

## Education, Society & Science in India

SHEKHAR KRISHNAN

Fall 2015 – Mon 15.00-17.00 & Wed 11.00-13.00/15.00-17.00

This graduate seminar is designed to expose doctoral students to the history and sociology of modern science education in colonial and post-colonial India, with a focus on ideas and institutions, concepts and thinkers, and major debates in this emerging field.

The seminar will meet twice per week for four months, and is spread over three units or themes of five weeks each on 1. “Colonialism & Modernity”, 2. “Nation & State” and 3. “Education, Policy & Society”.

Participants shall take turns writing **three 500-600 word** review/discussion papers on the assigned readings for prior circulation via the mailing list, as well as to lead discussion in that day’s seminar session. Names of discussants are noted in **bold** below.

The main requirement is a long essay or research paper of **5,000-6,000 words**, comprising a literature review, social, demographic or other data with a theoretical argument on education, science and society in India. Rough drafts are due mid-way in the term.

Deadlines for paper preparation and completion are noted in the schedule and syllabus below. All seminar participants are expected to complete close reading of assigned texts in advance in every session, and be prepared to participate in person and via the mailing list.

### AUGUST 2015

7-9 1.0. *Course Introduction*  
12-13 1.1. *Modernity & Rationality*  
17-19 1.2. *Colonial Power*  
24-26 1.3. *Colonial Science*  
31 ***No Class***

### OCTOBER 2015

5-7 2.3. *National Science*  
12-14 ***No Class: Reading Week***  
19 ***Paper Part Rough Draft Due***  
23 2.4. *Science Fiction*  
26-30 ***Open Sessions on Papers***

### SEPTEMBER 2015

2 1.4. *Indian Science I*  
7 ***Bibliography/Outline Due***  
9 1.5. *Indian Science II*  
14-18 ***History of Education Course***  
21-23 2.1. *Indian Nationalism*  
28-30 2.2. *Democracy & Education*

### NOVEMBER 2015

2-4 3.1. *Democracy & Merit*  
13 3.2. *Popular Science & Culture*  
15 ***Paper Full Draft Due***  
18 3.3. *Knowledge & Revolution*  
23-27 3.4. *Schools & Society*  
30 3.5. *Course Conclusion*  
30 ***Final Paper Submission***

# 1. Colonialism & Modernity

## 1.0. INTRODUCTION

**MONDAY 3 AUGUST – Course Introduction**

**FRIDAY 7 AUGUST: STEPHEN PHILIP**

- Bhattacharya, Sabyasachi. 'Indian Science Today: An Indigenously Crafted Crisis.' In *India's World: The Politics of Creativity In a Globalized Society*, edited by Arjun Appadurai and Mack, Arien, 240–64. New Delhi: Rupa & Co., 2012.
- Visvanathan, Shiv. 'Democracy, Plurality and the Indian University.' In *Higher Education in India: In Search of Equality, Quality and Quantity*, edited by Jandhyala B. G. Tilak, 36–57. New Delhi: Orient Blackswan, 2013.

## 1.1. Modernity & Rationality

**WEDESDAY 12 AUGUST: DURGAPRASAD KARNAM**

- Kaviraj, Sudipta. '1. On State, Society and Discourse in India.' In *The Imaginary Institution of India*, 9–38. Bangalore: Permanent Black, 2010.
- Shukla, Sureshachandra. 'From Pre-Colonial to Post-Colonial-Educational Transitions in Southern Asia.' *Economic and Political Weekly* vol. 31, no. 22 (1 June 1996): 1344–49.

**THURSDAY 13 AUGUST: MIHIKA SHAH**

- Gramsci, Antonio. 'On Education.' In *Selections from the Prison Notebooks*, edited by Quintin Hoare and Geoffrey Nowell Smith, 24–43. New York: International Publishers, 1971.
- ———. 'The Intellectuals.' In *Selections from the Prison Notebooks*, edited by Quintin Hoare and Geoffrey Nowell Smith, 3–23. New York: International Publishers, 1971.

## 1.2. Colonial Power

**MONDAY 17 AUGUST: KANCHAN MISHRA**

- Habib, S. Irfan, and Dhruv Raina. 'Copernicus, Colonialism, and the Role of Science in 19th Century India.' In *Social History of Science in Colonial India*, 229–51. Oxford University Press, 2007.
- Kaviraj, Sudipta. '2. On the Construction of Colonial Power: Structure, Discourse, Hegemony.' In *The Imaginary Institution of India*, 39–84. Bangalore: Permanent Black, 2010.

