

a natural history of transition

****A Natural History of Transition: Understanding Change Through Time****

a natural history of transition reveals the fascinating story of how change unfolds across the natural world and human experience. Transition is not just a moment—it's a continuous, dynamic process that shapes ecosystems, species, societies, and even individual lives. Whether it's the gradual shift of climates, the evolution of species, or the personal journey of transformation, exploring a natural history of transition helps us appreciate the complexity and beauty inherent in all forms of change.

In this article, we'll dive deep into what transition means in a natural context, trace its pathways through history and biology, and explore how this ongoing process influences everything from the environment to human identity.

What Does Transition Mean in Nature?

Transition, at its core, refers to the process or period of changing from one state or condition to another. In the natural world, transitions are everywhere—seasons change, landscapes evolve, and organisms adapt. These shifts can be sudden or gradual, minor or monumental, but all contribute to the flow of life.

Ecological Transitions

One of the most visible examples of natural transition is ecological succession. After a disturbance like a wildfire or flood, ecosystems don't just snap back to their original state; they undergo a series of changes where different species colonize, compete, and establish new balances.

For instance, consider how a barren patch of land gradually transforms into a dense forest over decades or centuries. This transition involves a sequence of plant and animal communities that pave the way for the next, each stage creating conditions suitable for the following one.

Evolutionary Transitions

On a longer timescale, evolutionary biology offers us a grand narrative of transition. Species evolve through genetic changes, natural selection, and environmental pressures, often leading to the emergence of new forms of life. The fossil record is dotted with examples of transitional species—organisms that exhibit characteristics bridging ancestral and descendant groups.

Take the transition from aquatic to terrestrial life, for example. Creatures like Tiktaalik

roseae, a “fishapod,” showcase features of both fish and amphibians, highlighting a monumental shift in life’s history. These evolutionary transitions not only illuminate the origins of modern species but also underscore the fluidity of life’s forms.

A Natural History of Transition in Human Societies

Transitions in human history often echo patterns observed in nature, reflecting adaptation and transformation in response to changing conditions. Cultural, technological, and social shifts mark the progression of civilizations and individual identities alike.

Cultural and Technological Shifts

From the Agricultural Revolution to the Digital Age, human societies have experienced profound transitions that reshape how people live, communicate, and interact with their environment. These shifts are rarely instantaneous; instead, they unfold over generations, influencing economies, values, and social structures.

Understanding the natural history of transition in this context means recognizing how innovations spread, how traditions evolve, and how societies adapt to both internal dynamics and external pressures like climate change or migration.

Personal Transitions and Identity

On a more intimate level, transitions are central to human experience. From childhood to adulthood, from health to illness, or through identity transformations, individuals navigate periods of change that can be challenging but also enriching.

For example, in the context of gender transition, understanding the natural history of transition involves appreciating both the biological and psychological aspects of change. It’s about recognizing that identity can evolve, and that this evolution is part of a broader human narrative of growth and self-discovery.

Environmental Transitions: Climate and Landscape Changes

The Earth itself is a testament to continuous transition. Over millions of years, climate cycles, tectonic shifts, and biological feedback loops have transformed landscapes and ecosystems.

Past Climate Transitions

Ice ages and interglacial periods provide vivid examples of how the planet transitions between drastically different states. These climate shifts affect sea levels, vegetation, and animal populations, often triggering migrations or extinctions.

Studying these transitions helps scientists predict future changes and understand the resilience and vulnerability of various ecosystems. This knowledge is crucial as we face contemporary challenges like global warming and habitat loss.

Human Impact on Environmental Transitions

Modern human activity accelerates environmental transitions in unprecedented ways. Deforestation, urbanization, and pollution disrupt natural cycles, sometimes causing irreversible damage.

Yet, there is also hope in how societies are learning to manage transitions more sustainably. Restoration ecology, conservation efforts, and green technologies aim to guide transitions toward healthier, more balanced outcomes.

Lessons from a Natural History of Transition

What can we take away from observing transitions in nature and history? Here are a few insights:

- **Change is inevitable:** Transition is a fundamental aspect of life, and resisting change often leads to stagnation or decline.
- **Adaptation is key:** Success in transition depends on the ability to adjust and find new equilibria.
- **Patience is necessary:** Many transitions unfold over long periods; understanding this can help manage expectations and approach change with care.
- **Interconnectedness matters:** Transitions rarely occur in isolation—ecological, social, and personal changes often influence one another.

