

Curriculum Vitae
J. STEPHEN LANSING
External Professor, Santa Fe Institute
External Professor, Vienna Complexity Hub
Professor Emeritus, University of Arizona
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ORCID 0000-0003-2132-5309
Scopus ID 700338124

EDUCATION

Ph.D. Anthropology	University of Michigan	1977
Doctoral Fellow	Institute for Advanced Study, Princeton	1976
M.A. Anthropology	University of Michigan	1973
B.A., highest honors	Wesleyan University, CT	1972

PROFESSIONAL EXPERIENCE

Center for Advanced Study in the Behavioral Sciences, Stanford

2021-2022	Fellow
2000-2001	Fellow

Max Planck Institute for Evolutionary Anthropology

2021-	Visiting Scholar
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INSEAD Asia

2020-	Hoffman Global Institute Fellow
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Complexity Science Hub Vienna

2017-	External Professor
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Santa Fe Institute

2009-	External Professor
2002-2007	Professor
1999-2002	External Professor

Nanyang Technological University

2014-2019	Director, Complexity Institute
	Professor, Asian School of Environment

University of Arizona

2014-	Professor Emeritus, Anthropology, Ecology & Evolutionary Biology
2002-2014	Professor, Ecology & Evolutionary Biology
1998-2014	Professor, Anthropology

Stockholm University

2008- 2012 Senior Research Fellow, Stockholm Resilience Centre

Institute for Advanced Study, Durham University

2007 Winifred Jean Stubbs Fellow

University of Michigan

1995-8 Professor, School of Natural Resources and Environment

1995-8 Professor, Anthropology

University of Southern California

1990-6 Professor, Anthropology

1987-92 Chair, Department of Anthropology

1983 Associate Professor, Anthropology

1977 Assistant Professor, Anthropology

Institute for Advanced Study, Princeton

1976-77 Doctoral Fellow

RESEARCH INTERESTS

Anthropology, complexity, sustainability, coupled human-environmental systems, heritage conservation, Malay archipelago

RESEARCH GRANTS (PRINCIPAL INVESTIGATOR)

- 2023 Quantum Temple Impact Fund \$8,907
“Adapting traditional Balinese irrigation techniques to reduce greenhouse gas emissions from rice paddies and increase yields”
- 2021 Max Planck Institute for Evolutionary Anthropology \$154,678
“Cave Punan, the last remaining nomadic hunter-gatherers in Borneo”
- 2019 Leakey Foundation \$23,190
“Pilot study of Cave Punan hunter-gatherers of Borneo”
- 2018 Singapore Ministry of Education Academic Research Fund S\$79,996
“Modeling the effects of social processes on demography and lifestyle diseases”
- 2018 National Science Foundation \$43,702
“Rapid: First contact with Punan Batu Hunter-Gatherers in Borneo”
- 2015 Singapore Ministry of Education Academic Research Fund S\$1,004,073
“Co-evolution of Humans and Infectious Diseases in Island Southeast Asia”
- 2013 Nanyang Technological University S\$500,000
“Transition pathways: islands of order”
- 2011 National Science Foundation \$47,880
RAPID: Critical transitions in at-risk Balinese subaks
- 2007 National Science Foundation \$1,247,928
“Anthropological models of social structure, genes and language”
- 2007 National Science Foundation \$75,000
“Indonesian Origins: Genes, Languages and Cultures” video programs
- 2004 National Science Foundation \$675,000

- 2002 National Science Foundation \$32,789
 “The Austronesian Expansion: Reading Social Structure from the Genome”
- 2000 National Science Foundation #BCS-0083524 \$1,000,000
 “Conference on Robustness in Coupled Natural and Human Systems”
 “Biocomplexity: Emergence of cooperation from human-environmental interactions”
- 1997 University of Michigan \$68,385
 “Genesis: Agent-based modeling of behavioral ecology”
- 1996 United Nations Food and Agriculture Organization
 “Computer Assisted Advisory and Planning (COMEXAP) Programme in Indonesia”
- 1995 National Science Foundation #SBR 962990 \$188,671
 “Integrative Modelling of Environmental Change in an Agroecosystem”
- 1993 United Nations Food and Agriculture Organization
 “Computer Assisted Advisory and Planning (COMEXAP) Programme in Indonesia”
- 1993 National Science Foundation #BNS 9222426 \$15,000
 “Emergent Properties of Balinese Water Temples”
- 1992 Native American Rights Fund \$24,000
 “The Loss of a River: Management of Riverine Resources by the Skokomish Tribe”
- 1992 Advanced Technology Group, Apple Computer \$24,000
 “Microcomputer applications for sustainable development”
- 1990 National Science Foundation grant BNS 9005919 \$30,000
 “Comparative Socio-Bio-Physical Analysis of Balinese Irrigation”
- 1987 National Science Foundation grant #BNS-8705400 \$96,714
 “Ecosystem Model of Balinese Irrigation”
- 1986 National Science Foundation grant # 53-4804-9827 \$20,391
 “Irrigation Management by the Balinese Temple Ulun Danu Batur”
- 1983 National Science Foundation grant #53-4804-2751 \$56,774
 “Cultural Ecology of Balinese Water Temples”

