionalism legitimated through an aggressively managed digital media organization.

Ganguly further adds, "We believe the insight for the campaign is deeprooted in Indian culture and would strike a chord with the audience. We have all tried to jugaad our way out of situations. While it is a popular practice, we all know that it is not the optimum solution. Local service partners listed on Sulekha understand that consumers aren't looking for quick fixes, but for permanent solutions. Our 'Go #AntiJugaad' campaign echoes this sentiment and aims to reach out to everyone who seeks easy access to professional, high-quality local services" (Anon. 2016). Why anti-jugaad? If on the one hand contemporary Indian media momentarily nominates jugaad to be the essential characteristic of Indianness, on the other it is seen as a shameful national habit, a kind of miserly shopkeeper's make-do ethos. The ironic recourse to deep-culture (i.e., essentialist) marketing refers to and obscures other relations: How transparent is the system of measures determining quality? What situations call for jugaad and which don't, who gets to say so, and on what basis? And what exactly, given the evolving ecologies of matter, population, policy, capital, land, water, identity, and biological life, is a permanent, optimal solution? Intensively and extensively today in neoliberal India this solution involves the mobile phone. Satya Prabhakar, the CEO of Sulekha.com, feels that smartphones have ushered in a new era of local services in India, and Sulekha ideally wants to tap in to it with the campaign. "Smartphones have revolutionized how Indians search for and consume local services. It has become an important business category and the market is currently valued at \$200 billion. At Sulekha, we have had a 90 per cent growth in local services demand last year, and it will only grow. We are committed to make this business a success" (Anon. 2016).7 The pedagogy of elite consumption passes through the pirated prism of the mobile phone, and a branded network of service providers will spread a new ethos: anti-jugaad will win the day. But what are we to make of the moment of jugaad "innovation" in relation to affection and affect?

Indeed, what is at stake in these sets of representations, these affective images? In affective ethnographies, affirmation and ethics pass beyond good and evil to consider material infrastructures of good and bad, that is, the fuzzy set of joyous passions as emergent quasi-causes of gradients in an ecology's morphogenesis. These fuzzy sets of sensation, in their mode of ontological affectivity and epistemological common notion, bring to crisis both Western humanism and the regime of what Elizabeth Povinelli (2016), following Quentin Meillasoux, has called "correlationism."

For Povinelli, a common thread connecting the diverse schools of speculative materialism is a shared abhorrence of Kant's influence on metaphysics. But, as she is careful to point out, many differences separate the schools. "Thus, if Meillassoux's approach is to demonstrate that humans can think the absolute, then Steven Shaviro's solution for how to sidestep the correlationalist trap is to intervene in how we think about thought, af-

firming his call for a new 'image of thought'" (2016, 125). For Povinelli and Steven Shaviro, thought is not, after all, an especially human privilege, and it is in fact one of the driving insights behind panpsychism. Drawing on recent biological research that seems to indicate that aspects of what we commonly understand as thinking—or an experiential sensitivity to affect and be affected—"goes on in such entities as trees, slime mold, and bacteria, even though none of these organisms have brains. Other forms of existence might not think like humans think, namely apprehend through the semiotic forms of human cognition (categories and reason). But that does not mean they do not think. It means we should think about thinking in another way. A noncorrelational approach to thought—pulled from Charles Peirce's model of the interpretant or George Molnar's concept of aboutness—seems to exist in all things. Advancing a model of thought that would include nonhuman thought 'means developing a notion of thought that is pre-cognitive (involving "feeling" rather than articulated judgments) and non-intentional (not directed towards an object with which it would be correlated)" (Povinelli 2016, 125–126; see also Shaviro 2014, 14–20). Rather than miring oneself in a philosophical contradiction, thinking how objects can be let to be without human thought transforms first philosophy into aesthetics, which, critically following Whitehead and Graham Harman, Shaviro argues involves a method of turning oppositions into contrasts.

For her part, while Povinelli is sensitive to the question of attention, she relates its processes in their ontological orientations to nonhuman becomings. She does so through the discursive construction of sets of memoryimages circulating in the lifeworlds of Northwest Australian aboriginal peoples. Through it, she draws out a resource for what I am calling affective ethnographies, and that is a practice of decolonizing attention.

I turn here to the work of Henri Bergson, Gilles Deleuze, and Félix Guattari for aid in forming a pragmatic notion of jugaad, or more precisely a common notion (i.e., a notion common to two or more multiplicities), which the practice of jugaad affirms in its various assemblages, sensorymotor circuits, and (de)habituations and virtuosities (Deleuze 1988b, 53). As will be clear in the chapters that follow, I have been affected by jugaad practice to develop a wariness of its political ecology. I want to summarize and conclude the discussion of the Sulekha ad by considering its affective relations in the difference between affection and affect, and between intellectual and manual labor. Keep in mind the repeated "innovation"



FIGURE 1.2. Nikhil's "jugaad time" face in the Sulekha ad.

image: the light-bulb flickering on jugaad time for Nikhil and his relations is strictly speaking the image—already past but still incomplete—of a passage from one state to another.

Deleuze's work on affection images, taken from his encounter with Spinoza, Kant, Lacan, Nietzsche, and Bergson, allows us to better pose the question of hacking today. First, we have the body's affection and idea involving the nature of the external body, and, second, we have the embodied power of action or affect. Deleuze defines the latter as an increase or decrease of the power of acting, for the "body and mind alike" (1988b, 49). Notice then that the body's affection differentially affects both the mental and manual labor divide; I will return to this in the conclusion to this chapter. Thus, on the one hand, affection refers not to an idealized conception of the body but to a definite state, composition, or set of dispositions of the affected body (the body's "polyphased space," or, as Felix Guattari defines it, an "abstract space where the axes represent the variables characterizing the system" [Guattari 1995, 97; see also Combes 2013, 4]). Fugitive and incomplete, the variables of a body's multiple phase space, seemingly captured in the face's expression of innovation, are precisely what is potentialized in the jugaad practices dramatized in the Sulekha ad (Bergson 2012, 260). But the body's phase space implies the effective action of an affecting body. As feminist work on biopolitical affect has shown, the valence and politics of affect cover a vast range of referents, processes, and struggles (Ahmed 2007; Ashcraft 2017; Berlant 2016; Clough 2010; Cowen and Siciliano 2011; De Angelis 2007, 2010, 2017; Grosz 2013; Knights 2015; McIntyre and Nast 2011; McLean 2014; Morrissey 2011; Povinelli 2016; Pratt et al. 2017; Puar 2017; Pullen and Rhodes 2015; Pullen et al. 2017; Yusoff 2017; Zeiderman 2018). Emotion, our common sense, but not some universal experience of fear, for instance, is one dimension of affect: it refers thought back to a preindividual and historical form of the bodily capacity to sense and act, and to make sense of that act. But it remains the latter form, which is already the idea of its form (what image of thought is necessary to think affective capacities as well as what Povinelli calls geontology?). The senses of nonhuman and human ecologies within and against semiocapitalism that Povinelli's nuanced analysis activates as a specific postcolonial archive, affect and participate in what is now a general displacement of the postcolonial critique of representation (Povinelli 2016, 215; Derrida 1998; Berardi 2009a). Here, affect refers to the durational passage from one habituated state to another, taking into account a strictly unpredictable "correlative variation of the affecting bodies" as shifting and emergent capacities along gradients of intensity.

