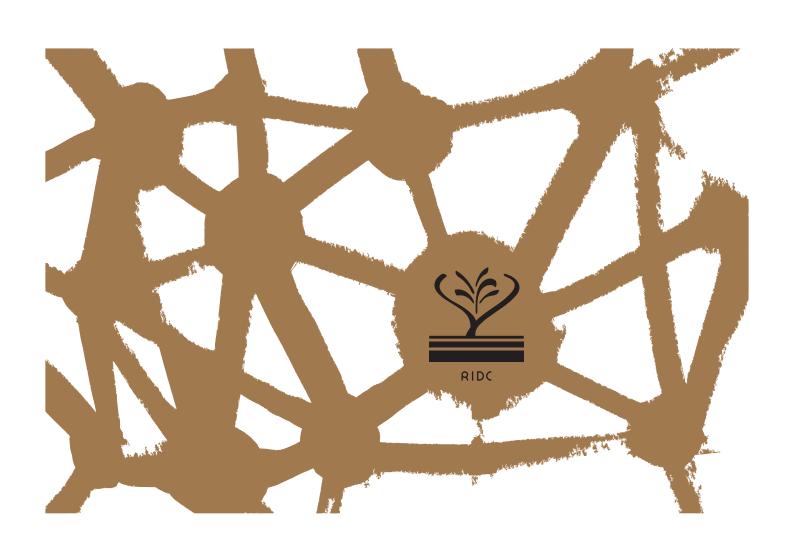
岡山大学 OKAYAMA UNIVERSITY

RESEARCH INSTITUTE FOR THE DYNAMICS OF CIVILIZATIONS



GLOBAL GATE FOR LEARNING



全 RIDC 文明動態学研究所 Research Institute for the Dynamics of Civilizations, Okayama University

Message from the director



In recent years, human survival has been threatened by the outbreak of the COVID-19 pandemic and seemingly endless warfare. While scientific research on transmission prevention and vaccine development is being advanced to overcome this global crisis, attention is also being increasingly given to the effects of the pandemic on areas that traditionally fall under the umbrella of the humanities and social sciences, such as social relationships, values, cultural customs, and the economy.

From the emergence of humans to approximately 10,000 years before present, the small-scale and dispersed nature of groups precluded the outbreak of pandemics. Infectious diseases only started to pose a significant threat to humans following the start of agriculture and animal domestication and the subsequent increase in population, formation of cities and states, and appearance of settlements with populations in the tens to hundreds of thousands. While artificialization of the natural environment through agriculture and animal domestication, the development of technology, the creation of new worldviews and values, and other such uniquely human phenomena (=civilization) brought a new prosperity to humanity, they also brought about various problems, such as warfare, environmental degradation, discrimination, and poverty.

These various issues facing modern society were born at the intersection of humanity, society, technology, and the environment. Searching for individual causes of each respective aspect of the current situation is unlikely to provide a long-term perspective leading to a fundamental solution. Against this backdrop, the Research Institute for the Dynamics of Civilizations aims to establish a framework for interdisciplinary research both within the humanities and social sciences and with the field of natural sciences in order to elucidate the nature of human history in ways that would not otherwise be revealed through narrower approaches.

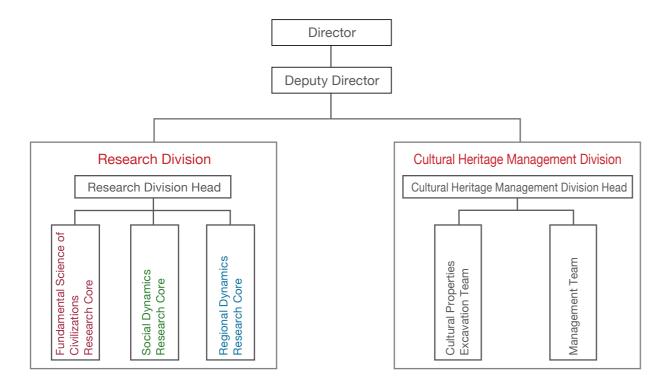
Research Institute for the Dynamics of Civilizations, Okayama University

