

FRANCESCA BRAY

CURRICULUM VITAE, MAY 2018

Professor Emerita of Social Anthropology, University of Edinburgh
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Education:

Part IA in Natural Sciences, Cambridge, 1969; BA Hons (Class I) in Chinese Studies,
Cambridge, 1973; MA Cantab, 1975.
PhD (Social Anthropology), Cambridge 1985.

Academic posts:

1973-82: Research Associate, then Fellow, of the East Asian History of Science Library,
Cambridge
1982-84: Leverhulme Research Fellow, Needham Research Institute (formerly East Asian
History of Science Library), Cambridge
1985-87: Chargée de Recherche, Centre National de la Recherche Scientifique (CNRS), Paris
1985-87: Research Fellow, Needham Research Institute
1986-87: Visiting Professor, Department of Anthropology, Yeungnam University, Gyongsan
632, Republic of Korea (on secondment from the CNRS)
1988-89: Associate Professor of Anthropology, University of California at Los Angeles
1989-93: Professor of Anthropology, UCLA
1994-96: Senior Wellcome Research Fellow, Centre for the History of Science, Technology
and Medicine, Manchester University (appointed to University Reader 1995)
1993-2004: Professor of Anthropology, University of California Santa Barbara
2005-2017: Professor of Social Anthropology, University of Edinburgh
2018: Professor Emerita of Social Anthropology, University of Edinburgh

Prizes and honours:

1985 Prix Bordin for History, Académie des Inscriptions et Belles-Lettres, Institut Français,
for *Science and Civilisation in China*, Vol. VI Part 2, *Agriculture*.
1999 Dexter Prize (Society for the History of Technology) for *Technology and Gender:
Fabrics of Power in Late Imperial China*.
2008 Sally Hacking Prize (SHOT) for *Technology in World History*
2015 *Choice Outstanding Academic Title* for *Rice: Global Networks and New Histories*

1997 Rausing Lecturer in the History of Technology, Cambridge
1998 University of Victoria Lam Lecturer
1998 Visiting Fellow, Institute of Modern History, Academia Sinica, Taipei.

- 1999-2000 Faculty Research Lecturer, UCSB.
2000 Lecturer in the History of Science, Smith College.
2002: Keynote speaker, World Agri-Culture Conference, Gyongzhu, Korea.
2006: Keynote speaker, East Asian STS Network, National Taiwan University.
2007: Keynote speaker, Society for the History of Technology 50th Anniversary National Science Foundation Workshop: 'Thinking big in space and time', Washington DC.
2010: Keynote speaker, 'The history of everyday life in East Asia', Younghan Cultural Institute, Gyeongbuk National University, Korea.
2013: Keynote speaker, 'Foodways in China: new scholarly trajectories', University of Oregon.
2014 Goody Lecture, Max Planck Institute for Social Anthropology, Halle.
2014 Joseph Needham Lecture, University of Hong Kong,
2014: Keynote lecture, Asian Society for the History of Medicine Biennial Conference, Hong Kong University
2015: Keynote lecture, 4th Forum for the History of Technology in China, Beijing.
2016: Presidential address, Society for the History of Technology conference, Singapore.
2016: Keynote address, East Asia STS Network conference, Tsing Hua University, Beijing.
2016: "Understanding Technology" public lecture series, National Museum of Scotland.
2017: Hu Shih Distinguished Lecture, Cornell University.
2017: Keynote address, 60th Anniversary Conference, Institute for the History of the Natural Sciences, Chinese Academy of Science, Beijing.
2017: Keynote lecture, *Asian Dynamics Initiative* conference, Copenhagen.
2018: Keynote lecture, ANAMED-SHOT workshop "*History of Technology at the turn of the 20th century: Ottoman and Post-Ottoman Cities*", Istanbul.
2018: Keynote lecture, 6th Forum for the History of Technology in China, Hangzhou.
2018: Keynote lecture, 45th ICOHTEC (International Congress for the History of Technology) congress, Saint-Etienne, France.
- Visiting Scholar, Max Planck Institute for the History of Science, Berlin, 2009-2011; 2013-2016.
Neubauer Collegium Fellow, University of Chicago, Spring 2015.
Honorary Professor, Hong Kong University, Institute for the Humanities and Social Sciences, 2011-2019.
Honorary Professor, Beijing Normal University, 2011-2016.
Distinguished Professor, Beijing Normal University, 2016 – (permanent appt.)
- President, Society for the History of Technology (SHOT): 2013-2018 (2013-14 Vice-President, 2015-16 President, 2017-18 Past President)

Selected professional service

International Advisory Committee, Maison des Sciences de l'Homme, Paris (1993-98).

Steering Committee, International Society for the History of Science, Technology and Medicine in East Asia (2000-)

Society for the History of Technology: Advisory Council 1999-2004; Executive Council 2005-2008; Edelstein Prize Committee: 2008-2011 International Outreach Committee: 2012-2014; President 2013-2018.

International Advisory Board, Chinese Academy of Science, Institute for the History of Natural Science, History of Technology Research Group *Borderlines and Intersections: Knowledge Spheres in Pre-Modern China, 10th-18th Centuries*, 2007-2014.

Senior Adviser, *Concepts and modalities: practical knowledge transmission*, Director: Dr Dagmar Schaefer, Max Planck Institute for the History of Science, Berlin, 2006-11.

International Review Committee, History of Science Program, Harvard University, 2011.

International Scientific Advisory Board, Max Planck Institute for the History of Science, Berlin, 2007-15.

Curriculum adviser, Science and Technology Studies Graduate Programme, Hong Kong Institute for the Humanities and Social Sciences, University of Hong Kong, 2011-17.

International Advisory Board, HKIHSS: Sep 2016 – Aug 2019

Appointment committee, 2 Professors of Social Anthropology, University of Zurich, 2014.

External examiner, MSc, China in Comparative Perspective, LSE: 2015-18.