There is therefore a difference in nature between affection and affect. An affection-image is a state of composition of the body, and affect follows from it "as from its cause." But, and this is decisive for a thoroughgoing displacement of what Deleuze disparagingly calls Platonic representationalism, the affect "is not confined to the image or idea; it is of another nature, being purely transitive, and not indicative or representative, since it is experienced in a lived duration that involves the difference between two states" (Deleuze 1988b, 49). So affect is the durational difference (following Gabriel Tarde, the identity of a duration would here be simply the most minimal degree of difference [Tarde 2012]) or intensive variation in a body's phase space, while affection is compositional. Intensive difference passes through the durations of affect such that it both repeats and potentializes the compositional state that is the body's affection (Shaviro 2014). Deleuze shows that an existing mode (body) is thereby defined by a definite and yet plastic capacity to affect and be affected.

A mode's essence is a power; to it corresponds a certain capacity of the mode to be affected. But because the mode is a part of Nature, this capacity is always exercised, either in affections produced by external things (those affections called passive), or in affections explained by its own essence (called active). Thus the distinction between power and act, on the level of modes, disappears in favor of two equally actual powers, that of acting, and that of suffering action, which vary inversely one to the other but whose sum is both constant and constantly effective. Thus Spinoza can sometimes present the power of modes as an invariant identical to their essence, since the capacity to be affected remains fixed, and sometimes as subject to variation, since the power of acting (or force of existing) "increases" and "diminishes" according to the proportion of active affections contributing to the exercise of this power at any moment. It remains that a mode, in any case, has no power that is not actual: it is at each moment all that it can be, its power is its essence. (Deleuze 1992a, 93)

Povinelli, in her creative engagement of the notion of essence as power, notes that the "power (potenza) of potentiality is the positivity within biopower, within Life" (2016, 80; on essence as power see also Hardt, 1995; Deleuze 1992a). Following Shaviro (2014) and Jane Bennett (2010), Povinelli argues for a break from a focus on essences in affective ethnographies. "When the focus of the ontology of self-organized being is shifted from the search for essences to the desire for events, from sharp epidermal boundaries to fuzzy and open borders, and from simple local bodies to complex global patterns, the following emerge as exemplary ontological objects: weather systems, carbon cycles, computer routing systems" (2016, 46). This movement away from epidermally enclosed, self-oriented, and self-organized entities and toward the complex dynamics of far-fromequilibrium assemblages likewise characterizes Bennett's model of a postbiopolitics grounded in the concepts of actants, affects, and events rather than in the processes of life differentiating from nonlife. We will return to the potentiality of technoperceptual plasticity in the chapters that follow, but here I highlight its relation to the affective event.

And here too we are on the experimental terrain of composing an affective method. When one mode encounters another mode, an affect-event may be produced in which an operation of resonation takes hold of both modes, such that both modes enter into a third relation, a relation with the outside of what folds them together in composition or decomposition (Culp 2016; Combes 2013, 36; Massumi 2002). The light-bulb effect, the sensorimotor circuit of what, in business and management discourses as we shall see, is celebrated as creativity and innovation itself, is in Sulekha's (and behind them Ogilvy and Mather's) elite appropriation and rejection of the "deep" culture of jugaad, the result of the high-risk habits of the

"incorrigibly" precarious. Affective method, then, involves a thinking and practice of essences as ontological and epistemological at once (Barad 2007; Deleuze 1992a). Power as (in)capacity, to think with both Andrew Culp (2016) and Jasbir Puar (2017), becomes the affective-image and common notion of an essentialized jugaad, its specific regime of potentialization, habituation, and capture.

The affect of jugaad is bound up with what Sohn-Rethel analyzed as one of the fundamental problems of capitalism: the division between intellectual and manual labor. Now, if we take jugaad as method, that is, as the idea of the idea of working around to the point of sabotaging what's given as fixed, normal, formal, propertied, *suvarna* (upper caste), appropriate and right, its joyous practice destabilizes not only the value-form of commodity production for monopolistic control, but also the enforced dichotomy between intellectual and manual labor in several caste and class hierarchies that it presupposes. Sohn-Rethel links this latter dichotomy to the social synthesis produced through the abstraction of money (1978, 6).

Clearly the division between the labour of head and hand stretches in one form or another throughout the whole history of class society and economic exploitation. It is one of the phenomena of alienation on which exploitation feeds. Nevertheless, it is by no means self-apparent how a ruling class invariably has at its command the specific form of mental labour which it requires. And although by its roots it is obviously bound up with the conditions underlying the class rule, the mental labour of a particular epoch does require a certain independence to be of use to the ruling class. Nor are the bearers of the mental labour, be they priests, philosophers or scientists, the main beneficiaries of the rule to which they contribute, they remain its servants. The objective value of their function, and even the standard of truth itself, emerge in history in the course of the division of head and hand which in its turn is part of the class rule. Thus objective truth and its class function are connected at their very roots and it is only if they can be seen thus linked, logically and historically that they can be explained. But what implications does this have for the possibility of a modern, classless and yet highly technological society? This question leads on to the need for a further extension of Marxist theory which did not arise at an earlier epoch: what is in fact the effective line of differentiation between a class society and a classless one? . . . The three groups of questions raised here

stand in an inner relationship to each other. The link connecting them is the social synthesis: the network of relations by which society forms a coherent whole. . . . As social forms develop and change, so also does the synthesis which holds together the multiplicity of links operating between men according to the division of labour. (Sohn-Rethel 1978, 4)

The deconstruction of binaries (e.g., the reversal and displacement of manual and intellectual labor) has become a mechanical process—Facebook and Google bots do it regularly. That is not my aim here: material *gradients* between intellectual and manual labor pass through the affective dynamism of historically situated bodies whose power, whose essence (power) we do not fully know. In the chapters that follow, I will return to the dichotomy highlighted in Sohn-Rethel's study of class formation; here I want to mark how the affective passage from obstacle to flow in the Sulekha ad is tied to (at least) two movements at once: the affective, durational, and embodied passage from one state of bodily affordances to another, and a general, but again embodied displacement of the dichotomy of manual and intellectual labor. Power's (in)capacity and creative labor: do these two movements resonate and/or intersect, and are these abstractions—resonation and intersection—merely two expressions of a certain will to power within postcolonial practices of affective ethnography (Culp 2016)?⁸

The Sulekha ad humorously stages the class and gender drama of jugaad as the discourse and practice of India's new "extreme work" cultures (Bloomfield and Dale 2015; Gascoigne et al. 2015), in which the workaround becomes work. In the ad, the song highlights the euphoric egoism of the jugaadu: the light bulb *chamatkar*, the miracle or marvel of innovation as intellectual labor of an entrepreneurial service class, is immanent to Nikhil, and its benefits (through manual, but highly stylized labor), its affective passages, are self-evident (to him). The frugality of the jugaadu poses a radical, destabilizing, and unsustainable risk to social reproduction, as water and electricity disruption stops up all other flows—from affection to shitting to money. Jugaad is an enemy of sustainability, and so it is an enemy of the (gendered and sexed) home (and through association also anathema to true religion); it is an obstacle to security and trust. David Harvey has usefully noted that the

monopoly power of private property is, therefore, both the beginning and the endpoint of all capitalist activity. A non-tradeable juridical right exists at the very foundation of all capitalist trade, making the option

of non-trading (hoarding, withholding, miserly behavior) an important problem in capitalist markets. Pure market competition, free commodity exchange and perfect market rationality are, therefore, rather rare and chronically unstable devices for coordinating production and consumption decisions. The problem is to keep economic relations competitive enough while sustaining the individual and class monopoly privileges of private property that are the foundation of capitalism as a political-economic system. (2002, 97)