Mission

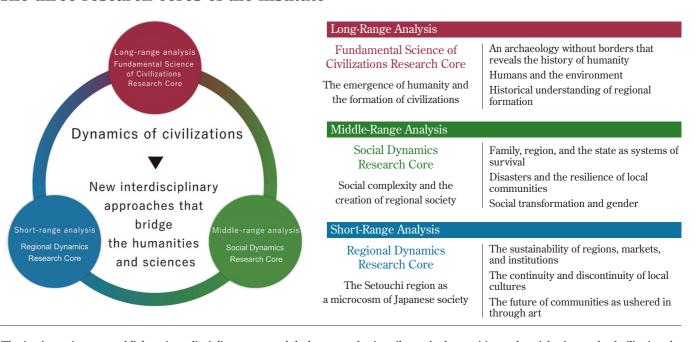
Connecting different disciplines, regions, and time periods to realize new research in the humanities and social sciences

The study of the dynamics of civilizations is a new discipline that was created in order to reconsider the various issues facing modern society within the framework of human civilizations and contribute to the construction of a sustainable society using the knowledge attained through inquiry into the past and a focus on local regions.

Organization



The three research cores of the institute

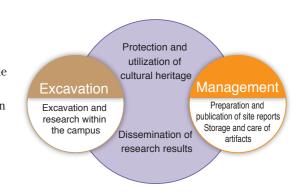


The institute aims to establish an interdisciplinary research hub centered primarily on the humanities and social sciences by facilitating the organic collaboration among researchers from both inside and outside the university through various research projects and the formation of an international network.

Working in close coordination with the Okayama University Faculty of Humanities and Social Sciences, the institute aims to foster individuals who can produce new knowledge, give back to society, and succeed on both the local and international stages

Cultural Heritage Management Division

- ■Overview/Successor to the Okayama University Archaeological Research Center, the Cultural Heritage Management Division implements surveys, pursues conservation, conducts research, and promotes the utilization of cultural heritage within Okayama University, with a particular focus on the archaeological excavation, research, and management of buried cultural property. Additionally, it widely presents the results of these activities to the public and endeavors to utilize its findings within the community.
- ■History/The excavation of buried cultural property within Okayama University began with the attendance of archaeologists from the Okayama City Board of Education at construction on the Shikata Campus in 1978, with observational and trial excavations conducted by Okayama Prefecture and Okayama City continuing until 1982. Preparation of a system for the protection of archaeological sites within the university began in earnest the same year, resulting in the creation of the Office of Archaeological Excavation in 1983 for the purpose of ensuring both the smooth construction of university facilities and the protection of buried cultural property. In November 1987, it was subsequently reorganized into the Archaeological Research Center, conducting excavations of and research on buried cultural property within the university, publishing reports of its findings, managing excavated artifacts, and periodically holding exhibitions. Following integration into the Research Institute for the Dynamics of Civilizations, it will continue carrying out these tasks, in addition to enhancing its research activities in line with the goals of the institute.
- Organization/The Cultural Heritage Management Division operates under the specific guidance of a council of faculty members belonging to the Research Institute for the Dynamics of Civilizations. Additionally, archaeological excavation within the campus is conducted as a university-wide operation and excavation and research are carried out under the guidance of a committee for the excavation of buried cultural property. Under the Division Head (professor) and Team Leader (associate professor) are four faculty members and five technical assistants. While duties are divided between the Cultural Properties Excavation Team and the Management Team, all members cooperate to protect and promote the cultural heritage of the university and endeavor to widely disseminate the results of their activities.



