

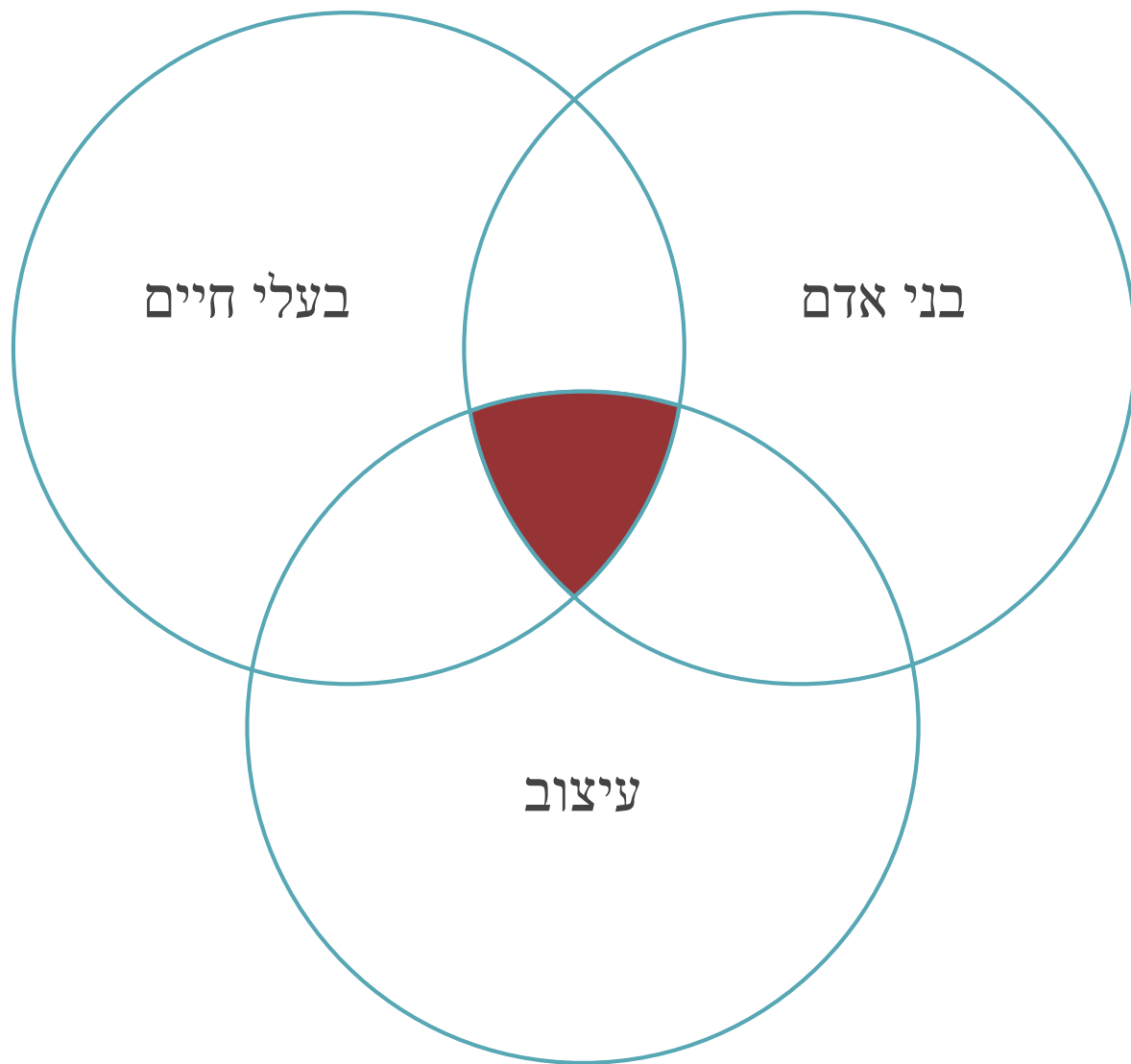
אדם-חיה-מרחב מחשבות עיצוביות על בני אדם, בעלי חיים ותכנון נופי

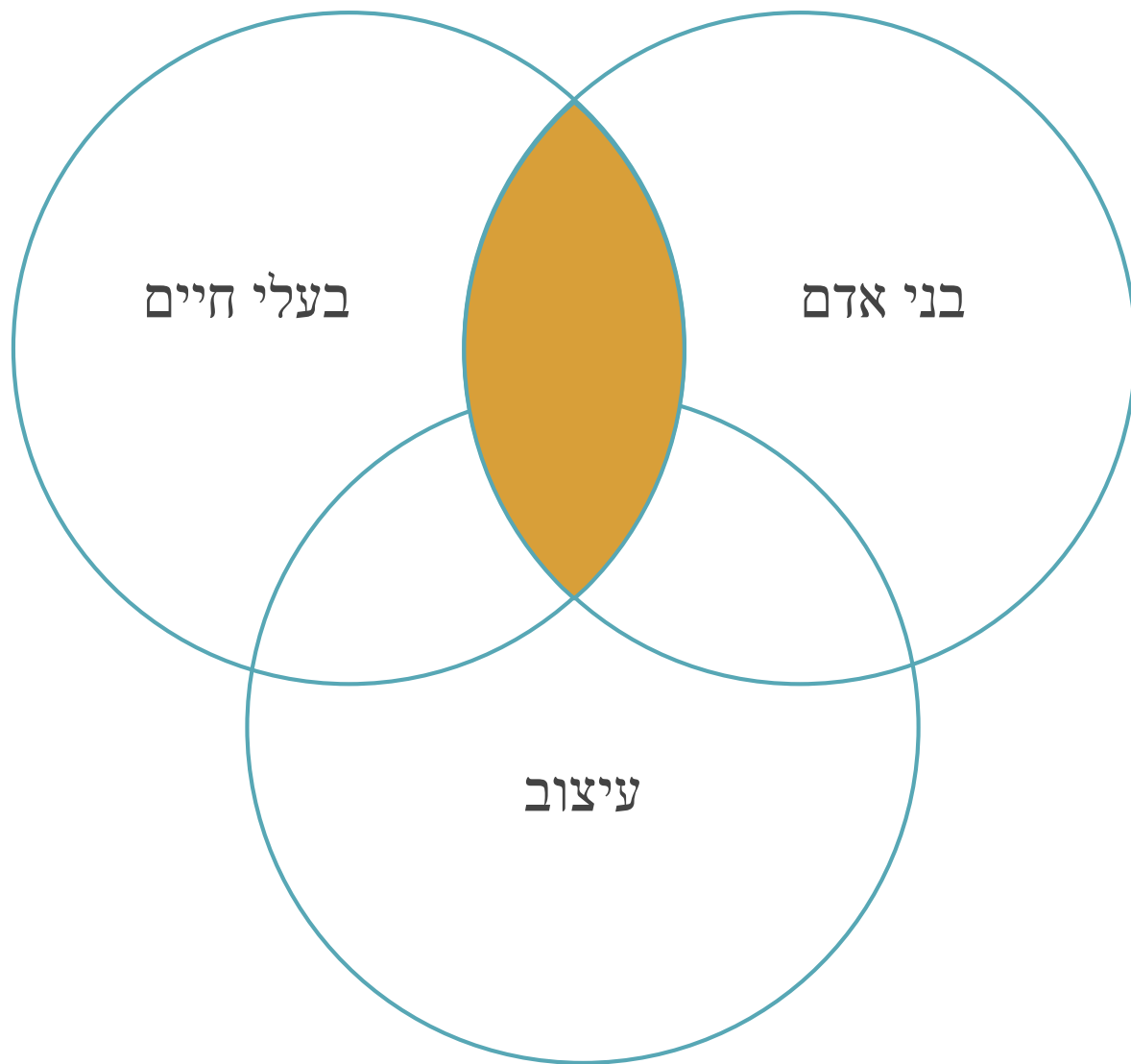
ד"ר דניאל מטקלף



Human-Centred Design

*The only problem with Human-Centred
Design is that it is human centred*





מה בין בני אדם ובעלי חיים?