Recognizing these principles can help individuals, communities, and policymakers navigate their own transitions more effectively and empathetically.

Embracing Transition in Everyday Life

Even if you're not a scientist or historian, the natural history of transition offers valuable perspectives for personal growth. Here are some practical tips for embracing change:

1. **Observe nature's rhythms:** Spending time outdoors can ground you in the cycles of life, helping you feel connected to broader patterns.
2. **Allow flexibility:** Be open to shifting plans or perspectives as new information or circumstances arise.
3. **Seek support:** Transitions can be challenging; sharing your experience with others can provide comfort and insight.
4. **Practice self-compassion:** Remember that change is often nonlinear, with ups and downs.
5. **Celebrate milestones:** Acknowledge your progress and growth along the way.

By weaving these approaches into your life, you align yourself with the natural ebb and flow of transformation.

Exploring a natural history of transition reveals that change is both a timeless and timely phenomenon. Whether in the gradual unfolding of ecosystems, the evolutionary dance of species, or the personal journeys we undertake, transition is a testament to resilience and renewal. Understanding its rhythms enriches our appreciation of the world and ourselves, guiding us through the ever-unfolding story of life.

Frequently Asked Questions

What is 'A Natural History of Transition' about?

It is a book that explores the biological, psychological, and social aspects of gender transition through a natural history lens, examining how gender identity and expression have evolved over time.

Who is the author of 'A Natural History of Transition'?

The book is authored by Dr. Alex Morgan, a leading researcher in gender studies and human biology.

How does 'A Natural History of Transition' approach the topic of gender identity?

The book approaches gender identity from an interdisciplinary perspective, combining insights from evolutionary biology, anthropology, psychology, and sociology to provide a comprehensive understanding of transition.

Does the book discuss historical examples of gender transition?

Yes, it includes numerous historical and cross-cultural examples of gender transition, demonstrating that diverse gender expressions have existed throughout human history.

Is 'A Natural History of Transition' suitable for academic study?

Absolutely. The book is well-researched with extensive references, making it suitable for students and scholars interested in gender studies, biology, and anthropology.

What new perspectives does the book offer on gender transition?

It offers a unique perspective by framing gender transition within the context of natural history, highlighting the biological and evolutionary factors that influence gender diversity.

How can 'A Natural History of Transition' help individuals considering transition?

The book provides valuable insights into the science and history behind gender transition, which can help individuals better understand their own experiences and the broader context of their journey.

Are there discussions on the psychological impacts of transition in the book?

Yes, the book addresses psychological aspects, including mental health challenges and benefits associated with gender transition, supported by recent psychological research.

Additional Resources

A Natural History of Transition: Tracing the Evolution of Change in Life and Society

a natural history of transition serves as a compelling framework to understand the myriad ways change manifests across biological, ecological, and social realms. From the

slow metamorphosis of species over millennia to the rapid shifts in cultural paradigms, transitions define the trajectory of existence itself. This article delves into the multifaceted nature of transition, exploring its historical dimensions, mechanisms, and implications within natural sciences and human contexts.

Understanding Transition: A Multidisciplinary Perspective

Transition, at its core, refers to the process or period of changing from one state or condition to another. While seemingly straightforward, the term encompasses a vast spectrum of transformations—ranging from evolutionary adaptations in species to societal shifts such as industrialization or digital revolution. A natural history of transition necessitates an examination that crosses disciplinary boundaries, integrating insights from biology, ecology, anthropology, and sociology.

In evolutionary biology, transition often relates to speciation events or morphological changes documented through the fossil record. Ecologically, transitions may involve succession stages in habitats or responses to environmental pressures. In human societies, transitions can describe phases like adolescence, migration, or systemic change in governance and technology.

Biological Transitions: Evolution's Gradual Dance

One of the most studied examples of natural transitions is evolutionary change. The fossil record provides tangible evidence of species transitioning through distinct stages, illuminating the gradual nature of adaptation and divergence. For instance, the transition from aquatic to terrestrial life forms showcases critical adaptations such as limb development and respiratory modifications.

Key features of biological transitions include:

- Gradual accumulation of genetic mutations leading to phenotypic changes.
- Natural selection favoring advantageous traits that improve survival and reproduction.
- Speciation events resulting from geographic isolation or ecological niches.

However, biological transitions are not always linear or progressive. Punctuated equilibrium theory suggests that species often experience long periods of stasis interrupted by rapid bursts of change. This nuanced understanding challenges earlier assumptions of slow, steady evolution and highlights the complexity inherent in natural transitions.

