Dunn, Jane Chiara, 1999–2096

Jane Chiara Dunn, born 24 Jun 1999, Portland, Maine, United States of America, died 7 Oct 2096, Mojave Monastery, was an American ecological monk, writer, and institution builder. She was the founder of Mojave Monastery and the Interfaith Ecological Organization (the "Ecological Order"), lead author of *Ecological Perspectives* and *Ecological Practices*, author of *Into the Long Night*, and the lead developer of the Mojave Protocols. She is widely regarded as one of the major architects of the global institutions of the ecotechnic period (c. 2150–c. 2900).

Early years

Dunn was born in Rockland, a city in Maine, a state in the United States of America, then the most populous and second largest sovereign political entity in North America. (See *nation-state* for more on pre-ecotechnic governance.) The names and histories of her parents, as well as information concerning her childhood and early adulthood, have been lost. Her name first appears in the Pre-Ecotechnic Record in 2031, when, while living in Portland, Oregon, she published the essay "Social science in the anthropocene" (see also below) in *Dædalus*, the journal of the American Academy of Arts and Sciences, with the American academic Mary Armin. The essay is Dunn's only major surviving work published prior to the foundation of Mojave Monastery.

Mojave Monastery

Findings from the Mojave Monastery Archival Restoration Project (MMARP) suggest that Dunn and 72 others, including Kei Dai and Calla Ogdán, first settled in the Mojave Desert in 2037. The site they chose, which would eventually become the site of Mojave Monastery, was located outside the abandoned town of Essex, in the then-state of California, near an abandoned military airfield. As the settlers developed methods for trapping water, growing food and medicinal herbs on-site, and building structures out of locally available materials (mainly cob and rammed earth), the community became self-sustaining and began to attract a small number of visitors. New long-term members were however not accepted until 2046, when it was formally declared an ecological monastery.

According to MMARP publications (see especially L. J. Leight, K. Carpenter, and J. Friedberg, 3012, *Building the Raft: Jane Dunn, the Mojave Protocols, and Globalizing Ecological Ecumenism, 2037–2317*), Dunn, Dai, and Ogdán were the main drafters of the monastery's initial rules. The initial drafts underwent several revisions before being accepted in a plenary session of all Mojave monastics, who according to the MMARP all adopted the rules the same day. Of the initial 72 settlers, 30, including Dunn, Dai, and Ogdán, became monks. 27 accepted a similar but

less comprehensive set of rules and became the first members of the ecological lay community at Mojave. Of the remaining 15 initial settlers, six left in the years between 2037 and 2046; the remaining nine left on the occasion of the formal foundation of the monastery. (Of these nine, five eventually returned.)

Unlike rules in many other monastic traditions, the rules at Mojave Monastery did not include provision for an abbot or other spiritual leader; indeed they were almost entirely devoid of theological, spiritual, or even philosophical content. Instead, they focused almost exclusively on the practical problems of estimating and providing for the material needs of every member of the community and for the continued viability of the settlement as a whole. The rules addressed both biophysical aspects (e.g., growing food, constructing shelter) and social aspects (e.g., division of labor and resources) of these problems. Work crews were instituted among the monastics and lay community. People were frequently shifted between crews to limit overspecialization. All land and equipment was owned in common. Monastics were encouraged to celibacy for practical reasons, but there was no penalty for transgression. Promiscuity among the lay community was gently discouraged, with the official rationale being limited resources for childrearing and risks to personal health and social stability. Most dwellings were communal; a small handful of structures were allocated to private dwellings for stable couples and other childraising groups in the lay community. Sexual activity between consenting adults in the lay community was explicitly declared a private matter, with the main exception being activity that might produce children. Contraception and abortion were explicitly declared standard practices and economically organized within the health and wellness sector.

The only practice explicitly encouraged in the rules as a regular spiritual discipline was the contemplation of the material interconnectedness of all things, preferably by walking observantly outside or by reading ecological literature. Yet in discussing even this practice, the rule drafters emphasized practical rather than spiritual benefits. Other practices discussed in the initial Mojave rules are daily exercise, disciplined and compassionate communication (especially concerning the division of labor and resources), and reflection on one's desires, frustrations, confusions, and fears.