Appointment committee, Professor of History of Technology, University of Paris I (Sorbonne), 2016-17

Advisory Board: *Technology in the Making of Modern East Asia*, Hong Kong Institute for the Humanities and Social Sciences, funded by HKRC (2017-22).

Habilitation examiner for: Dr Mareile Flitsch, Geschichte und Kulturwissenschaften, Freie Universität, Berlin, April 2001; Dr Marie-Claude Mahias, Ethnologie, Ecole des Hautes Etudes en Sciences Sociales, Paris, May 2002; Dr Dagmar Schaefer, Ostasiatischen Studien, University of Wuerzburg, April 2005; Dr Florence Bretelle-Establet, CNRS, Paris, November 2015.

External PhD examiner: U Penn, National University of Singapore, Oxford, Stirling, UCL, LSE, SOAS, etc.

Tenure, promotion and hiring reviews for Harvard, History of Science (2002); University of Pennsylvania, History of Science (2002); UCLA, Anthropology (2000, 2002), Ohio State University, History (2003); UC San Diego, History (2004); Chinese University of Hong Kong (2005); National Tsing Hua University (2007, 2010); University of Chicago (2010); University of California, Santa Barbara (2011); Wissenschaftskolleg zu Berlin (2013); Macarthur Foundation (2014); School of Oriental and African Studies, London (2014); Korean Advanced Institute for Science and Technology (KAIST) (2014); National University of Singapore (2015); Johns Hopkins University (2015); Freie Universität, Berlin (2015).

International member, appointments board: 2 professorial positions in Anthropology at the University of Zurich (summer-fall 2013); professorial position at Paris I (Sorbonne) (spring 2016).

Reviews of research proposals for the Economic and Social Research Council (UK), the Wellcome Trust for the History of Medicine (UK), Wenner-Grenn, NSF, Hong Kong Research Council, Danish Research Council, etc.

Editorial responsibilities:

Editorial board, *Chinese Science/Journal of the History of Science, Technology and Medicine in East Asia* (1992-); *Revista Nuevas Tendencias en Antropología (Journal of New Trends in Anthropology)* (2012 -); *Techniques & culture* (1995-2007); *Taiwanese Journal of the History and Philosophy of Science* (2002 -); *East Asian Science, Technology & Society* (2006 -); *L'Homme et la société* (2013 -); *Artefact* (2014 -); *History and Technology* (2017 -).

Advisory editor, *Isis* (1998-2000).

Contributing editor, *Technology & Culture* (2006-).

Associate editor, *East Asian Science, Technology & Society* (2016 -)

Editorial committee, California University Press (1991-4); chair (1993-94).

Guest editor: *Chinese Science* (no. 12, 1995), essays in honor of Nathan Sivin.

Guest editor: *Techniques & culture*, 'Qu'est-ce qu'un texte technique? Réflexions à propos de la Chine et des Andes' (1997).

Co-editor with Yung Sik Kim, *Current Perspectives in the History of Science in East Asia*, Seoul National University Press (1999).

Editorial and planning board (1996-2001) of the volume on China in the *International Encyclopaedia of the History of Science*, Enciclopedia Italiana (Italian version published 2001, Chinese version published 2002).

Guest editor, *East Asian Science, Technology and Society* 2,2 (December 2008): 'Constructing intimacy: technology, family and gender in East Asia'.

Executive Council, *China Quarterly* (2009-2014).

Reviews of book MSs for University of California, Cambridge, Duke, Harvard, Chicago, Hawai'i University, Manchester University Presses, Bloomsbury, Berghahn, Routledge, etc.

Reviews of submitted articles for *American Ethnologist*; *Medical History*; *Economic Development and Cultural Change*; *Technology and Culture*; *Current Anthropology*; *Journal of Historical Sociology*; *Social Studies of Science*; *Journal of Asian Studies*; *Late Imperial China*; *Journal of Women's History*; *Taiwan Journal of Anthropology*; *Ethnos*; *Medical Anthropology Quarterly*; *Journal of Global History*; *Leonardo*; *Journal of Material Culture*; *JRAI*; *PoLAR*, etc.

Publications:

Books:

- Science and Civilisation in China*, Volume VI Part 2: *Agriculture*, Cambridge University Press, 1984; Chinese trs. Commercial Press, Taipei, 1994; Japanese trs. University of Kyoto Press, 2007.
- The Rice Economies: Technology and Development in Asian Societies*, Blackwell, Oxford, 1986; reissued with revisions, University of California Press, 1994.
- Technology and Gender: Fabrics of Power in Late Imperial China*, University of California Press, 1997; Taiwanese imprint SMC Publishing, Taipei, 1997; Chinese trs. Jiangsu People's Press, Nanjing, PRC, 2006.
- Yung Sik Kim and Francesca Bray (eds), *Current Perspectives in the History of Science in East Asia*, Seoul National University Press, 1999.
- Technology and Society in Ming China (1368-1644)*, American Historical Association-Society for the History of Technology, 'Historical Perspectives on Technology, Society and Culture' pamphlet series no. 1, AHA, Washington D.C., 2000.
- Karine Chemla, Francesca Bray, Fu Daiwie, Huang Yi-Long and Georges Métailié (eds), *Le scienze in Cina*, vol. II in Sandro Petruccioli (ed), *Enciclopedia della historia della scienza*, Roma, Istituto Treccani, 2001.
- Francesca Bray, Vera Dorofeeva-Lichtmann and Georges Métailié (eds), *Graphics and Text in the Production of Technical Knowledge in China: The Warp and the Weft*, Brill, Leiden, 2007.
- Technology, Gender and History in Imperial China: Great Transformations Reconsidered*, Routledge (Asia's Transformations/Critical Asian Scholarship), New York & London, 2013 (*Jishu, xingbie, lishi: zhong xinshenshi dizhi Zhongguo di da zhuanxing* (trs. Wu Xiujie), Jiangsu People's Press, Nanjing, 2017).
- Francesca Bray, Peter Coclanis, Edda Fields-Black and Dagmar Schäfer (eds), *Rice: Global Networks and New Histories*, New York: Cambridge University Press (Economic History series), 2015. *Choice* Outstanding Academic Title 2015.