The Tree of Animal Life

Illustration: Katie Scott

“

A single life form is a set of things that are not that life form – I am made of lungs, for instance, which are evolved swim bladders of fish

”

Tim Morton (2013)

Copyrighted Material

DONNA J. HARAWAY WHEN SPECIES MEET



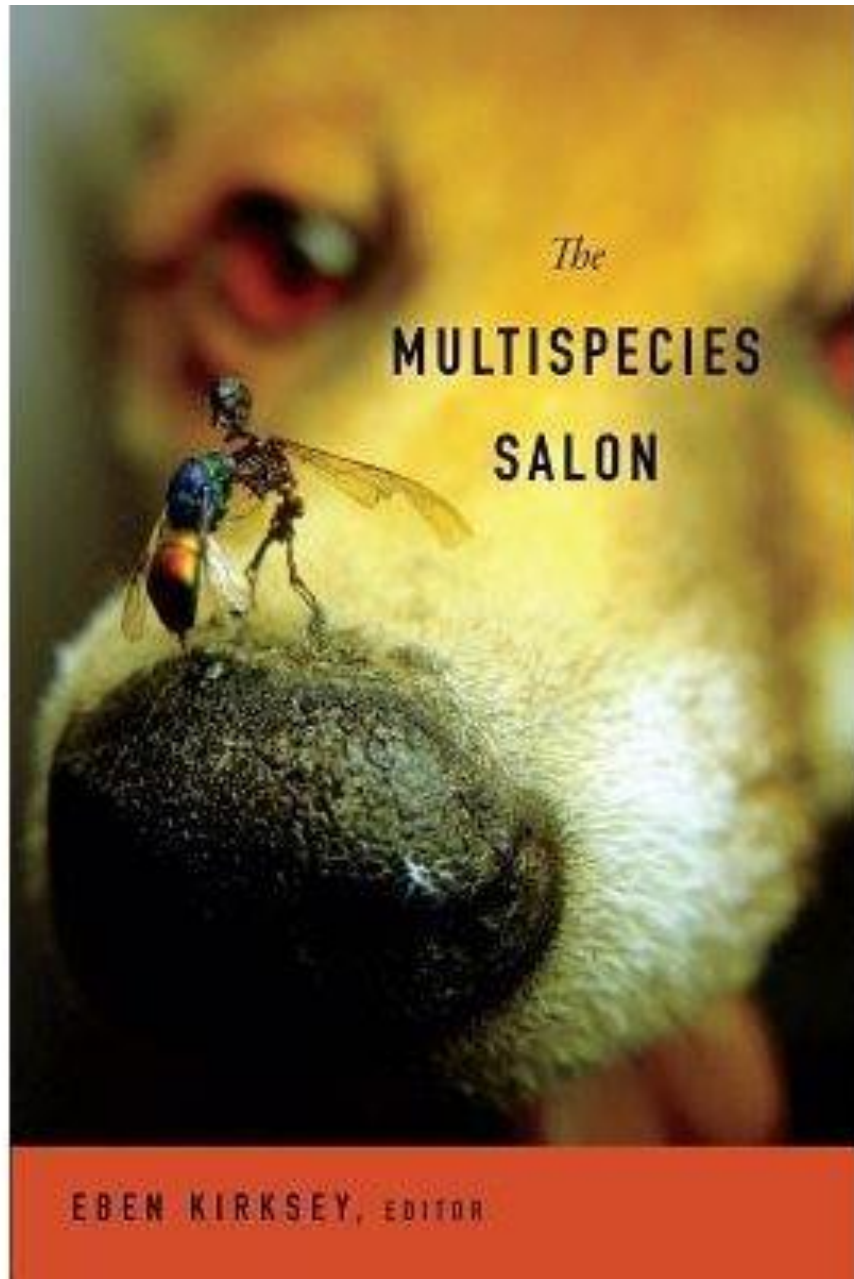
Copyrighted Material

”

אני אוהבת את העובדה שהגנום האנושי נמצא רק ב-10 אחוז מהתאים הקיימים במרחב אותו אני מכנה הגוף היום-יומי שלי. 90 האחוזים הנותרים מלאים בגנום של חיידקים, פטריות ומיקרובים אחרים, חלקם לוקחים חלק בסמפוניה שמחזיקה אותי בחיים, חלקם רק תופסים טרמפ, ואינם מזיקים לשאר הגוף שלי, הגוף שלנו. בגוף זה אני נמצאת במיעוט.

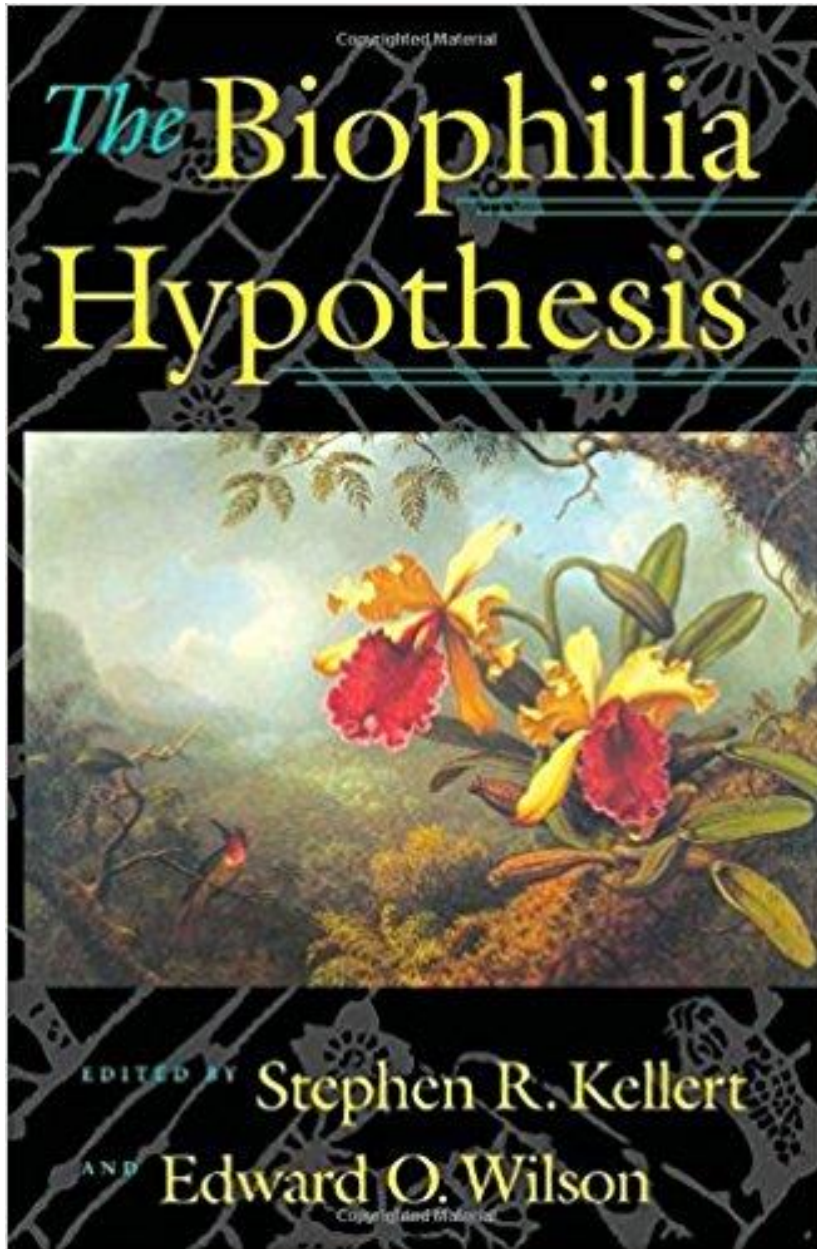
“

Donna J. Haraway, *When species meet*



The Animal Turn

תשומת לב הולכת וגדלה כלפי ה"לא
אנושי" בתחומים שבעבר התייחסו
בעיקר ל"אנושי"