PUBLICATIONS

BOOKS

Lansing, J. Stephen and Murray P. Cox. 2019. *Islands of Order*. Princeton Studies in Complexity. Princeton University Press.

Website for the book: www.islandsoforder.com

Lansing, J. Stephen and Julia Watson. 2012. *Guide to Bali's UNESCO World Heritage Tri Hita Karana: Cultural Landscape of Subaks and Water Temples*. Jakarta: Ministry of Education and Culture.

Perfect Order: Recognizing Complexity in Bali. 2006. Princeton Studies in Complexity. Princeton University Press.

Julian Steward Prize, American Anthropological Association.

Priests and Programmers: Technologies of Power in the Engineered Landscape of Bali.
Princeton University Press, 1991. Revised 2nd edition 2007.
J.I. Staley Prize, School for Advanced Research.

The Balinese. 1994. New York: Harcourt Brace.

The Three Worlds of Bali. 1983. New York: Praeger

*Evil in the Morning of the World: Phenomenological Approaches to a Balinese
Community.* 1974. Ann Arbor: Michigan Papers on South and Southeast Asia #6

ARTICLES AND CHAPTERS

Lansing JS, Arthawiguna WA, Chung NN, Jacobs G, Kremer JN. 2023. Adaptive irrigation management by Balinese Farmers reduces greenhouse gas emissions and increases yields. 2023. *Philosophical Transactions of the Royal Society B.* **8 September** 2023. <https://doi.org/10.1098/rstb.2022.0400>

Pisor AC, Magargal KE, **Lansing JS.** 2023. Climate change adaptation needs a science of culture. *Philosophical Transactions of the Royal Society B.* **September** 2023. DOI:[10.1098/rstb.2022.0390](https://doi.org/10.1098/rstb.2022.0390)

Pradiptajati Kusuma, Murray P. Cox, Graeme Barker, Herawati Sudoyo, **J. Stephen Lansing**, Guy S. Jacobs. 2023. Beyond expansion: Deep ancestry of Bornean hunter-gatherers supports long-term local ancestry dynamics. *Cell Reports*, **Volume 42, Issue 11**, 28 November 2023. <https://www.sciencedirect.com/science/article/pii/S221112472301358X>

Sorensen DV and **Lansing JS.** 2023. Bali, Borneo and the Blockchain: Explorations in the Preservation of Cultural Heritage. Springer: *Proceedings of the 2023 International Conference on Human-Computer Interaction.*

Lansing, J. Stephen, and James N. Kremer. "Emergent properties of Balinese water temple networks: coadaptation on a rugged fitness landscape." *Foundational Papers in Complexity Science*, ed. David Krakauer. Santa Fe Institute Press, in press. Original: *American Anthropologist* (1993): 97-114

J. Stephen Lansing, Guy S. Jacobs, Sean S. Downey, Peter K. Norquest, Murray P. Cox, Steven L. Kuhn, Herawati Sudoyo, John H. Miller, Safarina G. Malik, and Pradiptajati Kusuma. 2022. Deep ancestry of contemporary mobile hunter-gatherers in Borneo. *Evolutionary Human Sciences*, **4**, E9. doi:10.1017/ehs.2022.3

