ANENDURING

STATE By Lesley S. King

any theories have arisen as to why some forms of government—states—arise and endure for hundreds of years, while others fail. Early thinkers suggested that "great men"-transformative figures such as Kamehameha in Hawaii or Shaka in KwaZulu imposed their will on ordinary kin groups. Others have posited that system factors such as population pressure or irrigation management-to name only a few-impelled state development. However, in recent years, rethinking of the histories of various enduring states and new methods of archaeological excavation and survey have allowed more precise and comprehensive hypotheses. The key idea is simple: In order to begin to understand how states form, we need to understand the achievements and problems of the polities that preceded states.

Anthropologist Henry Wright has been at the forefront of this new hypothesis. A member of the SFI External Faculty and professor of anthropology at the University of Michigan, Wright travels the world searching for what is for him treasure—ancient garbage. By sifting through it, he finds pot sherds, animal bones, industrial waste, and in some areas, documents left by early government officials. But what's most important for him is these findings' association with the remains of residences, offices, palaces, forts, and other buildings. Much of Wright's work involves mapping such places, as well as whole regions, noting the placement of villages, towns, and strongholds, and the relationship of these to traces of roads, canals, and other features of the landscape. By comparing [§] successive mappings, he can monitor the trajectories $\stackrel{\mathbb{H}}{=}$ of the first states.

LESSONS FROM THE CRADLE

Wright has studied the evidence of pre-state chiefdoms in southeastern North America, New Zealand, Madagascar, China, and, of course, the Middle East, particularly the Basin of the Tigris and Euphrates, known as Mesopotamia. It's that "cradle of civilization" so wrought by conflict today that still draws

him. As a graduate student he worked in Iraq under Robert McCormick Adams, of the University of Chicago's Oriental Institute and a long-standing figure at SFI. It was during the 1960s when many new approaches in archaeology were being devised, and Wright wanted to use these approaches to explain developments in this earliest of civilizations.

What he found there is evidence of the rise and fall of states and shifting centers of political dominance. At one such, Uruk, the largest city in the world in about 3200 B.C. (located in present-day Iraq near the Euphrates), surveys by Adams

and his German colleague Hans Nissen showed that it was surrounded by a network of smaller cities, towns, and villages, through which people, goods, and ideas circulated in diverse ways. Wright's own work, with Gregory Johnson of Hunter College, showed similar, though smaller, cultural systems existed around the city of Susa somewhat earlier, in about 3600 B.C. Adam's surveys also revealed that radical political and economic changes were occurring in southern Mesopotamia as early as 4000 B.C. Unfortunately,

FAR LEFT: Terraced fields in modern Madagascar are reminders of days of early state formation, when an army of citizen-soldiers was promised rice paddies in return for their service. CENTER: A clay figurine depicting an important person in the ancient city of Uruk, ca. 3600-3400 BC.



during the 1980s, political strife in the region stopped research before further fieldwork could document the emergence of the first networks of primary states. Beyond these difficulties, Wright still saw a need for deeper understanding of the process of primary state formation. By chance, he was invited to undertake archaeology in Madagascar.

THE ISLAND AT THE END OF THE WORLD

Wright is looking at that critical point when villagers living in a world of kin and ritual and under the rule of chiefs became incorporated into larger polities controlled by multi-tiered hierarchies and with interdependent decision-making agents. In Madagascar, a 900-mile-long continental fragment that broke off the eastern edge of Africa some 170 million years ago, he found a new perspective. Only recently, about 1,200 years ago, was human settlement established there. And only in the 18th century was an enduring state formed by the Merina people in Madagascar's central highlands. The recent nature of this state, and its accompanying wealth of records, ranging from oral and written histories to relatively intact archaeological sites, has allowed Wright to refine his understanding of state origins.

So, what happened among the 18thcentury Merina to make their state successful? The answer is important because it has implications for the general question of how and why any system, including our individual cognitive systems and our planetary Internet, is robust. As an example

of a resilient state polity, Wright points to the Ife Kingdom in West Africa, which formed more than a millennium ago. "It revived again and again because it had interlocking and redundant components," he says, adding, "It's still there!"

Fortunately, Wright's broad view of the world archaeological landscape helps him to find out the nature of those components. For 20 years he was a member of the Committee for Research and Exploration for the National Geographic Society. He was a MacArthur Fellow, resident scholar at the School of American Research, and is a member of the National Academy of Sciences. He has served on SFI's Science Board and Science Steering Committee.

FROM PRE-STATE TO STATE

So what processes lead to enduring states? Wright proposes that prior to the emergence of primary states, periods of intense conflict alternate with periods of alliance and relative peace. He sees state origins not as a single revolutionary breakthrough but a complicated Wright sees state origins not as a single revolutionary breakthough but a complicated experimental process of fits and starts with many innovations and many failures.

experimental process of fits and starts with many innovations and many failures. "Modeling this kind of political and economic process is a major challenge," he says. "Studying cases which are closer to us in time and documentable by traditional history as well as archaeology helps us to do so."

