

INTER-DISCIPLINARY.NET

BEYOND THE SUPERFICIAL

MAKING SENSE OF FOOD IN A GLOBALIZED WORLD



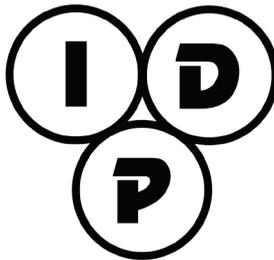
EDITED BY: SWETHA ANTONY AND ELIZABETH M. SCHMIDT

Inter-Disciplinary Press

Publishing Advisory Board

Ana Maria Borlescu
Peter Bray
Ann-Marie Cook
Robert Fisher
Lisa Howard
Peter Mario Kreuter
Stephen Morris
John Parry
Karl Spracklen
Peter Twohig

Inter-Disciplinary Press is a part of *Inter-Disciplinary.Net*
A Global Network for Dynamic Research and Publishing



2016

© Inter-Disciplinary Press 2016
<http://www.inter-disciplinary.net/publishing>

The *Inter-Disciplinary Press* is part of *Inter-Disciplinary.Net* – a global network for research and publishing. The *Inter-Disciplinary Press* aims to promote and encourage the kind of work which is collaborative, innovative, imaginative, and which provides an exemplar for inter-disciplinary and multi-disciplinary publishing.

All rights reserved. No part of this publication may be reproduced, stored in a retrieval system, or transmitted in any form or by any means without the prior permission of Inter-Disciplinary Press.

Inter-Disciplinary Press, Priory House, 149B Wroslyn Road, Freeland, Oxfordshire. OX29 8HR, United Kingdom.
+44 (0)1993 882087

ISBN: 978-1-84888-430-4
First published in the United Kingdom in eBook format in 2016. First Edition.

Table of Contents

Introduction

Swetha Antony and Elizabeth M. Schmidt

Coping with Loss: Living without Tea in Ireland during World War II <i>John Porter</i>	1
The Most American Daily Bread: The Rise and Fall of Wonder Bread <i>Keiko Tanaka</i>	9
Deepening Cultural Knowledge: Semiotic Study on Finnish Chocolate Packages <i>Heidi Uppa and Tania Rodriguez-Kaarto</i>	21
Cannibals and Vegetarians in Ancient Greek Theories of the Natural State <i>John Dayton</i>	37
Questions of Culinary Commonplacings: The Social Significance of Personal Recipe Collections in the Late Nineteenth Century <i>Elizabeth M. Schmidt</i>	45
‘São João, São João, acende a fogueira do meu coração’: An Examination of Food, Culture and Identity in the Brazilian Festas Juninas <i>Bianca Arantes dos Santos</i>	55
‘Mamakization’: Food and Social Cohesion in Multiethnic Malaysia <i>Eric Olmedo and Shamsul AB</i>	65
Agriculture and Sexual Minorities: Historical Precedents and Contemporary Evolutions <i>Andrea Bosio</i>	75
Our Land of Milk and Honey: Spirituality in the Transformation of Ecological and Heritage Production <i>Hart N. Feuer</i>	97
Conventual Sweets: A Culinary Journey to Innovation <i>Maria José Pires, Cláudia Viegas and Nelson Félix</i>	111

Our Land of Milk and Honey: Spirituality in the Transformation of Ecological and Heritage Production

Hart N. Feuer

Abstract

Many facets of globalisation are contested on ethical or humanitarian grounds but the defence of local food and agriculture often borders on the spiritual. In particular, the decline or homogenisation of local food and agriculture is often acutely felt because it embodies a spiritual violation of cultural identity and sacredness of the land. The essence of this crisis has been newly characterised in Pope Francis' latest encyclical *Laudato si'*, which captures the spiritual relevance of agriculture by characterising the human response to contemporary ecological decline and culinary shifts. In trying to understand how we arrived at our present state, sociologists of faith, such as the late Jacques Ellul have long described how technology comes to dominate over nature in processes such as agricultural development. In his argument, by incrementally drawing humans away from nature and into technological spheres (by engineering tractors, producing agri-chemicals, and genetically modifying plants), alienation from nature is amplified and the scope of ecological crisis broadens. This phenomenon is not new; indeed, most religious texts and creation myths caution against this alienation through parables and commandments. In light of the new public attention being drawn to the spiritual dimension of the ecological crisis, this chapter explores content from Judeo-Christian texts and Cambodian myths that specifically speaks to this phenomenon. The valorisation of the land found, for example, in the book of Exodus referencing Israel as the 'land flowing with milk and honey', is typical of religious and pseudo-religious narrative that are integrated with political narratives such as nationalism and cultural patrimony. In this chapter, I address how national metanarratives built on these spiritual-historic characterisations play a role in shaping agriculture and food policy and evaluate the spiritual dimension of a few Cambodian initiatives that attempt to moderate the alienation brought about by industrialisation and globalisation.