- Anne C. Pisor, Xavier Basurto, Kristina G. Douglass, Katharine J. Mach, Elspeth Ready, Jason M. Tylanakis, Ashley Hazel, Michelle A. Kline, Karen L. Kramer, **J. Stephen Lansing**, Mark Moritz, Paul E. Smaldino, Thomas F. Thornton, James Holland Jones. 2022. Effective climate-change adaptation means supporting community autonomy. *Nature Climate Change*, **12**, 213–215 (2022). <https://doi.org/10.1038/s41558-022-01303-x>
- Lansing, J. S., Chung, N. N., Chew, L. Y., & Jacobs, G. S. 2021. Averting Evolutionary Suicide from the Tragedy of the Commons. *International Journal of the Commons*, 15(1), 414–430. DOI: <https://doi.org/10.5334/ijc.1118>
- Yérali Gandica, **J. Stephen Lansing**, Ning Ning Chung, Stefan Thurner, and Lock Yue Chew. 2021. Bali’s Ancient Rice Terraces: A Hamiltonian Approach. *Phys. Rev. Lett.* **127**, 168301
Commentary on this article: <https://www.eurekalert.org/news-releases/932139>
- Heini Natri, K. S. Bobowik, Pradiptajati Kusuma, Chelzie Crenna Darusallam, Guy S. Jacobs, Georgi Hudjashov, **J. Stephen Lansing**, Herawati Sudoyo, Nicholas E. Banovich, Murray P. Cox, Irene Gallego Romero. 2020. Genome-wide DNA methylation and gene expression patterns reflect genetic ancestry and environmental differences across the Indonesian archipelago. *PLOS Genetics* doi: [10.1371/journal.pgen.1008749](https://doi.org/10.1371/journal.pgen.1008749)
- Berelsford, Christa...**Steve Lansing** et al. 2020. Developing a sustainability science approach for water systems. *Ecology and Society* 25 (2:23). DOI: 10.5751/ES-11515-250223
- Wall, J.D., E. Stawiski...**J.S. Lansing**, J. Friedlaender, M.P. Cox, M. Hammer, T. Karafet, K.C. Ang, S.Q. Mehdi, V. Radha, V. Mohan, P.P. Majumder, S. Seshagiri, J.-S. Seo, S. Schuster and A.S. Peterson. 2019. The GenomeAsia 100K Project: enabling genetic discoveries across Asia. *Nature* 576 (7785):106-111. doi: 10.1038/s41586-019-1793-z
- Chung, N.N., G.S. Jacobs, H. Sudoyo, S.G. Malik, L.Y. Chew, **J.S. Lansing** and M.P. Cox. 2019. Sex-linked genetic diversity originates from persistent sociocultural processes at microgeographic scales. *Royal Society open sci.* 6: 190733. <http://doi.org/10.1098/rsos.190733>
- Guy Jacobs, G. Hudjashov, L. Saag, P.Kusuma, C. Darusallam, D. Lawson, M. Mondal, L. Padani, F. Ricaut, M. Stoneking, M. Metspalu, H. Sudoyo, **J.S. Lansing** and M. Cox. 2019. Multiple Deeply Divergent Denisovan ancestries in Papuans. *Cell* 177, 1–12. <https://doi.org/10.1016/j.cell.2019.02.035>

Har-Shemesh Omri, Rick, Q., **Lansing, J. Stephen**, & Sloot Peter, M. A. (2020). Questionnaire data analysis using information geometry. *Scientific Reports* (Nature Publisher Group), 10:8633 (2020) doi:<http://dx.doi.org/10.1038/s41598-020-63760-8>

Lansing J. Stephen and Therese A. de Vet. 2018. Social-Ecological Systems. Hilary Callan, ed. Wiley: *The International Encyclopedia of Anthropology*. DOI: 10.1002/9781118924396

J. Stephen Lansing, Cheryl Abundo, Guy Jacobs, Elsa Guillot, Murray Cox, Stefan Thurner, Sean Downey, Lock Yue Chew, Tanmoy Bhattacharya and Herawati Sudoyo. 2017. Kinship structures create persistent channels for language transmission. *Proc Natl Acad Sci USA*. Dec 5 2017, 114 (49): 12910-12915.

J. Stephen Lansing, Stefan Thurner, Ning Ning Chung, Aurelie Coudurier-Cuveur, Cagil Karakas, Kurt Feysenmyer and Lock Yue Chew. Adaptive self-organization of Bali's ancient rice terraces. *Proc Natl Acad Sci USA*, June 5 2017.

Commentary on this article:

Carson, J. Environmental science: A chain of cooperation. *Nat Hum Behav* 1, 0160 (2017). <https://doi.org/10.1038/s41562-017-0160>

H. S. Sugiarto, **J. S. Lansing**, N. N. Chung, C. H. Lai, S. A. Cheong and L. Y. Chew. 2017. Social cooperation and disharmony in communities mediated through common pool resource exploitation. *Physical Review Letters* 118, 208301 (2017).