**WEDNESDAY 19 AUGUST: CHARUDATTA NAVARE**

- Baber, Zaheer. 'Science, Technology and Colonial Power.' In *Social History of Science in Colonial India*, edited by Irfan Habib and Dhruv Raina, 102–58. Oxford University Press, 2007.
- Kumar, Deepak. '4. Science in Education.' In *Science and the Raj: 1857-1905*, 113–50. New Delhi: Oxford University Press India, 1995.

## 1. Colonialism & Modernity

### 1.3. Colonial Science

#### MONDAY 24 AUGUST: SHUBHAYAN KABIR

- Acharya, Poromesh. 'Indigenous Education and Brahminical Hegemony in Bengal.' In *The Transmission of Knowledge in South Asia: Essays on Education, Religion, History and Politics*, edited by Nigel Crook, 98–118. Oxford University Press, 1996.
- Cohn, Bernard S. 'The Command of Language and the Language of Command.' In *Colonialism and Its Forms of Knowledge*, 16–56. Princeton: Princeton University Press, 1996.

#### WEDNESDAY 26 AUGUST: RATNA

- Arnold, David. 'The Colonial Prison: Power, Knowledge and Penology in 19th Century India.' In *A Subaltern Studies Reader, 1986-1995*, edited by Ranajit Guha, 140–78. Minneapolis: Univ Of Minnesota Press, 1997.
- Kumar, Deepak. '5. Research in Science.' In *Science and the Raj: 1857-1905*, 151–79. New Delhi: Oxford University Press India, 1995.

### 1.4. Indian Science I

#### MONDAY 31 AUGUST: NO CLASS

#### WEDNESDAY 2 SEPTEMBER: SUJATA VARDARAJAN

- Nandy, Ashis. *Alternative Sciences: Creativity and Authenticity in Two Indian Scientists*. 2nd Edition. New Delhi: Oxford University Press India, 2001.

### 1.5. Indian Science II

#### MONDAY 7 SEPTEMBER: NO CLASS – Paper Outline & Bibliography Due

#### WEDNESDAY 9 SEPTEMBER: STEPHEN PHILIP

- Prakash, Gyan. '3. Translation and Power' and '4. The Image of the Archaic' In *Another Reason: Science and the Imagination of Modern India*, 49-85, 86-122. Princeton, N.J.: Princeton University Press, 1999.

## History of Education Course, Dr P. Varadaran

#### MONDAY-TUESDAY 14-15 SEPTEMBER

- "Beginnings of Educational Policy-Making, 1700-1843"

#### WEDNESDAY 16 SEPTEMBER

- "Transfer of Power and Charles Wood's Despatch for Education, 1854"

#### THURSDAY 17 SEPTEMBER

- "Indian Education (Hunter) Commission, 1883"

#### FRIDAY 18 SEPTEMBER

- "From the Imperial Bill, 1913 to the Wardha Commission, 1939"

## 2. Nation & State

### 2.1. Indian Nationalism

#### MONDAY 21 SEPTEMBER: DURGAPRASAD KARNAM

- Dhareshwar, Vivek. 'Politics, Experience, and Cognitive Enslavement.' In *Education and Society: Themes, Perspectives, Practices*, edited by Meenakshi Thapan and T. N. Madan, 81–97. New Delhi: Oxford University Press, 2015.
- Prakash, Gyan. '7. A Different Modernity.' In *Another Reason: Science and the Imagination of Modern India*, 201–26. Princeton: Princeton University Press, 1999.
- SUPPLEMENT: Gandhi, Mohandas Karamchand. *Hind Swaraj, Or, Indian Home Rule*. Madras: G.A. Natesan, 1921.

#### WEDNESDAY 23 SEPTEMBER: MIHIKA SHAH

- Chatterjee, Partha. 'The Nation and Its Women' in *The Nation & Its Fragments – Colonial & Postcolonial Histories*, 116-134. Delhi: Oxford University Press, 1995.
- Kumar, Nita. 'The Strength of Women Educators and the Weakness of History.' In *Lessons from Schools: The History of Education in Banaras*, 151–85, New Delhi; Thousand Oaks; London: Sage Publications, 2000.
- SUPPLEMENT: Kishwar, Madhu. 'Arya Samaj and Women's Education.' *Economic and Political Weekly* 21, no. 17 (26 April 1986).

### 2.2. Democracy & Education

#### MONDAY 28 SEPTEMBER: RATNA

- Acharya, Poromesh. 'Educational Ideals of Tagore and Gandhi - A Comparative Study.' *Economic and Political Weekly* vol. 32, no. 12 (22 March 1997): 601–5.
- Beteille, Andre. *Universities at the Crossroads*. New Delhi: Oxford University Press, 2010, pp.10-31.
- Rao, Parimala. 'Compulsory Education and Political Leadership in Colonial India, 1840–1947.' In *New Perspectives in the History of Indian Education*, 151–75. New Delhi: Orient Blackswan, 2013.

