

1. Videos

India: What can it teach us about innovation ?

By
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The patched-together 'jugaad' vehicle has become a symbol for India's austerity-driven economic boom. But it may actually be holding the country back, argues Thomas Birtchnell.

Mobilities in India have a different tempo to the rest of the world. So, for instance, on India's urban roads there are taxis being pulled by people (or rickshaw wallahs) next to bullock carts carrying goods. In turn these can often be found next to a brand new SUV carrying an IT worker. All of these different types of mobility might be queuing together on a road because a couple of holy cows won't move off the road! You see them all together. And this means it's different to the rest of the world. So here's the idea of a different tempo. Outside of cities, in India's villages, mobilities are also distinctly different. So there you can see ploughs being drawn by oxen for example. This is technology that seems medieval to those in Europe or the US. As well you see Bicycles are ubiquitous and many people simply walk for long distances to get to work or for everyday activities, such as collecting water.

Huge movements of people

Beyond these different types of mobility technology, there are also huge movements of people within India so there is movement from the countryside to the city and from poor states to more wealthy ones. This internal mobility is fuelled by disparities in India's remarkable economic growth. For instance, India's hyped-up IT sector only hires only about one million people: that is one thousandth of a billion. Many people move from the countryside to the city out of desperation and end up working in India's informal sector, which is actually 2 third of the GDP. Also on the move is India's small number of students. This is a tiny number of people in relation to the overall population. What is significant here is that you have also different level of education. So on one hand, you have vocational colleges and on the other hand, you have this elite world-class institution. And when we combine the two, is this access to global circuits so you have this global movement of education and there is a system to move people out of India on global circuits to other countries.

Mobilities at the top and bottom of the social pyramid

In my research on India I am interested in the interweaving of these different types of mobility and the linkages between mobilities at the bottom of the social pyramid and those at the top of the pyramid as well. What links up the mobilities at the BoP, which is the bottom of the pyramid, and the ToP, is a unique sense of austere innovation involving doing more with less, resilience, robustness and so on. In India, in 2005 you saw more than 267 million people living on a dollar a day, and so this is transformed the idea of living within your means into a way of living meaningfully. So there is another side to this

austere innovation. It tends to exacerbate the different dimensions of austerity between India and the rest of the world.

The world's biggest blackout

So for example of this, in 2012 India earned the dubious reputation of suffering the world's biggest blackout with 600 million Indians affected. This kind of blackouts are regular disruptions in India and many citizens resort to innovative solutions such as using their own backup energy supplies, solar panels, diesel generators, this kind of things. So then innovative austerity is not only a force for good, it can also play a role in the actual cause of the problem. So for example, innovation also exists in people stealing the neighbour electricity and like all the way up the line. So this blackout is actually cured because people have this austere innovation. The same thing goes for the huge number of mobile phone users, I mean it's staggering how many are in India you have more than one billion of mobile phone now. This is being seen as sign of emerging middle-class but also, in is taken as counted as mobile phones also make a lot of sense to the wandering poor. To give a constant flow of telecommunication to this fast number of mobile phones, you need generators, because of the blackout. And so what happened is you get 2 billion litres of diesel a year being use to keep these phones online. And because of this infrastructure, and the threat of blackouts, you see people innovating in kind of ways of using the phone itself. So for example, instead of making calls, they received calls and do miss calls, using free "missed calls" features, so they don't actually use their phone properly. So this is another example of austere innovation.

The jugaad, assembled by the rural poor

In my research I have tried focused on one particular example of this Indian innovation. This is what is called a jugaad. That's a vehicle that has been assembled by the rural poor in India from other vehicles such as motorbikes and trucks. These vehicles are often dangerously overloaded with people and goods and they don't have feature of modern vehicles such as windscreens, seats, power steering and so on. It is possible that the Hindi word jugaad shares an etymology with the word juggernaut, which we have in English. The juggernaut actually was a description of this huge temple carts and still have this annual festivals honouring the god Jagannath. In the colonial time this was seen as out-of-control ritual vehicles represented Indians' lack of concern for personal safety. So as seen as almost the character floor on that they have the lack of personal safety. So the austere innovation was actually seen as something that was negative of in India. This Jugaads are very visible on the roads, they often break down and contribute to India's infrastructure problems. They block highways, they cause collisions, this kind of things. The owners thought use the resources around them to repair these vehicles so this is the way you get the idea of resilient innovation at the bottom of India's social pyramid. Because the Jugaads have no complex electronics or engine parts and so can be easily repaired without much cost.