Featured in <https://phys.org/news/2017-05-phase-transitions-rice-farmers-insight.html>

Windia W., Sedana G., De Vet T.A. and **J. S. Lansing**. Resilience of Balinese Subaks to Development Planning. 2017. In Paul Sillitoe ed, Indigenous knowledge: enhancing its contribution to natural resources management. Oxfordshire: *CABI*.

Georgi Hudjashov, Tatiana M. Karafet, Daniel J. Lawson, Sean Downey, Olga Savina, Herawati Sudoyo, **J. Stephen Lansing**, Michael F. Hammer, Murray P. Cox. 2017. Complex Patterns of Admixture across the Indonesian Archipelago . *Molecular Biology and Evolution*, Volume 34, Issue 10, 1 October 2017, 2439–2452.

Lansing J. Stephen and Therese A. de Vet. 2016. Social-Ecological Systems. *International Encyclopedia of Anthropology*. New York: Wiley Blackwell.

Murray P. Cox, Georgi Hudjashov, Andre Sim, Olga Savina, Tatiana M. Karafet, Herawati Sudoyo, and **J. Stephen Lansing**. 2016. Small Traditional Human Communities Sustain Genomic Diversity Over Microgeographic Scales Despite Linguistic Isolation. *Mol. Biol. Evol.* 33(9): 2273–2284.

- Orr Y, Dove M and **J Lansing**. 2015. Environmental Anthropology. *Annual Review of Anthropology*. 44:153–68.
- Guillot EG, Hazelton ML, Karafet TM, **Lansing J S**, Sudoyo H, Cox MP. 2015. Relaxed observance of traditional marriage rules allows social connectivity without loss of genetic diversity. *Mol Biol Evol* 32:2254-2262.
- Commentary on this article: Caspermyer M. 2015. Kissing Cousins, Arranged Marriages, and Genetic Diversity. *Mol Biol Evol* (2015) 32 (9): 2498.
<http://mbe.oxfordjournals.org/content/32/9/2498.1>
- Lansing, J.** & Durney F. 2015. Irrigation Societies. *International Encyclopedia of the Social & Behavioral Sciences*, Second Edition, 2015, 724–726.
- Lansing J.** 2015. Complexity: An Emerging Trend in the Social Sciences. In *Emerging Trends in the Social and Behavioral Sciences* (eds.) Robert Scott and Stephen Kosslyn, Hoboken, NJ: John Wiley and Sons.
 DOI: 10.1002/9781118900772.etrds0048
- Michael Hammer, Tatiana Karafet, Fernando Mendez, Herawati Sudoyo, and **J. Lansing**. 2015. Improved phylogenetic resolution and rapid diversification of Y chromosome haplogroup K-M526 in Southeast Asia. *European Journal of Human Genetics* **23**, 369-373 (March 2015) | doi:10.1038/ejhg.2014.106
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- Lansing J.S.** et al. 2014. Regime Shifts in Balinese Subaks. *Current Anthropology* 55(2): 232-239.
- Tumonggor, M., T.M. Karafet, S. Downey, **J.S. Lansing**, P. Norquest, H. Sudoyo, M. Hammer and M.P. Cox. 2014. Isolation, Contact and Social Behavior Shaped Genetic Diversity in West Timor. *Journal of Human Genetics* 59:494–503.
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- Tumonggor, M.K., Karafet, T.M., Hallmark, B., **Lansing, J.S.**, Sudoyo, H., Hammer, M.F., and Cox, M.P. The Indonesian archipelago: an ancient genetic highway linking Asia and the Pacific. *Journal of Human Genetics*, 58:165-173.

