

# *Theory Talks*

*Presents*

---

THEORY TALK #63

---

SIDDHARTH MALLAVARAPU ON  
INTERNATIONAL ASYMMETRIES,  
ETHNOCENTRISM, AND A VIEW ON IR FROM  
INDIA

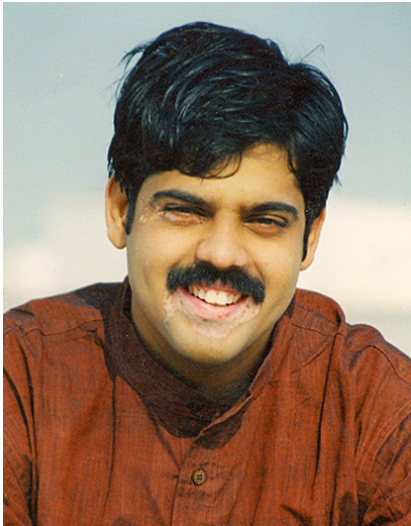
## Theory Talks

is an interactive forum for discussion of debates in International Relations with an emphasis of the underlying theoretical issues. By frequently inviting cutting-edge specialists in the field to elucidate their work and to explain current developments both in IR theory and real-world politics, Theory Talks aims to offer both scholars and students a comprehensive view of the field and its most important protagonists.

**Citation:** Creutzfeldt, B. (2014) 'Theory Talk #63: Siddharth Mallavarapu on International Asymmetries, Ethnocentrism, and a View on IR from India.' *Theory Talks*, <http://www.theory-talks.org/2014/02/theory-talk-63.html> (9-04-2013)

---

## SIDDHARTH MALLAVARAPU ON INTERNATIONAL ASYMMETRIES, ETHNOCENTRISM, AND A VIEW ON IR FROM INDIA



How is the rise of the BRICs in the international political and economic system reflected in our understanding of that system? One key insight is that the discipline of International Relations that has emanated from the northern hemisphere is far less ‘international’ than is widely thought. Scholars from the ‘Global South’ increasingly raise important challenges to the provincialism of IR theory with a universal pretense. Siddharth Mallavarapu’s work has consistently engaged with such questions. In this *Talk*, Mallavarapu, amongst others, elaborates on IR’s ethnocentrism, the multitude of voices in the Global South, and why he rather speaks of a ‘voice from India’ rather than an ‘Indian IR theory’.

**What is, according to you, the biggest challenge / principal debate in current IR? What is your position or answer to this challenge / in this debate?**

One of the things I constantly contend with in my work is to think of ways of how we can widen our notion of the *international*. IR has been too closely linked to the fortunes of the major powers, and this has been to our detriment, because it has impoverished our sense of international. I think the spirit of what I contend with is best captured by what [Ngugi wa Thiong'o](#) in his book *Globalectics: Theory and Politics of Knowing* concerns himself with, namely ‘...the organization of literary space and the politics of knowing’. My interest is to grapple with the manner in which the discipline of International Relations in its dominant mainstream idiom orchestrates and administers intellectual space and the implications this carries for the broader politics of knowledge. Simply put, the principal challenge is to confront various species of ethnocentrism – particularly Anglo-American accents of parochialism in the mainstream account of International Relations.

I am also keenly sensitive to some disciplinary biases and prejudices, which I think sometimes take on tacit forms and sometimes more explicit forms, and in which provincial experiences are passed off as universal experiences. The whole question of “benchmarking” is problematic, in that a benchmark is set by one, and others are expected to measure up to that benchmark. Then there is the question of certain theories, for example the idea that hegemony is desirable from the perspective of international stability – think of the [Hegemonic Stability Theory](#) in the 1970s, or

the Democratic Peace Theory that assumes that liberal democracy is an unsurpassed political form from the perspective of peace. Then there is human rights advocacy of a particular kind, and the whole idea of the 'Long Peace' applied to the Cold War years. In reality, this was far from a 'long peace' for many countries in the Third World during the same era.

I am also interested right now in the issue of the evolution of IR theory, and was really intrigued by the September 2013 issue of the European Journal of International Relations, with its focus on "the End of International Relations Theory": I find this fascinating, because just at a time when there are new players or re-emerging and re-surfacing players in the international system, there is a move to delegitimize IR Theory itself. So I am curious about the conjuncture and the set of sociologies of knowledge that inform particular terms and turns in the discipline.