Articles and book chapters:

- 'Swords into plowshares: a study of agricultural technology and society in early China', *Technology and Culture*, Jan.1978: 1-33.
- 'La Chine moderne héritière de l'agriculture traditionnelle', in M. Enghelborg-Bertels (ed), *La commune populaire chinoise*, Brussels, 1978: 28-32.
- 'The Green Revolution: a new perspective', *Modern Asian Studies*, 13, 4, Oct. 1979.
- 'Agricultural technology and agrarian change in Han China', *Early China* 5, Fall 1979: 3-13; Chinese tr. *Nongye kaogu* [Agricultural Archaeology] 2, 2, December 1982.
- 'The evolution of the mouldboard plough in China', *Tools & Tillage* III.4, 1979: 227-239.
- (with A.F. Robertson): 'Sharecropping in Kelantan, Malaysia', in G. Dalton (ed), *Research in Economic Anthropology* 3, JAI Press, Greenwich, Conn., 1980: 209-44.
- 'Réserves de grain en Chine impériale', in M. Gast and F. Sigaut (eds), *Les techniques de conservation de grains à long terme*, vol. 2, CNRS, Paris, 1981: 44-51.

- 'Indigenous agricultural development and technology transfer' [in Chinese], *Shijie nongye* [World Agriculture], Beijing, December 1980: 1-5.
- 'Agricultural development policies in early China', in *China and the West: Feeding the People*, Europe-China Association, Brussels, 1980: 9-16.
- 'Millet cultivation in China: a historical survey', in *J. Ag. Trad. Bot. Appl.* XXVIII,3-4, 1981:291-308. in
- 'Select bibliography on Chinese agricultural history', *ibid*: 369-74.
- 'The Chinese contribution to Europe's Agricultural Revolution: a technology transformed', in *Explorations in the History of Science and Technology in China*, Zhonghua wenshi luncong, Shanghai, 1982:597-637.
- 'Trends in research in agricultural history in the People's Republic of China', *Chinese Science* 5, 1982: 35-41.
- 'World agriculture: a historical perspective', *Interdisciplinary Science Reviews* 7, 3, September 1982: 202-210; Ch. trs. in *Nongshi yanjiu* [Agr. Hist. Res.] 5 (1985): 225-32.
- 'Patterns of evolution in rice-growing societies', *J. Peasant Studies* 11, 1, October 1983: 3-33.
- 'Evolution in padi farming in Kelantan, Malaysia', in B. Koechlin, F. Sigaut, J.M.C. Thomas and G. Toffin (eds), *De la vouête céleste au terroir, du jardin au foyer: mosaïque sociographique, Textes offerts à Lucien Bernot*, Editions EHESS, Paris, 1987: 337-346.
- 'Essence et utilité: la classification des plantes cultivées en Chine', *Extreme-Orient Extreme-Occident* (Paris) 10, Spring 1988: 13-27.
- 'Rice economies: the rise and fall of China's communes in East Asian perspective', in Jan Breman and Sudipto Mundle (eds): *Rural Transformation in Asia*, Oxford University Press, Delhi, 1991: 193-217.
- 'Population, agricultural intensification and economic diversification: the case of Asian rice economies', in *Human Responsibility and Global Change*, Institute of Human Ecology, Goteborg University, 1992: 99-114.
- 'Medicine in China': chapter in W.F. Bynum and R. Porter (eds), *Companion Encyclopedia of the History of Medicine*, Routledge, London and New York, 1993: 728-54.
- 'Agriculture for developing nations', *Scientific American*, July 1994: 18-25.
- 'Le travail féminin dans la Chine impériale: l'élaboration de nouveaux motifs dans le tissu social', *Annales HSS*, July-August 1994, no.4: 783-816.
- 'A deathly disorder: understanding amenorrhea in China', in Don Bates (ed), *Knowledge and the Scholarly Medical Traditions*, Cambridge University Press, 1995: 235-50.
- 'Qu'est-ce qu'un texte technique? Réflexions à propos de la Chine et des Andes', *Techniques & culture* 29 (1997): 1-25.
- 'Machines for living: domestic architecture and the engineering of the social order in late imperial China', *Cambridge Anthropology* 20, 1-2 (1998): 92-110.
- 'Technics and civilization in late imperial China: an essay in the cultural history of technology', *Osiris* 13 (1998): 11-33.