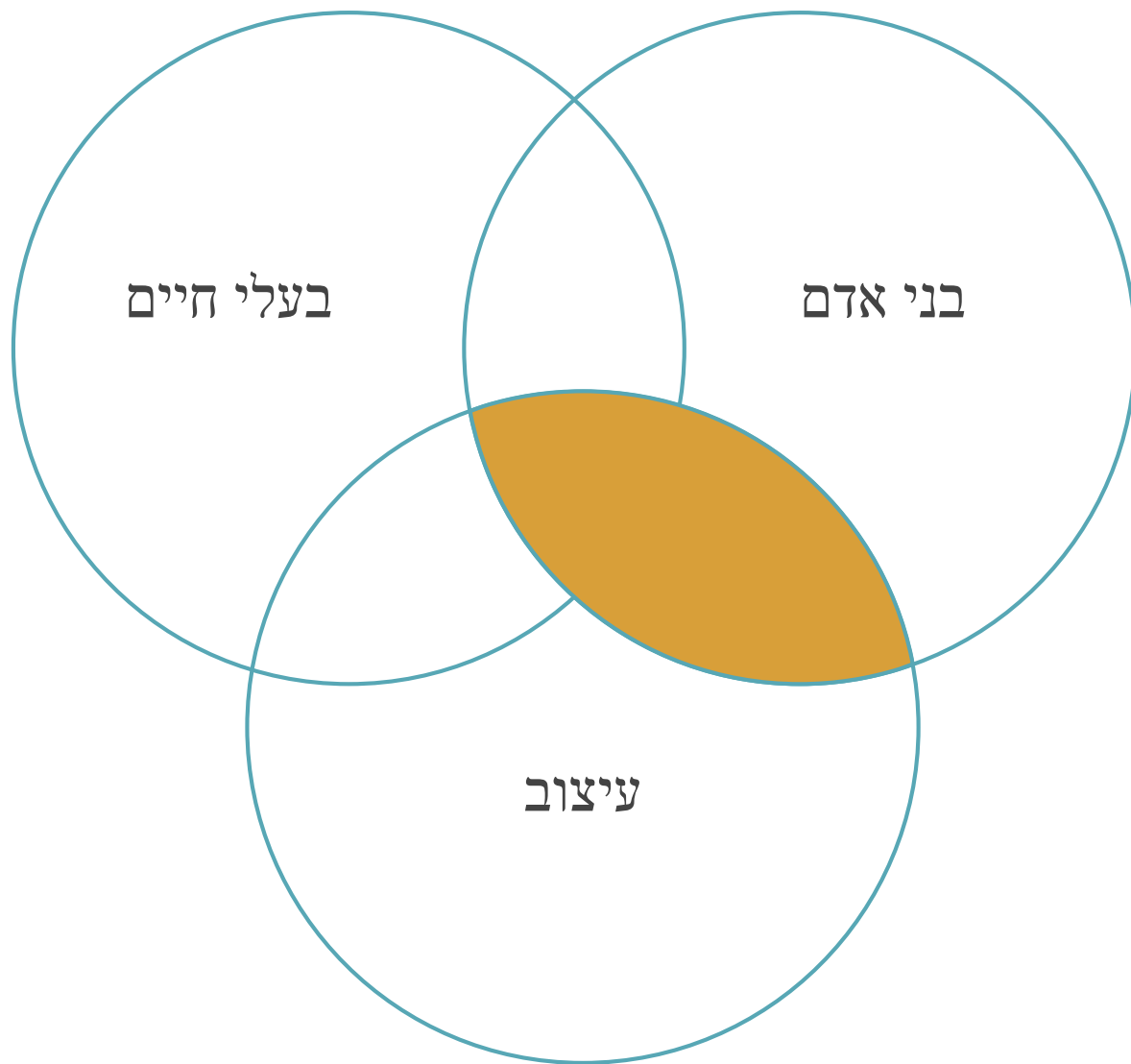
“

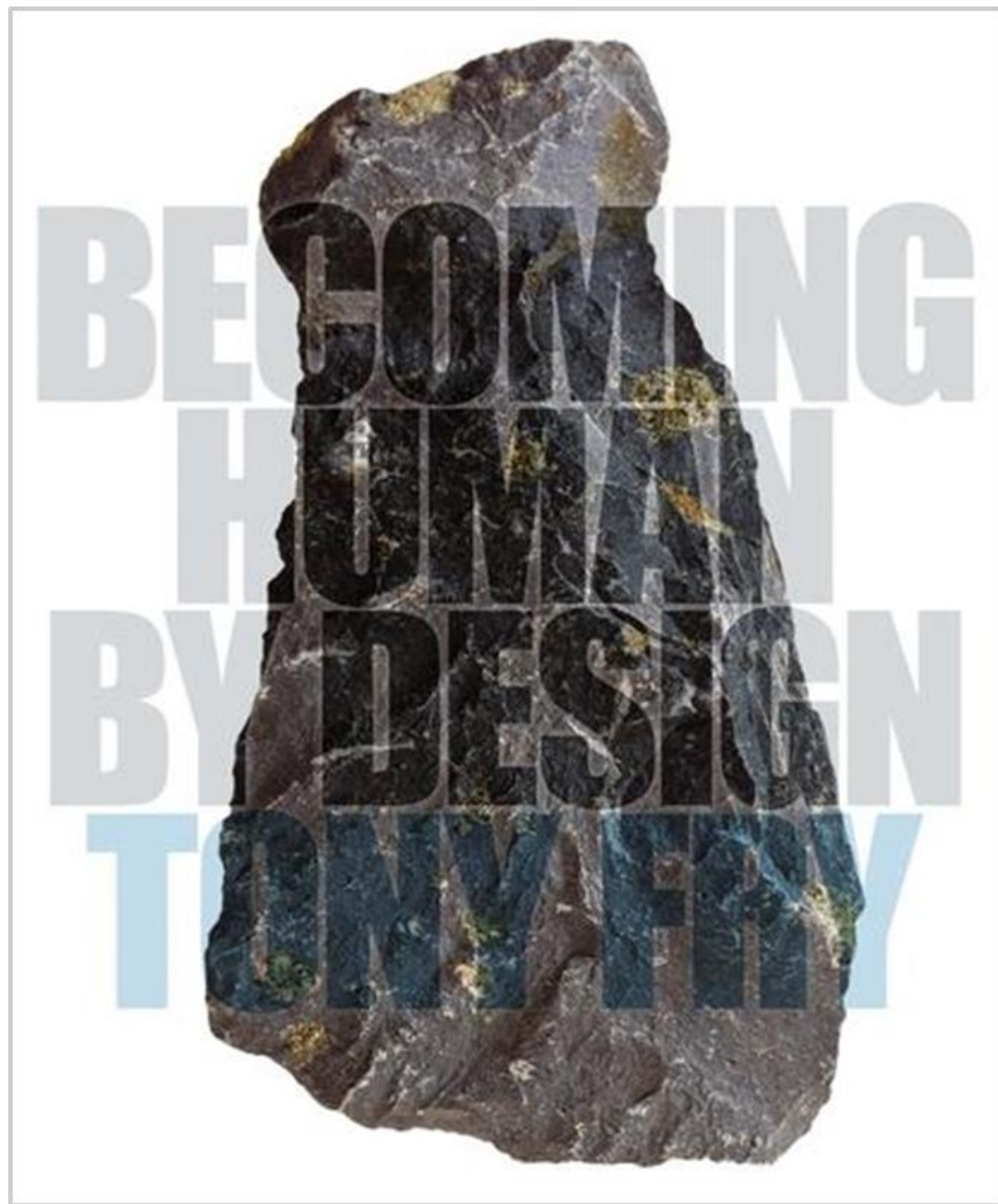
Humans possess an innate tendency to seek connections with nature and other forms of life.