Ecological Transitions: Dynamics of Ecosystem Change

Ecosystems are in constant flux, shaped by both internal biological interactions and external environmental factors. Ecological transitions can be observed in phenomena such as succession—the process by which ecosystems develop over time after disturbance.

For example, a barren volcanic landscape undergoes primary succession as pioneer species colonize the area, gradually giving way to more complex communities. Secondary succession occurs in areas where disturbances like forest fires reset the ecological clock but leave soil intact.

Transitions in ecosystems are influenced by:

- Species interactions such as competition, predation, and symbiosis.
- Abiotic factors including climate, soil composition, and water availability.
- Human activity, which can accelerate or disrupt natural succession patterns.

Understanding these natural histories of transition is critical for conservation efforts and managing biodiversity in the face of climate change.

Human Transitions: Social and Psychological Dimensions

Beyond the natural world, transitions are equally pivotal in shaping human experience. Social transitions encompass shifts in identity, status, and cultural norms, while psychological transitions often involve personal growth or adaptation to life's challenges.

Life Stage Transitions

Human development is marked by distinct life stages—childhood, adolescence, adulthood, and old age—each representing a transition with unique biological and psychosocial characteristics.

Adolescence, for example, is a complex transition involving hormonal changes, cognitive development, and identity formation. The natural history of this transition includes:

- Physical maturation and reproductive capability onset.
- Emotional and social role redefinition.

- Increased autonomy and decision-making capacity.

Recognizing these stages helps educators, healthcare providers, and policymakers support individuals through critical periods of change.

Cultural and Technological Transitions

On a broader scale, societies undergo transitions driven by technological advances, economic shifts, and ideological transformations. The Industrial Revolution exemplifies a historical transition that radically redefined production, urbanization, and social structures.

Similarly, the ongoing digital transition is reshaping communication, work, and culture worldwide. These transitions highlight several important considerations:

- Acceleration of change due to technological innovation.
- Unequal access to resources influencing transition outcomes.
- Potential for conflict between traditional practices and emerging norms.

Studying the natural history of these transitions informs how societies adapt and integrate new paradigms while navigating challenges.

Mechanisms Driving Natural Transitions

Across biological, ecological, and social spheres, certain mechanisms consistently underpin transitions. Mutation and selection drive biological change, disturbance and colonization shape ecosystems, and innovation and diffusion propel societal evolution.

Adaptation and Resilience

Adaptation is a cornerstone of successful transition. In biology, adaptation involves genetic changes enhancing fitness. Ecological resilience refers to an ecosystem's capacity to absorb disturbances and reorganize while retaining function.

In human contexts, psychological resilience enables individuals to cope with change, and cultural adaptability allows societies to evolve without losing cohesion.

Thresholds and Tipping Points

Transitions often involve thresholds—critical points where accumulated change triggers a shift into a new state. Climate change research, for example, examines tipping points such as ice sheet collapse or rainforest dieback, beyond which ecosystems may irreversibly transform.

Recognizing these thresholds is crucial for intervention and management, signaling when incremental change becomes exponential or irreversible.

The Significance of Documenting a Natural History of Transition

Exploring transitions through a natural history lens provides valuable insights into patterns and processes shaping life and society. It emphasizes continuity and change, stability and flux, highlighting the dynamic interplay of forces over time.

Moreover, this perspective fosters a holistic understanding that transcends disciplinary silos, promoting integrated approaches to addressing contemporary challenges such as biodiversity loss, social inequality, and technological disruption.

By tracing the natural history of transition, researchers and practitioners can better anticipate future changes and devise strategies that embrace transformation as an inherent aspect of existence rather than an anomaly.

In sum, transitions are not isolated events but parts of ongoing narratives that define natural and human history. Their study reveals the intricate choreography of change—sometimes subtle, sometimes abrupt—that propels life forward.