As we have seen in the Sulekha anti-jugaad "campaign," class, gender, ability, and religion are articulated in a whole ecology of sensation, continually synthesizing feedbacked perception with machinic capacities. One might say that a kind of class-caste war is being conducted through the pedagogy of Sulekha's anti-jugaad: "Elevate yourselves from the manual pettiness of your backward caste precarity," it seems to command. It is based on the radical separation between jugaad as vulgar, low-caste, manual, amateur, material, creative, DIY, and disorganized/informal practice versus professional, pure, suvarna, formally organized, value-added, insured, and networked labor (Athique et al. 2018, 10-15). Yet, in practice, there is no separation: as we shall see, makeshift, heterodox economic practice and logistics, and mobile media workarounds are differentially meshed throughout the precarious formal and informal ecologies of social reproduction in India's so-called smart cities. Thus, we come to the image of our first approximation: not Nikhil, but his ad hoc, preindividual ecologies, the dynamics of egoistic affections, joyous passions separating the ecology from what it can do, expelling solidarity for sympathy, the effects of unconscious heterosexual masculinity (the hacker-engineer as the active, joyous man) and a vague, backgrounded Hinduism, the embodied, material flows that give the lie to any rigorous separation between formal and informal economies as well as intellectual and manual labor—these processual dynamics, differently crosshatched in each sign, close-up, and shot-reverse shot, are usually obfuscated through the commodification, gridding, and capture of the affective relations of the jugaad image (see Deleuze 1994). While, as I will show, jugaad practice is embraced enthusiastically by both men and women, its majoritarian media representation usually puts its practice in the domain of masculine control, rarely in terms of women's joyous and virtuosic hacking into the conditions of their own exploitation.

The Jugaadu's Smart City

In chapters 3 and 4, I turn to the problem of hacking the smart/Big Data city. Here I want to pave the way for that discussion by asking another question in the context of a short documentary on subaltern media ecologies: How does postcolonial, urban media practice in India refocus the question of the political today? As I suggested above, the embodiment of media in India returns us to the project of a political ecology of the image. Recall that for Bergson an image is halfway between a representation and a thing, and if it has a "life" it is through the temporal and material organization of noncoinciding resonant unities, or moving wholes, which could be durations, a neural network, the murmuration of a flock of birds, or assemblages of assemblages of as many other things besides. In diagramming practices of the image as sensory-motor circuits in ecological feedback with assemblages of matter, bacteria, minerals, speed, and technologies (all with varying degrees of force and vectors of change for a given assemblage), what is at stake for the question of a method of experimentation in affect? I will offer some introductory thoughts on the question of method in my final section of this chapter, but here I want to turn to the collective assemblages of these experiments and consider their ontologies. One of the great challenges of Deleuze's work on affect is to resituate the question of the political ecology of capital ontologically, through what others have called variously ontopower, necropower, biocapital, or geontopower (Deleuze 1986, 1988a, 1988b; Massumi 2015a; see also Manning 2009, 2013; Manning and Massumi 2014; Mbembe 2001; Povinelli 2016). Hence, if affect is autonomous, one line of flight for this multiplicity is the political itself. This is not, however, to blithely affirm in the manner of a braying ass that can only say yes some vague horizontal connectivism that would bestow a technoperceptual joy onto subaltern struggles against regimes of neoliberal debility. As Culp (2016, 17) warns,

Joy surfaces as the feeling of pleasure that comes when a body encounters something that expands its capacities, which are affects said to "agree with my nature," to be "good" or simply "useful." To end the story here (though some do) would reproduce a naive hedonism based on inquiries into subjects and their self-reported affective states. Spinoza's theory of affects is not an affirmation of a subject's feelings but a proof

of the inadequacy of critique. Affects are by-products emitted during the encounter that hint at a replacement for recognition or understanding as the feedback loop to indicate if knowledge was sufficient. But there are innumerable forms of knowledge, many of which invite stupidity or illusion.

The importance of this warning affects a shift in affective dispositions, from parataxis to parataxis, through the diagrammatic method. The "darkness" that Culp aims to raise to a higher power and purpose (2016, 32), an untimely hatred of biopolitical capital and all that flows from it, suggests that the diagrammatic method poses questions of the passions (joyous and sad) precisely to develop common notions traversing multiplicities and the stupidity that captures them. In what follows, I diagram the autonomy in affect through a consideration of jugaad subjectivity in a documentary film about media piracy in Mumbai, *Videokaaran* (2012).

Jagannathan Krishnan's *Videokaaran* begins with a scene of a gettogether of a few working-class, Dalit male fans of Indian cinema. Later in the film this clip is resituated through a recursive unfolding of a vibrant, largely male subaltern media ecology. The "hero" of the film is a member of what he refers to as a "criminal" network (with its own don!); he is also active in the Christian community. Sagai Raj, a thirtysomething tenth-standard pass (basic primary education), is a media entrepreneur in a slum of Bombay. He once owned a video parlor (popular urban exhibition and social spaces screening video CDs to working class and Dalit communities; see Titus, forthcoming) but now runs his own photography studio, and on the side he helps run a porn-video-smuggling network through assorted video piracy practices.

The clip shows Sagai sitting in a darkened room with his friend (and the filmmaker) discussing the "janoon" (madness) of Indian cinema. He discloses that his own connection to cinema (and to kriya yoga) is through Rajnikanth, the popular Tamil film star. He immediately contrasts him to Hindi film star (and brand) Amitabh Bachchan, hoping to draw his friend out to deliver some famous dialogues. The "somewhat forced" conversation turns to Rajnikanth and Bachchan's costarring film *Hum* (with Govinda), which revitalized Amitabh's flagging career back in the early 1990s; in it they had some chemistry, they all agree. Sagai refocuses attention on a comparison between Rajnikanth and Amitabh; he contrasts their trademark entries into films in terms of their speeds (fast and slow, respectively)



FIGURE 1.3. Sagai Raj, nighttime vision shot.

and what qualities of the actor's style they allow to be emphasized (action versus dialogue).