Within the framework set by the rules, all monastics and lay community members were expected to find ways to contribute to the ongoing process of collectively estimating and meeting the needs of the community. Small groups were expected to plan work, allocate resources, and resolve conflicts. The rules framed community expectations about how these processes were generally to be handled. A collection of interlinked but loosely hierarchical councils, terminat-

ing in a council of eight senior monastics, including, at the founding, Dunn, Dai, and Ogdán, offered fora for public deliberation in cases of confusion or unresolvable conflict. The rules offered the councils three classes of formal statement: observations, recommendations, and instructions. Observations were seen as a council's input to the processes of solving practical community problems, and rarely included suggestions for particular actions. Recommendations, produced much more rarely, specified particular actions to be taken, but were nonbinding. Instructions were produced only in the direst of circumstances and could carry threats of severe punishments such as expulsion in the event of noncompliance. Instructions from the highest council could be nullified if a majority of community members agreed to do so; as such, the rules directed the councils to hold public deliberations prior to the issue of any recommendations or instructions, and to ensure that a majority of community members understood and agreed with such a statement before issuing it.

Economic activity in the first fifty years at Mojave Monastery evolved into roughly eleven main interlinked categories, later codified in the Mojave Protocols: water trapping, food production, waste processing, health care, construction, education, public safety, communication, transportation, research, and defense. Monastics and lay community members trapped water and produced food on-site with a wide range of agricultural techniques, including dew traps, rainwater catchment, permaculture, hydro- and aquaponics, and sophisticated composting techniques. Food shortages did occur, but MMARP scholars report that only two shortages with severe health consequences are recorded in the monastery's first fifty years. Beyond food production, the monastery established a reputation as a center for the study and breeding of desert-adapted microorganisms and microecosystems for rapid and safe processing of human waste; for preventive medicine; and for the construction of human- and wind-powered vehicles for long-distance overland travel from salvaged materials. These activities linked the monastery to a continent-wide network of communication and trade among ascendent ecological communities and slowly decaying industrial and postindustrial communities that were nevertheless rich sites of technical information and salvaged materials. Within the community, the monastery rules specified desiderata for economic organization across sectors, indicating that community members should coordinate to produce the goods and services needed in each category in a just, accountable, inclusive, sustainable, and resilient manner, although they also acknowledged that there would often be tradeoffs between these goals.

Writings

"SOCIAL SCIENCE IN THE ANTHRO-

POCENE" Dunn's oldest substantive surviving written work, "Social science in the anthropocene," is an essay written with the American academic Mary Armin and published in 2031 in *Dædalus*, the journal of the American Academy of Arts and Sciences. The essay draws heavily on *The Value of Social Science*, a collection of essays published eleven years earlier by a group of social scientists, legal scholars, policy makers, educators, community workers, and businesspeople. The essays in *The Value of Social Science* advanced a particular perspective on what social science is, what it is good for, how it should be conducted, and how it should be supported by social institutions. It was organized largely as a response to a prevailing cultural perspective in the United States at the time that the social sciences, with the exception of economics, were largely irrelevant to the well-being of society and unfit subjects for study by the young, who were encouraged to study the scientific and technical subjects which were then seen as the main drivers of individual and collective well-being. *The Value of Social Science* argued that without broad-based social development, which could be achieved and understood fully only through a rich social scientific and humanistic awareness, science and technology alone would not bring indefinite improvements in human well-being, and indeed that the present social and ecological crises could be blamed on a perspective that assumed that they could. The contributors to the volume argued that the central contributions offered by the social sciences to American society at that time were: (1) a richer understanding of power; (2) more effective and just models of collective decision making (i.e., governance) in all sorts of organizations, including crucially a more accurate and therefore more actionable understanding of the locus of responsibility for actions and outcomes (e.g., failure, success, crime, deviance); (3) a richer understanding of human psychological development in social context, including intellectual, kinesthetic-artisanal, and emotional-interpersonal elements, and (4) a richer notion of what it means to be alive and human in society and in the world; i.e., a vision of a meaningful and fulfilling life and the means to achieve it.

The editors of *The Value of Social Science* briefly discussed ecological issues such as ecosystem degradation and global climate change, and a few contributors focused on them. But the volume did not explicitly or systematically advance a role for social science in responding to global anthropogenic ecological change. By 2031, with these changes growing ever more severe, Dunn and Armin set out in "Social science in the anthropocene" to propose just such a role.

The essay has four parts. The first part of the essay draws on scholarship in the earth sciences to elaborate on the notion of the "anthropocene"—i.e., the

notion that human activity had impacted the Earth sufficiently dramatically to merit the proclamation of a new geologic era—and explore the proximate and ultimate causes of ecological degradation and crisis. They argue that the dominant ultimate causes for anthropogenic damage to ecosystems are (1) human ignorance of the dynamics of ecosystems and (2) social and economic agreements and institutions that predate ecological knowledge, and which are hard to change even in the face of knowledge that the social practices (especially economic activity) they support or require are ecologically damaging.