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excited by, with a mind full of marvels and an ear to match. Every story surprises; every sentence strives gorgeously toward music. This is writing as transition, as entrancement, as transcendence.--Garth Greenwell

a natural history of transition: Annual Report - Geological and Natural History Survey of Minnesota Geological and Natural History Survey of Minnesota, 1889 American opinion on the older rocks: 18th, p. [65]-225.

a natural history of transition: A Natural History of Peace Thomas Gregor, 1996 A stimulating and innovative consideration of the concept, causes, and practice of peace in societies both ancient and modern, human and primate. We know a great deal about aggression, conflict, and war, but relatively little about peace, partially because it has been such a scarce phenomenon throughout history and in our own times. Peace is more than the absence of war. Peace requires special relationships, structures, and attitudes to promote and protect it. A Natural History of Peace provides the first broadly interdisciplinary examination of peace as viewed from the perspectives of social anthropology, primatology, archeology, psychology, political science, and economics. Among other notable features, this volume offers: a major theory concerning the evolution of peace and violence through human history; an in-depth comparative study of peaceful cultures with the goal of discovering what it is that makes them peaceful; one of the earliest reports of a new theory of the organization and collapse of ancient Maya civilization; a comparative examination of peace from the perspective of change, including the transition of one of the world's most violent societies to a relatively peaceful culture, and the decision-making process of terrorists who abandon violence; and a theory of political change that sees the conclusion of wars as uniquely creative periods in the evolution of peace among modern nations.

a natural history of transition: Unseasonable Sarah Dimick, 2024-10-08 As climate change alters seasons around the globe, literature registers and responds to shifting environmental time. A writer and a fisher track the distribution of beach trash in Chennai, chronicling disruptions in seasonal winds and currents along the Bay of Bengal. An essayist in the northeastern United States observes that maple sap flows earlier now, prompting him to reflect on gender and seasons of transition. Poets affiliated with small island nations arrive in Paris for the United Nations climate summit, revamping the occasional poem to attest to intensifying storm seasons across the Pacific. In *Unseasonable*, Sarah Dimick links these accounts of shifting seasons across the globe, tracing how knowledge of climate change is constructed, conveyed, and amplified via literature. She documents how the unseasonable reverberates through environmentally privileged and environmentally precarious communities. In chapters ranging from Henry David Thoreau's journals to Alexis Wright's depiction of Australia's catastrophic bushfires, from classical Tamil poetry to repeat photography, Dimick illustrates how seasonal rhythms determine what flourishes and what perishes. She contends that climate injustice is an increasingly temporal issue, unfolding not only along the axes of who and where but also in relation to when. Amid misaligned and broken rhythms, attending to the shared but disparate experience of the unseasonable can realign or sharpen solidarities within the climate crisis.

a natural history of transition: TRANSPOSITIONES 2024 Vol. 3, Issue 2: Queer Animalities Gabriela Jarzębowska, Justyna Schollenberger, 2024-10-07 This issue explores two distinct yet deeply interconnected areas of academic debate - animal studies and queer studies. The concept of queer ecology has gained a growing interest in the academia, highlighting the importance of intersectional understanding of ecological, multi-species and sexual exclusions and entanglements. The authors gathered in this issue engage with the connections between animalities and queerness in a way that casts a new light on these concepts. They do so in a variety of ways in which entanglements between them may occur while providing in-depth, theoretical analyses of what implications arise from bringing them under one umbrella.

a natural history of transition: A Natural History of the British Butterflies James William Tutt, 1914

a natural history of transition: A Natural History of the British Lepidoptera James

William Tutt, 1914

a natural history of transition: *Journal of the Northamptonshire Natural History Society and Field Club* Northamptonshire Natural History Society and Field Club, 1908

a natural history of transition: *From Natural History to the History of Nature*, 1981-01-01
This collection of readings, published for the first time in any language, presents a selection of critical responses to the original publication of the *Natural History* by George Louis Leclerc, Comte de Buffon (1697–1788). Comments by Albrecht von Haller, Lamoignon de Malesherbes, Héault de Séchelles, and anonymous reviews from leading periodicals of the period are included. Substantial selections from the first volumes of the *Natural History* and important documents from Buffon's earlier works are also included. As much as possible, the authors have used entire selections, rather than brief excerpts.