It's a shrewd observation: Rajnikanth's sonically weaponized and lightning-fast gestures are well-known signatures of his style. Throughout Videokaaran, the viewer pieces together a precarious ecology of image, desire, movement, media technology, class/caste, masculinity, intellectual property, and law (Berardi 2008; Berlant 2016; Butler 2006; Hardt and Negri 1999, 2001, 2009; Harvey 2002; Liang, 2009; Lovink and Rossiter 2007; Sundaram 2009; Terranova 2004). Through it we glimpse the traces of social struggles to common resources that are trapped in the monopoly rents of private property. In an urban dialect of easy misogynist masculinity (mothers and sisters figure heavily, with scatological swear words punctuating each sentence), the entrepreneurs of affective style discuss the gentrification of cinema—ticket prices certainly (talkie versus multiplex [Ganti 2012; Rai 2009]), but also the destruction of subaltern videoparlor culture due to copyright policing and corrupt licensing. This was Krishnan's initial intuition in making the film: the cinema is being taken away from the poor (others have documented how the poor have been taken out of dominant Hindi cinema—see Ganti 2012). The demolition of the video parlor, in a strange but unintended haunting of the demolition of the Babri masjid in Ayodhya that sparked the nationwide resurgence of Hindu chauvinism in 1991, is one act in this history of the gentrification of cinema in India. The mise-en-scène is almost claustrophobic, with

extreme close-ups of mouths laughing with shiny, yellowed teeth; gray shapes against a vaguely glowing suburban night; greenish nightvisioned ghosts; slips of an unsteady handheld camera glancing over naked male torsos; missing actants (a woman who is repeatedly named but only fleetingly filmed—the drama of colonial ethnographic filmmaking haunts the mise-en-scène); the dangers of visibility for the ones who follow the arcane path of jugaad, blurring TV screen shots of movies; reaction shots of Sagai watching TV (sets of sensory-motor circuits); and the social and economic daring of living in poverty.

What image is this? Is that a well-posed question today in India? Deleuze's cinema books develop a typology of Bergsonian images as they circulate through and create sensory-motor effects. An effective history of affect is centrally at issue in a striking early passage in Cinema 1: The Movement-Image (Deleuze 1986). This image concerns time-as-duration, but also an artistic practice that experiments in the affects of the interval of durations, an image that would be relegated to the humanism of the dialectic in Deleuze's subsequent analysis of Soviet montage, but one that points to a way of encountering what Sagai Raj expresses in Videokaaran. This is the pathos-image, which is not sadness but rather some kind of mixture of intuitive, immanent firstness and relational secondness (Pierce 1995; Deleuze 1986, 98), images that flash out untimely zones of indeterminate intensities and nonlinear processes. "Kya bolunga main? [What can I say?]," Sagai Raj asks filmmaker Jagannathan through a face that conjoins the intensity of cinephilia with the recognition of speaking to someone (the filmmaker) who does not know Rajnikanth in Tamil.

Deleuze speaks of the pathetic image as involving two aspects. Recalling our discussion of affection and affect in the Sulekha ad, here we see simultaneously the transition from one term or quality to another, and the sudden emergence of a new quality that is born from the transition accomplished: the pathetic image is both compression and explosion. Deleuze writes of the acceleration of qualities moving through the movement of the montage, and in so doing the image passes to a "higher power" (1986, 35), or a passage into a new dimension, raising it to the n+1 power. What are the implications of this accelerated morphogenesis into a new dimension? It is the interval within jugaad ecologies, as affective passage (Deleuze 1988b), which now takes on a new meaning: the interval is the qualitative and abductive leap into the raised power of the instant.

I take Deleuze's treatment of the pathetic as part of a certain proposi-

tion on the ontology of affective intervals. Not unlike Nikhil in the Sulekha ad, with Sagai Raj we see reiterated the expression of a certain style of entrepreneurial masculinist piracy/hacking; in this image, the manual and intellectual labor of invention is displaced in and through a subject who, living partly in jugaad time, partly in actuality, seems slightly out of kilter, a bit odd, a "geek," and at his best a kind of single-minded virtuoso of the hack, not untimely, perhaps, but hypertimely. He narrates in breathless yet measured Bombay Hindi his many attempts to produce and capture value in and through media—as image maker for others, wedding video maker, Photoshop expert, curator of a machinic assemblage of interpolated bits of porn, as a designer of a largely masculinist social center (i.e., the video parlor) for the exhibition of the pan-genres of Tamil cinema. He demonstrates the parlor's logistics of recirculation, its existence against surveillance, the litter of the Anthropocene, and the naturalization of privatized property (Harney and Moten 2013). The video parlor is a space of commoning and extracting (Barbagallo 2015), or sharing and exploiting; the organizational practices include watching for police, using decoys and costumes, directing traffic in and out of the video parlor away from the train tracks, weed and liquor consumption, cameras, communications, and image-production. These curation practices undergird and/ or facilitate piracy ecologies. The director's camera has come after the catastrophe of the demolition of the video parlor—the camera both commemorates and circulates this disaster: turning the device that records the memory of this injustice, Sagai Raj shoots the director trying to light a cigarette (Jagannathan had originally intended to hire Sagai to shoot the movie, but quickly realized it would be better to have Sagai as its hero).

I think of this anomalous documentary in a sense as speaking to the world described so well by David Harvey, that world in which capitalist rent is an art. *Videokaaran* tells the story of those who practice another quasi-capitalist art: jugaads, workarounds, life hacking, or virtuosic precarity. In this world, jugaads produce value and profit, but usually at a very small scale, and that too momentarily; meanwhile the jugaadu, who, through his canny displacement of the dichotomy between head and hand, has unwittingly become the vehicle of a kind of preindividual fetish for jugaad, and thereby accumulates reputational value and, typically, money. In the giddiness of Sagai Raj's description of his extralegal escapades is an ecstatic embrace of the necessary contingency of movement and action in the formal capitalist and informalizing hacking ecologies that work his

assemblage. But already Sagai Raj takes the question of media practice to a higher level, beyond just the vagaries of the workaround, and he raises it to the level of a philosophy of virtuosity, which is also a philosophy of technique, or pragmatics. Sagai Raj celebrates his criminal activities as a style of creating images, for others, for himself. Both his activities and his images take him into the realm of the pathetic: not sadness, but into the preindividual potentiality of affect, in rhythmic motions of compression and explosion. Sagai Raj reads the signs of affect. He tells the director, I can read your face and body and know your presence before you approach me. "Sagai analyses the behaviour of policemen, and studies people so closely that 'even when I look at a shadow I know who it is. When we were screening films we had to monitor the audience and be alert all the time.' He and his friends have been so influenced by movie stars that they are already natural performers—the swagger and the smart lines come easily to them." In one scene, Sagai describes the best strategy for taking a beating from a cop. After simulating a particular threshold of pain, he crumples his body, expressing and dissimulating a physical limit. Indeed his image streams multiply expressions; his different practices have their own but sometimes overlapping image domain. In another, folded intimately with his admiration for film stars, he describes stalking women for sex: not sex workers, but women who he knows "want it." When queried about the seeming misogyny in his objectifications, he literally shrugs it off.¹⁰ These contradictory foldings of affects, habits, memories, and violence show that in subaltern media ecologies whose own domain is organized through increasingly arcane and highly stylized arts of the extralegal and of the exception we are witness to important laws of capitalist accumulation and masculinist violence (Agamben 2005; Roy 2009). Property is expropriation; expropriation is violence; violence is the law of suvarna capital. Meanwhile, the pirated is made common; the commons informalize capital; the commons are the future anterior of capital. There is no symmetry or dialectic here, however. The passage from law to jugaad to the ethics of the extralegal and the commons involves the analyses of nonlinear rhythms, the effects of which are sometimes indiscernible yet real, insofar as they are virtual. These virtual, abstract rhythms, as joyous passions autonomous, preindividual, quasi-casual and in relation, link the speeds and gestures of favorite masculinist heroes to the cycles, violence, and pleasures of the extralegal. This involves at times state-sanctioned entrepreneurship, marking Sagai Raj's career—negotiating beatings by the police while working the pirate kingdom to his own (gendered) advantage.