Key Words: Heritage, national cuisine, spirituality, Pope Francis, globalisation, agriculture, *laudato si'*.

1. Introduction

As a multifaceted phenomenon, globalisation is often contested along numerous practical, ethical and humanitarian grounds; on the issue of food and agriculture, however, the arguments often border on the spiritual. While the various direct responses have ranged from the erection of trade barriers and the

establishment of protective subsidies to more violent outbursts of nationalism, the pacification derived from these measures (not to mention their effectiveness) typically erodes over the long-term, leading to real and perceived loss of agricultural and culinary heritage. The loss or homogenisation of food culture and agro-biodiversity is felt acutely because it often comes to represent an existential threat to the uniqueness of cultural identity and to the sacredness of the land. Although innovative mechanisms for safeguarding heritage are constantly being developed (from land zoning, targeted subsidies, and geographic designations to child food education, global slow food and farmer movements), their impact is non-comprehensive, and has often been marginal. The creeping sense of global disillusionment about these losses can now perhaps more usefully be described as a spiritual crisis, one that is fuelled by the middling performance of technological or superficial policy solutions. While some commentators, most notably the late sociologist and theologian Jacques Ellul, diagnosed and predicted the combined technological and spiritual basis of this crisis since the 1960s, the release in June, 2015 of a sweeping encyclical from Pope Francis entitled *Laudato si'* has recaptured public attention on this issue. This chapter revisits the evolution of the debate about technology, nature and spirituality, outlining its culmination in 2015 with the cross-religious fervour around the release of *Laudato si'*. As a case study, I then map these historical insights onto the everyday understandings of the cultural-spiritual crisis in food and agriculture in Cambodia, a developing country at the onset of agricultural industrialisation.

In this, I illuminate how the nascent, everyday processes of asserting food sovereignty and reproducing local food aesthetic are embedded in the broader shift to recognise the spiritual connectedness of humans to their food. In the spirit of many texts in rural sociology, I underline the contradictions that emerge from societal initiatives to reconcile the informal natural ethos around agricultural production with the march of commoditisation and globalisation.¹ In particular, I reflect on how spiritual-historic metanarratives, such as those embedded in Judeo-Christian agricultural and environmental leitmotifs, align with contemporary national narratives governed by intergenerational naturalistic memory, consolidation of the cultural unit of the nation-state, and nostalgia. Drawing on a few key insights from field research in 2009, 2010 and 2014 in Cambodia, I question how contemporary developing countries might develop their reflexive explorations into the spiritual and naturalistic dimensions of their material heritage into effective counter-measures against the alienation of modernity.

2. 'Technique' and the Legacy of Jacques Ellul

Over the course of a tremendous life, theologian and sociologist Jacques Ellul (Université Bordeaux IV) fought passionately for explicitly including spiritual and religious dimensions, indeed Christian values, into the ongoing debates about ecological destruction and the alienation of humans from their natural world. With

his prescience about the direction of the contemporary debate, and his Christian background, Ellul would have been an ideal adviser to Pope Francis in the development of *Laudato si'*. Indirectly, Ellul's theories have likely filtered their way into *Laudato si'* as a natural consequence of building upon the foundational theories of Pope Francis' predecessor, Pope Paul VI. At the 25th anniversary celebration of the United Nations Food and Agriculture Organisation, Pope Paul VI remarked:

the most extraordinary scientific advances, the most amazing technical abilities, the most astonishing economic growth, unless they are accompanied by authentic social and moral progress, will definitively turn against man.²