#### WEDNESDAY 30 SEPTEMBER: SUJATA VARDARAJAN

- Ambedkar, B. R. *The Essential Writings of B. R. Ambedkar*. Edited by Valerian Rodrigues. New Delhi: Oxford University Press, 2004, pp.60-74.
- Velaskar, Padma. 'Education for Liberation: Ambedkar's Thought and Dalit Women's Perspectives.' *Contemporary Education Dialogue* 9, no. 2 (1 July 2012): 245–71.
- Zelliott, Eleanor. 'Dalit Initiatives in Education, 1880–1992.' In *New Perspectives in the History of Indian Education*, edited by Parimala Rao, 45–67. New Delhi: Orient Blackswan, 2013.
- SUPPLEMENT: Ambedkar, B. R. 'Annihilation of Caste: Speech Prepared by Dr B.R. Ambedkar for the Annual Conference of the Jat-Pat-Todak Mandal of Lahore, But Not Delivered'. 15 May 1936.

## 2. Nation & State

### 2.3. National Science

#### MONDAY 5 OCTOBER: STEPHEN PHILIP

- Chatterjee, Partha. 'The National State.' In *The Nation & Its Fragments – Colonial & Postcolonial Histories*, 200–219. Princeton, N.J: Princeton University Press, 1993.
- Prakash, Gyan. '6. Technologies of Government.' In *Another Reason: Science and the Imagination of Modern India*, 159–200. Princeton: Princeton University Press, 1999.

#### WEDNESDAY 7 OCTOBER: KANCHAN MISHRA

- Advani, Shalini. 'Educating the National Imagination.' *Economic and Political Weekly* 31, no. 31 (3 August 1996): 2077–82.
- Visvanathan, Shiv. *Organizing for Science: The Making of an Industrial Research Laboratory*. Oxford University Press, 1985, pp.99-200.

## NO CLASS – A.R.M. & Reading Week, 12-16 October

MONDAY 19 OCTOBER: PAPER PRESENTATIONS – *Paper Half Rough Draft Due*

### 2.4. Science Fiction

#### FRIDAY 23 OCTOBER: CHARUDATTA NAVARE

- Ghosh, Amitav. *The Calcutta Chromosome: A Novel of Fevers, Delirium & Discovery*. Harper Perennial, 2001.

FRIDAY 30 OCTOBER: PAPER PRESENTATIONS

## 3. Education, Policy & Society

### 3.1. Democracy & Merit

#### MONDAY 2 NOVEMBER: MIHIKA SHAH

- Poonacha, Veena. 'Uncovering the Gender Politics of Science Policies and Education.' *Economic and Political Weekly*, 15 January 2005, 241–46.
- Subramanian, Ajantha. 'Making Merit: Indian Institutes of Technology and the Social Life of Caste.' *Comparative Studies in Society and History* 57, no.2 (2015): 291–322.
- Subramanian, Jayasree. 'Perceiving and Producing Merit: Gender and Doing Science in India.' *Indian Journal of Gender Studies* 14, no. 2 (1 June 2007): 259–84.

#### WEDNESDAY 5 NOVEMBER: RATNA

- Beteille, Andre. *Universities at the Crossroads*. New Delhi: Oxford University Press, 2010, pp.40-113.
- Madan, Amman. 'Sociologising Merit.' *Economic and Political Weekly* vol, 42, no. 29 (21 July 2007): 3044–50.

## 3.2. Popular Science & Culture

### FRIDAY 13 NOVEMBER 15.00-17.00: CHARUDATTA NAVARE

- Kaur, Raminder. '2. The Dawn of the Atomic Age in India', '5. Nuclear Truths and Cracks in the the Surface' and '9. Atomic Comics' in *Atomic Mumbai: Living with the Radiance of a Thousand Suns*, 21-54, 122-156, 241-73. New Delhi: Routledge India, 2013.

## 3.3. Knowledge & Revolution

### SUNDAY 15 NOVEMBER – *Paper Full Rough Draft Due*

### WEDNESDAY 18 NOVEMBER 11.00-13.00: DURGAPRASAD KARNAM

- Ilaiah, Kancha. Selections from *Post-Hindu India: A Discourse in Dalit-Bahujan, Socio-Spiritual and Scientific Revolution*. New Delhi: Sage India, 2009, pp.ix-xxvi, 1-48, 67-85, 125-140, 210-231, 267-295.