Harvey's work opens another question: the monopoly advantage of both intellectual property and first-mover advantage is the source of license rents that overwhelmingly favor oligopolistically configured multinational corporations based in the global North, and intense sites of social and political struggle throughout the world (Harvey 2002; Nolan and Zhang 2007; Smiers 2007). For Jagannathan recounting his experiences making the film, copyright did not figure as a major obstacle in Sagai's media practices (personal correspondence, April 7, 2016). Indeed, intellectual property in today's distributed piracy kingdoms (Sundaram 2009) is increasingly seen as merely a historical phase of organizing and controlling the creation, distribution, and consumption of experience (e.g., in the creative industries or smart cities scheme). However, in the economies of the global South low wages, desperately precarious agricultural conditions, urban and factory-related ecological disasters, chronic water shortages, and poor access to poor infrastructures continue to characterize everyday life (see Amin and Thrift 2002; Birkinshaw 2016; Gill and Pratt 2008; Hesmondhalgh and Baker 2010; Smiers 2007). India has been unevenly integrated into the service and creative industries of the global North, and recent policies by both the former Congress and present BJPled government have sought to encourage "glocal" brand presences for Indian companies. Going by the hype of the current BJP chauvinism and their plans for smart cities, the future seems to be blisteringly bright for India's creative industries.

But Sagai's pirate kingdom is the excluded center of India's Acche Din (good days), as Prime Minister Narendra Modi calls our era of falsely imprisoned students, censored histories, neoliberal corrupt rule, heterosexist stigmatization, lynch law, murdered journalists, murdered Dalit intellectuals, and might-is-right politics. The hacking ecology that Sagai mobilizes to jugaad his way to his next image show is a state of exception, a necropolitical domain, with its joyous and sad passions that continue to separate its own ecology from what it can do. Its intensities and events in forms of life and politics in poor and Dalit urban communities suggest another dimension to the passage of the interval, but one that composes political subjectivities and affections that no longer bear clear connections to older party-style affiliations or even caste, class, and religious identi-

ties. *Videokaaran* does not shy away from the pervasive presence of the conservative Hindu Shiv Sena throughout Bombay life—the final scenes are of Sagai Raj, himself a Dalit Christian, walking through a Hindutva crowd in the midst of a boisterous procession, seemingly both within and outside this other masculinist assemblage. The extralegal image of the jugaadu (as virtuoso of the workaround) does not disclose a politics, but the conditions of possibility of politics as such. Those conditions suggest that media and affect are twined in the body, compressing and exploding habituations continually. *Videokaaran* brings out other ecological relations in jugaad practices. Affect in jugaad time, as the durational passage from a static affection to experimentation, triggers euphoria for Sagai Raj; his at times docile, at times aggressive masculinity coevolved with his machinic assemblages and media consumption practices.

To summarize and conclude, jugaad, as I will argue in the chapters to come, is an image of entrepreneurial abandon and virtuosity, one that curiously withdraws value from its otherwise accumulating and circular flow (Schumpeter 2008). The intensive parataxis draws forward by juxtaposing contrasting if not contradictory jugaad images:

- 1 The social practice of jugaad is aligned with what is essentially Indian, and it is excoriated as incorrigibly premodern. Jugaad, thus, brings out the questions, Which essence? Which modernities?
- 2 The social practice of jugaad is celebrated as innovation, and it is decried as value-blocking. In this and many other ways, the value of jugaad involves the political economy of nonformalized creativity in India today.
- Jugaad is accepted as the law of precarity, and it is moralized against as short-sighted egoism. As subjectivity, jugaad involves the materiality of class, caste, and privilege and consumerist habituation.
- 4 Jugaad is celebrated as the new rule for frugalizing India, and it is bemoaned as uncontrollable extralegal "exception." Law and poverty collude to keep jugaad a joyous passion, strategically abstracted from but feedbacked to 1, 2, and 3.

The ecology of these contrasts constitutes different ontological dimensions of jugaad practices. This is why for both neoliberalism (Sulekha's campaign to domesticate the jugaadu) and the law (Sagai's pirate excep-

tion to its rule) the patronage and associations through which jugaads take form ensure an acceptable, probable degree of fluctuations in existing relations of sense, force, and value.

Jugaad as Affective Practice and Critical Method

New critical methods of affecting and sensing the technological substrates of bodily and collective capacities have emerged today. These methods disrupt, repurpose, and/or reassemble molar and molecular relations of force, sense, and value, and they develop critical feedbacks to politicotheoretical practices. Throughout *Jugaad Time*, I consider the everyday practice of jugaad as a potentializing affective passage and intercalated hinge between actuality and virtuality. How does this hinge perform its relations in the processes of doing research? What does this suggest about the geopolitics of research today? Can a kind of pragmaticism of jugaad enable a critical reflection on doing research in affective practices under conditions of neoliberal, postcolonial, racialized, late, all-too-late capital?

Let us begin with a distinction of attention: when we refer to a jugaad event, what is the referent of this term? Jugaad as a workaround, for example, repurposing a brassiere as a motor's belt, can be part of a kind of lifehacking philosophy.¹¹ However, as a practice it is not solely, or primarily, focused on hacking anything; its affective disposition intuits a purposeful, continual, mental, and manual tinkering focused on getting something done, elegantly and beautifully if possible, but, even if in a patchwork, makeshift, even ugly way, done. Mobilizing a mode of attention that Povinelli brings to crisis in Geontologies, tinkering-based workarounds can sometimes be direct hacks into forms of power, whether algorithmic or not, but they need not be. With varying intensities of attention, workarounds can open interfaces, massage machines and media, for better, quicker flow of more work, more pleasure, more (self-)exploitation. Workarounds can literally create time out of timepass (on timepass see Rai 2009). The overworked neighborhood mobile-repair adept attends to your faulty device with intuitive, implicit, and formal jugaad diagrams to make the device functional again; its sad and joyous passions reverberate through your habits whose processes express (in)capacities and powers that involve the jugaad in other political economies of becoming.

Jugaad then can be understood through several utility measures, grids of efficiency, and tables of values common to neoliberalizing postcolonial

economies (Brown 2015; Povinelli 2016), but specifically developed in the informal economies of India (see Lloyd-Evans 2008). If we consider the implications for both politics and theory of recent work in postcolonial queer disability studies—for instance, the work of Puar (2017) and Dasgupta and Dasgupta (2018)—we might ask what jugaad can offer a method of research. Is there an archive of queer jugaad ecologies from which interdisciplinary methodologies can learn?