My response to this challenge is to consciously work towards inserting other voices, traditions and sensibilities in the discipline to problematize its straightforward and simplistic understanding of large chunks of the world. My work is informed by what international relations *praxis* looks like in other places and how it is locally interpreted in those contexts. There are gaps in mainstream narratives and I am interested in finding ways to create space for a more substantive engagement with other perspectives by broadening the disciplinary context. This is not merely a matter of inclusive elegance but a matter of life and death because poor knowledge as evident from the historical record generates disastrous political judgments that have already resulted in considerable loss of human life, often worst impacting the former colonies.

The global south holds a particular attraction for me in this context, especially given its often problematic representations in mainstream IR discourse. The underlying premise here is that the discipline of IR will stand to be enriched by drawing on a much wider repertoire of human experiences than it currently does. The normative imperative is to nudge us all in the direction of being more circumspect before we pronounce or pass quick and often harsh political assessments about sights, sounds, smells and political ecologies we are unfamiliar with. IR as a discipline needs to reflect the considerable diversity.

My doctoral research on the role of the International Court of Justice advisory opinion rendered in July 1996 on the legality of the threat or use of nuclear weapons provided an opportunity to probe this diversity further. While advancing a case for categorical illegality of nuclear use under all circumstances, Judge Christopher Gregory Weeramantry discusses at length the multicultural bases of international humanitarian law. In doing so, he combines knowledge of world religions, postcolonial histories and canonical international law to frame his erudite opinion, which displays a thoughtful engagement with often neglected or obscured sensibilities.

These examples can be exponentially multiplied. Such a sentiment is most succinctly captured by Chinua Achebe in *Home and Exile* where he argues that "...my hope for the twenty-first [century] is that it will see the first fruits of the balance of stories among the world's peoples.' It most critically calls for "...the process of 're-storying' peoples who had been knocked silent by the trauma of all kinds of dispossession." I would treat this as an important charter or intellectual map for anybody embarking on the study of International Relations today. I would also like to add that this storytelling would inevitably encounter the categories and many *avatars* of race, class,

gender and nationality crisscrossing and intersecting in all sorts of possible combinations generating a whole host of political outcomes as well.

The skewed politics of knowledge is most evident when it comes to theory with a big ‘T’ in particular. Most theories of International Relations emanate from the Anglo-American metropole and little from elsewhere. This is not because of an absence of theoretical reflection in other milieus but due rather to a not so accidental privileging of some parts of experiential reality over others. IR has been too caught up with the major powers. I could think of conscious efforts to theorize both in the past and in the present elements of reality hidden from conventional vantage points. One recent illustration of social and political theorizing from the context I am more familiar with is an account by Gopal Guru and Sundar Sarukkai titled *The Cracked Mirror: An Indian Debate on Experience and Theory*. There are on-going theoretical engagements in Africa, the Arab world, Asia and South America reflecting an intellectual ferment both within and outside of these societies. International Relations as a discipline has to find ways of explicitly engaging these texts and relating it to prevailing currents in world politics rather than carry on an elaborate pretence of their non-existence. I am more troubled by claims of an ‘end of International Relations theory’ just at a moment when the world is opening up to new political possibilities stemming from the projected growth in international influence of parts of Asia, Africa, the Arab world and South America. IR has to move beyond its obsession of focusing on the major powers and seriously democratize its content. The terms ‘global’ or ‘international’ cannot be a monopoly or even an oligopoly. Such a view has severely impoverished our understanding of the contemporary world.

### **How did you arrive at where you currently are in IR?**

I cannot really claim that this was a neatly planned trajectory. I stumbled upon the discipline by chance not design. My initial curiosity about the world of social cognition emerged from a slice of my medical history. When I was at school in my early teens, I developed a condition referred to as Leucoderma or Vitiligo which involved skin depigmentation. I enjoyed writing from an early stage and recall recording my observations of the world around me in a piece titled *Etiology Unknown* borrowing language from the doctor’s diagnosis. I recall an urgency to comprehend and make sense of what I perceived then as a fast changing world where old certitudes were dissolving on a daily basis. I felt an outsider at some remove from my earlier self and it gave me on retrospect a distinct vantage point to witness the world around me. It was impacting who I thought I was and thereby compelled me to confront issues of identity – individual and social. An extremely supportive family made all the difference during these years.