## 3.4. Schools & Society

### MONDAY 23 NOVEMBER 15.00-17.00: SUJATA VARDARAJAN

- Bhog, Dipta, Purwa Bharadwaj, and Disha Mullick. 'Plotting the Contours of the Modern Nation: A Feminist Reading of Geography Textbooks'. In *Education and Society: Themes, Perspectives, Practices*, edited by Meenakshi Thapan and T. N. Madan, 358-75. New Delhi: Oxford University Press, 2015.
- Powell, Avriell. 'Perceptions of the South Asian Past: Ideology, Nationalism, and School History Textbooks'. In *The Transmission of Knowledge in South Asia: Essays on Education, Religion, History and Politics*, edited by Nigel Crook, 190-223. Oxford University Press, 1996.

### WEDNESDAY 25 NOVEMBER 15.00-17.00: STEPHEN PHILLIP

- Page, Elspeth. 'Negotiation and Compromise: Gender and Government Elementary Education' in *Educational Regimes in Contemporary India*, edited by Radhika Chopra and Patricia Jeffrey, 178-95. New Delhi: Sage Publications, 2005.
- Thapan, Meenakshi. "Docile" Bodies, "Good" Citizens or "Agential" Subjects? *Economic and Political Weekly*, 30 September 2006, 4195-4203.

### FRIDAY 27 NOVEMBER 11.00-13.00: KANCHAN MISHRA

- Alam, Arshad. 'Controlling Minds, Disciplining Bodies: Life Inside a Madrasa'. In *Sociology of Education in India: Changing Contours and Emerging Concerns*, edited by Geetha B. Nambissan and S. Srinivasa Rao, 224-41. New Delhi: Oxford University Press, 2012.
- ———. 'Science in Madrasas'. *Economic and Political Weekly*, 30 April 2005, 1812-5.
- Vaugier-Chatterjee, Anne. 'Plural Society and Schooling: Urdu-Medium Schools in Delhi'. In *Educational Regimes in Contemporary India*, edited by Radhika Chopra and Patricia Jeffrey, 99-117. New Delhi: Sage Publications, 2005.

## 3.5. CONCLUSION

### MONDAY 30 NOVEMBER 17.00-20.00: OPEN SESSION & DINNER – *Final Paper Due*

## Other Suggested Readings

- Abraham, Itty. *The Making of the Indian Atomic Bomb: Science, Secrecy and the Postcolonial State*. London: Zed Books, 1998.
- Althusser, Louis. 'Ideology and Ideological State Apparatuses (Notes Toward an Investigation).' In *Mapping Ideology*, edited by Slavoj Žižek, 100–140. London: Verso, 1994.
- Basu, Aparna. *Essays in the History of Indian Education*. Concept, 1982.
- Bhattacharya, Sabyasachi, ed. *The Contested Terrain: Perspectives on Education in India*. New Delhi: Orient BlackSwan, 1998.
- Carnoy, Martin. *Education as Cultural Imperialism*. 1st edition. New York, NY: David McKay Company, 1974.
- Deshpande, Satish, and Usha Zacharias, eds. *Beyond Inclusion: The Practice of Equal Access in Indian Higher Education*. New Delhi: Routledge India, 2013.
- Dewey, John. *Democracy and Education*. New York: Free Press, 1997.
- Ellis, Catriona. "Snapshots" of the Classroom: Autobiographies and the Experience of Elementary Education in the Madras Presidency, 1882—1947'. *Childhood* 18, no. 3 (2011): 384–401.
- Foucault, Michel. *The Archaeology of Knowledge*. New York: Pantheon Books, 1972.
- ———. *The Order of Things: An Archaeology of the Human Sciences*. New York: Pantheon Books, 1971.
- Kumar, Krishna, and Joachim Oesterheld, eds. *Education and Social Change in South Asia*. New Delhi: Orient BlackSwan, 2006.
- Minault, Gail. *Secluded Scholars: Women's Education and Muslim Social Reform in Colonial India*. New Delhi: Oxford University Press India, 1998.
- Paik, Shailaja. *Dalit Women's Education in Modern India: Double Discrimination*. Routledge, 2014.
- Phalkey, Jahnavi. *Atomic State: Big Science in Twentieth-Century India*. Ranikhet: Permanent Black, 2013.
- Stoler, Ann. *Race and the Education of Desire: Foucault's History of Sexuality and the Colonial Order of Things*. Durham: Duke University Press, 1995.
- Williams, Raymond. *Keywords: A Vocabulary of Culture and Society*. New York: Oxford University Press, 1985.