He has determined that the first enduring state in Madagascar, the Merina Kingdom, came about through a series of experiments performed by earlier rulers, successive efforts which failed but did result in

increasingly complex control structures. The early efforts involved local leaders conquering villages and ports, bringing them together under a king's rule only to be splintered later. The main feature of these early attempts is their lack of formal social mechanisms to insure the continuity of control, Wright notes. "Formal hierarchies through which information and goods moved were poorly developed, though there was some reorganization of local communities and the episodic constituting of strong military forces," he says.

Then around 1780, Ramboasalama, a Merina noble depicted in traditional histories as both "courageous and able" and "devious and avaricious," took control of the marginal hill town of Ambohimanga. He built an army of citizensoldiers by promising rice paddies in return for their service. Archaeological studies done by Wright, with the research staff of the Musée d'Art et d'Archéologie in Antananarivo, show that Ramboasalama defended his frontier with a system of fortified villages supported by the labor of his citizen soldiers. He took the throne name Andrianampoinimerina, "The Lord Beloved in the Heart of Imerina," and turned Ambohimanga into an imposing capital with monumental defenses and a central palace, placing himself at the center of the Malagasy cosmos.

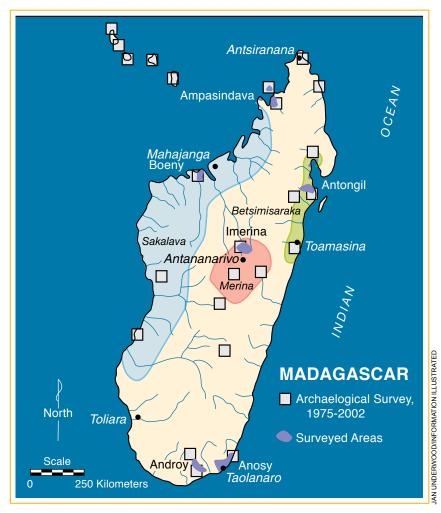
In subsequent years, Andrianampoinimerina conquered most of the central highlands of Madagascar and moved his capital to Antananarivo, which is still the capital. He imposed a hierarchical governmental system with provincial governors, military commanders, judges, tax collectors, and police. This increased interdependence because no part of the government could function without the others. "This is a much more robust system than its predecessors, and it survived and prospered after



In the 18th century, Andrianampoinimerina, a Merina noble, imposed a hierarchical governmental system— Madagascar's first enduring state.

the founder's death," Wright says. "Such systems can last hundreds of years, whereas pre-state systems generally form and fall over much shorter periods." Ultimately, Wright notes, such emergent primary states give rise to empires such as the Roman Empire and the Han in China, and to modern national states. If researchers want to test formal models of the key transformation from pre-state to state societies, it is important "to precisely characterize the organization of successive efforts to build successful political or social formations, and the factors that lead to failures and successes," he writes.

Wright has taken the insights gained from work in Madagascar back to Mesopotamia to help him pose new questions and design

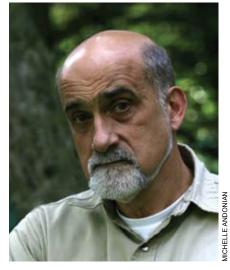


A WAR AGAINST HISTORY

In 2003, as head of a team sponsored by the National Geographic Society, Henry Wright was one of the first foreign archaeologists to go into Iraq after the coalition forces entered. What he and the team found was relatively little damage from the military conflict but massive destruction from subsequent looting. They found that armed gangs of men with picks and even power equipment have ripped sites to pieces in the search for salable objects-clay tablets with early written texts, statues, jewelry, and the like—destroying the layers within the remains of buildings and discarding mundane trash that might have informed researchers about the historical contexts of the more spectacular objects. "The situation there is far worse than we realize," he says. The destruction of the archaeological

new research programs. In eastern Syria, he's helping to complete a regional survey as part of the British research team under David and Joan Oates in ancient Nagar, known today as Tell Brak, where excavation has revealed evidence of administration as early as 4000 B.C. There, archaeological survey is documenting an explosion of large settlements at the same time, followed by collapse and re-emergence. "The findings from Brak may provide some of the best evidence of the first steps toward successful state organization in Mesopotamia," he says.

Even with all this progress, Wright is far from claiming that the problem is solved. He says what's still needed is more data collected by interdisciplinary teams, more theoretical work, and more refinement of models. "It's challenging because you have many agents manipulating many variables," he says. But he remains optimistic. "With the kind of approaches to complexity that have been developed by SFI researchers, we have some hope of devising useful answers to this issue of state origins within our lifetime." record of ancient Mesopotamia is paralleled by the destruction wrought by such peaceful activities as urban expansion and agricultural land leveling in the other heartlands of early state formation. Says Wright, "It is daunting to think that, with



only limited and poorly supported efforts to retrieve the evidence, we are erasing the only hope we have for understanding the beginnings of the cultural worlds within which we live."

Henry Wright continues to explore state origins throughout the world.