This argument, repeated by Pope Francis in *Laudato si'*, that humanity's relationship to nature can readily be usurped by technology (or 'technique'³ as Ellul calls it) and hollowed of its spiritual core, was laid out in Ellul's 1954 treatise, *The Technological Society (La technique ou l'enjeu du siècle)*. Over a number of later works, Ellul develops his contention that civilisations, and the attendant technology necessary to enable urban density, draws humans away from nature and portends ecological exploitation.⁴ As synthesised by Dunham in his doctoral dissertation covering Ellul's 1975 book, *The Meaning of the City (Sans feu ni lieu: Signification biblique de la Grande Ville)*, the over-zealous 'application' of technique in the development and functioning of the ancient city of Babylon ultimately led to its destruction.⁵ This is chronicled from a religious standpoint in the books of Jeremiah and Revelation but has more recently gained considerable archaeological and anthropological confirmation through the excavations of Harvey Weiss' team at Yale University. While many faults are associated with the fall of Babylon, this parable is particularly revealing of the dangers of agricultural industrialisation. Together, religious, historical and archaeological accounts suggest that Mesopotamian civilizations aggressively pursued extensive irrigation schemes and credit-leveraged expansion of agricultural zones. This led to an ecologically unsustainable spike in food production that, while it lasted, fuelled a period of societal excesses, including military aggression,⁶ which later proved difficult to wind back as climate change and increasing soil salinity eroded the productive bases for cities such as Babylon.⁷ Speaking to this dilemma, Ellul casts a generally pessimistic picture of the interplay of civilisation and technique, contending that the way they mutually reinforce each other to create a hegemonic 'technological morality'⁸ makes the process difficult to interrupt.⁹ In similar fashion, many contemporary technocratic measures for protecting agricultural heritage (such as geographic indication or ecological food certifications) are themselves constitutive of technique, and therefore predestined to fail or backfire in achieving socially-resilient environmental goals. To better understand the basis

upon which Ellul, and later Pope Paul and Pope Francis, argue for spiritual reconsideration of nature, it is important to understand the various *hindernisse* for ecological and cultural protection that have long been identified in pseudo-historical narratives of various religious texts and creation myths. As an indicative case, I turn to some of the most well-known narratives found in the Hebrew Bible.

3. The Biblical Underpinning of Nature and Agriculture

Worldwide, it is common for national pseudo-religious or religious narratives to link the creation (or existence) of a homeland (or the world) with natural fertility and abundance of food. Cambodia and Israel are no exceptions.¹⁰ The book of Genesis in the Hebrew Bible is particularly useful as a reference point as it is broadly representative of many disparate cultural mythologies found worldwide and has particular utility in connecting the theological work of Jacques Ellul with contemporary understanding of food, nature and agriculture.¹¹

To begin with, it is important to acknowledge that the Hebrew Bible differentiates between natural food harvesting and farming—a distinction often overlooked. Most often based on a degree of mistranslation is the scope of God’s initial commandment to Adam in the Garden of Eden that he should ‘tend the land and keep it’.¹² As Pope Francis comments in *Laudato si’*, the two verbs have complementary definitions: one refers to cultivating or ploughing the land while the other connotes care, protection, and preservation. This implies, as Pope Francis writes, ‘a relationship of mutual responsibility between human beings and nature’.¹³ In the Garden of Eden, this relationship was ostensibly not difficult to maintain, as Adam and Eve were vegetarian gatherers living primarily from the harvest of wild foods (this period of ‘pre-domestication’ is described in Genesis 2:5-6). After the fall from paradise, however, the setting for a more antagonistic relationship between nature and humans was laid by God. This section of the Hebrew Bible is worth quoting at length:

Cursed is the ground because of you; through painful toil you will eat of it all the days of your life. The land will bring forth thorns and thistles, and you will have to work to extract the plants of the field.¹⁴

Taken out of context, this pronouncement *seems* to be prophetic regarding the development of not only farming, but of industrial agriculture: the ‘cursed’ ground must be countered with fertilisers; the thorns and thistles (i.e. the weeds) must be combated with pesticides; and the painful toil of work must be relieved through mechanisation. However, looking at the broader context of the Hebrew and Christian Bibles, Pope Francis comments that these seemingly harsh conditions after the fall were meant to sediment humanity’s relationship with nature on a more equal basis—one in which the challenge of cultivation becomes an embedded part

of human culture, i.e. agri-culture.¹⁵ He suggests that, in demythologising nature with this combative stance, nature is rendered vulnerable and thus in need of our responsibility. As Pope Francis writes, ‘A fragile world, entrusted by God to human care, challenges us to devise intelligent ways of directing, developing and *limiting* our power’¹⁶ (stress added).