The turmoil and confusion in those years led me to develop a deeper interest in understanding more loosely why people reacted in particular sorts of ways to what was in medical terms merely a cosmetic change. It also led me to informally forge community whenever I saw anybody else experiencing similar states of being. I also internalized one of the first ingredients of good social science – the capacity to be empathetic and put ourselves in others shoes. I learnt that the discipline of Sociology among the available choices in my milieu came closest to allowing me to pursue these concerns more systematically further. I applied to a Sociology master’s programme

after my undergraduate years at Jawaharlal Nehru University in Delhi, but I had also applied simultaneously to the International Relations programme since in my understanding it after all concerned the wider world – an extension of scale but similar I imagined in terms of the canvas of concerns. The numbers in India are large, the competition is stiff: I made it to the IR programme but did not make it to the Sociology programme.

Having got there, I had some outstanding influences, and I soon realized that one could also think about issues of identity (then cast by me in terms of simple binaries – home and the external world, the relationship of inside and outside, victors and the vanquished) in the discipline of IR. I decided to stick the course and delve into these questions more deeply while keeping up with a broader interest in the social sciences.

I could list a few influences that were critical at various stages of my academic biography: at high school, an economics teacher S. Venkata Lakshmi was very encouraging and positive and confirmed my intuitive sense that I would enjoy the social sciences. Subsequently at college I had in Father Ambrose Pinto a fine teacher of Political Science. He would take us on small field excursions to observe first hand issues such as caste conflicts in a neighbouring village, and all that helped me develop a sharper sense of the political which moved away from the textbook and was strongly anchored in the local context.

At the graduate level of study, Kanti Bajpai who later also became my mentor and advisor in the doctoral programme exercised an enormous influence as a role model. I was convinced that a life of the mind is worth aspiring and working towards once I came into contact with him in the classroom. He also exposed me to all the basic building blocks of an academic life – reading, writing, researching, teaching and publishing, demonstrating at all times both patience and unparalleled generosity. We have collaborated on two edited volumes on *International Relations in India* and I continue to greatly value an enduring friendship.

For over a decade, I have also had the good fortune of coming into contact with B.S. Chimni who is an exemplary scholar in the Third World Approaches to International Law (TWAIL) tradition. It has been a great joy bouncing off ideas and discussing at length various facets of International Relations, International Law and Political Theory together over the years. I have learnt much from this rich and continued association. In 2012 we worked jointly on an edited book titled *International Relations: Perspectives for the Global South*.

I have also learnt (and continue to do so) from my students both at Jawaharlal Nehru University (JNU) and at the South Asian University (SAU). At JNU, I made my beginnings and continue to take some pride in being intellectually home spun at one of the foundational and premier crucibles of International Relations scholarship in India. I have also thoroughly enjoyed my interactions over the years with the students drawn from diverse backgrounds. At SAU, I have in the space of a short period been exposed to some fine students from across the South Asian region. I have often been impressed by their understanding of politics and on occasion have marvelled at their demonstration of a maturity beyond their years. There is much I learn from them particularly from their insider narratives of the unique political experiences and trajectories of their specific countries.

Himadeep Muppidi has also been a remarkable influence in terms of clarifying my thinking about the workings of the global IR episteme. His receptivity to hitherto neglected intellectual inheritances from outside the mainstream and most evidently his capacity to write with soul, passion and character while retaining a deep suspicion of the ‘objectivity’ fetish in the social sciences has alerted me to a whole new metaphysics and aesthetic of interpreting IR. The thread that runs through all these interests and influences is firstly the issue of context, and secondly the question of agency –what it meant to be marginal in some sense, how could one think about theorizing questions relating to dispossession, relating to a certain degree of marginality– and also the broader issue of the politics of knowledge itself: of how certain attitudes and concepts seem to obscure or deface certain conditions, which seem to be quite prevalent.

I have also found excellent academic conversationalists with sometimes differing perspectives who help sharpen my arguments considerably. I would like to make special mention of Thomas Fues and the fascinating global governance school that he offers intellectual stewardship to in Bonn. In the years to come, I look forward to further intellectual collaborations with scholars from Brazil and South Africa and other parts of South America and Africa as well as the Arab world.

**What would a student need to become a specialist in IR or understand the world in a global way?**

The key without a doubt is curiosity. I do my best to feed that curiosity as a teacher. I also think Gerardo Munck and Richard Snyder’s counsel and interviews in their book, *Passion, Craft and Method in Comparative Politics* are a useful resource for students wanting to study International Relations. I also feel strongly that classics need to be read and engaged with, by bringing them into play in our contemporary dilemmas. I find that many of the questions we ask today are not necessarily entirely new questions: there is a history to them and there has been some careful thought given to them in the past, so it is important to partake of this inheritance.

