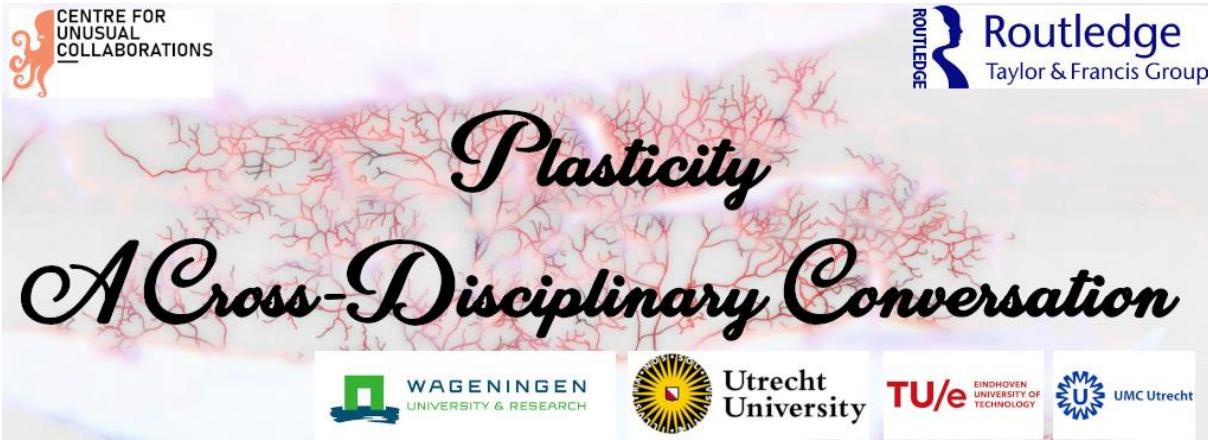


INVITATION TO CONTRIBUTE TO THE BOOK

Plasticity

A Cross-Disciplinary Conversation



Book Theme

It is an old truth that change is inseparable from the flow of time. The great Old Greek philosopher Heraclitus claimed that one could not step into the same river twice, thereby questioning the existence of constant identity-carrying entities. Indeed, even (temporarily) 'constant' entities can undergo a process of change. In some academic disciplines, the dialectic between change, maintenance, affordances, and meaning-making is called plasticity.

Today, plasticity functions as a key concept across multiple scholarly fields, e.g., materials science, neuroscience, plant and cell biology, and philosophy, and it has the potential to expand even further. However, each field possesses a unique, slightly different understanding of what plasticity entails. For example, in materials science, plastic deformation refers to deformation that occurs between elastic behavior and the breaking point, while in biology, phenotypic plasticity refers to an organism's adaptability to a changing environment.

This multitude of meanings poses opportunities for further development in plasticity studies (e.g., can patches of common ground be found?) but also in projects that focus more broadly on inter-, multi-, and trans-disciplinary studies. How can these studies function in a non-integrative integration milieu?

The book attempts to answer these questions on two levels. First, it will provide a disciplinary arena for multiple fields to present their views on plasticity – whether it is or is not a key concept in these fields. Second, it will bring together experts and interdisciplinary travelers for a joint conversation about plasticity and the implications of a multifaceted concept of plasticity in interdisciplinary studies. These goals will be achieved through the unique structure of this book.

Book Structure

The book will combine two elements.

A. Traditional scholarly chapters, written by experts on plasticity in specific fields. Chapters provide a background and analysis of plasticity that are understandable to scholars and stakeholders from

other fields. The chapters consist of a (inter)disciplinary perspective on the meaning of plasticity within (a) certain field(s) (Each chapter ~6000 words)

B. Commentaries – short pieces that act as bridges between chapters, reflecting upon the usage of plasticity between fields, as well as expanding the concept of plasticity (e.g., suggesting directions where conceptual understanding of plasticity from these fields can influence and be integrated into other disciplines). Alternatively, commentaries can reflect on the meta-theory of inter-, multi-, and trans- disciplinary studies from the perspective of plasticity. The editors will thread these intermezzo-like reflections together to form a non-unified whole (Each commentary ~1000 words)

We hope that;

by bringing together multiple experts and interdisciplinary travelers from different fields,

by shedding light on plasticity from multiple perspectives,

by extending and expanding the concept to new fields and areas

a new, pluralistic reading of plasticity might emerge in between the paragraphs, chapters, and commentaries.

Invitation

We invite you to contribute a commentary, depending upon your preferences. You, an expert on plasticity in your field or a curious interdisciplinary traveler, are invited, amongst others, to expound on your disciplinary or non-disciplinary view on plasticity or to enter into a dialogue with other like-minded people interested in plasticity via your chapter or your commentary piece.

The invitation is intended for researchers from all disciplines, societal stakeholders, and artists. It aims to question what plasticity means – from plastic deformation to being a shapeshifter, a form within a form – changing, adapting, evolving, mutating, and persisting from within and without, along with its ever-changing milieu.

To submit a commentary, contact the editors and request the complete list of chapter abstracts (according to the titles below). Next, choose one (or more) of the chapters, and we will send it to you to read. Finally, write your chapter and send it to us.