The city of Angkor, the foremost representation of the Khmer civilisation in Cambodia, is symbolic of this narrative. Although ultimately succumbing to a fate similar to that of the ancient city of Babylon, for many modern Cambodians the spirituality, disciplined social organisation and honour that are associated with the agronomic feats of their predecessor Khmer civilisation provide a beacon of hope for *future* development.¹⁷ The apparent contradiction of glorifying a failed civilization in the past is reconciled, however unjustifiably, by the populist view of many Cambodians that the flaws of the past can be remedied with current technology. In the meantime, the ancient Khmers are glorified for their advanced cultivation, physically embodied in the extensive archaeological remains of irrigation canals and waterways interwoven with the city of Angkor, and the bounty of their orchards, embodied in the two towering Palmyra sugar palms that nobly flank the temple of Angkor Wat.¹⁸ In the Judeo-Christian tradition, this type of valorisation of the homeland is notably present in the Exodus 33:3 reference to Israel as the ‘land flowing with milk and honey’. Speaking to this populist ideal of agricultural development, Pope Francis cautions that human transformations of the landscape have often failed to respect its inherent ecological functional and aesthetic balance. He writes: ‘Nature is usually seen as a system which can be studied, understood and controlled, whereas creation can only be understood as a gift from the outstretched hand of the Father of all’.¹⁹ Echoing warnings made by Ellul in the 1970s and Pope Francis today, the parables about the fall of Babylon and Angkor both speak to the risks of over-reliance on technology in managing human-made environments and the underappreciation of ecological systems.

4. Managing Technique: Symbols of Agriculture and Nature

In an article for the *Journal of Social and Biological Systems*, Ellul argues that technique increasingly contributes to the human relationship with nature being mediated through symbolic attestation, rather than direct interface.²⁰ For example, rains can symbolise nature’s system of fertility and nurturing of plants but the same phenomenon can also be symbolically transmuted into the more instrumentalised concept of ‘filling up the reservoirs’ for irrigation. Ellul posits that the logic and imperatives of technique insert a wedge between humans and their natural environment. In the same article, Ellul points to the obvious, if rather unwieldy, solution: ‘If [man] is only in a direct physical relationship to his natural environment he is completely disarmed’.²¹ Perhaps ironically, agriculture is a battle with nature but it is also an avenue to nature, and the products of agriculture,

encoded through education and consistent exposure, reinforce the spiritually cogent mutual independence that engenders ecological empathy.²²

An evolving example of this relationship can be observed in the case of Palmyra palm products. On the one hand, the tree's productive uses²³ and complementarity to rural life²⁴ can be stressed: among other farm uses, the versatile palm sap is transformed into sugar (syrup, paste, cakes and granules), vinegar, wine, beer, liquor, and animal feed. It has different forms for rural consumption (informally ecological), urban marketing (as a natural heritage product), and for export (particularly as a certified organic product). On the other hand, the Palmyra sugar palm is laden with social and spiritual appreciation: it is recognised as a national heritage symbol, associated with civilisation of Angkor, has been written about in poetry,²⁵ protected by royal decree,²⁶ and exemplified as an ecologically-balancing²⁷ and aesthetic tree.²⁸ In this way, a contemporary nation can complement the technocratic basis of conservation by attaching cultural patrimony and spiritual relevance.

But how can these symbols be revered and enjoyed if humankind's relationship with agriculture, and thereby nature, has often been so fraught by hard labour and poverty? In seeking to emancipate itself from the eternal 'toil'²⁹ over the land, is it surprising that humankind has progressively applied technology, thereby amplifying alienation with nature? Indeed, this process is built into common discourses of agricultural modernisation. The decline in the number of farmers in industrialised countries through specialisation has shifted agricultural experience to migrant labourers, miners of minerals for fertiliser, laboratory technicians producing chemical components for pesticides and herbicides, engineers of farm equipment, prospectors and refiners of fuel for farming machinery, builders and administrators of extensive irrigation networks, geneticists and plant breeders, and of course taxpayers who subsidise farming. By all appearances, technique has usurped humankind's agriculturally-mediated relationship with nature. This view, however, ignores the ebbs and flows of alienation, the reflexive learning in different regions, and the safeguards built into agriculture.