Then there is language: it is vital for students to break out of one particular region or one particular set of concerns which flow from a limited context, and in this way to become willing to engage with other contexts. In this sense, language learning potentially opens up other worlds. I also believe that some exposure to quantitative methods is important: you need to be able to both contextualize and interpret data with some degree of confidence and not overlook them when approaching texts. Not everybody may choose it but we need to make the distinction between *The Signal and the Noise* as Nate Silver reminds us. I have found Marc Trachtenberg’s *The Craft of International History* a very useful text in providing some very practical advice in fine tuning our research designs to weave the past into our present. D.D. Kosambi’s essay on ‘combining methods’ still provides important clues to thinking creatively about method.

I also think it is important for students to avoid the temptations of insularity and also pose questions in a fashion that allows them to explore the workings of these questions in diverse settings. They should be open to a diversity of methods from different disciplines such as

ethnography, and develop a deeper historical sensitivity, all these are crucial to shaping up as a good scholar.

In sum, the importance of classics, fieldwork and language acquisition cannot be emphasized sufficiently. Classics bring us back to refined thought concerning enduring questions, language opens up other worlds, and field work compels one to at least temporarily inhabit the trenches, dirty your hands and acquire an earthy sense of the issues at hand.

**Given the importance you attach to the learning of language, among other things, and the linguistic diversity that characterises India, do you often perceive language to be a barrier to understanding?**

I think language works in two ways. On the one hand, each language has a specific manner of framing issues and a specific set of sensibilities associated with it which in some respects is quite unique. However, languages also lend themselves to different cross-cultural interpretations and adaptations. Kristina S. Ten in an evocative piece titled “Vehicles for Story: Chinua Achebe and Ngũgĩ wa Thiong’o on Defining African Literature, Preserving Culture and Self” maps some key lines of an enduring debate. Thiong’o has a particularly strong position on this question of language: he says he no longer wants to write in the English language, but instead in his native Gikuyu, as well as Swahili. He argues that language has to do with memory, has to do with what he calls a soul, and he maintains that language hierarchies are very real and that we must contribute to enriching our own pools of language to begin with, if we are to contribute to a much wider, global repertoire of languages. In contrast, Chinua Achebe whom I mentioned earlier, very often wrote in English and held the position that it was important to be accessible to more people and to reach diverse audiences who would not necessarily be from his home country. He said it was possible to use a language like English and permeate it with local texture, wisdom and pulse – something he has exemplified in his own work. I consider his writings a testimony to how well that can be done.

So there is a bit of a divide in terms of how one can look at this question of language, but teaching in India I know that there are students who may be very bright but who are constrained by the fact that they have not had the same access to English schools, and therefore are restricted to the vernacular. These students may have some very good ideas, but they feel disadvantaged by the fact that their command of the English language is not sufficient to guarantee close attention to what they wish to say. Some work hard to overcome these challenges and meet with considerable success. While I think it is wonderful to learn another language, it does not need to entail a diffidence or neglect of one’s own native language or any other vernacular language. My impression is that if unimaginatively pursued something is lost in the process and students end up feeling diffident and apologetic about their native language which is entirely undesirable. I believe therefore that while one should enthusiastically embrace new languages, the challenge is to accomplish this without unconsciously obscuring one’s native tongue. Having said that, all of us in India are keen to go to English language schools. Vernacular languages have often lost out in the process. So there is something to be said about this concern about language. We have to tread

carefully and remain attentive to how language hierarchies are positioned and deployed for advancing particular species of knowledge claims.

**From the language issues flow conceptual questions: Asia is a Western construct, and South Asia an extension of that. You reluctantly use this term, South Asia, in what you call shorthand, and similarly terms “nation” and “state”. How can we break away from these concepts if we don’t have a new vocabulary?**

This really flows from the fact that IR is still very much an ethnocentric construct. We are also suggesting in the same breath that there is a particular form in which most concepts and categories tend to be employed. I think IR language is imbued at least partly with the vocabulary of the hegemon or of the dominant powers, so that it shares with the area studies’ legacy the political connotations that are still very much with us. One way that I try to break away from this when I introduce students to these concepts and categories is by focusing on the lineage and the broader intellectual history and etymology of concepts which come into play in IR. Students are in any case acutely aware of the fact that there is a strong area studies tradition which has mapped the world in a particular way which was not an innocent discursive formation by any stretch of imagination. They also recognize that this is not the only framing possible. The challenge for us is of course to introduce new concepts and categories. I noticed for instance that South Asia has become ‘Southern Asia’ for some strategic commentators (Steven A.Hoffmann among others) because ‘Southern Asia’ also includes China. However, when it is done from the perspective of strategy there are other interests intertwined such as specific geopolitical assessments.