- `A stable landscape? Social and cultural sustainability in Asian rice systems', in *The Sustainability of Wet-Rice Agriculture*, Manila, IRRI, 1998: 45-66.
- `Decorum and desire: an architectonics of domestic space in China', in Hsiung Ping-chen (ed), *Lijiao yu qingyu: qianjindai Zhongguo wenhua zhong di hou/xiandaixing* [Neo-Confucian Orthodoxy and Human Desires: Post/Modernity of Chinese Culture in the Late Imperial Period], Taipei, Institute of Modern History, Academia Sinica, 1999: pp 1-69.
- `Chinese health beliefs', in John Hinnels and Roy Porter (eds), *Health, Religion and Suffering*, London, Routledge, 1999: 187-211.
- `Introduction', in Yung Sik Kim and Francesca Bray (eds), *Current Perspectives in the History of Science in East Asia*, Seoul National University Press, 1999: iii-v.
- `Chinese traditions of agricultural writing', in Yung Sik Kim and Francesca Bray (eds), *Current Perspectives in the History of Science in East Asia*, Seoul National University Press, 1999: 118-30.
- `Towards a critical history of non-Western technology', in Gregory Blue and Timothy Brooks (eds), *China and Historical Capitalism: Genealogies of Sinological Knowledge*, Cambridge University Press, 1999: 158-209. (Ch. trs. *Zhongguo yu lishi zibenzhuyi: hanxue zhishidi xipuxue*, Beijing, Chuliu Tushu Gongsi, 2004: 219-280.)
- `Technics and civilization in late imperial China: an essay in the cultural history of technology', *Osiris* 13 (2000): 11-33.
- `The Chinese experience', in John V. Pickstone and Roger Cooter (eds), *Medicine in the Twentieth Century*, Amsterdam, Harwood Academic Publishers, 2000: 717-36.
- `China: Agriculture", in Arne Hessenbruch (ed), *A Reader's Guide to the History of Science*, London, Fitzroy Dearborn, 2000: 132-33.
- (with Georges Métailié), `Who was the author of the *Nongzheng quanshu*?', in Catherine Jami, Gregory Blue and Peter Engelfriet (eds), *Statecraft and Intellectual Renewal in Late Ming China*, Leiden, Brill, 2000: 322-359.
- `American modern: the foundation of American civilization', <http://www.anth.ucsb.edu/faculty/bray/toilet/index.html>, posted May 2001.
- `Are GMOs good for us? What anthropologists can contribute to the debate', *General Anthropology* 8, 1 (Fall 2001): 1-7; reprinted in *ANTROPOLógicas* (Universidade Fernando Pessoa, Lisbon) 6 (December 2002): 43-56.
- Co-editor (with Karine Chemla, Fu Daiwie, Huang Yilong and Georges Metailie), *La Scienza in Cina*, in *Storia della Scienza*, Istituto della Enciclopedia Italiana, Rome, 2001: Volume II: 1-608.
- `Introduzione generale, prologo", in *ibid*: 5-6; `Aspetti della storiografia della scienza in Cina: Joseph Needham', *ibid*: 8-11; `Tecniche essenziale per il popolo', *ibid*: 208-219; `L'agricoltura (degli Song)', *ibid*: 390-400; `Introduzione ai Ming', *ibid*: 431-40; `L'agricoltura (dei Ming)', *ibid*: 502-11.

- 'Genetically modified foods: shared risk and global action', in Barbara Herr Harthorn and Laury Oaks (eds), *Revising Risk: Health Inequalities and Shifting Perceptions of Danger and Blame*, Westport CT, Praeger, 2003: 185-207.
- 'How wholesome is that soup? The political contents of the refrigerator', in Peter D. Herschok, Marietta Stepaniants and Roger T. Ames (eds), *Technology and Cultural Values: On the Edge of the New Millennium*, Honolulu, University of Hawaii Press, 2003: 354-83.
- 'Rice, technology, and history: the case of China', in *Education about Asia*, special issue on *Teaching about Asia through rice*, 9,3 (Winter 2004): 14-20.
- 'Early China', in W. Bernard Carlson (ed), *Technology in World History*, vol. II, *Early Empires*, New York, Oxford University Press, 2005: 8-35.
- 'Late Imperial China', in *ibid.*, vol. III, *The Medieval World*: 64-91.
- 'The inner quarters: oppression or freedom?' in Ronald G. Knapp and Kai-Yin Lo (eds), *House Home Family: Living and Being Chinese*, Honolulu, University of Hawai'i Press, 2005: 259-80.
- 'La tecnología de la casa estadounidense', in Paloma González Marcén, Sandra Montón Subías and Marina Picazo Gurina (eds), *Dones i activitats de manteniment en temps de canvi*, Bellaterra, Universitat Autònoma de Barcelona, Centre d'Estudis del Patrimoni Arqueològic de la Prehistòria, *Treballs d'arqueologia*, 11 (2005): 5-24.
- 'Introduction', in Francesca Bray, Vera Dorofeeva-Lichtmann and Georges Métaillé (eds), *Graphics and Text in the Production of Technical Knowledge in China*, Brill, Leiden, 2007: 1-78.
- 'Agricultural illustrations: blueprint or icon?', *idem*: 526-574.
- 'Instructive and nourishing landscapes: natural resources, people and the state in late imperial China', in Greg Bankoff and Peter Boomgaard (eds), *The wealth of nature: how natural resources have shaped Asian history, 1600-2000*, Palgrave Macmillan, 2007: 205-226.
- 'Gender and technology', *Annual Review of Anthropology* 36 (2007): 37-53.
- 'Tales of fertility: reproductive narratives in Late Imperial China', in Siegfried Zielinski and Eckhard Furlus (eds), *Variology 3: On Deep Time Relations of Arts, Sciences and Technologies in China and Elsewhere*, Kunstwissenschaftliche Bibliothek Volume 37, Walter König Verlag, Cologne, 2008: 93-114.
- 'Agriculture in China', in Helaine Selin (ed), [Encyclopaedia of the History of Science, Technology, and Medicine in Non-Western Cultures](#) (revised 2nd ed.) 2008, Part 1, 33-43, DOI: 10.1007/978-1-4020-4425-0_8411; online version: <http://www.springerlink.com/content/g3683621jv7204u7//fulltext.html#Fig3>
- 'Technology', in Bonnie G. Smith (ed), *Encyclopedia of Women in World History*, New York, Oxford University Press (2008), Volume 4: 203-209.
- 'Genetically altered foods', in Vincent N. Parillo (ed), *Encyclopedia of Social Problems*, Sage, 2008, volume I: 396-98.