This last issue has been debated fervently among rural sociologists who have questioned why, even in the most advanced cases of industrialisation, technique faces natural barriers when it comes to agriculture. Foremost here is the Mann-Dickinson thesis, which suggests that the fundamental rootedness of agriculture in ecological systems hampers its full and inevitable commoditisation and absorption into capitalist relations.³⁰ Jan Douwe van der Ploeg, using the case of highly industrialised Dutch farmers, demonstrates that considerable diversity or heterogeneity of farming styles persists despite the predominantly capitalist agricultural context.³¹ Furthermore, the expansion of technique in agriculture has always faced backlashes and counter-movements, such as Luddism in 19th Century England, or the alternative food movements gaining ground in the latter part of the 20th Century.

And in countries such as Cambodia, which have developed their agricultural development programs later and have had a chance to learn from trends in other countries, active measures are underway to pre-empt some undesirable aspects of industrialisation found in many developed countries.³² While contemporary promotion and conservation programs, such as that for Palmyra products, are themselves constitutive of technique, approaches that amplify the direct physical relationship with nature can also simultaneously mitigate technique. Alternative approaches to measuring, or valuing, agricultural productivity that are systemic and include social and naturalistic components also suggest way of maintaining reflexivity when applying technique. This potential can be demonstrated from the case of a multi-purpose farmer in Cambodia, who related his experience in the following way:

Before I let my farm become multi-purpose according to the NGO's ideas, I felt that I should be the master of my field. I cleaned the weeds and brought water from far away and used selected seeds. One year I fell ill with malaria before transplanting and I watched from my bed as my children tried to farm on their own. When I could go out again, I saw our fields and I thought we were ruined. There was a pond and my seedlings were drowning. My dikes were broken except where the sugar palm tree roots held it in place. Instead of fixing everything, I dug a pond where the water collected and I planted trees on the dikes after I fixed them. I started raising fish and frogs and using seeds that grew big on my field. [...] Other people made fun of me because my farm looked messy and complicated but the next year I had the best palm sugar, rice, beans, frogs and fish. Now I watch the nature to see her opinion about how to change my farm.³³

Implied here is the process whereby ecological production systems become less constitutive of technique by engendering humility towards nature and natural processes and by valorising the reproduction of the natural order as a sign of respect for nature.³⁴ These 'anti-technique techniques', often embedded in agroecology and permaculture, not only use ecological systems as a model, they also imply a sustained relationship with nature. In other work, I have shown how the technology of modern-day ecological agriculture in Cambodia struggles to escape from the alienation of technique³⁵ but that, in contrast to industrial methods, ecological cultivation approaches are more easily adapted to alternative valuation and direct contact with nature.³⁶ It is in this contested space that experiments in resolving the spiritual crisis of contemporary agricultural sustainability find fertile soil.

5. Conclusion

The euphoria for industrial products beginning in the 1950s, which has inspired much of Jacques Ellul's warnings about the escalation of the technological society, has subsided and a new mental construct of heritage and diversity protection is emerging, particularly in cases dealing with agriculture and food.³⁷ However, without attention to the spiritual dimension of this crisis, societies may simply end up repackaging technique and reproducing the agricultural conditions that the parables of Eden, Babylon and Angkor were meant to guard against. In *Laudato si'*, Pope Francis acknowledges this challenge:

The idea of promoting a different cultural paradigm and employing technology as a mere instrument is nowadays inconceivable. The technological paradigm has become so dominant that it would be difficult to do without its resources and even more difficult to utilize them without being dominated by their internal logic.³⁸

And yet, despite this negative outlook, both Ellul and Pope Francis consider activities and engagement on behalf of human-nature harmony to be noble and worthwhile. The fanfare surrounding *Laudato si'* and the swing of the pendulum toward ecological agriculture and agro-biodiversity might be construed as a turning point, but Pope Francis is under few illusions about the scale of the intervention required:

There needs to be a distinctive way of looking at things, a way of thinking, policies, an educational programme, a lifestyle and a spirituality which together generate resistance to the assault of the technocratic paradigm.³⁹

These elements, which are being experimented with in Cambodia and around the world, need to be judged on a basis of how close they draw humans to nature.

Notes

¹ This follows the work of David Goodman, 'Agro-Food Studies in the "Age of Ecology": Nature, Corporeality, Biopolitics', *Sociologia Ruralis* 39.1 (1999): 17–38.

² Pope Paul VI, 'Address to the FAO' (Speech at the 25th Anniversary of the UN Food and Agriculture Organisation, Rome, 16 November 1970).

³ Technique means 'the totality of methods rationally arrived at and having absolute efficiency (for a given stage of development) in every field of human

activity'. Jacques Ellul, *The Technological Society*, trans. John Wilkinson (New York: Knopf, 1954), xxv.