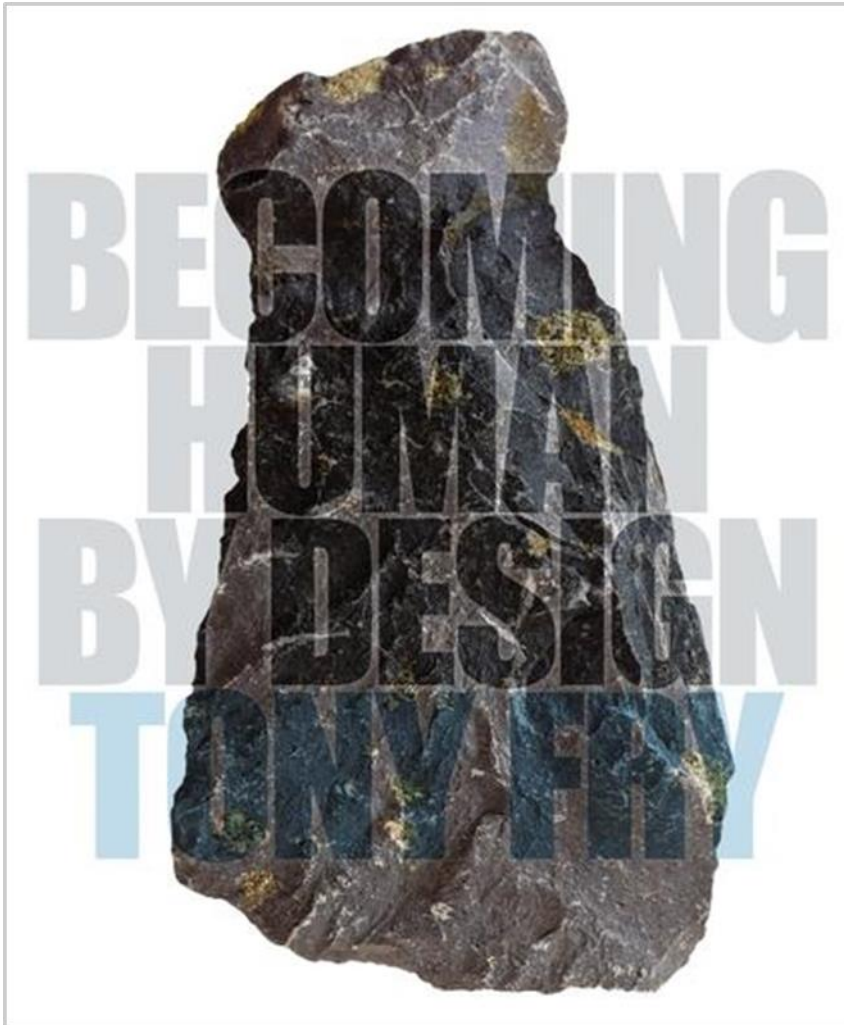
”

Edward O. Wilson, *The Biophilia Hypothesis*

מה בכל זאת עושה אותנו אנושיים?







“

...human intelligence is inseparable from design...

It is not just that primates evolved the intelligence to begin to make their own tools, but rather that tool-use by primates altered the nature of their evolution toward increased intelligence...

”

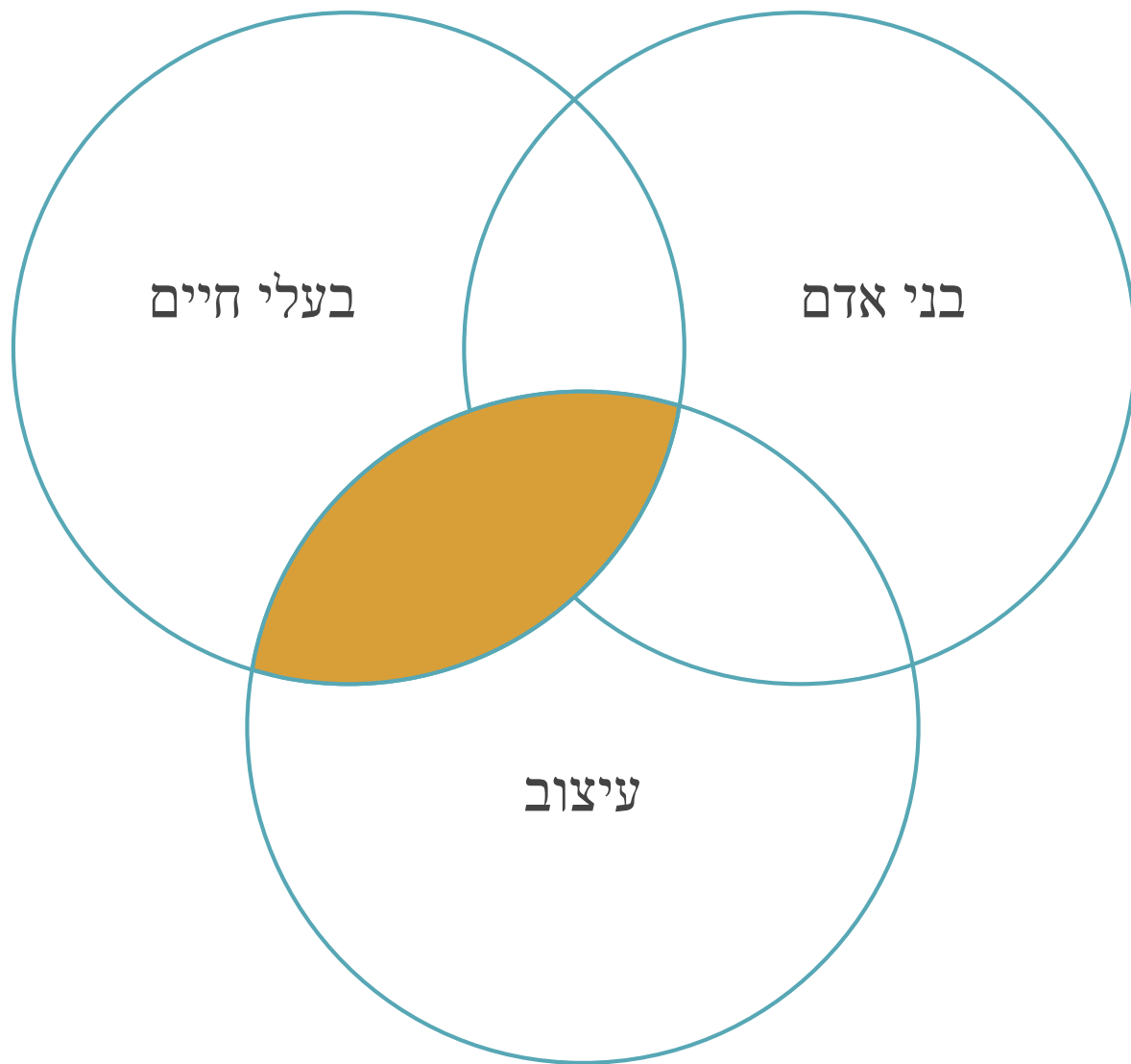
(Tonkinwise, 2013)