In social practices ranging from the virtuosity of mobile phone repair wallahs and the constant repurposing of media devices in informal piracy ecologies, to negotiating the disabling, debilitating Brahmanical biopolitics (onto/geontopower) of caste through different practices of commoning, workaround, and refusal, the affective disposition of jugaad can be linked to what Brian Massumi (2015a, 2015b) has called the priming of ontopower. Ontopower is a form of economic, political, and social power that generates, as we have seen above, affections (as states of being) and affects (as a durational passage from one state to another) preemptively, that is, in anticipation of events, keeping the body's capacity in a state of ever-ready deployment. Jugaad practices anticipate the functioning of ontopower: in its tinkering with material and intensive affordances and continually recalculated strategies interfacing with different combinations of assemblages, jugaad can potentialize conditions of extreme precarity. Simultaneously, jugaad mobilizes tendencies common to the ecologies of sensation of prosumer neoliberalism: individualism, consumption, short-term fixes, award-yielding work, savings, debt, human capital, entrepreneurialism, and disruptive innovation. Here, jugaad, far from being a practice of autonomous hacking, capitulates to and intensifies capitalist habituation and surplus value accumulation.

Indian neoliberalism has developed its own jugaad image, as the practice is enthusiastically taken up in business management discourses, euphemistically refashioned as "frugal innovation." Acting within and against these systems of force, sense, and value, jugaad enables a renewed focus on the unequal material conditions of its ecologies, the forms of struggle commensurate with their overthrow, and the diagrams for a noncapitalist landing to our collective lines of flight (De Angelis, 2007, 2010, 2017). However, the revolutionary becoming moving through jugaad practice suggests we may never be landing as such. Formal sociological categories or images of thought that foreground the primacy of academic value will find in jugaad diagrams an impossible and sloppy eclecticism. Normal-

izing jugaad through this image of thought, which we can call, following through on some provocative work in organizational studies, the image of excellence within a neoliberal university, yields nothing (Ashcraft 2017; Thanem and Wallenberg 2015; Dale and Latham 2015). The essence of (non)human freedom itself is in play in every jugaad.

A pragmatic and effective political economy of the heterodox practices of informality legible in jugaad practice calls for both a speculative method conjoining virtual and actual affects (affordances, capacities, tendencies, debilities), and an experimentation in and through ecologies that traverse digital-analogue assemblages of contemporary postcolonial capital (Massumi 2015b). In interviews with practitioners, jugaad became for me an attentive and canny bodily orientation toward historically specific *dispositifs* of power, exploitation, discourse, materiality, value, and intensity, and a relational practice of experiencing, negotiating, and, at times, changing human and nonhuman ecologies. Many of these interviews were conducted while specific jugaads were being affected; sometimes the interviews themselves were a kind of jugaad for our interlocutors. Jugaad works with, and at times creates, metabolic imbroglios—events in the informal economies of the precariat's biopolitical production of both resistance and dispossession in contemporary postcolonial capitalism in India (Arboleda 2015). Here, I begin considering examples to which I will return later.

In one of the interviews conducted by the Delhi-based researcher Anisha Saigal, a middle-class woman from Delhi recounts her history of negotiating gender power by hacking the paternal authority that was attempting to secure the home from globalized cable. In Jugaad Time, I consider domestic space-time as a feedbacked field of patterned (and controlled) but unpredictable (and agentive) intensive resonances: assemblages of discourses and practices of patriarchal control, feminist emancipation, queer-techno-pananimist-sexuality, postcolonial development, electrical "griddyness," urban proximity, and technoperceptual affordance: following Clough (2018), the diagram of an exstatic India within and against assemblages of control and accumulation. Each ecology has its own diagram, even its own method: an ecology's resonations of force, sense, and value take affective ethnography a step closer to a counteractualizing common notion, moving from an initial joyous or sad passion—connecting cables, watching American TV serials like Santa Barbara under the patriarchal radar—to a common notion of becoming within and against the multiplicities in force. What would a fruitful diagram here be? More specifically, how do we situate politically the changing relations of force, sense, and value that dominate, circulate, and flow in and through such practices of jugaad? Throughout this book, I define force as the set of power relations and capacities struggling to control, construct, or territorialize a given actant's relations, its assemblages, processes, and conjunctures (Latour 2005); there is also a certain, at times decisive force in the jugaadu's virtuosity. By sense, I mean the historical and embodied processes of perception, signification, sensation, tendencies, and habits that such an actant or conjuncture emerges from (Deleuze 1988a, 1988b). Value I define both in terms of monopolistic forms of capitalist accumulation, structures intensifying the exploitation of newly algorithmized and productivized bodies and relative surplus value ecologies, and in terms of the nonlinear emergence of technoperceptual "basins of attraction" in digitally networked social life in everything from styles of consuming viral memes to emergent forms of political organization such as the direct democracy and alternative currency experiments in Europe or the feminist activist movement Why Loiter?, or Dalit political organizing in Mumbai.¹² Relations of force, sense, and value limn technoperceptual assemblages through and in which capacities and affordances of carbon- and silicon-based ecologies coevolve.

Thus, as method, Jugaad Time makes the case for an ecological and affective analysis of a social practice that is quite simply a pragmatic and networked approach to an obstacle. The ecology and social history of this ethical pragmatism is potential and actual at once. The modes of sufficient reason employed in the practice of jugaad engage intuition as much as probability (Adorno 2013; Ansell-Pearson 2001; Bergson 1988; Deleuze 1988a, 1988b; Hardt 1999; Sohn-Rethel 1978). Raising this doubled epistemology to its ontological vitality, moving from a joyous passion (jugaad) to a common notion (workaround power/property), through the memory spores of control databases alive with what Jacques Derrida once called "archive fever," the diagram of jugaad overlaps fractally (n-1) with its own practice, constructing an interzone where memoir, science fiction, ethnography, and political philosophy combine to make "an affirmation of becoming." Jugaad Time diagrams sets of potentialities and probabilities both within and "beyond" jugaad, and, as Nietzsche urged, for the benefit of a time to come.

This is another wager of *Jugaad Time*: the diagrammatic method of affective ethnography is focused as much through acts of enabling destruc-



FIGURE 1.4. Example of a life-hacking jugaad. Photo by Anisha Saigal.

tion (critique, deconstruction, parataxis) as through modes of decolonizing attention (Povinelli 2016; Strumińska-Kutra 2016; see also Hart, G. 2006, 2008). Thus the term "ethnography" is transformed and recontextualized in the realm of affect; decolonizing attention affects the term "ethnography," and the attention it takes to do this has become involved in processes of experimentation within and against the panoptico-digital and capitalist capture of ethnography. The diagram presented in the chapters that follow charts the actual and potential resonant fields enfolding the practice of jugaad in forms of creativity, research, value generation, politics, and communication. For instance, linking urban and neural plasticity to the hacking practices common in jugaad cultures yields strategic questions for how policy is implemented, as well as how feminist, Dalit, and queer politics is imagined and practiced. The capitalist economy in India is actually lived by the vast majority of its inhabitants in ways that bring to crisis the neoliberal methods of academia. Indeed, capital itself throughout South Asia has broken with contemporary academic forms of critiquing, arguing, explaining, or demonstrating by relating the practice of jugaad ontologically and epistemologically to both the histories of DIY cultures of everyday resistance of subaltern subjects and communities (frugal innovation), and to an as-yet-undecided, potential future in which the practice of jugaad reorients emergent technoperceptual assemblages to become resonant and functional. Each of these relations is an ethics of composing a plane of consistency. This method draws on the work of Franco Bifo Berardi, Erin Manning, Brian Massumi, and Félix Guattari. As Bifo notes, in a talk at a meeting on "Psychoanalysis and Semiotics" held in Milan in 1974, Guattari spoke about signifying semiologies and a-signifying semiotics thus:

My opposition between despotic signifying semiologies and asignifying semiotics remains highly schematic. In reality, there are only mixed semiotics which belong to both in varying proportions. A signifying semiology is always shadowed by a sign machine, and, conversely, an a-signifying sign machine is always in the process of being taken over by a signifying semiology. But it is certainly useful to identify the polarities represented by the two, in other words the signifying semiology as a paranoid-fascist ideal, and a non-signifying semiotics as the ideal of schizo-revolutionary diagrammatization, of getting beyond the system of signs towards the plane of consistency of particle-signs. (Guattari 1984, 140)

Bifo writes, "Guattari uses here the notion of the particle-sign. This is his way of molecularizing semiosis, of seeing it as an activity of projecting psychochemical agents. We can speak of signs as material agents of semiotic mutations. This has nothing to do with ethereal messengers of meaning, but instead with viral agents in Burroughs's sense who, in fact, spoke of language as a virus: signs not as pure representations, but propagating as asignifying contagion, transforming the semiotic ecosphere" (Berardi 2008, 107). Thus, what is at stake for Jugaad Time in the diagrammatic method is precisely a thoroughgoing displacement of representational and semiotic frameworks toward an experimental and embodied (or molecular) practice of productive contagions traversing multiplicities. ¹³ Consider the set of jugaads operating within Prime Minister Narendra Modi's discourse and practice of "smart cities." Through legal (security and controloriented policy) and extralegal means (dispossession), the smart city has emerged as a form of elite reappropriation of the right to the city. Numerous contrasting forms of technoperceptual contagions traverse the formal

and informal dichotomy at different scales: mobile phone viruses, always on sensors, habituated practices, tinkering, infrastructure-light security, data ontologies, hacking, and so on. These vectors of contagions operate through the project of smart urban (re)generation, or anti-Dalit and anti-Muslim social cleansing. An implicit and generalized jugaad governmentality makes possible both the ongoing and rapid privatization and segregation of social, material, media, and economic infrastructures, as well as the proliferation of contagious practices of commoning resources in ad hoc and makeshift pirate infrastructures and emergent technoperceptual assemblages (Jamil 2017).

In the chapters that follow, I diagram jugaad practice through its moments of corporate capture as innovation, in its dynamics of noncapitalist refusal, and in its plastic time-spaces of creativity. Thus, I hope to show how political ecologies of sensation can raise compositional questions for both radical politics and queer embodiment. What I will call the hacking ecologies of jugaad necessarily entail an ethics of experimentation. In "Machinic Orality and Virtual Ecology," Guattari locates ecologies of the virtual in practices of aesthetic and hence ethical experimentation that are "deterritorialised machinic paths capable of engendering mutant subjectivities" (1995, 90). Deconstruction of the structures and codes is a necessary but not sufficient step on such paths, and as we go further toward an epistemology of ontological common notions we are invited to take "a chaosmic plunge into the materials of sensation" (1995, 90). In India, increased inequality and unanswered injustice, rampant militarism and unchecked authoritarianism, as well as state suppression of dissent, stigmatization of nonnormative sexualities, and neoliberal policies legitimating privately owned civic "smart" spaces have all made it imperative to recast the axes of values, forces, and senses that naturalize injustice as the fundamental finalities of human relations and productive activity. Understanding jugaad's ecology of the virtual is thus just as pressing as knowing its actual ecologies of the pirate world. Following Guattari, we will attempt to move beyond the relations of actualized forces, and into virtual ecologies that will not simply attempt to preserve the endangered species of Indian cultural life but to "engender conditions for the creation and development of unprecedented formations of subjectivity that have never been seen and never felt. This is to say that generalized ecology—or ecosophy—will work as a science of ecosystems, as a bid for political regeneration, and as an ethical, aesthetic and analytic engagement" (91–92). Guattari urges us

toward a fractal ontology where the subject is a fractured anchor point within "incorporeal fields of virtuality" (95). Thus, jugaad's very timely and increasingly valuable ecology of sensation can be diagrammed as a historically specific but ontologically untimely phase space of a (de)habituating body, never identical to itself, "in permanent flight on a fractal line" (95).

Notes

PREFACE

1. Here the works of Bernard Stiegler, Mark Hansen, Walter Benjamin, Susan Buck-Morss, Martin Heidegger, Jacques Derrida, Gilles Deleuze, Félix Guattari, Gilbert Simondon, Isabelle Stengers, Raniero Panzieri, Manuel DeLanda, Michael Hardt, and Antonio Negri all have important things to add to this argument. Questions of techne and anima, of the archive and the digital, or coevolution of carbon- and silicon-based life—these questions have been layered in the pages that follow, such that their itinerary would form sets of parataxes intercalated between a fetishized status quo of property, security, and territory and a potentially liberatory, ugly, and experimenting undercommons, unbranded and autonomous. This dialectic is not over.

INTRODUCTION

- 1. See Ajana 2013; Arboleda 2015; Baka 2013; Berardi 2008, 2009b; Bhaskaran 2004; Birkinshaw 2016; Brown 2015; Sen and Dasgupta 2009; Mandarini 2005; Narrain 2008; Streeck 2014; Vanita 2013.
- 2. Povinelli, drawing on inspiring work by Brian Massumi, pursues the implications of American Pragmatism for the project of decolonizing attention. See her important analysis in *Geontologies* where she discusses the vitalism of the pragmatic frame and its resonances with aboriginal dreaming practices and their associated materialist animism (2016, 30–37, 125–138). Massumi and Povinelli have both informed my own project of decolonizing attention pursued in this study.
- 3. Contemporary digital marketers are drawing on the work of economist Richard Thaler and Cass Sunstein (1999) to develop ecologies of behavioral change for "better" consumers: "In the wake of economist Richard Thaler's Nobel Prize in Economic Sciences for his research in behavioral economics, staff

writer Hal Conick explores Thaler's revolutionary theories on how to "nudge" people to behave in certain ways and how that theory remains relevant in the digital age. "Perhaps you were nudged by a snack wrapper, imploring you to pick up, unwrap and devour its salty-sweet contents," Conick writes. "Perhaps you were nudged by a mobile notification: respond to a friend request, tip your rideshare driver or—hey, it's raining—order some delivery food." Marketing is, in many ways, a long-game nudge" (Soat 2018, 3). These kinds of nudge campaigns using and abusing jugaad have been fairly consistent in Indian advertising—see for instance the recent makemytrip.com ads featuring Alia Bhatt and Ranveer Singh: https://www.youtube.com/watch?v=n45H7ThwDDs.