- 'Science, technique, technology: passages between matter and knowledge in imperial Chinese agriculture', *British Journal for the History of Science* 41, 3 (September 2008): 319-344.
- Guest editor, *Constructing intimacy: technology, family and gender in East Asia*, special issue of *East Asian Science, Technology & Society: an International Journal*, 2.2 (June 2008).
- 'Introduction', *ibid*: 1-15.
- 'Becoming a mother in Late Imperial China: maternal doubles and the ambiguity of fertility', in Susanne Brandstädter and Gonçalo D. Santos (eds), *Chinese Kinship: Contemporary Anthropological Perspectives*, London, Routledge, 2008: 181-203.
- 'The technics of the America home', in Sandra Montón-Subías and Margarita Sánchez-Romero, (eds), *Engendering Social Dynamics: the Archaeology of Maintenance Activities*, Oxford: BAR International Series 1862 (Hadrian Books), 2008: 25-31.
- 'Technology in China', in Jan Kyrre Berg Olsen, Stig Andur Pedersen and Vincent F. Hendricks (eds), *A Companion to the Philosophy of Technology*, Oxford, Wiley-Blackwell, 2009: 28-31.
- '*Diguo shiji: qianxiandai Zhongguo di jishu huitu yu tongzhi*' (Imperial designs: technical drawing and governance in Late Imperial China), trs. Hu Siluo, *Yishu yu Kexue* (Art & Science) 9 (2009): 1-10.
- 'STS', in Alan Barnard and Jonathan Spencer (eds), *Encyclopedia of Social and Cultural Anthropology*, 2nd ed., London, Routledge, 2009: 634-36.
- 'Ginotécnica y civilización', *Lectora: revista de dones i textualitat* 16 (2010) special issue on *Mujeres en Asia Oriental* (ed. Pau Pitarch Fernández): 81-92. [trs of introduction to *Technology and Gender*]
- 'Connecting with the past? A commentary', *East Asian Science, Technology and Society: an International Journal*, 4, 2 (June 2010): 327-333.
- 'How Blind Is Love?: Simon Winchester's *The Man Who Loved China*', *Technology & Culture* 51, 3 (July 2010): 578-588.
- 'A response to "The STS challenge to philosophy of science in Taiwan"', *East Asian Science, Technology and Society: an International Journal*, 5 (2011): 49-51.
- 'Qu'est-ce qu'un texte technique?' (revised version of 1997 article) in Gils Bartholeyns, Nicolas Govoroff and Frédéric Joulian (eds), *Cultures matérielles*, 2 vol special issue of *Techniques et culture*, 54-55, July 2011: vol. 1, 182-199.
- 'Chinese literati and the transmission of technological knowledge: the case of agriculture', in Dagmar Schäfer (ed), *Cultures of Knowledge: Technology in Chinese History*. Leiden: Brill, 2011: 299-325.
- 'Gender and technology' (repr. of 2007 ARA article), in Neelam Kumar (ed), *Gender and Science: Studies across Cultures*. Delhi: Foundation Books / Cambridge University Press India, 2012: 37-60.
- 'Only connect: comparative, national, and global history as frameworks for the history of science and technology in Asia' *East Asian Science, Technology and Society: an International Journal*, 6:2 (June 2012): 223-227.

- 'Tools for virtuous action: technology, skills and ordinary ethics', in Charles Stafford (ed), *Ordinary Ethics in China*, London: Berg, 2013: 175-193.
- '圓滿的結局？帝制晚期醫療案例中的生育敘事 (Happy endings? Reproductive cultures in late imperial Chinese medical cases). In Chu Pingyi (ed), *Weisheng yu yiliao* (Health and medicine), 4th International Conference on Sinology, Academia Sinica, Taipei, 2013: 1-26.
- Preface to Xiang Fang, *Social Construction of Nuclear Risk in China: Local People's Participation in Civil Nuclear Issues in China at the start of the 21st Century* (in Chinese), Sun Yat-sen Library of Sociology: Guangzhou, 2014.
- 'Rice as self: food, history and nation-building in Japan and Malaysia', 2014 Goody Lecture, Max Planck Institute for Social Anthropology, Halle.
- 'Global networks and new histories of rice', in Francesca Bray, Peter A. Coclanis, Edda L. Fields-Black and Dagmar Schäfer (eds), *Rice: Global Networks and New Histories*, New York: Cambridge University Press (Economic History series), 2105: 1-35.
- 'Technological transitions', ch. 5 in Merry E. Wiesner-Hanks, Jerry H. Bentley and Sanjay Subrahmanyam (eds), *Cambridge History of the World*, vol. 6 part 1, *The Construction of a Global World, 1400-1800 C.E.*, Cambridge: Cambridge University Press, 2015: 76-106.
- 'Kexue, jiyi, jishu: Zhongguo nongye cong wuzhi dao zhishi di chuanyue' [Science, technique, technology: passages between matter and knowledge in Chinese imperial agriculture'], trs. Dong Xiaoping, *Beijing Shifan Daxue xuebao* [Beijing Normal University Review] 2015, 4: 84-104.
- 'Notions of purity: an anthropological perspective', in *Annual Report of the Government Chief Scientific Adviser 2015. Forensic Science and Beyond: Authenticity, Provenance and Assurance*. The Government Office for Science, London: 120-122.
- 'Qimin yaoshu 齊民要術'. In Cynthia L. Chennault, Keith N. Knapp, Alan J. Berkowitz and Albert E. Dien (eds), *Early Medieval Chinese Texts: A Bibliographical Guide*. Berkeley: Institute of East Asian Studies, University of California, 2016: 232-41.
- 'Feeding the farmers, feeding the nation: the Long Green Revolution in Kelantan, Malaysia', in James L. Watson and Jakob Klein (eds), *Handbook of Food and Anthropology*, London: Bloomsbury, 2016: 173-199.
- 'Les techniques et l'histoire globale', with Liliane Hilaire-Perez, in Liliane Hilaire-Perez, Guillaume Carnino and Aleksandra Kobijlski (eds), *Les mondes et leurs techniques, XVIe-XVIIIe siècle*, Série Nouvelle Clio, Presses Universitaires de France: 7-22.
- 'Les techniques de la terre', in *ibid*: 313-340.
- 技術史學會：國際化和翻譯的藝術 [The Society for the History of Technology: internationalisation and the art of translation] (trs. Zhang Zhihui and Huang Yaowei). *Kexue wenhua pinglun* [Science and Culture Review] 13, 4 (2016): 11-28.
- 'Science, technology and late Imperial history', *The Chinese Historical Review*, 2017, 1: 94-104.