“

The historical link between animals and architecture is as long and as old as society. From its early beginnings... **architecture has been silently devoted to managing human and animal life**

”

The [Cross-Species Design Imperative](#) by Ned Dodington









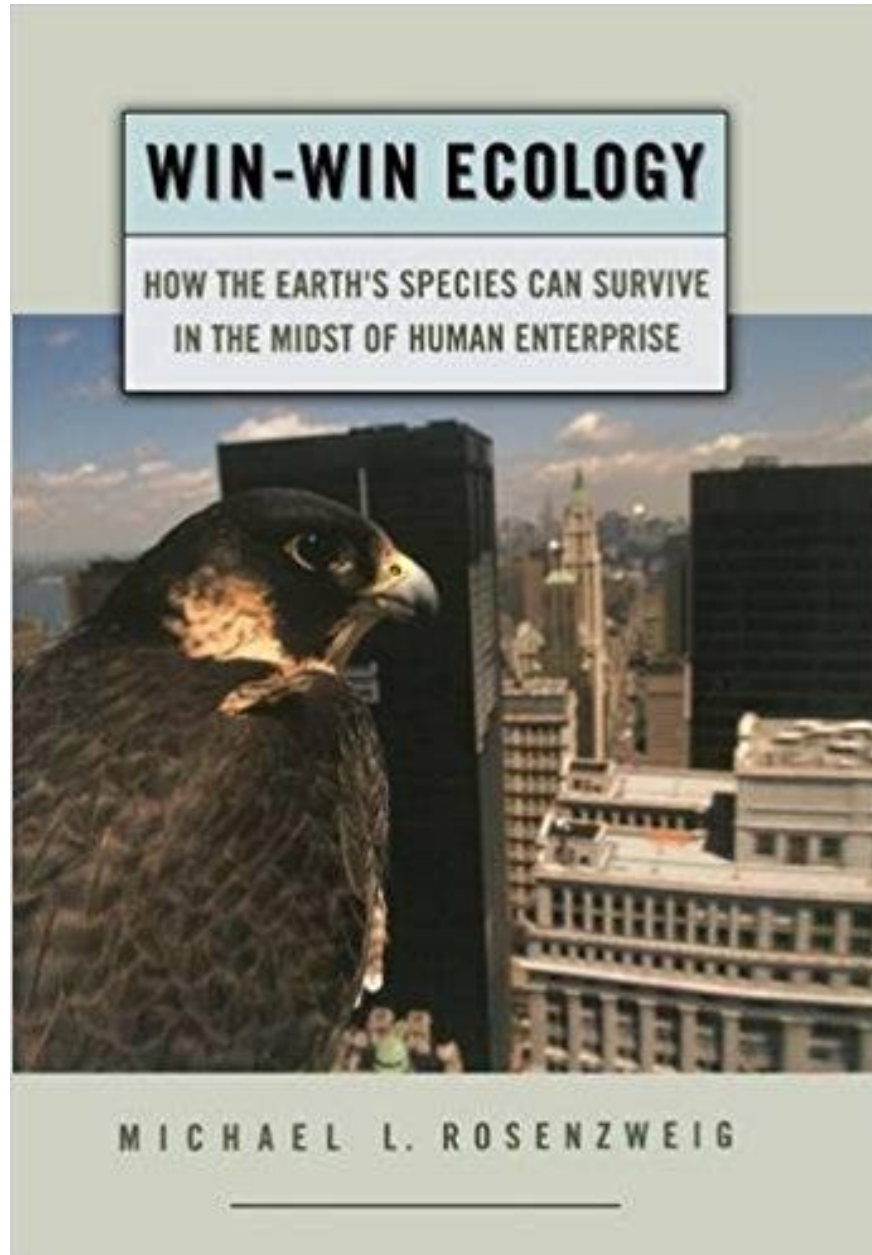




צילום: בני סטרשונסקי

Synurbization

Synurbization denotes changes in behaviour and adjustment of wild animal populations to the new conditions they encounter in urban environments (Luniak, 2004)



“

There still is time, there is a good reason to believe that civilization need not destroy most of the Earth's nonhuman species.

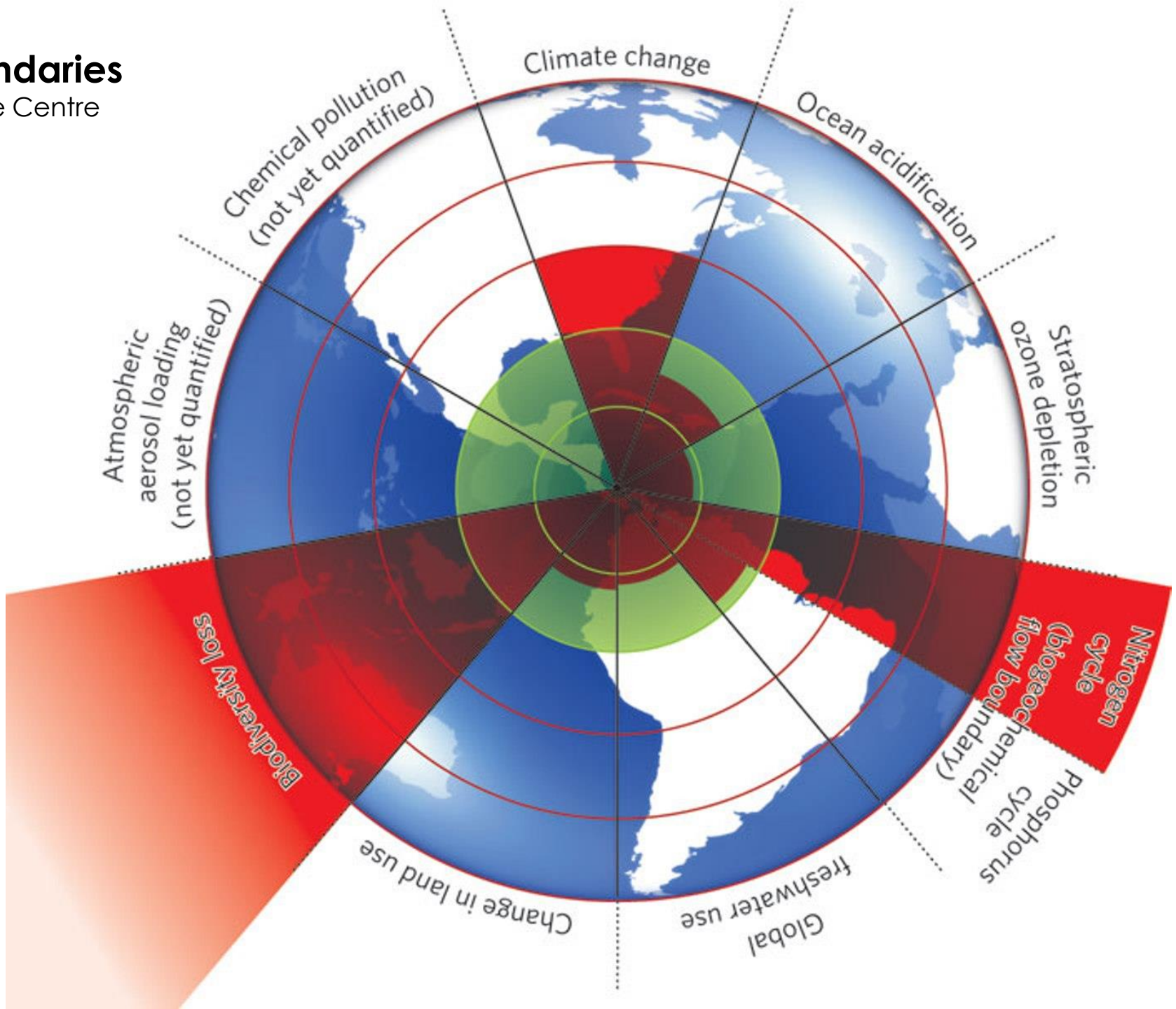
The trick is to learn how to share our spaces with other species.