- Lansing, J. Stephen** and Thérèse A. de Vet. Clifford Geertz. 2013. In R. Jon McGee and Richard L. Warms, eds. *Theory in Social and Cultural Anthropology*. NY: Sage Publications, 303-307.
- Lansing, J. Stephen** and Thérèse A. de Vet. 2012. The Functional Significance of Balinese Water Temples: A Reply to Critics. *Human Ecology*. Volume 40, Number 3 (2012), 453-467.
- Lansing, J. Stephen**, Siew Ann Cheong, Lock Yue Chew, Murray P. Cox, Moon-Ho Ringo Ho, Wayan Alit Arthawiguna. 2012. Alternate Stable States in a Social-Ecological System. *Working Papers of the Santa Fe Institute* 12-08-012.
- Lansing, J. Stephen** and James N. Kremer. 2011. Rice, Fish and the Planet. *Proc Natl Acad Sci USA*, vol. 108 no. 50, 19841-19842
- Lansing, J. Stephen**, Murray P. Cox, Therese A. de Vet, Sean S. Downey, Brian Hallmark and Herawati Sudoyo. 2011. An ongoing Austronesian expansion in Island Southeast Asia. *Journal of Anthropological Archaeology* 30 (3): 262-272.
- Lansing, J. Stephen** and Murray P. Cox. 2011. The Domain of the Replicators: Cultural Evolution and the Neutral Theory. *Current Anthropology*, February 2011: Vol. 52, No. 1, pp. 105-125
- Lansing, J. Stephen** and Karyn Fox. 2011. Niche construction on Bali: the gods of the countryside. *Phil. Trans. R. Soc. B* 2011 **366**, 927-934.
- Lansing, J. Stephen** and Sean S. Downey. 2011. *Anthropology and Complexity*. In Clifford Hooker, ed., *Philosophy of Complex Systems*, Vol 10 of *Handbook of the Philosophy of Science*. 2011. North Holland: Elsevier, pp 569-601.
- Tatiana M. Karafet, Brian Hallmark, Murray P. Cox, Herawati Sudoyo, Sean Downey, J. **Stephen Lansing** and Michael F. Hammer. 2010. "Major East-West Division Underlies Y Chromosome Stratification Across Indonesia", *Molecular Biology and Evolution* 27: 1833-1844.
- Cox MP, Karafet TM, **Lansing JS**, Sudoyo H, Hammer MF. 2010. Autosomal and X-linked SNPs reveal a sharp transition from Asian to Melanesian ancestry in eastern Indonesia and a female-bias in admixture rates. *Proc R Soc Lond B* 277: 1589-1596.
- Lansing, J. Stephen**, Sean S. Downey, Marco Janssen, John Schoenfelder. 2009. A Robust Budding Model of Balinese Water Temple Networks. *World Archaeology*, Vol. 41(1): 112-133.
- Lansing, J. Stephen**. Complexité et anthropologie. 2009. *Nouvelles perspectives en sciences sociales*. Volume 4, numéro 2, avril 2009, pp. 47-52.

- Lansing, J. Stephen**, Joseph C. Watkins, Brian Hallmark, Murray P. Cox, Tatiana M. Karafet, Herawati Sudoyo, Michael F. Hammer. 2008. Male dominance rarely skews the frequency distribution of Y chromosome haplotypes in human populations. *Proc Natl Acad Sci USA* 105: 11645–11650.
- Sean S. Downey , Brian Hallmark, Murray P. Cox , Peter Norquest, and **J. Stephen Lansing**. Computational Feature-Sensitive Reconstruction of Language Relationships: Developing the ALINE Distance for Comparative Historical Linguistic Reconstruction. 2008. *Journal of Quantitative Linguistics; Volume* 15; Number 4; pp. 340–369
- Cox, Murray P., Alan J. Redd, Tatiana M. Karafet, Christine A. Ponder, **J. Stephen Lansing**, Herawati Sudoyo and Michael F. Hammer. 2007. A Polynesian motif on the Y chromosome: population structure in remote Oceania. *Human Biology* 79.5 (Oct 2007): 525(11).
- Lansing, J. Stephen**, Murray P. Cox, Sean S. Downey, Brandon M. Gabler, Brian Hallmark, Tatiana M. Karafet, Peter Norquest, John W. Schoenfelder, Herawati Sudoyo, Joseph C. Watkins, and Michael F. Hammer. 2007. Coevolution of languages and genes on the island of Sumba, eastern Indonesia. *Proc Natl Acad Sci USA* 104 (41): 16022-16026.
- Lansing, J. Stephen**, Tatiana M. Karafet, John Schoenfelder, and Michael F. Hammer. 2008. A DNA signature for the expansion of irrigation in Bali? In Sanchez-Mazas A, Blench R, Ross M, Peiros I, Lin M (eds), *Past Human Migrations in East Asia and Taiwan: matching archaeology, linguistics and genetics*. London: Routledge, 376-394.
- Lansing, J. Stephen, John Schoenfelder and Vernon Scarborough. Rappaport’s Rose: Structure, Agency and Historical Contingency in Ecological Anthropology. In Biersack A. and Greenberg J.B., ed., *Reimagining Political Ecology*. Durham & London: Duke University Press, 2006: 325-358.
- Karafet, T.M., **J. S. Lansing**, Alan J. Redd, Joseph Watkins, I. W. Ardika, S. P.K. Surata, Laura Mayer, Michael Bamshad, Lynn Jorde, Michael F. Hammer. A Balinese Y chromosome perspective on the peopling of Indonesia: Genetic contributions from pre-Neolithic hunter-gatherers, Austronesian farmers, and Indian traders. *Human Biology*, Feb. 2005, v. 77 no. 1, pp.93-114.
- Lansing, J. Stephen**. 2005. On Irrigation and the Balinese State. *Current Anthropology* 46 (2):305-6.
- Lansing, J. Stephen** and John H. Miller. 2005. Cooperation Games and Ecological Feedback: Some Insights from Bali. *Current Anthropology* 46(2): 328-334.

