# Engaging Science, Technology, and Society

THEMATIC COLLECTION: STS AND INNOVATION ENGAGEMENTS

# What is Innovation in the Non-English Languages?

PANKAJ SEKHSARIA

CENTRE FOR TECHNOLOGY ALTERNATIVES FOR RURAL AREAS (C-TARA)

INDIAN INSTITUTE OF TECHNOLOGY (IIT) — BOMBAY

INDIA

#### Abstract

The paper focuses on the issue of translation and transformation of language and meaning with a focus on the word and the concept 'innovation' What for example are the different transformations that take place between innovation in English and similar words and concepts in Hindi, the most widely spoken language in India? The paper concludes by emphasising the need for more engagement with innovation in the non-English languages because these are more representative of the lived realities and challenges faced by communities in their respective contexts and geographies.

#### **Keywords**

jugaad; innovation; India; Hindi; informality

#### Introduction

As would be perhaps evident from the title of this *engagement*, the issue I am trying to grapple with here is prominently about language and place. It is also at the same time deeply linked to questions of translation *into* and *from* English, the pre-eminent contemporary medium of knowledge exchange and therefore of a power (im)balance. I preface English because this is the medium I write in here – it would be the same question and set of issues (moving in opposite or different directions) if this compendium was to be written in a different language. At the centre is the idea, practice and the possibility of transformation that (can)not take place through translation.

Deciding on a title for the piece that would be both relevant and intriguing in equal measure led me to attempt multiple iterations and I list some of these here because they illustrate, I think, the key task at hand:

- Does innovation happen outside the English language?
- Is there no innovation outside the English language?
- Is innovation innovation in non-English languages?

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**To cite this article:** Sekhsaria, Pankaj. 2023. "What is Innovation in the Non-English Languages?" *Engaging Science, Technology, and Society* 9(2): 75–81. https://doi.org/10.17351/ests2023.1375.

To email contact Pankaj Sekhsaria: psekhsaria@gmail.com.

And then a couple of more non-sensical sounding versions:

- Should innovation be called *innovation* in the English language?
- Is innovation innovation in the English language?

Needless to say, these questions and this piece emerge from my own location in one important context of a complex and wide-ranging cultural- and language-scape of India, where Hindi is the language of prominence. It is also the language I grew up in and the one I use regularly with family, friends and in the larger communities I am part of.

# Innovation in English – Is It Jugaad in Hindi?

I am not a scholar of Hindi by any definition, but my working knowledge of the language and recent efforts to understand this better suggest that the word and idea that is innovation in the English language does not have a direct translation in Hindi. The expression that comes closest would be *jugaad*, but jugaad then is a far more complex and colourful idea than innovation could ever be. This can be best understood by turning the lens and reversing the question — by asking how jugaad would translate into English. And, a world opens up here that is as exciting as it can be infuriating because *jugaad* can be best described as, well, *jugaad*.

This is something I have written about earlier (Sekhsaria 2020) and take the risk of repeating here because it captures the essence rather well; it would serve no purpose to re-invent the writing wheel. Jugaad is a word in many languages such as Hindi, Marathi, Gujarati, Punjabi, Oriya and Mythili that are spoken in the upper half of India. It is an inextricable part of local vocabularies, an integral part of the way life is lived and the world negotiated. It means different things to different people in different contexts. It is used to explain the process of reconfiguring materialities to overcome obstacles and find solutions; it could mean working the system to one's advantage; it is used as a synonym in certain contexts for gambling and corruption; and across large parts of Western and Northern India there is a self-rigged vehicle, which also goes by the name of 'Jugaad' (Jolly 2009; Giridharadas 2010). There are other interesting locally contextualised name variants for this vehicle such as Chakda in western India (Varma 2004), Maruta in parts of the north (Purie 2010) and Vano in the east (Sekhsaria 2019). Jugaad is as much a noun as it is a verb – concept, process and product all rolled into one at the same time – an idea characterised by plasticity and an articulation that has a wide range of meanings and usages revolving primarily around problem-solving or solution-finding.