⁴ See notably: Jacques Ellul, *The Meaning of the City*, trans. Dennis Pardee (Grand Rapids, MI: Eerdmans, 1970); Jacques Ellul, *The Politics of God and the Politics of Man*, trans. Geoffrey W Bromiley (Grand Rapids, MI: Eerdmans, 1972); Jacques Ellul, 'Power of Technique and the Ethics of Non-Power', *The Myths of Information: Technology and Postindustrial Culture*, ed. Kathleen Woodward, trans. Mary Lydon (London: Routledge and Kegan Paul Ltd, 1980), 242–47.

⁵ Paul L. Dunham III, 'The Meaning of Technology: A Theology of Technique in Jacques Ellul' (Ed.D. diss., West Virginia University, 2002).

⁶ Wes Jackson, *Consulting the Genius of the Place: An Ecological Approach to a New Agriculture* (Berkeley, California: Counterpoint Press, 2010), 75–77.

⁷ Harvey Weiss and Marie Agnès Courtney, 'The Scenario of Environmental Degradation in the Tell Leilan Region, NE Syria, during the Late Third Millennium Abrupt Climate Change', *Third Millennium BC Climate Change and Old World Collapse*, ed. H. Nüzhet Dalfes, George Kukla, and Harvey Weiss (Berlin: Springer, 1994), 107–48; Harvey Wilkinson, 'Environmental Fluctuations, Agricultural Production and Collapse: A View from the Bronze Age Upper Mesopotamia', *Third Millennium BC Climate Change and Old World Collapse*, ed. H. Nüzhet Dalfes, George Kukla, and Harvey Weiss (Berlin: Springer, 1994), 67–106.

⁸ Ellul, 'Power of Technique and the Ethics of Non-Power', 243.

⁹ Jacques Ellul, 'The Technological Order', *Technology and Culture* 3.4 (1962): 401–405.

¹⁰ George Cœdès, Walter F Vella, and Susan Brown Cowing, *The Indianised States of Southeast Asia* (Honolulu: East West Center Press, 1968), 66; Nusara Thaitawat, *The Cuisine of Cambodia* (Bangkok: Nusara and Friends, 2000), 17.

¹¹ The Forum on Religion and Ecology at Yale University has chronicled the increasing attention paid to ecological world narratives in religions across the world. Furthermore, Pope Francis convened a global meeting of religious leaders on 28 April, 2015 which received unprecedented attention in non-Christian circles See: Mary Evelyn Tucker, 'Response from Other Religions' (Paper presented at the conference of Pope Francis and the Environment: Yale Examines Historic Climate Encyclical, New Haven, CT, April 8, 2015).

¹² Genesis 2:15 (Author's translation)

¹³ Pope Francis, *Laudato Si'* (The Vatican: The Holy Sea, 2015), 49.

¹⁴ Genesis 3:17-18 (Author)

¹⁵ Pope Francis, *Laudato Si'*, 57.

¹⁶ Ibid.

¹⁷ Hart Nadav Feuer, 'Pre-Industrial Ecological Modernization in Agro-Food and Medicine: Directing the Commodification of Heritage Culture in Cambodia' (PhD

Diss., University of Bonn, 2013), 73–85; Judy Ledgerwood, ‘History/Myth and the Nation: Research at Angkor Borei, Cambodia’ (Friday Forum Lecture Series, University of Wisconsin-Madison, February 21, 1997); Sen Hun (Prime Minister of Cambodia), ‘Remarks at the Opening of Trapang Thmar Water Storage, Phnom Srok District, Banteay Meanchey Province’, *CNV*, 2006, viewed on 12 June 2014. http://www.cnv.org.kh/2006_releases/09mar06_banteay_meachey_water_tropeang_thmar.htm.

¹⁸ Bernard Philippe Groslier, ‘La Cité Hydraulique Angkorienne: Exploitation Ou Surexploitation Du Sol?’, *Bulletin de l’Ecole Française d’Extrême-Orient Paris* 66.6 (1979): 161–202.

¹⁹ Pope Francis, *Laudato Si*, 56.

²⁰ Jacques Ellul, ‘Symbolic Function, Technology and Society’, *Journal of Social and Biological Systems* 1.3 (1978): 208–210.

²¹ *Ibid.* 208.

²² Pope Francis, *Laudato Si*, 155–157.