The second part of the essay summarizes the main arguments of *The Value of Social Science* (see above). The third part links this view of social science in general to the specific social, political, and economic conditions of the intensifying ecological crises of the late 2020s. The fourth part proposes concrete actions for social scientists, policy makers, educators, businesspeople, nonprofit organizations, and institution builders.

Ecological Perspectives *Ecological Perspectives* (sometimes "the *Ecological Perspectives*" or simply "the *Perspectives*") is a book-length collection of essays written by Dunn, Dai, Ogdán, and other Mojave monastics between 2031 and 2062. The essays treat a range of practical, social scientific, and philosophical topics relating to Dunn's life work. The major focuses are ecological social and political philosophy, ecological ecumenism (i.e., the relationship between ecology and a wide range of religious traditions), and practical matters in the organization of monastic life. The essays circulated individually and in various collections and versions in the years between 2031 and 2062, and were first published together in a single volume in 2062 under the Monastery's publishing imprint.

The *Perspectives* includes seven essays: (1) "Social science in the anthropocene" (written by Dunn and American academic Mary Armin, first published in 2031; see above); (2) "Ecology as philosophy"; (3) "Ecology as political philosophy"; (4) "Ecological personalities"; (5) "Nine years in the desert"; (6) "Organizing Mojave Monastery"; and (7) "Ecological ecumenism in North America to 2060."

"Ecology as philosophy," first published 2040, is an extended commentary on two books, *Buddhism and Ecology in a Complex Society* (2025), and *Ecology and the World Religions* (2034). Dunn's working title for the essay was "Social science and organized religion in the anthropocene: social ecology as a way of life for the individual and small group." "Ecology as political philosophy" (2044) connects these themes to questions of larger-scale social organization, and "Ecological personalities" (2046) to questions of individual and social psychology. The last three essays, "Nine years in the desert"

(2051), "Organizing Mojave Monastery" (2055; updated 2060), and "Ecological ecumenism in North America to 2060" (2060) chronicle and reflect on the experiences of the authors. "Nine years in the desert" is an account of the settlement of the Mojave Monastery site before the formal declaration of the monastery. "Organizing Mojave Monastery" describes the monastery's first nine years and considers the monastic community as a living organism. "Ecological ecumenism in North America to 2050," based on notes from Dunn's travels in the late 2050s, describes the network of ecological communities in North America.

Following publication of the *Perspectives*, Dunn mostly stopped revising the essays collected in it. Her public writing efforts for the following 14 years, beyond everyday work at Mojave Monastery and ongoing practical and philosophical correspondence with monastics and members of the lay ecological community around the world, focused on leading the collective compilation of the *Ecological Practices* (see also below), published in 2076.

Following the foundation of the Ecological Order in 2086, the *Perspectives* became one of two foundational texts of the Order (the other being the *Ecological Practices*; see also below), used by members and ecological organizations such as monastic communities to guide their individual lives and make collective decisions.

ECOLOGICAL PRACTICES *Ecological Practices* (sometimes "the *Ecological Practices*" or simply "the *Practices*") is a book-length collection of short observations, reflections, advice, and instructions collected in the period 2061–2075 by monastics and lay members of ecological communities throughout North America, organized by the monastic community at Mojave Monastery under Dunn's leadership, and published in 2076 under the monastery's publishing imprint.

The *Practices* is a sort of *summa* of lessons learned within North American ecological ecumenism up to that period. It is one of the two foundational texts of the Ecological Order, the other being the *Ecological Perspectives*, published before the *Practices* (see above). The *Practices* links the philosophical and social theories developed in the *Perspectives* to the concrete biophysical and social contexts and institutions of late-21st-century ecological ecumenism to offer specific advice to ecological monastics and lay community members. The content of the *Practices* embodies the historical trajectory of rules adopted by North American ecological communities, many of which were modeled after the initial rules of Mojave Monastery and the Mojave lay community but subsequently adapted for local ecological and social conditions.