Research Institute for the Dynamics of Civilizations, Okayama University

Long-Range Analysis

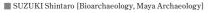
Fundamental Science of Civilizations Research Core

The emergence of humanity and the formation of civilizations

An archaeology without borders that reveals the history of humanity

Humans and the environment

Historical understanding of regional formation



- IIZUKA Yoshiyuki [Petrology, Scientific Analysis of Artifacts]
- UEMURA Genki [History of Philosophy, Contemporary Philosophy] CHIBA Yuta [Mesoamerican Archaeology]
- SHIKAKU Ryuji [West Asian Archaeology]
- SUGIYAMA Saburo [New World Archaeology, Anthropology]
- SUGIYAMA Nawa [Mesoamerican Archaeology, Zooarchaeology] MATSUMOTO Naoko [Cognitive Archaeology, Gender Archaeology] SEIKE Akira [Japanese Archaeology]
- TSUKAMOTO Kenichiro [Mesoamerican Archaeology]
- MAEDA Hitoki [Archaeology]



Drone-based LiDAR conducted over Teotihuacar

- HAMADA Tatsuhiko [Japanese Archaeology]
- RYAN Joseph [Japanese Archaeology, East Asian Archaeology]

Embracing a long-term perspective on the emergence and dynamics of civilizations, the Fundamental Science of Civilizations Research Core aims to elucidate the unique characteristics of humans that allowed them to bring about the rise of civilizations and the various factors that led to their subsequent ebb and flow. It seeks to investigate universal issues that will contribute to the creation of a sustainable society, such as how agriculture, a major turning point in human history, began and how humans have responded to cyclic climate change.

To accomplish these goals, this research core places particular emphasis on interdisciplinary research. In addition to nondestructive analysis (including X-ray computed tomography and muon radiography) and bioarchaeology, collaboration with researchers from both inside and outside the university hailing from a variety of fields, such as geoscience, chemistry, botany, genetics, and physics, is advanced in order to develop new research methods enabling the reconstruction of society and the environment from the archaeological record and to conduct simulation- and GIS-based analysis and modelling.

In addition to the Setouchi region of Japan, Mexico, Guatemala, and other regions of Mesoamerica are situated as a central research field. International research on the dynamics of civilizations across diverse environments has the capacity to reveal the historical processes by which regions are formed, the essential nature of humans that led to the emergence of civilizations, and the mechanisms behind the diversity of culture and society. Ultimately, this research core strives to answer the fundamental question of the humanities: What does it mean to be human?

Middle-Range Analysis

Social Dynamics Research Core

Social complexity and the creation of regional society

Family, region, and the state as systems of survival

Disasters and the resilience of local communities

Social transformation and gender



Near the railroad station in Madagascar

- IMAZU Katsunori [Ancient Japanese History]
- OKUBO Noriko [Japanese Art History Ukiyo-e]
- OSAWA Makoto [Cultural Anthropology]
- SHIBATA Rvo [Medieval Archaeology]
 - TSUKUDA Asami [Cultural Anthropology]
- KAWAMOTO Naomi [Cultural Anthropology] TOKUNAGA Seiko [Medieval Japanese History]
 - NOZAKI Takahiro [Japanese Archaeology]
- MURAKAMI Nana [Ancient History of Japanese]
 - HIGASHINO Masanobu [Early Modern Japanese History] MUROYAMA Kyoko [Early Modern Japanese History]

MATSUMURA Keiichiro [Cultural Anthronology]

new environments and created unique cultures, thereby leading to increasingly complex social systems. In the face of growing problems plaguing modern society, we are pressed to question their root causes and elucidate the processes by which these various problems arose and evolved.

Following their spread across the globe, humans adapted to

The Social Dynamics Research Core combines a middle-range temporal axis with a spatial axis encompassing various cultures and languages to illuminate how social systems and human relations-families, local regions, states, religions, social rank and class, gender, intergroup relationships, etc.—have evolved together with environmental and population change throughout the course of recorded history.

Reconsidering the relationship between humans and between humans and nature, this research core questions how a diverse and sustainable society can be realized going forward.

The Regional Dynamics Research Core considers the world

of the past 200 years—broadly, the "modern age". This period

witnessed the formation of nation-states and their people

until the 1980s, after which the rapid advance in globalization

led to either their subsequent dissolution and dismantling

or conversely to a reactionary strengthening of nationalism.

Reconfiguring the various boundaries once drawn according to traditional values, we aim to clearly demonstrate the significance and necessity of presenting and sharing the human trajectory from past to present.