List of Chapters

	Author	Subject	Title
1)	<u>Jerome Weiss</u> Institut des Sciences de la Terre (IsTerre), CNRS/ University of Grenoble, Grenoble, France	Crystal Plasticity	Plastic deformation of materials: from mildness to wildness
2)	<u>Dierk Raabe</u> Max Planck Institute for Sustainable Materials, Düsseldorf, Germany	Plasticity in mechanical continuum theory	Plasticity of metallic materials

3)	<u>Maggie Horst</u> School of Pharmacy, University of California San Francisco, San Francisco, California, USA	Plasticity in Chemistry materials and machines	Plasticity in Chemistry
4)	<u>Ray Noble</u> ¹ <u>Denis Noble</u> ² ¹ Institute for Women's Health, University College London, London, UK ² Department of Physiology, Anatomy & Genetics, University of Oxford, Oxford, UK	Plasticity and circular causality	Circular Causality and Plasticity in Living Systems
5)	<u>Natal van Riel</u> Department of Biomedical Engineering, Eindhoven University, The Netherlands	Plasticity in Metabolism	Resilience and Plasticity of Human Metabolism
6)	<u>Kokkoris Vasilis</u> Amsterdam Institute for Life and Environment (A-LIFE), Faculty of Science, Section Systems Ecology, Vrije Universiteit Amsterdam, The Netherlands	Plasticity in the underground network system	<i>Arbuscular Mycorrhizal Fungal Plasticity: From Cellular Dynamics to Ecosystem Functioning</i>
7)	<u>Kaisa Kajala</u> Experimental and Computational Plant Development, Utrecht University, The Netherlands	Plant Plasticity	<i>Plants, masters of plasticity</i>
8)	<u>Thomas Blankers</u> , <u>Willem Frankenhuys</u> Institute for Biodiversity and Ecosystem Dynamics, University of Amsterdam Amsterdam, The Netherlands	Chemical Ecology/ Phenotypic Plasticity	<i>Evolution of Plasticity</i>
9)	<u>Carla Gomez da Silva</u> Translational Neuroscience, University Medical Center Utrecht, The Netherlands	Plasticity in neurodevelopment	The plasticity of the developing brain and its importance in mature functions
10)	<u>Lukas J. Volz</u> ¹ & <u>Gesa Hartwigsen</u> ^{2,3}	Plasticity in Neurobiology through the Lens of Deep Brain Stimulation	Network-level Plasticity During Human Cognition

	<p>¹Department of Neurology, University Hospital Cologne, University of Cologne, Germany</p> <p>²Wilhelm Wundt Institute for Psychology, Leipzig University, Germany</p> <p>³Research Group Cognition and Plasticity, Max Planck Institute for Human Cognitive and Brain Sciences, Germany</p>		
<u>11)</u>	<p><u><i>Elizabeth Holdsworth</i></u></p> <p>Department of Anthropology, College of Arts and Sciences, Ohio State University, Ohio, USA</p>	Biocultural anthropology and child development	Human developmental plasticity
<u>12)</u>	<p><u><i>Fathali M. Moghaddam</i></u></p> <p>Department of Psychology, Georgetown University, Washington, DC, USA</p>	Political Plasticity	Political Plasticity and external hardwiring
<u>13)</u>	<p><u><i>Jennifer Hawkins</i></u></p> <p>Independent Scholar, UK</p>	Plasticity in Education	Brain plasticity is a physical reality that enables and affects all aspects of our understanding
<u>14)</u>	<p><u><i>Terre Vadén</i></u></p> <p>The Global Centre for Advanced Studies, GCAS College, Dublin, Ireland</p>	Large Scale Energy Systems and socio-cultural plasticity.	'All that is solid melts, and tradition, while tradition weighs like a nightmare' – socio-cultural plasticity in the age of fossil fuels
<u>15)</u>	<p><u><i>Ranjan Gosh</i></u></p> <p>Department of English, University of North Bengal, West Bengal, India</p>	Comparative literature, comparative philosophy, philosophy of education, environmental humanities, critical and cultural theory	Plastic History
<u>16)</u>	<p><u><i>Samuel Lynch, Helen English, Nathan Scott, and Jon Drummond</i></u></p> <p>School of Humanities, Creative Ind and Social Sci</p>	Plasticity in Music	Composing the unfixed: The plasticity of musical form

	College of Human and Social Futures, The University of Newcastle, NSW, Australia		
<u>17)</u>	<u>Heather Davis</u> Culture and Media, Eugene Lang College, The New School, New York, USA	Plasticity and Plastic	Chapter Reproduction: “Plasticity” from the book “Plastic Matter”
<u>18)</u>	<u>Johanna Hoffmann</u> Independent Urban Planner, West Coast, USA	Plasticity and Urban Planning	Plastic Cities: An Updated Assemblage Theory For Urban Futures
<u>19)</u>	<u>Miša Stekl</u> Modern Thought and Literature, Stanford University, California, USA	Plasticity in Trans Studies	Racial Plasticity and the Invention of Modern Homosexuality
<u>20)</u>	<u>Jenny Andrine Madsen Evana</u> Department of Media and Culture Studies, Utrecht University, The Netherlands	Plasticity in Gender Studies	From Plastic Potential to Malleable Control: Race, Gender, and the Thorniness of Transgression

Editors

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Submission information

For any question on content, form, or topic of commentaries, feel free to contact **Yaron Caspi** ycaspi@ntu.edu.tw; **Onur Başak O.Basak@umcutrecht.nl**

Submission Deadline:

The deadline for commentaries is **April 1st, 2026**.

The Book will be published at Routledge Press

All submissions will undergo a rigorous peer-review process by at least two independent reviewers to ensure high-quality contributions and scientific validity. The book will be published as an open-access book.

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