There is a growing body of translation and interpretation work around *jugaad*, particularly in the innovation studies allied management literature and it is quite fascinating to see *jugaad*'s varied morphs in a different language as: 'creative improvisation' (<u>Krishnan 2010</u>); 'developing alternatives, improvisations and make dos' (<u>Prahalad and Mashelkar 2010, 3</u>); 'an arrangement or a work-around, which has to be used because of lack of resources' (<u>Rangaswamy and Sambasivan 2011, 558</u>); and 'creative adaptation' and adjust (<u>Cappelli et al. 2011, 95</u>).

There is both a celebratory and feel-good air about <code>jugaad</code> (Giridharadas 2010; Radjou, Prabhu, and Ahuja 2012; Purie 2010; Datta 2010) — characterised by what Philip et al. (2012, 14) refer to as 'pleasurable or strategic essentialism', — making a virtue out of a situation of necessity and compulsion. There is also a great deal of scepticism and outright denial in peer-reviewed writing and in the mainstream English media of India. The main thrust here is simultaneously on the inappropriateness, unacceptability, irrelevance, and undesirability of <code>jugaad</code> for India. <code>Jugaad</code> here is what innovation is not and should not be. It can at best be a stepping-stone to the 'real', the genuine and a more systemic paradigm of innovation. 'It is time,' notes an editorial in the business news daily <code>Mint</code>, for instance, that 'we moved from the glorification of <code>jugaad</code> to the celebration of <code>true</code> scientific innovation' (<code>Mint</code> 2012; emphasis added by the author).

Authors such as Prahalad and Mashelkar (2010, 6) writing in the *Harvard Business Review* dismiss *jugaad* because 'the term (...) has the connotation of compromising on quality.' while Krishnan (2010, 170) notes similarly that 'India remains stuck in a more unscientific paradigm of innovation, often labeled as jugaad.'

## Is Jugaad a Form of Innovation or Is Innovation a Form of Jugaad?

What is striking about *jugaad* from the preceding narration is the diverse and wide-ranging spectrum of meanings, interpretations and uses it lends itself to. Would it be fair then to label *jugaad* as one type of innovation? I refer in particular to the now very popular formulation of 'jugaad innovation' as proposed by Radjou et. al. (2012). I use this as an exemplar of a very limited framing and understanding of the *jugaad* idea. 'Jugaad innovation' in some senses glorifies the *jugaad* idea but restricts and limits it so much that it becomes meaningless in my opinion.

Jugaad is offered in jugaad innovation as an adjunct to innovation, a mere adjective. Innovation is the heart while jugaad is just a descriptor. The incongruity of this stands out when we look at the range of diverse meanings and interpretations of jugaad as is evident in the brief review of literature above. Though interesting and important by itself, the question here is not so much what jugaad is or what the correct interpretation and translation is because that, for now, is a secondary issue. My concern is how and why such a plastic and elastic concept such as jugaad ends us being used as a mere description to another concept in another language?

What then if we were to change the lens and invert the question again:

- What if we were to ask a question about innovation to an audience that lives its life and negotiates its world entirely through a non-English language, Hindi in this case?
- What for them could be the innovation-jugaad relationship?

Needless to say, a complete reversal is bound to happen. For one who uses or knows *jugaad* to have such a wide-range of layers and meanings as discussed above; innovation, however imaginatively as it is interpreted and mobilised is bound to come across very restricted. What is broadly understood and described as innovation in the literature we are discussing both in STS and in innovation studies, is still only a limited

subset of the meanings and usages of *jugaad*. It can occupy only a small part of the *jugaad* spectrum. What we have then is not *jugaad* as a form of innovation, but innovation as a form of *jugaad*.

### **Larger Relevances**

This issue does not have just important academic and conceptual relevances; it has significant real-life implications as well. Though *jugaad* is a very important concept and conceptualisation in the Indian context – I have shown that it exists in parts of even the modern scientific enterprise in contemporary India (Sekhsaria 2019) – it is conspicuous by its absence in the policy discourse. There is either a complete silence or as we have seen, active denial and delegitimisation.