²³ J P Romera, ‘Le Borassus et Le Sucre de Palme Au Cambodge’, *L’Agronomie Tropicale* 8 (1968): 801–43.

²⁴ Khieu Borin, ‘The Sugar Palm Tree as the Basis of Integrated Farming Systems in Cambodia’, *Livestock Feed Resources within Integrated Farming Systems* (1996): 83–95.

²⁵ Sothun Sok, ‘Value of the Palm’, trans. Piseth Som, *The Pracheachun Magazine* 33 (February 2004): 25–26.

²⁶ Royal Government of Cambodia Prakas 481, 5 September 2003

²⁷ Koma Yang Saing, ‘Palm Trees in Cambodia’, *Magazine of Environment, Agriculture and Sustainable Development* (April–July 2000): 7.

²⁸ Chan Sarun, ‘Animal and Plant Species that Are Symbolic of Cambodia’, trans. Piseth Som, *The Pracheachun Magazine* 49 (June 2005).

²⁹ Genesis 3:17–18 (Author).

³⁰ Susan A. Mann and James M Dickinson, ‘Obstacles to the Development of a Capitalist Agriculture’, *Journal of Peasant Studies* 5 (1978): 466–81.

³¹ Jan van der Ploeg, *Labor, Markets, and Agricultural Production* (Oxford: Westview Press, 1996).

³² Feuer, ‘Pre-Industrial Ecological Modernization in Agro-Food and Medicine’.

³³ Informant was male, age 38, from Takeo province, Cambodia.

³⁴ Ellul, ‘Symbolic Function, Technology and Society’, 208–210.

³⁵ Hart Nadav Feuer, ‘Sustainable Agricultural Techniques and Performance Oriented Empowerment: An Actor-Network Theory Approach to CEDAC Agricultural and Empowerment Programmes in Cambodia’ (MPhil diss., University of Oxford, 2007).

³⁶ Hart Nadav Feuer, 'Negotiating Technical and Ideological Standards for Agroecological Rice Production in Emerging Markets: The Case of Cambodia', *East Asian Science, Technology and Society* 5.4 (2011): 441–59.

³⁷ Barbara Burlingame, ed., *Sustainable Diets and Biodiversity - Directions and Solutions for Policy Research and Action Proceedings of the International Scientific Symposium Biodiversity and Sustainable Diets United against Hunger* (Rome: FAO, 2012); David Goodman, 'Rethinking Food Production-Consumption: Integrative Perspectives', *Sociologia Ruralis* 42.4 (2002): 271–77.

³⁸ Pope Francis, *Laudato Si'*, 80.

³⁹ *Ibid.* 84.

Bibliography

Borin, Khieu. 'The Sugar Palm Tree as the Basis of Integrated Farming Systems in Cambodia'. *Livestock Feed Resources within Integrated Farming Systems* (1996): 83-95.

Burlingame, Barbara, ed. *Sustainable Diets and Biodiversity - Directions and Solutions for Policy Research and Action Proceedings of the International Scientific Symposium Biodiversity and Sustainable Diets United against Hunger*. Rome: FAO, 2012.

Cœdès, George, Walter F Vella and Susan Brown Cowing. *The Indianised States of Southeast Asia*. Honolulu: East West Center Press, 1968.

Dunham, Paul L. III. 'The Meaning of Technology: A Theology of Technique in Jacques Ellul'. Ed.D. Dissertation, West Virginia University, 2002.

Ellul, Jacques. 'Power of Technique and the Ethics of Non-Power'. Translated by Mary Lydon. *The Myths of Information: Technology and Postindustrial Culture*, edited by Kathleen Woodward, 242–47. London: Routledge and Kegan Paul Ltd, 1980.

Ellul, Jacques. 'Symbolic Function, Technology and Society'. *Journal of Social and Biological Systems* 1.3 (1978): 207-18.

Ellul, Jacques. *The Meaning of the City*. Translated by Dennis Pardee. Grand Rapids, MI: Eerdmans, 1970.

Ellul, Jacques. *The Politics of God and the Politics of Man*. Translated by Geoffrey W Bromiley. Grand Rapids, MI: Eerdmans, 1972.

Ellul, Jacques. 'The Technological Order'. *Technology and Culture* 3.4 (1962): 394-421.

Ellul, Jacques. *The Technological Society*. Translated by John Wilkinson. New York: Knopf, 1954.