Ongoing research projects range from the construction of local historical archives and the socialisation of cultural resources through ICT technology to basic archaeological research, all of which are carried out with an emphasis on interdisciplinary perspectives. In addition to pursuing collaborative research with scholars from diverse fields, we are advancing joint international research in order to elucidate social dynamics in line with the existence and lifeways of all humanity.

Short-Range Analysis

Regional Dynamics Research Core

The Setouchi region as a microcosm of Japanese society

The sustainability of regions, markets, and institutions

The continuity and discontinuity of local cultures

The future of communities as ushered in through art



- TSUMORI Takayuki [Global Logistics Analysis]
- IWABUCHI Yasushi [Local Politics, Civic Engagement]
- KITAGAWA Hirofumi [Urban Geography, Industrial Geography] TENNOJIYA Tatsumasa [Accounting]
- TASHIRO Kouki [Administrative Law] ■ FUKUSHIGE Satoko [Administrative Law, Public Property Law]
- SATO Jumpei [Economic History of East Asia] NISHITA Yosuke [Strategic Management]

 - MATSUOKA Hiroyuki [Modern Japanese History]
- Globalization, the significant increase in the spatial mobility of people, things, money, and information, can lead to interlocalization—the creation of a cross-border network connecting cities and regions. Therefore, in order to understand the phenomenon of globalization that characterizes the modern A view from Momo island, Onomichi city, Hiroshima prefecture (photo: SAITO Shinji) age, it is necessary to analyze the nature of regional society and inter-local networks.

Inter-local networks are created through markets, and

markets function by means of various systems set in place to support them. These systems have been developed based on cultures unique to each region. Meanwhile, globalization brings about the transformation and integration of the various systems, cultures, and technologies cultivated within each region. Corporations, individuals, governmental bodies, and other players operate within these transformations and systems, create and maintain this order, and bring about change. Through a comprehensive and multifaceted consideration of markets, systems, cultures, technologies, and the players concerned, this research core analyzes the mechanisms behind the creation, formation, dissolution, dismantling, and strengthening of people and their identity owing to globalization and the role and nature of regional society therein.

Osteoarchaeological research on the ancient Maya civilization

The ancient Maya civilization flourished in the area stretching from modern southeast Mexico through the countries of Central America. From its emergence around 1500 BC until it was conquered by the Spanish in the early 16th century AD, it developed a unique culture and history unimpeded by the various powers of the Old World. While it was once considered to be shrouded in mystery, modern scientific research centered on archaeology is beginning to shed light on the nature of ancient Maya society.

At RIDC, research on human remains from ancient Maya is carried out by a team led by Professor SUZUKI Shintaro. Interdisciplinary research bridging the sciences and humanities aims to bring to life the ancient people who composed this civilization on an individual level: Methods include archaeothanatology, which reconstructs the process of decay and nature of the interred body from a detailed analysis of the *in situ* distribution of bones; osteological examination, which reveals not only the estimated age of death and sex, but also lifestyle; stable isotope analysis, which allows tracing diet and life history; and the extraction and analysis of ancient DNA.

Major collaborative projects:

- Collaborative analysis with the University of Arizona of human remains uncovered from Aguada Fénix (Mexico), a site known for one of the earliest examples of monumental ritual architecture in the Maya area. Research focused on the reconstruction of the decaying process and fundamental osteological evaluation.
- Research on human remains from Cancuén (Guatemala) conducted with Panthéon-Sorbonne University (France). Research focused on reconstructing the movement of people through stable isotope analysis. Analysis of ancient DNA conducted with the Autonomous University of Yucatán (Mexico) and Harvard University (United States).
- Collaborative research with Yale University (United States) on human remains from Montana (Guatemala).

A new excavation

Excavation of the El Remanso site in the Escuintla Department of southern Guatemala is being carried out through the "Bioarchaeology of Human Migration in the Formation and Development of the Ancient Maya" project (JSPS Grant-in-Aid for Scientific Research (A); project number: 24H00102). Nine relatively well-preserved burials have already been found during the FY 2024 excavation alone from the previously uninvestigated site, which is expected to shed light on the relatively unknown southern coastal region of Guatemala. This multidisciplinary project brings together researchers from Guatemala, the United States, and Japan and is attracting attention from local media



A newly discovered burial of a young female

Cultural Properties Rescue Project

Okayama Shiryo Net has partnered with the national Shiryo Net and the Inter-University Research Institute Network Project to Preserve and Succeed Historical and Cultural Resources, an initiative headed by the National Institutes for the Humanities (lead organization: Rekihaku), Tohoku University, and Kobe University, in order to advance restoration activities for the materials damaged in the torrential rains that affected western Japan in 2018.