”

Michael Rosenzweig, *Win-win ecology*

Planetary Boundaries

Stockholm Resilience Centre



שמורת טבע עיינות גבתון



גיבתון הייתה עיר גבול בין ישראל לפלשתים. מקומה
בנחלת שבט דן. שמורת ביצה זו עשירה בצמחיית
קנה, סוף ועצי אקליפטוס שניטעו על ידי קקל.

הפגיעה בחי, בצומח ובדומם - אסורה!

הבערת אש - אסורה!

הכניסה ברכב - אסורה!

טיול נעים

מحمية عيانتو جبتون

גבתון עינתו מדינת גבולית בין ישראל ופלשתין. מחمية الاستقاع هذه
غنية بنباتات البوص والقصب وشجر الكينا، الذي غرسه الصندوق القومي الدائم
لإسرائيل (هكيرن هكيمت).

إيذاء الحيوان النبات والجماد - ممنوع!

ممنوع تشعلوا النار!

الدخول بالسيارة ممنوع!

نزهة ممتعة!

ENOT GIBETON NATURE RESERVE

Gibeton was the border town between Israel and Philistia, located in the territory
of the Dan tribe. This swamp reserve is rich in reedy vegetation and eucalyptus
trees that were planted by the Israel National Fund.

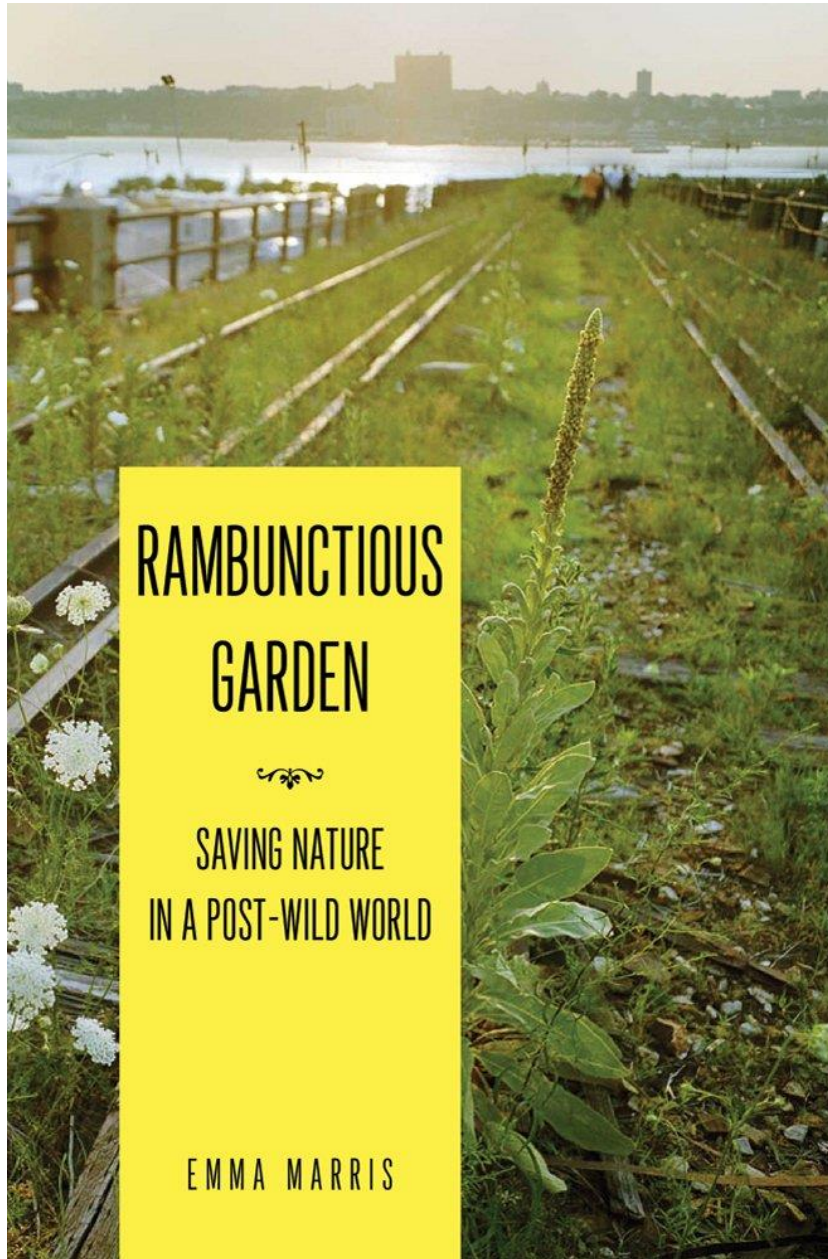
Do not disturb the animals, plants or geological formations!

Do not light fires!

Vehicles are prohibited!

Have a nice visit!