Feuer, Hart Nadav. 'Negotiating Technical and Ideological Standards for Agroecological Rice Production in Emerging Markets: The Case of Cambodia'. *East Asian Science, Technology and Society* 5.4 (2011): 441-59.

Feuer, Hart Nadav. 'Pre-Industrial Ecological Modernization in Agro-Food and Medicine: Directing the Commodification of Heritage Culture in Cambodia'. PhD Dissertation, University of Bonn, 2013.

Feuer, Hart Nadav. 'Sustainable Agricultural Techniques and Performance Oriented Empowerment: An Actor-Network Theory Approach to CEDAC Agricultural and Empowerment Programmes in Cambodia'. MPhil Dissertation, University of Oxford, 2007.

Goodman, David. 'Agro-Food Studies in the "Age of Ecology": Nature, Corporeality, Biopolitics'. *Sociologia Ruralis* 39.1 (1999): 17-38.

Goodman, David. 'Rethinking Food Production-Consumption: Integrative Perspectives'. *Sociologia Ruralis* 42.4 (2002): 271-77.

Groslier, Bernard Philippe. 'La Cité Hydraulique Angkorienne: Exploitation Ou Surexploitation Du Sol?' *Bulletin de l'Ecole Française d'Extrême-Orient Paris* 66.6 (1979): 161-202.

Hun, Sen. 'Remarks at the Opening of Trapang Thmar Water Storage, Phnom Srok District, Banteay Meanchey Province'. *CNV*. 2006. Viewed on 12 June 2014. http://www.cnv.org.kh/2006_releases/09mar06_banteay_meachey_water_tropean_g_thmar.htm.

Jackson, Wes. *Consulting the Genius of the Place: An Ecological Approach to a New Agriculture*. Berkeley: Counterpoint Press, 2010.

Ledgerwood, Judy. 'History/Myth and the Nation: Research at Angkor Borei, Cambodia'. Paper Presented at the Friday Forum Lecture Series, University of Wisconsin-Madison, February 21, 1997.

Mann, Susan A, and James M Dickinson. 'Obstacles to the Development of a Capitalist Agriculture'. *Journal of Peasant Studies* 5 (1978): 466–81.

Pope Francis. *Laudato Si'*. The Vatican: The Holy Sea, 2015.

Pope Paul VI. 'Address to the FAO'. Speech at the 25th Anniversary of the UN Food and Agriculture Organisation, Rome, November 16, 1970.

Romera, J P. 'Le Borassus et Le Sucre de Palme Au Cambodge'. *L'Agronomie Tropicale* 8 (1968): 801-43.

Sarun, Chan. 'Animal and Plant Species that Are Symbolic of Cambodia'. Translated by Piseth Som. *The Pracheachun Magazine* 49 (June 2005).

Sok, Sothun. 'Value of the Palm'. Translated by Piseth Som. *The Pracheachun Magazine* 33 (February 2004): 25-26.

Thaitawat, Nusara. *The Cuisine of Cambodia*. Bangkok: Nusara and Friends, 2000.

Tucker, Mary Evelyn. 'Response from Other Religions'. Paper Presented at the Meeting on Pope Francis and the Environment: Yale Examines Historic Climate Encyclical. New Haven, CT, April 8, 2015.

Van der Ploeg, Jan Douwe. *Labor, Markets, and Agricultural Production*. Oxford: Westview Press, 1996.

Weiss, Harvey, and Marie Agnès Courtney. 'The Scenario of Environmental Degradation in the Tell Leilan Region, NE Syria, during the Late Third Millennium Abrupt Climate Change'. *Third Millennium BC Climate Change and Old World Collapse*, edited by H. Nüzhet Dalfes, George Kukla, and Harvey Weiss, 107-48. Berlin: Springer, 1994.

Wilkinson, Harvey. 'Environmental Fluctuations, Agricultural Production and Collapse: A View from the Bronze Age Upper Mesopotamia'. *Third Millennium BC Climate Change and Old World Collapse*, edited by H. Nüzhet Dalfes, George Kukla, and Harvey Weiss, 67-106. Berlin: Springer, 1994.

Yang Saing, Koma. 'Palm Trees in Cambodia'. *Magazine of Environment, Agriculture and Sustainable Development* (April-July 2000): 7.

Hart Nadav Feuer is an assistant professor in the Division of Natural Resource Economics, Graduate School of Agriculture, Kyoto University, where he teaches and researches on the subjects of food, rural development, and area studies of East Asia.