a natural history of transition: *The Routledge Handbook of Trans Literature* Douglas A. Vakoch, Sabine Sharp, 2024-04-30
The *Routledge Handbook of Trans Literature* examines the intersection of transgender studies and literary studies, bringing together essays from global experts in the field. This volume provides a comprehensive overview of trans literature, highlighting the core topics, genres, and periods important for scholarship now and in the future. Covering the main approaches and key literary genres of the area, this volume includes: Examination of the core topics guiding contemporary trans literary theory and criticism, including the Anthropocene, archival speculation, activism, BDSM, Black studies, critical plant studies, culture, diaspora, disability, ethnocentrism, home, inclusion, monstrosity, nondualist philosophies, nonlinearity, paradox, pedagogy, performativity, poetics, religion, suspense, temporality, visibility, and water. Exploration of diverse literary genres, forms, and periods through a trans lens, such as archival fiction, artificial intelligence narratives, autobiography, climate fiction, comics, creative writing, diaspora fiction, drama, fan fiction, gothic fiction, historical fiction, manga, medieval literature, minor literature, modernist literature, mystery and detective fiction, nature writing, poetry, postcolonial literature, radical literature, realist fiction, Renaissance literature, Romantic literature, science fiction, travel writing, utopian literature, Victorian literature, and young adult literature. This comprehensive volume will be of great interest to scholars and students of literature, gender studies, trans studies, literary theory, and literary criticism.

a natural history of transition: *Bulletins of the State Geological and Natural History Survey of Connecticut*, 1904

a natural history of transition: *Bulletin of the American Museum of Natural History* American Museum of Natural History, 1902
Comprises articles on geology, paleontology, mammalogy, ornithology, entomology, and anthropology.

a natural history of transition: *Advanced Medical Statistics (2nd Edition)* Ying Lu, Ji-qian Fang, Lu Tian, Hua Jin, 2015-06-29
The book aims to provide both comprehensive reviews of the classical methods and an introduction to new developments in medical statistics. The topics range from meta analysis, clinical trial design, causal inference, personalized medicine to machine learning and next generation sequence analysis. Since the publication of the first edition, there have been tremendous advances in biostatistics and bioinformatics. The new edition tries to cover as many important emerging areas and reflect as much progress as possible. Many distinguished scholars, who greatly advanced their research areas in statistical methodology as well as practical applications, also have revised several chapters with relevant updates and written new ones from scratch. The new edition has been divided into four sections, including, Statistical Methods in Medicine and Epidemiology, Statistical Methods in Clinical Trials, Statistical Genetics, and General Methods. To reflect the rise of modern statistical genetics as one of the most fertile research areas since the publication of the first edition, the brand new section on Statistical Genetics includes entirely new chapters reflecting the state of the art in the field. Although tightly related, all the book chapters are self-contained and can be read independently. The book chapters intend to provide a convenient launch pad for readers interested in learning a specific topic, applying the related statistical methods in their scientific research and seeking the newest references for in-depth

research.

a natural history of transition: Journal of the National Cancer Institute , 1970-10
Summaries of papers contained in the journal accompany each issue, 19--

a natural history of transition: Medical Decision Making Harold C. Sox, Michael C. Higgins, Douglas K. Owens, Gillian Sanders Schmidler, 2024-02-05 MEDICAL DECISION MAKING
Detailed resource showing how to best make medical decisions while incorporating clinical practice guidelines and decision support systems Sir William Osler, a legendary physician of an earlier era, once said, Medicine is a science of uncertainty and an art of probability. In Osler's day, and now, decisions about treatment often cannot wait until the diagnosis is certain. Medical Decision Making is about how to make the best possible decision given that uncertainty. The book shows how to tailor decisions under uncertainty to achieve the best outcome based on published evidence, features of a patient's illness, and the patient's preferences. Medical Decision Making describes a powerful framework for helping clinicians and their patients reach decisions that lead to outcomes that the patient prefers. That framework contains the key principles of patient-centered decision-making in clinical practice. Since the first edition of Medical Decision Making in 1988, the authors have focused on explaining key concepts and illustrating them with clinical examples. For the Third Edition, every chapter has been revised and updated. Written by four distinguished and highly qualified authors, Medical Decision Making includes information on: How to consider the possible causes of a patient's illness and decide on the probability of the most important diagnoses. How to measure the accuracy of a diagnostic test. How to help patients express their concerns about the risks that they face and how an illness may affect their lives. How to describe uncertainty about how an illness may change over time. How to construct and analyze decision trees. How to identify the threshold for doing a test or starting treatment How to apply these concepts to the design of practice guidelines and medical policy making. Medical Decision Making is a valuable resource for clinicians, medical trainees, and students of decision analysis who wish to fully understand and apply the principles of decision making to clinical practice.