Lansing, J. Stephen and Robert L. Axtell. *Afterword to Nonlinear Models for Archaeology and Anthropology: Continuing the Revolution*, edited by Christopher S. Beekman and William W. Baden. Ashgate Press, 2005: 139-146.

Lansing, J.S., A.J. Redd, T.M. Karafet, J. Watkins, I.W. Ardika, S.P.K. Surata, J.W. Schoenfelder, M. Campbell, A.M. Merriwether, and M.F. Hammer. 2006. Reply [to: Indian traders in Ancient Bali: A Reconsideration of the Evidence]. *Antiquity* 80(307): online at <http://www.antiquity.ac.uk/ProjGall/lansing/index.html#response>.

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Lansing, J. Stephen 2004. “Blood is not the only social bond”, *The Times Higher Education Supplement*, Dec. 3, 2004.

Lansing, J.S., A.J. Redd, T.M. Karafet, J. Watkins, I.W. Ardika, S.P.K. Surata, J.W. Schoenfelder, M. Campbell, A.M. Merriwether, and M.F. Hammer. An Indian Trader in Ancient Bali? *Antiquity* 78:300 (2004): 287-293.

Lansing, J. Stephen. 2003. Comment on “The Precolonial Balinese State Reconsidered: A Critical Evaluation of Theory Construction on the Irrigation, the State, and Ritual” by Brigitta Hauser-Schäublin. *Current Anthropology* Vol 44, No. 2, April 2003

Lansing, J. Stephen. 2003. “Complex Adaptive Systems”, *Annual Review of Anthropology* 32: 183-204.

Lansing, J. Stephen. 2003. “The Cognitive Machinery of Power: Reflections on Valeri’s *Forest of Taboos*”, *American Ethnologist*, August 2003

Lansing, J. Stephen. 2002. “‘Artificial Societies’ and the Social Sciences”, Santa Fe Institute Working Papers and *Artificial Life* 8 (Oct. 2002): 279-292.

Lansing, J. Stephen. 2002. “Irrigation Societies”, *International Encyclopedia of Social and Behavioral Sciences*, Elsevier Science Ltd., Oxford, 7910-7913

Lansing, J. Stephen, Vanda Gerhart, James N. Kremer, Patricia Kremer, Alit Arthawiguna, Suprpto, Ida Bagus Suryawan, I Gusti Arsana, Vernon L. Scarborough and Kimberly Mikita. 2001. “Volcanic Fertilization of Balinese Rice Paddies”, *Ecological Economics* 38 (2001):383-390.