It is our goal to rediscover local culture and contribute to the creation of a new regional society by preserving and utilizing local historical materials, which are often lost to disasters. Utilizing (1) a historical material science approach to undesignated, privately stored cultural property and local historical heritage, (2) mathematical models using digital technology, and (3) new methodologies in the humanities including scientific analysis and conservation science, we aim to produce new research on regional history in order to reconsider the relationship between natural disasters, such as floods, earthquakes, epidemics, and adverse weather, and people's daily lives in line with the reality of local society.

By cooperating with universities participating in the national Shiryo Net initiatives, we aim to understand the mutual relationship between community and consciousness (both everyday and historical) and develop an educational program to cultivate individuals able to contribute to the construction of a diverse, open, and resilient regional society.

Following the Great Hanshin-Awaji Earthquake of 1995, historians, cultural heritage management specialists, museum affiliates, and citizens of the city of Kobe banded together to create the Historical Resource Network in an effort to rescue and protect the historical and cultural materials stored in private houses. Eventually, similar organizations appeared and spread across the country to protect local heritage from disaster. Based at Okayama University, Okayama Shiryo Net was started in 2005 to create a preventative network in operation before disaster strikes—the first of its kind in Japan. The Research Institute for the Dynamics of Civilizations is also committed to active participation in these initiatives



Rescuing an old document reused within a sliding door



Treatment to stabilize damaged materials

The Setouchi Project

Over the past 30 years, fragmentation (segmentation of the production process and cross-border decentralization) has rapidly increased accompanying the global formation and integration of information systems and logistics systems. Patterns of industrial agglomeration have changed significantly, with emerging cities and regions experiencing rapid and unprecedented growth and hypertrophy on the one hand, and the decline of formerly high-agglomeration cities and regions and the stagnation of mid- and low-agglomeration cities and regions on the other.

Against this backdrop, Japan's rural areas are experiencing the following changes. First is a decrease in the working-age population. A system that can be maintained in the face of population decline is needed. Second is increased hollowing-out of manufacturing accompanying globalization. Enhanced competitiveness of region-based industries and the development of new industrial agglomeration and linkages is needed. Third is a shrinkage of the region-based industry market. Foreign exports and an accompanying revitalization of existing industries into new profitable industries are necessary.

In light of these factors, we established the Working Group for the Promotion of Industry Reorganization in October 2024. This working group will consider the means to enable existing industries to become self-sustainable and improve their productivity and aims to contribute to the development of new regional industry agglomeration. The working group will start by implementing projects aimed at agriculture and logistics as region-based industries: for example, export promotion of such goods as peaches, grapes, and sake; the development of a migratory-style work-reform platform within agriculture; and the creation of a system for the utilization of unused farmland. Additionally, we are conducting field surveys to assess the sustainability of regional society, pursuing the creation of a disaster prevention logistics network in the Chugoku region, and developing a system for the securing and cultivation of personnel in order to establish logistics sustainability. These projects are realized through extensive industry-governmentacademia cooperation that connects multiple organizations (private companies, governmental bodies, etc.) and groups (external committees, academic societies, etc.) situated both inside and outside the university.



Singapore: The Pasir Panjang container terminal seen from the PSA headquarters



Dubai: Skyscrapers seen from downtown

Archaeological sites within the university

There are several archaeological sites within Okayama University: The Tsushima-okadai site on the Tsushima campus, the Shikata site on the Shikata campus, and the Fukuro site on the Misasa campus.

As of FY 2024, 75 archaeological excavations have been conducted at Okayama University: 44 at the Tsushima-okadai site, 29 at the Shikata site, and two at the Fukuro site. Results of these excavations have been published in numerous site reports, including 23 for Tsushima-okadai, 17 for Shikata, and one for Fukuro.