- 4. Robert Hullot-Kentor, Adorno's translator, usefully remarks: "Adorno organized Aesthetic Theory as a paratactical presentation of aesthetic concepts that, by eschewing subordinating structures, breaks them away from their systematic philosophical intention so that the self-relinquishment that is implicit in identity could be critically explicated as what is nonintentional in them: the primacy of the object" (Adorno 2013, xiv).
- 5. The campaign can be seen at https://www.youtube.com/watch?v=9V4GN _Of6nE.
- 6. See Udapa 2017; the moralistic anti-jugaad film *Jugaad*; and the criminality attached to jugaadus in *Ishquiyan*. See as well the films 99 and *Black Wednesday* in which the mobile is linked to various kinds of illegal and antinational activities. All point to a deep popular ambivalence regarding jugaad practice.
- 7. Snehojit Khan, "Sulekha urges users to go anti-jugaad with its new campaign," afaqs!, January 12, 2016, http://www.afaqs.com/news/story/46816_Sulekha-urges-users-to-go-anti-Jugaad-with-its-new-campaign.
- 8. Of course, one way to disrupt the drama of habituated discourses is to signify in another: I will often, throughout this study, refer to jugaads as (life) hacking, workarounds, tricks, cons, or reflowing. I have no doubt that I have not touched on the entire range of meanings and senses of this protean term. But I suppose diagrammatic affect plays in the fuzzy set of impossible definitions; jugaad is a term the exact definition of which is less important than the material and psychic relations it mobilizes. This is not, to be clear, a mysticism of the term but an insistence on the slow learning necessary to create common notions. Thus we proceed through hesitations and throat clearings, in short, through paratactical becoming.
- 9. Jai Arjun Singh, "Cinema and the underdog," *Caravan*, December 1, 2011, http://www.caravanmagazine.in/reviews-and-essays/cinema-and-underdog #sthash.1ryKOlUb.dpuf; "On a documentary titled *Videokaaran*, and Its memorable 'hero," *Jabberwock*, September 9, 2011, http://jaiarjun.blogspot.co.uk/2011/09/on-documentary-titled-videokaaran-and.html).
- 10. Sagai Raj's casual sexism resonates very differently today after the many gang rapes that have been publicized since 2011. Deepa Mehta's *Anatomy of Vio-*

lence (2016) is a searing commentary on both women's agency in India and the mediatization of rape today.

- 11. Interview with Sikh taxi driver, Coventry, UK, June 2016.
- 12. See D-cent, https://dcentproject.eu/; https://www.facebook.com/Why-Loiter-193556873988115/?fref=ts; Phadke et al. 2009; chapter 3 in this book.

13. I will also refer throughout Jugaad Time to various texts on Guattari's diagrammatics. Some representative sections follow here. "Guattari locates the emergence of the modern militant aggregation in what he calls the 'Leninist breakthrough' during the 1903 Second Congress of the All-Russian Social Democratic Labour Party, from where—following certain procedural and organisational disputes—emerged a set of affective, linguistic, tactical and organisational traits that constitute a kind of Leninist diagram or abstract machine (Guattari 1984, 184-195). This militant machine, Guattari argues, is characterized by the production of a field of inertia that restricts openness and encourages uncritical acceptance of slogans and doctrine; the hardening of situated statements into universal dogma; the attribution of a messianic vocation to the party; and a domineering and contemptuous attitude—'that hateful "love" of the militant'—to those known as 'the masses' (Guattari 1984, 130). Guattari sees the break of 1903 as the moment that a particular militant diagram was set forth: 'From this fundamental breach, then, the Leninist machine was launched on its career; history was still to give it a face and a substance, but its fundamental encoding, so to say, was already determined' (Guattari 1984, 130). As with any diagram, it draws together its substance in varying ways over time and space, but there is a certain regularity of functions upon which (at least in the 1980s) 'our thinking is still largely dependent today' (Guattari 1984, 190). In discussing the post-'68 French groupuscule milieu Guattari thus contends that the range of groups from anarchist to Maoist may at once be 'radically opposed in their style: the definition of the leader, of propaganda, a conception of discipline, loyalty, modesty, and the asceticism of the militant,' but they essentially perform the same militant function of 'stacking,' 'sifting' and 'crushing' desiring energies (Guattari 1995, 59)" (Thoburn 2008, 110). "The ethical wager is to multiply 'existential shifters' to infinity, joining creative mutant Universes. The ontological pragmatic corresponds to this function of existentialization, detecting intensive indices, diagrammatic operators in any point or domain whatever, without any ambition to universalize them, so that what is demanded are not instruments of interpretation but cartographic tools. Even the little 'a' of Lacan, with its admirable deterritorializing character, or the partial objects of Melanie Klein, can be considered as 'crystals of singularization,' 'points of bifurcation outside of dominant coordinates, from which mutant universes of reference might emerge" (Pelbart 2011, 76). "As a modern philosopher Bergson is novel not because he does not accept the restrictions placed on the philosophy of nature or life by Kant. His originality resides in the manner in which he resists Kant. The conceptions of homogeneous space and time that characterize modern thought are neither properties of things nor essential conditions of our knowledge of them. Rather, they articulate what Bergson calls the 'double work of solidification and division' that we effect on the world—'the moving continuity of the real'—as a means of obtaining a fulcrum for our action: 'They are the diagrammatic design of our eventual action upon matter.' Like Hegel, Bergson makes the charge that Kant's Copernican revolution has the effect of making matter and spirit unknowable. Navigating a way through and beyond the poles of metaphysical dogmatism (whether mechanism or dynamism) and critical philosophy becomes necessary in order to demonstrate that the 'interest' of space and time is not 'speculative' but vital. This is why Deleuze insists that it was important to Bergson to demonstrate the entirely empirical character of the élan vital, that is, as something that is lived. It will then become possible to gain an insight into the germinal character of life in which the separation between things, objects, and environments is neither absolutely definite nor clear-cut, for 'the close solidarity which binds all the objects of the material universe, the perpetuality of their reciprocal actions and reactions, is sufficient to prove that they have not the precise limits which we attribute to them'" (Ansell-Pearson 2001, 33-34).

FABLES OF THE REINVENTION I

1. All cell phones, as well as smartphones to a greater degree, give off forms of nonionizing electromagnetic radiation called radio frequency (RF) radiation and extremely low frequency (ELF) radiation. RF radiation consists of the cell signal, Bluetooth and Wi-Fi, while ELF radiation is generated by the phone's hardware. This radiation is absorbed into the body, usually through body tissue situated at or near where the cell phone is held. The degree of exposure will depend on several factors, including the type of cell phone being used, how far the user is from the cell phone's antenna, how much time is spent on the cell phone, and how far the user is from cell towers (https://defendershield.com/do-cell-phones-emit-radiation-actually-harmful/).

1. THE AFFECT OF JUGAAD

- 1. "Acche Din" (good days or times) and "India Shining" are both populist catch phrases of the Bharatiya Janata Party (BJP), India's right-wing party controlled by the Rashtriya Swayamsevak Sangh (RSS; "National Volunteer Organization"), founded in 1925 by Keshav Baliram Hedgewar (1889–1940). The RSS is a proto-fascist and paramilitary organization whose political face is the BJP.
- 2. According to Wikipedia, jugaad refers to "a creative idea, a quick, alternate way of solving or fixing problems"; colloquially it means a quick workaround that overcomes commercial, logistical, or legal obstacles. Derived from the Pun-