What I try to do, rather, is to draw on the deeper histories within the region itself, in order to arrive at concepts and conceptions which are more germane to our context. I don’t think I’ve succeeded in this project as yet, but one of the reasons why I think it’s important to historicise these elements and even categories is to open up the possibility of thinking about different imaginaries and along with that different categories. I don’t want to call it an alternative vocabulary, because I think that some sensibilities have been given short shrift in history, and some provincial experiences have more successfully masqueraded as universal experiences. Therefore, part of the challenge is to call that bluff, while another part of the challenge is to reconstruct and offer fresh perspectives. These may even be questions about traditional issues such as order or justice, questions of political authority, political rule or legitimacy. These are questions which are of concern to all societies though individual responses may not echo the language and slants of conventional IR theory. However, they may throw up some sophisticated formulations on these very issues. A part of the challenge for the IR scholar, then, is to recover and bring these ideas into the sinews of the mainstream IR academia.

It is equally important to avoid any sort of nativism, or to suggest that this is necessarily ‘the best’ approach, but to widen the inventory before moving on to stimulating a real conversation between divergent conceptions. We must avoid falling into the trap of what Ulrich Beck among others has referred to as ‘methodological nationalism’. I am by no means suggesting that there is “an Indian theory” of IR, but what I am curious about is how the world is viewed from this particular location. That is quite different from suggesting that there is a national project or a



national school of IR. I think that distinction needs to be made more subtly and needs to come through more clearly, but one of the projects I am currently involved in is the chronicling of a disciplinary history of IR in India and what that tells us about Indians and their readings of the world outside their home. In that process, I ask what the key issues that animated particularly an earlier generation of scholars - how did they present these ideas and why did they avoid using certain forms of presentation and framing? What were some of the conspicuous presences and nonappearances in their work? Exploring these sorts of issues will lead us forward by, firstly, bringing to bear all these pieces of work which I feel have been ignored or have not received their due, and secondly, by showing that there is a fair amount of diversity of thinking even in the earlier generations of IR scholarship. The intent is to avoid a monolithic conception of IR that emerges from India. I will have to make this point much more clearly and emphatically in the future, and hope that my focus on disciplinary history will contribute to some critical ground clearing. Similar inventories of IR scholarship need to be assembled in different locations from Africa, South America, other parts of Asia and the Arab world.

Many of these projects then also link up to very practical questions. One of the issues that is of interest to me in this context is that of South-South cooperation, such as for instance the IBSA Dialogue Forum, or the grouping known as BRICS, or the broader forum of the G-20. There is evidence that the traditional structures and ways of doing things are increasingly suspect and being viewed with suspicion by some actors within the international system. It is therefore more important now to reopen some of these questions and to think afresh about such things as institutional design: what does it mean to be talking about “democratising international relations”? How can we think of more inclusive and legitimate institutions? How can we think about ways in which we can cooperate for the provision of global public goods, but in a manner which is historically more legitimate and fair? How can we address previous asymmetries that are not necessarily going to just disappear? How do we deal with old power structures and their residual influences in terms of the Westphalian state system? What legacy has been enshrined for instance in the Bretton Woods institutions and what has that legacy meant? What happened to non-alignment? Vijay Prashad chronicles vividly the promise and unfulfilled promise of the non-aligned movement in his fascinating account titled *The Darker Nations: A People's History of the Third World*. How the past plays out in terms of contemporary global governance questions and arrangements is fundamental to my research interests. I have recently intervened on the Responsibility to Protect (RtoP) doctrine and its practice. I have been rather critical arguing that it cannot be disassociated from a longer history of interventionism by the major powers in the global south however benign its dressing. A thread that runs through my work is to demonstrate how historical asymmetry continues to manifest in terms of how the contemporary international system is structured. And I ask if we are to arrive at a more legitimate, inclusive and effective international system, then what are the mechanisms and steps which we need to work towards?