The *Practices* includes, *inter alia*, material concerning: (1) social dynamics among and organization of monastics, including (a) relations between

younger and older monastics, especially the tension between wise advice offered by elders and the freedom of younger community members to make and learn from their own mistakes and understand deeply and for themselves the reasoning behind the teachings and (b) protocols for collective decision making that acknowledge the wisdom of elders but do not submit the community to the sole judgment of an abbot or other leader; (2) the tasks to be completed in a biophysically nonspecialized monastery (i.e., a largely self-sustaining one), including water acquisition; food production and preparation; preventive and curative health care and production and preparation of health care materials, including medicinal plants and preparations; construction, repair, maintenance, and operation of transportation technologies; waste processing; construction, repair, and maintenance of buildings; provision of life-long practical, philosophical, political, and ethical education; provision of public safety; operation of research; and provision for collective defense; (3) relations between monasteries and their lay communities; (4) relations between nonspecialized monasteries and nearby communities (advising monasteries not to become too economically or socially isolated); (5) specialization of ecological monasteries, and relations between specialized monasteries and nearby communities (advising monasteries not to become dependent for essentials such as food and water on unsustainable or non-resilient communities, and to maintain their own educational arrangements); (6) interregional and global coordination and allocation for research, especially into dynamics and conditions in global ecological systems; (7) other communication and cooperation among monastic and lay ecological communities; (8) care of the dying; (9) appropriate education and work at different periods of life; (10) gender roles and sexuality (viz., striving to maintain the gender equality and non-heteronormativity won in some cultures in the late 20th and early 21st centuries; ensuring that everyone is trained, or can be trained, to do any kind of work, and denying that it is socially beneficial to have a gendered division of labor and indeed, to the contrary, that it is essential for both genders to have command over the skills formerly considered the province of the other, i.e., that it is socially essential, e.g., for men to have good interpersonal and emotional skills, incl. in rearing children and teaching the young, and for women to have a wide range of technical skills and train to be physically strong); and (11) child-rearing (viz., encouraging families to have only one child, and certainly not more than two; dark reflections on the consequences of this policy in pre-ecological political entities, but including observations that it is followed much more closely in lay ecological communities, in part because resources are scarce and cooperation is effective, because of better sex educa-

tion, because of greater gender equality, and finally because communities aim to care for children more or less equally).

The core practices of social organization documented in the *Practices* formed the core of the Mojave Protocols.

INTO THE LONG NIGHT In 2090, four years after the foundation of the Ecological Order and at the age of 91, Dunn published *Into the Long Night*, her only single-author book, under Mojave Monastery's publishing imprint. The 2080s saw a scientific consensus emerge among global ecological communities that Earth's ecosystems would take hundreds, perhaps thousands, of years to fully recover from the damage done to them over the previous four centuries, even with the focused and coordinated effort of ecological communities worldwide. Global carrying capacity for human population and sociotechnical complexity would be significantly lower for at least a thousand years. *Into the Long Night* can be read as a synthesis and update of the *Ecological Perspectives* and *Ecological Practices* in light of this consensus—and in light of Dunn's own advanced age. It offers Dunn's perspective on the long task for the Ecological Order and other ecologically aligned communities in light of the coming centuries of ecological hardship. It focuses especially on instruction to monastics, offering her last advice about ways of life that she hoped would allow monastic communities to survive and keep alive the life-giving social, ecological, and engineering knowledge developed in the previous centuries through the imminent dark age. Dunn expresses the hope that if this knowledge is kept alive, it can eventually be used to give birth to a renaissance that will produce a just and vibrant society of unprecedented but ecologically sustainable complexity in which humans and human culture will flourish.

Death and legacy

Jane Dunn died on October 7, 2096, at Mojave Monastery, surrounded by Mojave monastics and lay community members. She was buried outside the main hall at the Monastery. A small ecosystem, composed mainly of lichens, fungi, and three Palmer's oak saplings, was planted over her body. The ecosystem is still maintained by Mojave monastics and serves as a pilgrimage site.

Dunn was one of the main architects of the institutions of the global ecotechnic period (c. 2150–2900). The Mojave Protocols' emphasis on local and ecologically sustainable production of human essentials coupled with global communication formed the core of distinct but interlinked regional systems of production, exchange, and governance in the Americas, Africa, south and southeast Asia, and Oceania for almost 800 years, until the 30th-century Renaissance.

M. S. Silberman, L. J. Leight, Senders Quarry Cooperative, Bloomington, Great Lakes Commonwealth. From M. Cantú, ed., *Dictionary of Ecotechnic Practice and Thought*, Ente de Estudios Archivísticas, Organización Mexicana de Ciencias Sociales, México. 2nd ed., July 3014.