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- 'Flows and matrices, landscapes and cultures', *ICON: Journal of the International Committee for the History of Technology* 22 (2017): 8-19.
- 'SHOT (Society for the History of Technology): internationalization and the art of translation', *Technology & Culture* 58, 2 (July 2017): 815-834.
- 'Science, language and the purity of bottled water', *EASTS* 11, 3 (September 2017): 385-390.
- 'Introduction', in Angela Ki Che Leung and Izumi Nakayama (eds), *Gender, Health and History in Modern East Asia*, Hong Kong University Press, 2017: 1-34.
- 技術作為文化：跨文化分析的實驗 [Technology as Culture: an Experiment in Transcultural Analysis] (in Chinese, trs. Dong Xiaoping), Beijing Normal University Press, 2017.
- 'Weaving women in China: from virtuous subject to transgressive citizen', *Ariadne's Thread* (Document TECHSTYLE Series 1.0), CHAT (Centre for Heritage Arts and Textile), Hong Kong, 2017: 78-91.

In press:

- 'Bringing history into STS: change and continuity in China's technological cultures', *Science and Culture Review* (in Chinese).
- 'Technology'. In Howard Chiang (ed), *The Making of the Human Sciences in China: Historical and Conceptual Foundations*. Leiden: Brill, due 2018.
- 'Where did the animals go? Presence and absence of livestock in Chinese agricultural treatises', in Martina Siebert and Roel Sterckx (eds), *Animals Through Chinese History*, Cambridge University Press; due 2018.
- 'Agriculture', in Albert E. Dien and Kenneth Knapp (eds), *Cambridge History of China: Volume Two, The Six Dynasties 220-581*, Cambridge: Cambridge University Press, expected 2018.
- 'Science cultures', in Laura Grindstaff, Ming-Cheng Lo and John R. Hall (eds), *Routledge Handbook of Cultural Sociology*, 2nd ed., due 2018.
- 'Feeding the body national: rice as self in Malaysia and Japan', in Angela Leung and Melissa Caldwell (eds), *Moral foods: "good" and "bad" foods in the construction of modern Asian identity and citizenship*; Hawai'i University Press, expected 2018.
- 'Science and Confucian statecraft in East Asia', introduction to Chongtae Lim and Yung Sik Kim (eds), *Science and Statecraft in East Asia*, Brill, expected 2019.
- 'Tracking the translation of the *savoir-faire* of tea from China to British India', in Pamela H. Smith (ed), *Entangled Itineraries of Materials, Practices, and Knowledge in Eurasia*, University of Pittsburgh Press, expected 2019.

In progress:

- Co-editor with Chia-Ling Wu and Sean Hsiang-Lin Lei, *An EASTS Reader: Understanding Asian History through STS*. Duke UP are interested in publishing.

Francesca Bray cv 2018.05.05

Moving Crops and the Scales of History: a group-authored book co-authored with Barbara Hahn, John Lourdasamy and Tiago Saraiva; project sponsored by Dept III, Max Planck Institute for the History of Science, Berlin.

Book reviews for *American Ethnologist*, *Current Anthropology*, *Human Ecology*, *China Reviews International*, *Social History of Medicine*, *Journal of Economic History*, *Nutritional Anthropology*, *American Historical Review*, *Journal of Development Studies*; *Journal of Peasant Studies*; *Agricultural History*; *Bulletin de l'Ecole Française d'Extrême Orient*, *Isis*, *Annals of Science, Technology and Culture*, *Ethnos*, *Minerva*, *The Historian*, *Medical Anthropology Quarterly*, *Eighteenth-Century Studies*, *American Association of Geographers*, *History of Science in South Asia*, etc.

Interviews, blogs etc

'Chinese agriculture in the wake of the global food crisis', China Policy Institute Blog, University of Nottingham, 13 May 2015;

<https://blogs.nottingham.ac.uk/chinapolicyinstitute/2015/05/13/chinese-agriculture-in-the-wake-of-the-global-food-crisis/>

李约瑟的科技史太拔高中国文明？(Did Joseph Needham's history of science and technology in China overestimate Chinese civilisation?) TenCent interview with Cui Ying, posted 14 September 2015, <http://cul.qq.com/a/20150914/031695.htm>

Podcast interview with Carla Nappi, *New Books in East Asian Studies* (released 14 December 2015): <http://newbooksineastasianstudies.com/2015/12/14/francesca-bray-et-al-eds-rice-global-networks-and-new-histories-cambridge-up-2015/>

Fellowships and research awards

1976-77: grants from Royal Society and British Academy for ethnographic fieldwork in Malaysia.

1980: grants from British Council and Universities' China Committee for study tour of China.

1982: British Academy Wolfson Fellowship, 'Cooperation and control in rice-growing societies'.

1982-84: Leverhulme Fellowship, 'Patterns of development in rice-growing societies'.

1982: Visiting Fellow, Institute of Southeast Asian Studies, Singapore.

1988: UCLA Academic Research Grant and ISOP travel award for 'Popular medical concepts and health care in East Asia'.

1989: University of California Pacific Rim Research Grant (\$13,900) to organise an international workshop (December 1990) on 'Sexuality and gender in East and Southeast Asia'.

1990 (March - June): Visiting Fellow, Institut für Sinologie, University of Würzburg