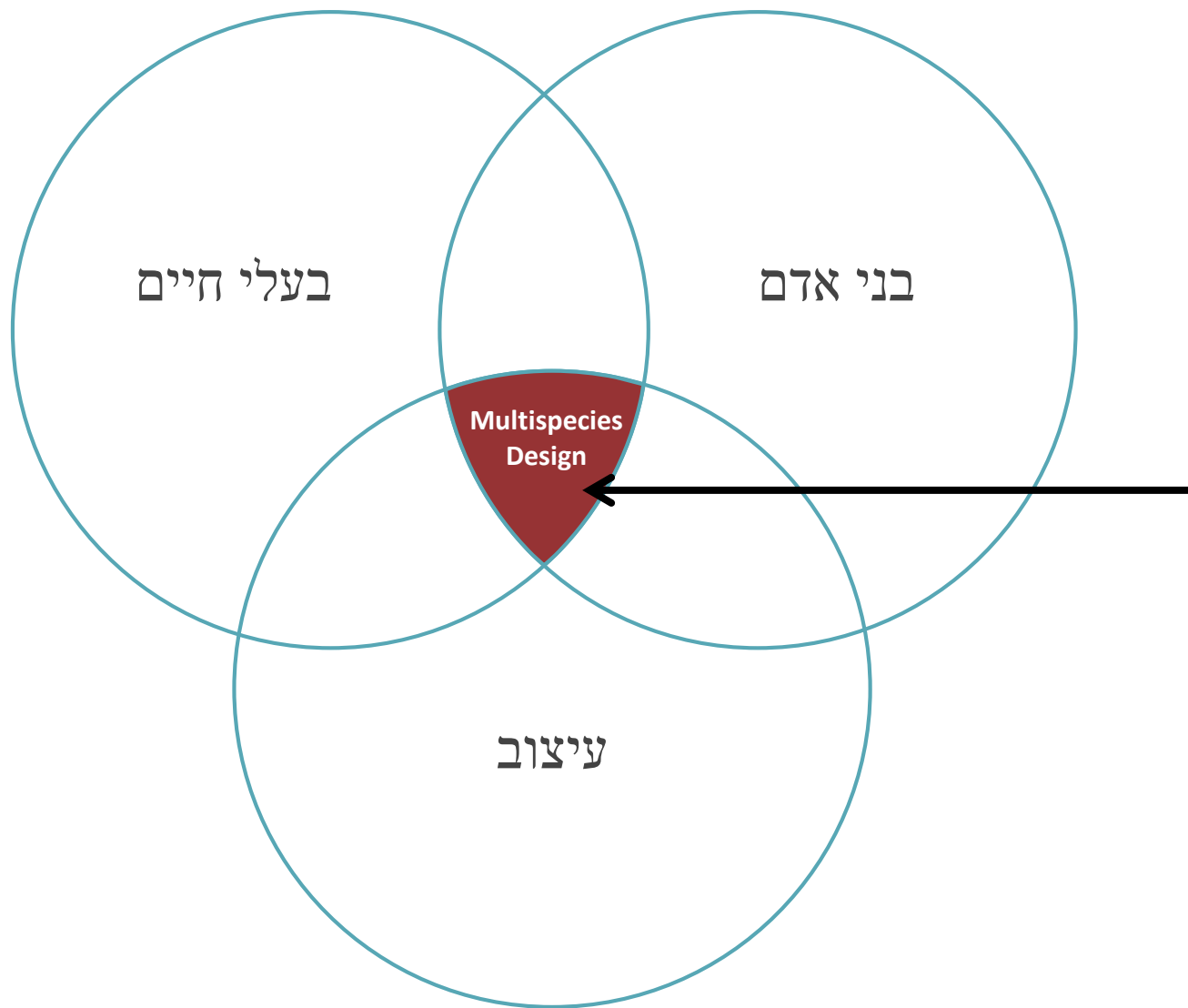


“

We have lost a lot of nature in the past three hundred years—in both senses of the word lost. We have lost nature in the sense that much of nature has been destroyed... But we have also lost nature in another sense. We have misplaced it. We have hidden nature from ourselves.

”

Emma Marris, *Rambunctious Garden*





“ A great deal is in stake in such meetings, and outcomes are not guaranteed. There is no teleological warrant here, no assured happy or unhappy ending, socially, ecologically, or scientifically. *There is only the chance for getting on together with some grace.* The great Divides of animal/human, nature/culture, organic/technical, and wild/domestic flatten into mundane differences - the kinds that have consequences and demand respect and response - rather than rising to subline and final ends.”

Donna J Haraway, *When species meet*

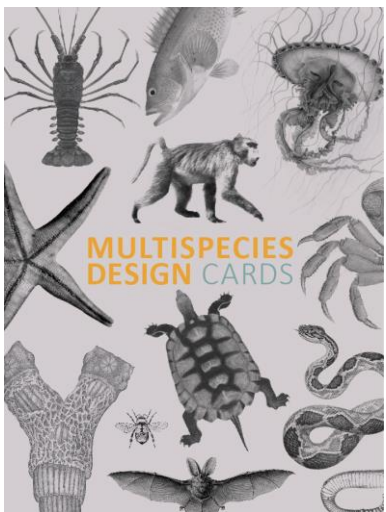
”הרבה מונח על הכף במפגשים מסוג זה, והתוצאות אינן מובטחות מראש. אין נקודת סוף ברורה, אין סוף טוב או רע, מבחינה חברתית, אקולוגית או מדעית. **כל שיש היא הזדמנות להסתדר יחד עם מעט חן.**

ההפרדות הגדולות, בין אדם לחיה, בין טבע לתרבות, בין אורגני לטכני, בין פראי למבויתת משתטחות להבדלים יום-יומיים – מהסוג שיש להן השלכות ודורשות כבוד ותגובה – לא מהסוג שמתיימר לקביעות נחרצות ונעלות.”

