

# Contact with Extraterrestrial Intelligence and Human Law

# Studies in International Criminal Law

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# Contact with Extraterrestrial Intelligence and Human Law

*The Applicability of Rules of War and Human Rights*

*By*

Michael Bohlander



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*For Laura*



# Children are a gift from God

Psalm 127:3



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# Foreword

We shall not cease from exploration, and the end of all our exploring will be to arrive where we started and know the place for the first time.

T. S. ELIOT



The search for extra-terrestrial (ET) life is probably one of the most multidisciplinary endeavours humankind has ever undertaken. Finding any evidence of alien life will be one of the most significant discoveries we will ever make, and we can only speculate on the profound impact contact with an intelligent ET civilisation will have on us, knowing that we are not alone in the Universe.

If this search has taught us anything over recent decades, it is that we must first look at ourselves to understand what makes us human, so that we can contemplate intelligent life on (and from) other worlds and how we should conduct ourselves in a contact situation. Are we to approach the very thing we are so keen to discover, potentially with fear, mistrust or even hostility, without considering plans for our actions? Indeed, we have a duty to ourselves and our planet to ensure our security. Examining our own history, with its many first encounters, conflicts, diplomatic meetings and negotiated solutions, may offer us the knowledge and guidance necessary for making such plans.

Admittedly, ET life may stretch or even go beyond our powers of imagination, and the behavioural conventions of another civilisation may well be at odds with our own, so we must keep an open mind about what might be out there. We are reaching out into the unknown: our unknowns may be known or unknown, but we need to start somewhere. Furthermore, our technology for searching is only just beginning to allow us to appreciate the expanse of our Universe and the wonders that potentially lie out there: the first discovery of an exoplanet was, in fact, made only 30 years ago. The existence of *Homo Sapiens* on this planet has been a mere blink in time's cosmic 'eye' and our journey of discovery has only just begun. We do not know where it will take us or when it will answer our questions. Nevertheless, for many of us it is a journey we are compelled to undertake.

Imagine, if you will, that we discover the existence of another intelligent lifeform on another planet, around a not-too-distant star in our galaxy. There are, of course, many other possible scenarios, from single-cell organisms in our own solar system to advanced life thousands of light years away or further.

What will we do? What can we do? Should we compromise Humanity's (often hard-fought-for and fragile) moral compass, so that we can join the Galactic Club? What research has been, or is being, undertaken to prepare us for such an event?

Through the lens of contact with ET (or evidence thereof), Prof. Michael Bohlander expertly takes us through examples of our current scientific thinking, our methodologies for dealing with such an event, and our imaginative speculations over what might ensue. He explores some of the key research areas we have thus far investigated, the potential contribution of science fiction – how often have elements depicted in this genre (or what we would have once considered magic) become science fact – and the protocols and legal apparatus we already have in place that may prove useful.

It would indeed be an awful waste of space if we were the only intelligent lifeforms in the Universe. It would also be an awful waste of our abilities of enquiry and communication if we did not prepare for the event that we are so driven towards and hopeful for. It is, therefore, important that we look at where we are and where we should be, and understand how we can bridge the gap between these two points. This book takes us through such a thought-provoking journey. Buckle up.

*Dr John Elliott*

Chair, UK SETI Research Network

Member, IAA SETI Permanent Committee

## Preface

I confess that I like Science Fiction – experience shows that many researchers engaged in the search for extraterrestrial intelligence (SETI) have found inspiration in its challenge of what often passes for intellectual orthodoxy, not unlike Paul Feyerabend's credo "*Against Method*". The idea for this book began when I was reading the second volume of Liu Cixin's *Three-Body-Problem* trilogy, *The Dark Forest*. Until then, SETI was something that had always casually interested me as something that I as a non-scientist could never really be part of. However, together with books such as Orson Scott Card's *Ender's Game*, Liu Cixin's work raised the question of how Earth would and should defend itself, if it even could, in the face of a hostile encounter with an alien civilisation. Would we extend them the same minimum civility as the interhuman laws of war dictate – at least on paper? Or would we reach for the ultimate indiscriminate weapon in our arsenal as a first choice to ensure the free survival of the human species? What would this in turn mean for our own understanding of humanitarian law? This aggressive scenario was then extended to encompass problems arising from a peaceful encounter – namely, what if the terms and conditions for joining an interstellar network of civilisations were of a nature that they would violate fundamental ethical and legal values which humans had fought for over centuries? What would we be willing to trade? These questions are obviously on the face of it highly speculative, yet at the very latest since the now openly declared official global interest in the UFO/UAP phenomenon since the 2020s, a topic previously – like SETI as a whole – shunned by most academics for fear of reputational and career damage, establishing actual contact may no longer be the domain of astronomers, and the above questions may become relevant sooner than imagined. If any of these phenomena were indeed shown not to be of this Earth, or at least not manmade, we would seriously have to reassess whether we still are the dominant species on this planet.