**What do you imagine that process might look like? Do we need to return to a “world of villages” (the 1300s) before we can reinvent IR, the national and the global? Do we need micro histories before we can reassemble a bigger history or is a subtle shift possible?**

There are two levels on which this can happen: on one level the changes that seem to work are incremental changes and not lock-stock-and-barrel fundamental changes. In terms of scale, different scholars do different things. Some scholars are interested in micro histories, others are interested in macro histories and asking the big questions.

I imagine both these projects are important and there should be more scholars from the global south as well who ask the big macro questions. What has happened for too long is that we have relegated this responsibility to the traditional post Second World War major powers and they have treated it as natural to offer us macro-historical narratives and pictures. I think scholars from the global south need now to attend to both tasks: to write good micro histories as well as reframe the larger questions of macro history. I would add that normative concerns such as the content and feasibility of global justice needs also to be an integral part of contemporary international relations scholarship. For instance, it would be fair to ask that in a world of plenty, why do so many people go hungry?

So if you were to ask me about my dreams and my hopes, I still think that the 1955 Bandung Conference and subsequent nonalignment visions remain unfinished business. I hope that within the span of the current generation there is greater egalitarianism accomplished in the international system and ultimately a balance not just in terms of what Achebe called the stories of the world, but also in terms of actual institutional designs and political outcomes. This should translate into much better provision of various public goods to global citizenry with special attention to those who have been historically disadvantaged. For assorted reasons there have been deep asymmetries within the international system which have persisted and resulted in diminishing the life chances and collective self-esteem of various peoples in the global south. There is an urgent need to both acknowledge and remedy the situation in the world we live in.

**In your experience, what is the role of the IR scholar in India in relation to the foreign policy establishment and the policy makers?**

It is quite hard to find traction of one's ideas in terms of any influence of scholars or groups of scholars on the social or political establishment. Overall I would say that academia has for a long time not been taken seriously by the foreign policy establishment, and that has more to do with the institutional structure where there is a pecking order and the bureaucracy sees itself as being better informed. Even in academic conference settings, one could periodically expect a practitioner of foreign policy to argue that they know best having been present at a particular negotiation or at the outbreak, duration and conclusion of any recent episode in diplomatic history. This does not in reality translate into the best knowledge because there is the possibility that besides the immediate detail, the absence of a larger historical context or even unaccounted variables in terms of the contemporary political forces at work during that moment could be blind spots in the narrative. It is fair to say therefore that the influence of academia on the Indian foreign policy establishment by and large has tended to be minimal. However, one could make the argument today that there are some early stirrings of changes in the offing.

Quite evidently, the Indian Foreign Service is far too miniscule for a country of India's size and desired influence in the international system. There is a perceived need from within the foreign policy establishment to draw on expertise from elsewhere and on occasion they do turn to the academia to invite counsel on specific issues. From the perspective of the IR academic, it is perhaps equally important to be not too close to the corridors of power as it could alter the incentive structure to the detriment of independent opinion making for securing short or long term political patronage.

**Siddharth Mallavarapu is currently Associate Professor and Chairperson at the Department of International Relations at the South Asian University in New Delhi. He is on deputation from the School of International Studies at Jawaharlal Nehru University. He completed his doctoral thesis on the politics of norm creation in the context of an Advisory Opinion rendered by the International Court of Justice in 1996 on nuclear weapon threat or use. This culminated in his first book, *Banning the Bomb: The Politics of Norm Creation*. His principal areas of academic focus include international relations theory, intellectual histories of the global south, disciplinary histories of IR, global governance debates and more recently the implications of recent developments in the field of cognition on the social sciences. Mallavarapu retains a special interest in issues related to the politics of knowledge and examines the claims advanced in the discipline of International Relations through this perspective. His immediate teaching commitments include a graduate course on 'Cognition and World Politics' and a doctoral level course on 'Advanced Research Methods'. He has co-edited (with Kanti Bajpai) two books on recent Indian contributions to International Relations theory. In 2012 along with B.S. Chimni, he co-edited *International Relations: Perspectives for the Global South*.**

*Related links*

- [Faculty Profile](#)
- Read Mallavarapu's *Dissent of Judge Weeramantry* here (pdf)
- Read Mallavarapu's *Indian Thinking in International Relations* here (pdf)
- Read Mallavarapu's *Because of America* here (pdf)
- Read Mallavarapu's *Nuclear Detonations: Contemplating Catastrophe* here (pdf)