- 1991: National Science Foundation, History and Philosophy of Science and Technology grant (\$50,000) for research on 'Technology, power and culture in pre-modern China'.
- 1993: Visiting Fellow, Ecole des Hautes Etudes en Sciences Sociales, Paris.
- 1994-99 [held only 1994-96]: Wellcome Trust for the History of Medicine, Senior Fellowship.
- 1998: 1998 Visiting Fellow, Institute of Modern History, Academia Sinica, Taiwan.
- 1999-2000: UC Pacific Rim Grant (\$15,000), UCSB Interdisciplinary Humanities Center grant (\$3,000) for international workshop on 'Renegotiating the scope of Chinese Studies'.
- 1999-2000: Institute for Social, Behavioral and Economic Research, UCSB, pilot grant (\$9,000) for 'An ethnographic mapping of the high-tech industry work-force in Santa Barbara'.
- 2001-02: co-PI with Nina Brown (graduate advisee), National Science Foundation, Societal Dimensions of Science and Technology Program (\$12,000), 'An ethnographic investigation of international migration in the Irish information industry'.
- 2002: co-PI with Scott MacLeod (graduate advisee), UCSB Institute for Social, Behavioral and Economic Research, Grants for Social Science Research (\$7,500), 'Tourism and the new technologies: a preliminary study of UNESCO World Heritage sites'.
- 2002-03: co-PI with Nina Brown (graduate advisee), University of California, Institute for Labor Economics Fellowship (\$19,973), 'International migration in the information industry'.
- 2003: co-PI with Margaret George-Cramer (lecturer in Sociology), UCSB Academic Senate Research Grant (\$6,300), 'State visions and corporate realities: Intel in Costa Rica'.
- 2003: UCSB Faculty Research Assistance Program awards, \$350 and \$875 for joint research project with Aaron Belchere (undergraduate) on 'Cultural and institutional contexts of GMOs'.
- 2006: co-PI with Georges Métaillé and Vera Dorofeeva-Lichtmann, €10,000 publication grant from the Chiang Ching-Kuo Foundation for *Graphics and Text in the Production of Technical Knowledge in China*.
- 2011: €30,000 from Max Planck Institute for the History of Science for an international workshop on 'New histories of rice' (published as *Rice: Global Networks and New Histories*, Cambridge University Press, 2015)

Postgraduate supervision:

In the course of my career I have supervised or co-supervised over fifty Masters and PhD students in Anthropology, Archaeology, History, History of Science, East Asian Studies, Geography, Development Studies, Public Health and Science Studies. Recent or current PhD projects include:

- Tanya Kane (1st supervisor): Transplanting education: a case study of the production of “American-style” doctors in a non-American setting (PhD awarded 2012; currently Adjunct Lecturer, Liberal Arts, Texas A&M University in Qatar)
- Paul Anderson (2nd supervisor): Threads of virtue: the ethical lives of Syrian textile traders (PhD awarded 2011; currently University Lecturer in Middle Eastern Studies and Assistant Director, HRH Prince Alwaleed bin Talal Centre, University of Cambridge)
- Hyun Chul Kim (2nd supervisor): From spirits to pollution: the process of death in rural Japan (PhD awarded 2011)
- Xiang Fang (STS, 2nd supervisor): Public perceptions of nuclear risk in the PRC (PhD awarded 2010, currently Associate Professor, Sociology, Sun Yat-sen University, PRC)
- Moxuan Li (STS, 2nd supervisor): Risk societies and the commercialisation of GM rice in China (PhD awarded 2010, has since worked for DFiD, Demos, Greenpeace; currently independent environmental researcher, California)
- Lisa Arensen (1st supervisor): Living with landmines: the Cambodian experience (PhD awarded 2012; independent development consultant, Cambodia)
- Christa Tooley (1st supervisor): ‘Save Our Old Town’: engaging developer-led masterplanning through community renewal in Edinburgh (PhD awarded 2012; currently Assistant Professor of Urban Studies and Anthropology, Wheaton College)
- Stewart Allen (1st supervisor): Learning and unlearning the Barefoot way in Tilonia, Rajasthan: an anthropological perspective on innovation and sustainability. PhD awarded October 2013; currently a Postdoctoral Research Fellow at the Max Planck Institute for the History of Science, Berlin.
- Yu-hsiang Chen (Sociology, 2nd supervisor): What is behind markets? A sociological study of Taiwan’s stock. PhD awarded February 2013; currently a Post-doctoral Fellow at National Sun Yat-Sen University, Taiwan.
- Tristan Partridge (co-supervisor): Local community and social movements in highland Ecuador. Viva passed July 2014, minor revisions. Currently a Postdoctoral Research Fellow at UC Santa Barbara.
- Amier Saidula (2nd supervisor) Family law and the state in Tajiki communities in the People’s Republic of China. Viva passed August 2014, minor revisions.
- Liz Chee (Science Studies/History, joint PhD programme Edinburgh-National University of Singapore, co-supervisor): Animal drugs in Chinese medicine since 1949. Writing up, thesis submitted Jan 2015, under revision.
- Don Duprez (1st supervisor) Shamanism and wellbeing in Hmong communities in Colorado. Submitted June 2015, viva September 2015.
- Ting-Ting Shum (1st supervisor) TB control in Shanghai. Fieldwork nearly complete; currently on leave of absence.
- Kragen Chen (Sociology/STS, 2nd supervisor) The milkfish export industry in Taiwan. Degree awarded 2017.

Jing Zhu (History, co-supervisor) Representations of ethnic peoples in the late Qing and Republican periods. Degree awarded 2017.

Hui Yan (Candy) Yu (Social Anthropology, 1st supervisor) Permanence pending: sexuality and citizenship among Chinese temporary migrants in the UK. Writing up.

Sulian Lizé (International Development, 1st supervisor): risk and the non-financialisation of the global rice market. Field-work.

Mentorship:

Dr Casey High, Lecturer, Social Anthropology

Dr Fadhila Mazanderani, Chancellor's Fellow, STIS

Professor Won Dong KIM, Kangwon National University, Korea; Visiting Researcher (Feb 2015 – Feb 2016) researching farmers' markets.

Professor Yuyu DONG, Shanghai Jiaotong University, PRC; Visiting Researcher, Chinese Scholarship Council grant (Aug 2015 – Aug 2016) researching the history of the electrification of Shanghai.

Dr Duoduo (Dora) ZHANG, Hunan University, PRC; Visiting Researcher, Chinese Scholarship Council grant (Sep 2015 – Sep 2016), researching 'Villages of Craftswomen: The Transformation of Chinese Ethnic Female Crafts in the Liquid World'.

Recent and upcoming talks, workshops and panels organised

Significant technologies: new approaches to the early modern history of the world', public lecture, College of Humanities and Social Sciences, Nanyang Technological University, 27 February 2015.