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- Vernon L. Scarborough, John W. Schoenfelder and **J. Stephen Lansing**. 2000. "Early Statecraft on Bali: The Water Temple Complex and the Decentralization of the Political Economy". *Research in Economic Anthropology*, Vol. 20: 299-330.
- Lansing, J. Stephen**. 1999. "Anti-Chaos, Common Property and the Emergence of Cooperation", in Dynamics in *Human and Primate Societies: Agent-Based Modelling of Social and Spatial Processes*, ed. Timothy Kohler and George Gumerman, Santa Fe Institute and Oxford University Press: 207-224.
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- 1999 **J. Stephen Lansing** and Therese A. deVet, "Head-hunting, chieftainship and alliance in southern Nias", in *Structuralism's Transformations: Order and Revisions in Indonesian and Malay Societies*, ed. Lorraine Aragon and Susan Russell. Tempe, AZ: Program for Southeast Asian Studies, Arizona State University, pp.69-91.
- 1998 **J. Stephen Lansing**, James N. Kremer and Barbara B. Smuts, "System-dependent selection, ecological feedback and the emergence of functional structure in ecosystems", *Journal of Theoretical Biology* **192**, 377-391.
- 1998 **J. Stephen Lansing**, Philip S. Lansing and Juliet Erazo, "The Value of a River". *Journal of Political Ecology* (5).
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- 1997 **J. Stephen Lansing**, "Systems Theory", in Thomas Barfield, ed., *The Blackwell Dictionary of Anthropology*. Oxford: Blackwell Publishers Ltd., pp 462-63.
- 1997 **J. Stephen Lansing**, Bali and Daisyworld: ecological feedback and the emergence of functional structure in ecosystems", *Mathematical Social Sciences* **33** (1997), 95-6.
- 1997 **J. Stephen Lansing**, MacroScope: exploratory analysis of ecosystems for fieldworkers. Rome: United Nations Food and Agriculture Organization.
- 1996 **J. Stephen Lansing**, "The Aesthetics of the Sounding of the Text", in Jerome Rothenberg and David Guss, eds., *The Book, Spiritual Instrument*. New York: Granary Books, 21-45.

- 1996 **J. Stephen Lansing**, “Stella in Bali: Systems-ecological simulation modelling of irrigation systems”, in Jonathan B. Mabry, ed., *Canals and Communities: Small-scale irrigation systems*. Tucson: University of Arizona Press.
- 1995 **J. Stephen Lansing** and James N. Kremer, “A Socio-ecological Analysis of Balinese Water Temples”, in *Indigenous Knowledge Systems: The Cultural Dimension of Development*, ed. D.M. Warren, L. Jan Slikkerveer and David Brokensha. London: Intermediate Technology Publications, 1995: New York: 258-268.
- 1995 James N. Kremer and **J. Stephen Lansing**, “Modelling water temples and rice irrigation in Bali: a lesson in socio-ecological communication”, in Charles A.S. Hall, ed., *Maximum Power: The Ideas and Applications of H.T. Odum*. Niwot, Colorado: University Press of Colorado: 100-108.
- 1995 **J. Stephen Lansing** and James N. Kremer, “Engineered Landscape: Balinese water temples and the ecology of rice”, *Encyclopedia Britannica Yearbook of Science and the Future, 1996*, pp. 196-219.
- 1994 **J. Stephen Lansing**, Review of Frederick Barth, Balinese Worlds. *Journal of Asian Studies*, Summer 1994, 618-619.
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- 1990 **J. Stephen Lansing**, “The Decolonization of Ethnographic Film”, *Society for Visual Anthropology Review*, Spring 1990: 13-16.
- 1990 **J. Stephen Lansing**, “Humanized Nature and Objective Spirit”, *Reviews in Anthropology* Vol. 19:187-193.
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- 1987 **J. Stephen Lansing**, Review of Danker Schaareman, Tatulingga: Ritual and Social Organization in a Balinese Community. *American Anthropologist* Vol. 90, No. 2:467-8
- 1987 **J. Stephen Lansing**, Balinese Water Temples and the Management of Irrigation. *American Anthropologist* 89:326-341.
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- 1985 **J. Stephen Lansing**, Review of Ian Mabbett, ed. Patterns of Kingship and Authority in Traditional Asia. *Journal of Asian Studies*,
- 1983 **J. Stephen Lansing**, “The Indianization of Bali”, *Journal of Southeast Asian Studies*, Vol. XIV, No. 2:409-421
- 1982 **J. Stephen Lansing**, “The Sounding of the Text”, in Rothenberg and Rothenberg, eds., *Symposium of the Whole*. Berkeley: University of California Press: 241-256.
- 1981 **J. Stephen Lansing**, “A Balinese Faust”, *Parabola: Myth and the Quest for Meaning*. Vol. VI, No. 4
- 1981 **J. Stephen Lansing**, Review of Anthony Forge, *Traditional Balinese Paintings*. *Journal of Asian Studies*, Vol. XI, No. 4: 849-50.
- 1980 **J. Stephen Lansing**, “Cycles of Time”, *Parabola: Myth and the Quest for Meaning*. Vol VI, No. 4
- 1979 **J. Stephen Lansing**, “In the World of the Sea Urchin: The Application of Husserlian Phenomenology to Cultural symbols”, in Becker and Yengoyan, eds., *The Imagination of Reality: Essays in Southeast Asian Coherence Systems*. Norwood, N.J.: Ablex: 75-84.
- 1979 **J. Stephen Lansing**, “The Court-Village Axis in the Balinese Arts”, in E. Bruner, ed., *Art, Ritual and Society in Indonesia*. Ohio University Papers in Southeast Asia Studies.
- 1978 **J. Stephen Lansing**, “Economic Growth and the Traditional Society: A Cautionary Tale from Bali”, *Human Organization*, Vol. 37 no. 4:391-394