SETI was and still is a learning curve for me as a lawyer and this book is partly meant to aid other lawyers in understanding its basics, but also to help scientists comprehend that what they do can have legal ramifications beyond the relatively simple matter of regulating signal detection protocols. On my journey I have been supported by eminent experts in the field, first and foremost by Dr John Elliott, longstanding member of the IAASETI Permanent Committee and Chair of the UK SETI Research Network. He was also kind enough to review an earlier version of this book and to grace it with a foreword. Among the many others who have lent their assistance or engaged in joint endeavours, I wish to mention (in alphabetical order) Dr Andreas Anton – especially for

reading the full manuscript and writing the epilogue –, Dr Ulrike Bohlmann, Professor Kathryn Denning, Dr Martin Dominik, Daniel Gerritzen – for reading the entire manuscript and providing comments – and Professor Hakan Kayal. The usual disclaimer applies. I am grateful to Mr Nickolas Tan (Durham LLB Class of 2023) for his support in preparing the manuscript. Thanks are also due to Durham Law School for its generous research leave policy that allowed me to draft most of the manuscript while on leave from teaching and administrative duties.

Chapters 3 and 7 contain slightly modified versions of material that was previously published in article form as “Metalaw – What is it good for?” in 188 *Acta Astronautica* (2021) 400–404, and “Joining the ‘Galactic Club’: What Price Admission? – A hypothetical case study of the impact of human rights on a future accession of humanity to interstellar civilisation networks” in 132 *Futures* (2021) 102801, both reproduced with kind permission of Elsevier. I would like to thank Mr Leslie Tennen, member of the IAA SETI Permanent Committee, for arranging permission to use the IAASET materials, and Dr Andrew Siemion, Director of the SETI Institute at Berkeley, for permission to use the 2015 METI Statement.

All webpages cited were last accessed on 20 February 2023.

The book is dedicated to our daughter Laura.

*Michael Bohlander*

Durham, February 2023

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# Abbreviations

AC	Appeals Chamber
AI	Artificial Intelligence
ASEAN	Association of Southeast Asian Nations
AU	Astronomical Unit
CAH	Crimes Against Humanity
CDF	Colonial Defense Forces
CETI	Communicating with Extraterrestrial Intelligence
CIA	Central Intelligence Agency
CU	Colonial Union
DISC	Decipherment Impact of a Signal's Content
DNA	Deoxyribonucleic Acid
ECHR	European Convention on Human Rights
ECREE	"Extraordinary claims require extraordinary evidence"
ECtHR	European Court of Human Rights
EoC	Elements of Crimes
ESA	European Space Agency
ET	Extraterrestrial
ETC	Extraterrestrial Civilisation
ETH	Extraterrestrial Hypothesis
ETI	Extraterrestrial Intelligence
EU	European Union
FTL	Faster-Than-Light
GG	<i>Grundgesetz</i> (Basic Law)
GPS	Global Positioning System
HRA	Human Rights Act 1998
IAA	International Academy of Astronautics
IAASETI	IAA SETI Permanent Committee
ICC	International Criminal Court
ICCPR	International Covenant on Civil and Political Rights
ICCS	Statute of the International Criminal Court
ICJ	International Court of Justice
ICL	International Criminal Law
ICTR	International Criminal Tribunal for Rwanda
ICTY	International Criminal Tribunal for the Former Yugoslavia
IDH	Interdimensional Hypothesis
IEO	Inner-Earth-Objects
IHL	International Humanitarian Law



ISS	International Space Station
LGBTQ	Lesbian, Gay, Bisexual, Transgender and Queer
LINCOS	Lingua Cosmica
LSST	Large Synoptic Survey Telescope
MAD	Mutually Assured Destruction
METI	Messaging to ETI
MILAMOS	Manual on International Law Applicable to Military Uses of Outer Space
NASA	National Aeronautics and Space Administration
NEO	Near-Earth-Objects
OST	Outer Space Treaty
POW	Prisoner of War
ROSCOSMOS	Russian State Space Corporation ( <i>Государственная корпорация по космической деятельности</i> )
SETA	Search for Extraterrestrial Artefacts
SETI	Search for Extraterrestrial Intelligence
SF	Science Fiction
SPD	Space Policy Directive
TC	Trial Chamber
UAP	Unidentified Aerial/Anomalous Phenomenon
UDHR	Universal Declaration of Human Rights
UFO	Unidentified Flying Object
UK	United Kingdom
UN	United Nations
UNOOSA	United Nations Office for Outer Space Affairs
UNSC	United Nations Security Council
USS	United States Ship
USSF	United States Space Force
WW I	World War I
WW II	World War II
ZPO	<i>Zivilprozessordnung</i> (Code of Civil Procedure)