A large portion of India's economy – in the range of 90 per cent in fact – operates in the informal sector. A dominant strand of finding solutions, getting by and just plain survival here maps onto, and is articulated as the idea of *jugaad*. A deligitimisation can and does have significant implications. A question can also be asked of a national system of innovation that is much in discussion these days;

- How can there be a national system of innovation that does not account for the multiple realities that constitute that nation?
- Can there even be *one* national system of innovation in a country with such a diversity of cultures and of the cultures of language?<sup>1</sup>

The celebration, recently, of India having climbed up two places to now being ranked forty-six in the 2021 Global Innovation Index (GII) stands out for this incongruity:

The consistent improvement in the GII ranking is owing to the immense knowledge capital, the vibrant start-up ecosystem, and the amazing work done by the public and the private research organizations. The Scientific Departments like the Department of Atomic Energy; the Department of Science and Technology; the Department of Biotechnology and the Department of Space have played a pivotal role in enriching the National Innovation Ecosystem.

The NITI Aayog has been working tirelessly to ensure the optimization of the national efforts for bringing policy led innovation in different areas such as electric vehicles, biotechnology, nano technology, space, alternative energy sources, etc. (<u>PIB 2021</u>).

This is an ecosystem that stands out for how little it includes — even within the formal structures. The limited set of institutions, knowledge structures, and thrust areas that are acknowledged in the government's official press note above, quite illustrate the point I am trying to make.

<sup>&</sup>lt;sup>1</sup> Several hundred languages are spoken in India with thirty-one different individual languages having more than a million native speakers as per the Census of India (2011).

It is not my contention at all that *jugaad* should be glorified. What I am arguing for is a more rigorously empirical and conceptual engagement with *jugaad* and other such concepts. The chasm between the world of academia and research on the one hand, and the lived realities of vast populations will otherwise never be bridged.

I write about Hindi because I am as engaged with this language as I am with English. What then about similar realities, interpretations and mobilisations in the multitude of other languages that constitute our world — the hundreds of languages spoken within India, and many hundreds more in different cultures, countries and continents? Can the discourse in and of innovation in English capture that diversity, complexity and nuance? My answer to that question is an emphatic no.

# A Response to Irwin's Provocations

And as I come to the end here, let me try and deal explicitly with the specific questions Irwin asks in his introductory essay (Irwin 2023): 'When it comes to engaging with and acting upon socio-technical change' Irwin asks in his first question, 'is "innovation" part of the solution or of the problem?' My answer here is yes ... yes, the current frame/s and place/s through which innovation operates is certainly a part of the problem when it comes to engaging with and acting upon socio-technical change. These could include issues of language, of geographical location, and related matters such as those political, cultural and financial capital.

This can, however, be part of the solution too and this constitutes my answer to Irwin's third question where he asks, 'What new conceptual and empirical resources can STS bring to the study of innovation (including the possible redefinition and reframing of the term itself)?' The solution lies in first recognising the nature of the problem, in identifying it and calling it out.

The discourse on innovation has to move out of its current space of dominance and current zone of comfort. The empirical resources that have to be tapped into for this exist in 'other' places and 'other' languages; they lie elsewhere, which itself lies all around. It is with humility that we need to first acknowledge and accept this. Being alive to these multiple empirical realities (and I know I have used this term already!) will provide us significant conceptual resources and insights that will take us by surprise and could be a hugely humbling experience.

This is as challenging as it will be exciting!

## Acknowledgements

I would like to thank Alan Irwin for inviting me to contribute this article and the editors of *ESTS* for their engagement and encouragement.

## **Author Biography**

Pankaj Sekhsaria teaches at the Centre for Technology Alternatives for Rural Areas (C-TARA), Indian Institute of Technology, Bombay. He is author most recently of *Instrumental Lives*: An *Intimate Biography of an Indian Laboratory* (Routledge 2019) and *Nanoscale*: Society's Deep Impact on Science, Technology and Innovation in India (Authors Upfront, 2020).

## **Data Availability**

Data published in this issue can be accessed in STS Infrastructures at: <a href="https://nzt.net/ark:/81416/p4ds3n">https://nzt.net/ark:/81416/p4ds3n</a>.

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