SELECTED ETHNOGRAPHIC FILMS , VIDEOS & SIMULATION MODELS

See <http://www.slansing.org/films-and-videos.html>

2019 Islandsfororder.com (simulation models)

To accompany Lansing, J. Stephen and Murray P. Cox. 2019. *Islands of Order*. Princeton Studies in Complexity. Princeton University Press.

2016 Crossing the Wallace Line

- 2012 Steve Lansing: Bali's Water Temples.
http://poptech.org/popcasts/steve_lansing_balis_water_temples
- 2009 "Voyagers on the Ring of Fire"
 A 47 minute anthropological film about genes, languages and the Austronesian expansion, produced for the National Science Foundation. Directed by J. Stephen Lansing, edited by A. Ashley Stinnett.
- 2006 "Perfect Order: A Thousand Years in Bali" Whole Earth Films and the Long Now Foundation. http://www.wholeearthfilms.com/lansing_stephen.html#
- 2003 SAIL (Simulated Agents in Love), [SEP] An agent-based simulation of rule-based marriage and genetic relatedness
<http://www.ic.arizona.edu/~lansing/home.htm>
- 1999 "The Sacred Balance"
 Anthropologist/presenter for sequences on Balinese ecology in a 4 part science series hosted by David Suzuki and co-funded by the National Science Foundation. See <http://www.sacredbalance.com/web/baliintroduction.html>
 The Water Priests Apprentice simulation game:
<http://www.sacredbalance.com/web/baliintroduction.html>
- 1999 "Love in Paradise...?" (anthropologist/presenter). 27 minute video on Balinese ideas about love and marriage, produced by Cafe Productions for Geo (German television).
- 1996 "The Way of Science" (anthropologist/presenter)
 Program 4 of the PBS Science Series "The Human Quest", nationally broadcast beginning April 1996
- 1995 "The Tribe's Plan"
 A fourteen minute video for the Skokomish Indian Tribe, produced and directed by J. Stephen Lansing.
- 1995 "Farmer's meeting"; "From the Mountains to the Sea"; "Aftermath of the Green Revolution": three short videos for the Balinese agro-ecology exhibit in "The Great Technology Challenge", a traveling exhibition on sustainable technology created by the California Museum of Science and Technology: Videos are shown in a Balinese farmer's meeting pavillion, accompanied by photos and interactive displays based on *Priests and Programmers: Technologies of Power in the Engineered Landscape of Bali*.
- 1994 Heal the Watershed!
 A 22 minute video for the Skokomish Indian Tribe, produced and directed by J. Stephen Lansing. Finalist, Italian International Festival of Ethnographic Films, Sardinia, Oct. 12-15 1994

1988 The Goddess and the Computer

A one hour ethnographic film, produced and directed by J. Stephen Lansing and Andre Singer. Camera by J. Stephen Lansing and Mike Thomson. Produced by Channel Four London and broadcast over British television November 11, 1988. Acquired for U.S. broadcast on the PBS science series "NOVA", WGBH Television (Boston). British selection for Italian International Festival of Ethnographic Films, Sardinia, Oct. 1-3 1990. Distributed in the U.S. by Documentary Educational Resources, Boston, MA (tel. 617-926-0492).http://web.me.com/stevelansing/Site_2/Videos_%26_talks.html

1988 Bali Model (a systems ecology model of water temples and paddy ecology)
http://web.me.com/stevelansing/Site_2/Bali_Model.html

1983 Chiefs and Kings of Indonesia

A one hour documentary film by J. Stephen Lansing, produced by The Disney Channel for "The Explorers" series. Distributed by The Disney Channel.

1981 The Three Worlds of Bali

A one hour ethnographic film, "written by J. Stephen Lansing and based upon his own research". Broadcast over national public television in the ODYSSEY series on November 17, 1981. Awarded CINE Golden Eagle in 1982. Distributed by Documentary Educational Resources, Boston, MA (tel. 617-926-0492).