The Tsushima-okadai site

In addition to being one of the most well-known Jömon settlements of Western Japan, findings from this site have greatly contributed to clarifying the development of paddy fields from the Yayoi through the Early Modern period. It holds additional significance as a wartime site, having been utilized as an Imperial Japanese Army camp in 1907.



Excavation of an army bridge facility on campus

The Shikata site

This site has provided invaluable information concerning the development of settlements from the Middle Yayoi period onward and in particular the structure of sites from the ancient and medieval periods. It is also well known for the discovery of archaeological features and artifacts related to the Shikata manor, a private estate of the Fujiwara regents.

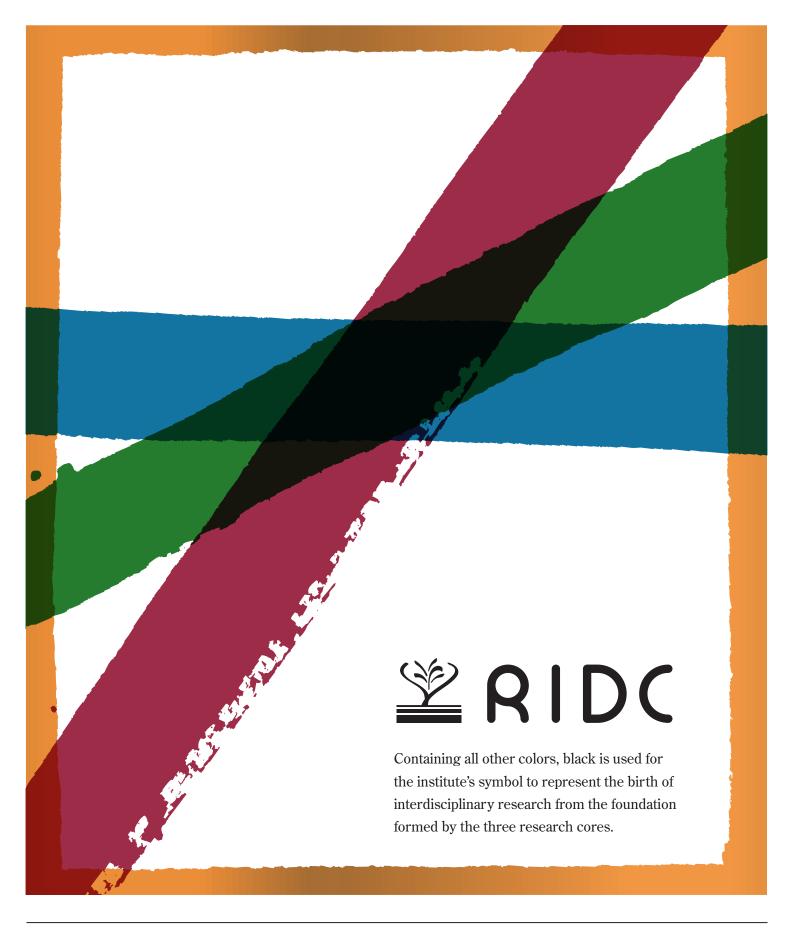


Exhibit: "Mourning in the medieval period: The Shikata site"

Located on the northern and southern ends of the Okayama Plain, the Tsushima-okadai and Shikata sites are the subject of ongoing archaeological excavation and research. It is particularly noteworthy that, even though these sites are located in an urban setting, a significant extent of each site has been excavated, allowing a fuller understanding of the ancient history of this region and revealing its cultural diversity. Particular emphasis is placed on interdisciplinary joint research with the natural sciences, including geoenvironmental analysis through coring surveys, analysis of unearthed seeds and wooden objects, and dating of features and artifacts.

The Fukuro site

This site was discovered in 1997 during construction at what is now the Institute for Planetary Materials. Features and artifacts have been discovered dating from the end of the Initial Jōmon period, approximately 8000 years ago, through the medieval period, revealing for the first time the history of the Misasa area.





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