A term for frugal innovation but also for corruption

So the word jugaad has developed this idea of frugal innovation. But at the same time it's seen as something also negative, it has combination of corruption, risky behaviour and also cutting corners. There is a really good image of this from 1979, there is a photograph which symbolise this kind of innovation. It was taken of Indian Space Research Organisation's latest rocket. It was one of the first India missile launched from the country. And what you see as it come out of the hangar, it's bouncing on a bullock car, so car pulled by cars. And at the time this was seen is a modern space-faring nation in India, but in fact globally was seeing as the government was not getting serious about addressing endemic poverty and development. But for a spokesperson for the ISRO, they responded that this was actually an example of how innovative India was. So this bullock cart potentially much better also this

suppose person recon than an air-conditioned truck because it didn't interfere with the satellite's antenna. It had no electronics. You see this idea of jugaad has been favourable and negative and what you see in recent times is it's being favorite at the top of the pyramid. It's being also borrowed as a term for austerity.

Jugaad as a practice the wasteful West can learn

So, for example, you see in a recent book called jugaad innovation (Kevin Roberts), the CEO of Saatchi and Saatchi, talks about austerity being a new operating system for the world and jugaad in India as a practice that the wasteful West can learn. Now many elites in India as well have adopted this term and they championed this idea of India innovation drawing on practices at the bottom of the pyramid. So it's an idea of "grassroots" innovation, that's pourable to Indian ICT sector's phenomenal growth. And it's particularly seen in global outsourcing and other services where you see austerity play a role in a global sense in terms of knowledge economy. It comes with no surprise that Nandan Nilekani, who was the co-founder of one of the India premier IT company, Infosys, who features prominently in Thomas Friedman's book *The World Is Flat*, uses the term Jugaad in his own book *Imagining India*. This was some precedent for the Indian elite. Many people are also sceptical for example on Rajeew Mantri, executive director at venture capital firm Navam Capital, describes a "jugaad myth" that has the potential to impinge on official accounts of systemic risk in India.

A connection between the top and bottom

So this idea of jugaad put the most interesting one currently this idea of connection between the ToP and the PoP. Now one thing that's emerge out of this discussion about the bottom of the pyramid is this idea of using jugaad to understand the Indian consumer market We observe L'Oreal India's CEO, Dinesh Dayal, saying that there's a huge growth and desire to consume at the Bottom of the Pyramid And by learning jugaad, the companies can access this markets. Slimily, the managing director of Renault India, Sylvain Bilaine, talks as well about this kind of local practices or self-construction and repair as a the pragmatic ethic what businesses is co-opt and deployed in activities in India to understand this kind of consumer base. In my own research I've been questioning this borrowing by the ToP of values at the BoP. I argue that in fact jugaad cannot be separated from its social and cultural contexts and the practice is part and parcel of India's infrastructure deficit and you have to take on-board the dramatic social inequalities across different regions in the world and how jugaad links to this.

A paradox at the heart of jugaad

So I guess you can say there is a paradox at the heart of the idea of jugaad. The word is contingent on India's unique risk society and works directly against the transfer to India of modern cosmopolitan standards of consumption. Therefore it is an unlikely strategy for a mass shift to a middle class akin to that of the US or UK through jugaad. What you see is the paradox is two different versions of jugaad: one from the ToP, which you see as something that can deployed middle-class values, and one at the bottom, which is actually is highly risky and involved all sorts of dangerous elements being introduce. So, what you see is this idea of jugaad as a draw-card for India's elites, many of them who insulate themselves at the same time from India's risk society, for example you see them leaving mobile lives globally or leaving in gated communities as well in some IT hubs. This point means to a unique irony which is in this innovative mobility at the bottom of India's social pyramid. It is hard jugaad as a mobility phenomenon actually obstructs the country's apparent development as a global superpower simply because it has to the shortfalls of India's infrastructure.

Mobility

For the Mobile Lives Forum, mobility is understood as the process of how individuals travel across distances in order to deploy through time and space the activities that make up their lifestyles. These travel practices are embedded in socio-technical systems, produced by transport and communication industries and techniques, and by normative discourses on these practices, with considerable social, environmental and spatial impacts.

En savoir plus x

Movement

Movement is the crossing of space by people, objects, capital, ideas and other information. It is either oriented, and therefore occurs between an origin and one or more destinations, or it is more akin to the idea of simply wandering, with no real origin or destination.

En savoir plus x

Associated Thematics :

Lifestyles

- Diversity of lifestyles
- Inequalities

Policies

- Cars



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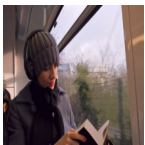
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