Panelist, Edinburgh Model UN Debate, *The Geopolitics of Food*, 20 March 2015.

'Re-writing the history of technology in the early modern world', 'Talking terms' roundtable, Mellon Foundation Consortium for the Study of the Premodern World, University of Minnesota, 16 April 2015.

'Reproductive cultures in late imperial China', seminar of the Center of Early Modern History, University of Minnesota, 17 April 2015.

'Catching water in a net: writing down how to grow rice'. Neubauer Collegium Symposium on *Knowing and doing in Asian Agriculture*, University of Chicago, 16-17 May 2015.

'Between *technologie* and *history of technology* : frameworks, sources and other challenges'. workshop on *La Technologie entre l'Europe et les États-Unis aux xix^e et xx^e siècles : rencontre et ignorance*, EHESS, Paris, 5 June 2015.

Organiser and presenter, Roundtable Panel on 'Cross-currents and intersections: EAHSTM's place and roles in the scholarly field today', *International Congress for the History of Science in East Asia*, Paris, July 2015.

'After the flush: private and public in California toilet culture and its technological imaginaries', workshop on *The second life of things*, Ethnographic Museum, Zurich, 26-28 August 2015.

- 'Rice and the rise of global capitalism', seminar, Institute for the History of the Natural Sciences, Academia Sinica, Beijing, 22 September 2015.
- Keynote lecture, 'Global histories of technology: beyond "European exceptionalism"?', 4th *Forum on the History of Technology in China*, Beijing University of Science and Technology, 23-26 September 2015.
- Co-organiser and mentor-discussant, Post-graduate workshop, *Society for the History of Technology*, Albuquerque, USA, 8 October 2015.
- 'Rice as self: solidarity through food in Japan and Malaysia'. FriED (Food Research in Edinburgh) seminar series, 5 November 2015.
- 'Global histories of technology: beyond "European exceptionalism"?', EASTS Lecture, National Taiwan University, 8 January 2016.
- 'Feeding the body national', paper presented at workshop on "Moral foods in Asian History", HKIHSS, Hong Kong University, 11 January 2016.
- Contributor, *Exploring craft and innovation*, SHOT-India workshop, Chennai, 29 Jan – 3 Feb 2016
- Co-organiser, with Tiago Saraiva (Drexel University), *Crops on the move*, international workshop, Max Planck Institute for the History of Science, Berlin, 25-29 April 2016, 22-29 August 2016, 13-20 March 2017, 12-23 December 2017.
- Technology as Culture: an Experiment in Transcultural Analysis*: seminar series, Department of Folklore and Cultural Studies, Beijing Normal University, October – November 2016.
- 'Bringing history into STS: change and continuity in China's technological cultures', keynote address, East Asia STS Network conference, Tsing Hua University, Beijing, 20 November 2016
- 'The politics of the handloom: craft, technology and the modern nation in China and India', "Understanding Technology" public lecture series, National Museum of Scotland, 6 December 2016.
- "Hail the maintainers": rethinking technology in Chinese history', Hu Shih Distinguished Lecture, Cornell University, 20 April 2017.
- 60th anniversary conference, Institute for the History of the Natural Sciences, Chinese Academy of Science, Beijing: keynote, 30 May 2017.
- 'The politics of the handloom: craft, technology and the modern nation in China and India', keynote lecture, Asian Dynamics Initiative Conference, Copenhagen, 28 June 2017.
- Workshop co-leader, "Writing global histories in the Anthropocene", Anthropocene Campus Philadelphia, 22-26 October 2017.
- Co-organiser, "The Republic of Plants", threaded panels at SHOT (Society for the History of Technology), 27-31 October 2017, Philadelphia.
- "The politics of the handloom: craft, technology and the modern nation in China and India", panel on *Politics, technology and women's work in modern Asia*, Cogut Humanities Workshop on *Gender, Labor and Cultural Representation in Chinese History*, Brown University, 18 April 2018.

“Bringing STS into history: technological landscapes and technological cultures in modernising China”, keynote address, ANAMED-SHOT workshop “*History of Technology at the turn of the 20th century: Ottoman and Post-Ottoman Cities*”, Istanbul.

Co-organiser, “Craft and innovation in modern societies”, SHOT-IHNS international workshop, 1-3 June 2018, China National Silk Museum, Hangzhou.

Keynote lecture, “Crops and history”, 6th Forum for the History of Technology in China, 4-5 June 2018, Hangzhou.

“Resisting transformation: technology, reproduction and the making of history”, keynote lecture, 45th ICOHTEC (International Congress for the History of Technology) congress, 16-21 July 2018, Saint-Etienne, France.

Co-organiser, “Moving crops and the scales of history: a roundtable”, SHOT, 11-14 October 2018, Saint Louis.

Current research collaborations

Moving Crops and the Scales of History: (2015-17): I am PI of a group-authored book project, in collaboration with Barbara Hahn, John Lourdusamy and Tiago Saraiva; project sponsored by Dept III, Max Planck Institute for the History of Science, Berlin.

Advisory Board and researcher: *Technology in the Making of Modern East Asia*, large collaborative research project, hosted at Hong Kong Institute for the Humanities and Social Sciences, funded by HKRC (2017-22).

Current research interests

- 1) Critical history of science and technology: (a) taking the case of China to develop innovative, anthropologically inspired applications of the concepts of science and technology to historical cases more generally; (b) rethinking the history of China through the lens of history of science and technology, understood anthropologically; (c) developing innovative approaches to rewriting global and early-modern history through a gender-sensitive and post-colonial focus on science and technology.
- 2) The micro- and macro-politics of technology in the contemporary world. Case studies I am working on include: domestic technologies, worldviews and immigration politics in California; technology, family and gender in East Asia; coalitions for and against genetically modified crops in the US and the EU; technology as concrete ethics; technologies of intimacy.
- 3) The comparative history of crops and their place in the development of global capitalism.
- 4) Anthropology and history of food.
- 5) Mapping technologies in movement: diagrams and *chaînes opératoires*.