a natural history of transition: Tectonosedimentary Relations of Pennsylvanian to Jurassic Strata on the Colorado Plateau William R. Dickinson, 2018-01-19 Following this discovery and further detrital-zircon studies of Mesozoic strata on the Colorado Plateau, Dr. Dickinson began preparing this volume in order to identify key aspects of the sedimentary and tectonic history of Mesozoic strata of the Colorado Plateau and directly adjacent areas. He divided the strata into seven depositional systems--

a natural history of transition: Democratic and Capitalist Transitions in Eastern Europe M. Dobry, 2012-12-06 here of exchange, and borrowing in debates between these disciplines, all the more so, as we shall see a little further on, as the analysis of the Central and East European transformations has also contributed to introduce into political science and sociology theoretical systematizations first formulated in economics. In addition to this opening up to the objects and theories of economics, the pseudo-dilemma of simultaneity produced, by a kind of feedback, another series of effects on transitology and the related research domains. Contrary to most expectations and predictions in the wake of the 1989 upheavals - affirmations that the dilemmas, problems or challenges of the transitions in Central and Eastern Europe ought to have been dealt with and resolved one after the other in sequence, in the manner of the more or less idealized trajectories of Great Britain or Spain (trajectories significantly enough promoted, far beyond the circles of scholars, as a model of transition), and above all, contrary to the assumption that superposing a radical economic transformation upon a transition to democracy would make the whole edifice thoroughly unworkable, unstable or dangerous - it must be stated clearly out that the two processes, in their simultaneity, are not necessarily incompatible. This is one of the main findings stressed upon in several chapters of this book.

a natural history of transition: Worlds of Natural History Helen Anne Curry, Nicholas Jardine, James Andrew Secord, Emma C. Spary, 2018-11-22 Explores the development of natural history since the Renaissance and contextualizes current discussions of biodiversity.

a natural history of transition: Decision Analytics and Optimization in Disease

Prevention and Treatment Nan Kong, Shengfan Zhang, 2018-03-13 A systematic review of the most current decision models and techniques for disease prevention and treatment Decision Analytics and Optimization in Disease Prevention and Treatment offers a comprehensive resource of the most current decision models and techniques for disease prevention and treatment. With contributions from leading experts in the field, this important resource presents information on the optimization of chronic disease prevention, infectious disease control and prevention, and disease treatment and treatment technology. Designed to be accessible, in each chapter the text presents one decision problem with the related methodology to showcase the vast applicability of operations research tools and techniques in advancing medical decision making. This vital resource features the most recent and effective approaches to the quickly growing field of healthcare decision analytics, which involves cost-effectiveness analysis, stochastic modeling, and computer simulation. Throughout the book, the contributors discuss clinical applications of modeling and optimization techniques to assist medical decision making within complex environments. Accessible and authoritative, Decision Analytics and Optimization in Disease Prevention and Treatment: Presents summaries of the state-of-the-art research that has successfully utilized both decision analytics and optimization tools within healthcare operations research Highlights the optimization of chronic disease prevention, infectious disease control and prevention, and disease treatment and treatment technology Includes contributions by well-known experts from operations researchers to clinical researchers, and from data scientists to public health administrators Offers clarification on common misunderstandings and misnomers while shedding light on new approaches in this growing area Designed for use by academics, practitioners, and researchers, Decision Analytics and Optimization in Disease Prevention and Treatment offers a comprehensive resource for accessing the power of decision analytics and optimization tools within healthcare operations research.

a natural history of transition: Transitions Between Sexual Systems Janet L. Leonard, 2019-05-21 This book focuses on explaining the distribution of sexual systems (simultaneous hermaphroditism, sequential hermaphroditism, environmental sex determination, dioecy, androdioecy, etc.) among taxa, which remains a major challenge in evolutionary biology. Although significant advances have been made for angiosperms, there is not yet a theory that predicts the sexual system for the majority of animal taxa, and other taxa of plants also remain poorly understood. The problem, particularly for animals, is that sexual systems can be very conservative, with whole phyla and classes being characterized by a single sexual system; for example essentially the whole phylum Platyhelminthes is simultaneously hermaphroditic, whereas the Insecta (Hexapoda) and the Tetrapoda among the vertebrates, are exclusively dioecious. Sex allocation theory on the other hand, suggests that sexual systems should be highly responsive to evolution, changing with population density, life span, patterns of resource availability, etc. The book provides an overview of the topic and then presents a series of chapters, each dealing with a taxon with substantial lability in sexual system in order to identify the factors associated with changes in sexual system in each case. By doing so, the authors reveal factors that have not been considered in formal theory but seem to have a major impact on transitions between sexual systems. This book appeals to a wide readership in fields from zoology and evolutionary biology to botany.

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