עקרונות לעיצוב רב-מיני

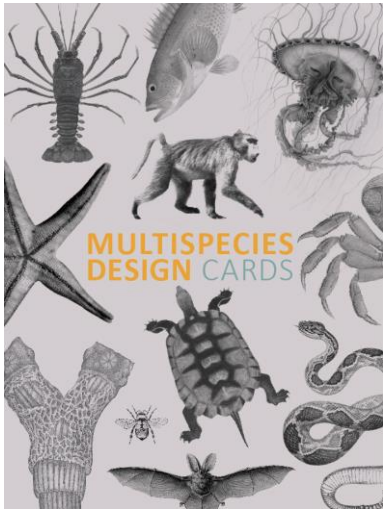
Multispecies Design

A toolkit created to help in design projects involving nonhuman species



<p>ANIMAL CLIENTS Extending responsibility</p> <p>MULTISPECIES DESIGN</p>	<p>ANIMAL CLIENTS Extending responsibility</p> <ul style="list-style-type: none"> Extend to your animal clients the same respect and responsibility you would to your human clients. Respect their needs as well as their wild nature. Avoid interventions that pose health or safety risks, or that might create dependency on humans or technology. <p>MULTISPECIES DESIGN</p>	<p>ANIMAL CLIENTS Identifying needs</p> <p>MULTISPECIES DESIGN</p>	<p>ANIMAL CLIENTS Identifying needs</p> <ul style="list-style-type: none"> Identify the needs of the animal you are designing for. What is missing for them in human habitats that exist in natural ones? What risks are present in human habitats that can be addressed by your design? <p>MULTISPECIES DESIGN</p>	<p>ANIMAL CLIENTS Participatory animal design</p> <p>MULTISPECIES DESIGN</p>	<p>ANIMAL CLIENTS Participatory animal design</p> <ul style="list-style-type: none"> Animals will modify the designs as they interact with them. Take this into consideration and design for these modifications. <p>MULTISPECIES DESIGN</p>	<p>ANIMAL CLIENTS Representing animals in the design process</p> <p>MULTISPECIES DESIGN</p>	<p>ANIMAL CLIENTS Representing animals in the design process</p> <ul style="list-style-type: none"> Create animal personas and include them in stakeholder interaction maps of your product/service. While prototyping, assess the designs also from an animal's perspective. Get help from your animal spokesperson for this. <p>MULTISPECIES DESIGN</p>	<p>RESEARCHING ANIMALS Learning the science</p> <p>MULTISPECIES DESIGN</p>	<p>RESEARCHING ANIMALS Learning the science</p> <ul style="list-style-type: none"> Read papers and books, watch videos and talk to scientists studying the animal. <p>MULTISPECIES DESIGN</p>	
<p>RESEARCHING ANIMALS Multispecies Design Ethnography</p> <p>MULTISPECIES DESIGN</p>	<p>RESEARCHING ANIMALS Multispecies Design Ethnography</p> <ul style="list-style-type: none"> Spend time with your animal clients in the field. Use photos, videos, drawings and visual diaries to capture their interaction with their environments. Focus on eco-socio-technical interactions, i.e. interactions between animals, humans and manufactured objects. <p>MULTISPECIES DESIGN</p>	<p>RESEARCHING ANIMALS Proxy interviews</p> <p>MULTISPECIES DESIGN</p>	<p>RESEARCHING ANIMALS Proxy interviews</p> <ul style="list-style-type: none"> Interview people studying the animal in question. Ask them to talk about the animal and also for the animal (as if they were the animal). <p>MULTISPECIES DESIGN</p>	<p>RESEARCHING ANIMALS Identifying animal spokespersons</p> <p>MULTISPECIES DESIGN</p>	<p>RESEARCHING ANIMALS Identifying animal spokespersons</p> <ul style="list-style-type: none"> Where possible, identify animal spokespersons capable of speaking on behalf of the animal throughout the design process. <p>MULTISPECIES DESIGN</p>	<p>RESEARCHING ANIMALS Somatic design research</p> <p>MULTISPECIES DESIGN</p>	<p>RESEARCHING ANIMALS Somatic design research</p> <ul style="list-style-type: none"> Experiment in seeing and experiencing the world from the animal's perspective. Use your imagination, role playing, movement props or any other means you can think of to help you with this. Change your viewpoint to the height of the animal and move in the environment at the animal's pace. <p>MULTISPECIES DESIGN</p>	<p>HUMAN-ANIMAL INTERACTIONS Representing animals in society</p> <p>MULTISPECIES DESIGN</p>	<p>HUMAN-ANIMAL INTERACTIONS Representing animals in society</p> <ul style="list-style-type: none"> Can your design help make the presence of urban wildlife more visible in cities? Can it highlight their needs? Can it highlight the benefits of living amongst animals? <p>MULTISPECIES DESIGN</p>	
<p>MULTISPECIES DESIGN CARDS</p> <p>Wild animals have mostly gone unnoticed within the design and planning of human habitats. Today, more than ever, we need thoughtful interventions and empathy towards them-to rethink how their needs can be addressed and within various fields of design.</p> <p>These cards were created to assist in design processes that involve wild animal species living in proximity and overlap with human systems.</p> <p>The cards are divided into four categories offering guidelines to treating animals as clients of design, researching animals as a design context, integrating human-animal interactions and designing for co-existence.</p> <p>There is no wrong way to use the cards-find out what works best for you.</p> <p>I hope you find them helpful!</p> <p>For more info visit danimetcalf.com</p>	<p>HUMAN-ANIMAL INTERACTIONS Focusing on mutually beneficial interaction</p> <p>MULTISPECIES DESIGN</p>	<p>HUMAN-ANIMAL INTERACTIONS Focusing on mutually beneficial interaction</p> <ul style="list-style-type: none"> How does your design benefit animals as well as humans? Does it bring them closer together in a respectful way? <p>MULTISPECIES DESIGN</p>	<p>HUMAN-ANIMAL INTERACTIONS Soft reservation</p> <p>MULTISPECIES DESIGN</p>	<p>HUMAN-ANIMAL INTERACTIONS Soft reservation</p> <ul style="list-style-type: none"> Some degree of separation between the animal and human uses of a structure is sometimes needed to keep humans and animals safe. Can this separation be achieved by addressing human and animal behaviour? Can hard barriers be avoided to leave room for interaction? <p>MULTISPECIES DESIGN</p>	<p>HUMAN-ANIMAL INTERACTIONS Addressing existing cultural baggage</p> <p>MULTISPECIES DESIGN</p>	<p>HUMAN-ANIMAL INTERACTIONS Addressing existing cultural baggage</p> <ul style="list-style-type: none"> What are the stories we tell about the animal in the specific socio-cultural context? Can your design challenge misconceptions and misunderstandings regarding the animal? Can it generate new narratives that focus on co-habitation and reconciliation? <p>MULTISPECIES DESIGN</p>	<p>HUMAN-ANIMAL INTERACTIONS Avoiding domestication</p> <p>MULTISPECIES DESIGN</p>	<p>HUMAN-ANIMAL INTERACTIONS Avoiding domestication</p> <ul style="list-style-type: none"> Some wild animals can be turned into pets; this is not the goal in Multispecies Design. Respect the animal's wild nature and avoid design that may lead to domestication. <p>MULTISPECIES DESIGN</p>	<p>HUMAN-ANIMAL INTERACTIONS Opening communication channels</p> <p>MULTISPECIES DESIGN</p>	<p>HUMAN-ANIMAL INTERACTIONS Opening communication channels</p> <ul style="list-style-type: none"> Can your design help open up communication channels between humans and animals? Can it translate animal language and behaviour into ideas understandable by humans and vice versa? <p>MULTISPECIES DESIGN</p>
<p>Image credits</p> <p>Extending responsibility: Illustration by Susanna Kopp Identifying needs: Illustration by Susanna Kopp Participatory animal design: Illustration by Charles Sirois Representing animals in the design process: Source unknown Learning the science: Illustration by Charles Sirois Multispecies Design Ethnography: Illustration by Susanna Kopp Proxy interviews: Illustration by Susanna Kopp Identifying animal spokespersons: Illustration by Susanna Kopp Somatic design research: Photo by Michael Mautz Representing animals in society: Illustration by Susanna Kopp Focusing on mutually beneficial interaction: Illustration by Susanna Kopp Soft reservation: Illustration by Susanna Kopp Addressing existing cultural baggage: Illustration by Susanna Kopp Avoiding domestication: Illustration by Susanna Kopp Opening communication channels: Illustration by Susanna Kopp Seeking synergies: Illustration by Susanna Kopp Open-ended design: Illustration by Susanna Kopp Ecology of reference: Illustration by Susanna Kopp Connectivity: Illustration by Susanna Kopp Embrace complexity: Illustration by Susanna Kopp</p>	<p>HUMAN-ANIMAL INTERACTIONS Seeking synergies</p> <p>MULTISPECIES DESIGN</p>	<p>HUMAN-ANIMAL INTERACTIONS Seeking synergies</p> <ul style="list-style-type: none"> Animals provide different ecosystem services in human habitats such as water filtering, pest control and weed removal. Try to look for synergies between the needs of humans and those of animals. <p>MULTISPECIES DESIGN</p>	<p>DESIGN LIKE AN ECOSYSTEM Open-ended design</p> <p>MULTISPECIES DESIGN</p>	<p>DESIGN LIKE AN ECOSYSTEM Open-ended design</p> <ul style="list-style-type: none"> Think of your design as part of an ever-changing system and accept that you will not have full control over all its outcomes. Can your design follow and change according to natural processes such as ecological succession, weathering and climate change? <p>MULTISPECIES DESIGN</p>	<p>DESIGN LIKE AN ECOSYSTEM Ecology of reference</p> <p>MULTISPECIES DESIGN</p>	<p>DESIGN LIKE AN ECOSYSTEM Ecology of reference</p> <ul style="list-style-type: none"> Some animals and plants are "pre-adapted" for certain conditions in urban environments because of their similarity to natural features. When addressing a specific area or feature in a built environment try to find your ecology of reference, i.e. a natural ecosystem with similar morphological, chemical or climatic features. <p>MULTISPECIES DESIGN</p>	<p>DESIGN LIKE AN ECOSYSTEM Connectivity</p> <p>MULTISPECIES DESIGN</p>	<p>DESIGN LIKE AN ECOSYSTEM Connectivity</p> <ul style="list-style-type: none"> Grey features in urban areas are often adjacent or in proximity to green ones. Can your design intervention help connect separated green areas and increase habitat connectivity? <p>MULTISPECIES DESIGN</p>	<p>DESIGN LIKE AN ECOSYSTEM Embrace complexity</p> <p>MULTISPECIES DESIGN</p>	<p>DESIGN LIKE AN ECOSYSTEM Embrace complexity</p> <ul style="list-style-type: none"> Complexity on all levels often leads to more biodiversity. Include complexity of form and materials in your designs to offer more diverse options and niches for animals. <p>MULTISPECIES DESIGN</p>

לראות ולחוות את המרחב מנקודת מבטן של החיות



RESEARCHING ANIMALS Somatic design research

- Experiment in seeing and experiencing the world from the animal's perspective.
- Use your imagination, role playing, movement, props or any other means you can think of to help you with this.
- Change your viewpoint to the height of the animal and move in the environment at the animal's pace.

MULTISPECIES
DESIGN CARDS



RESEARCHING ANIMALS Multispecies Design Ethnography

- Spend time with your animal clients in the field.
- Use photos, videos, drawings and visual diaries to capture their interaction with their environments.
- Focus on eco-socio-technical interactions, i.e. interactions between animals, humans and manufactured objects.

MULTISPECIES
DESIGN CARDS



RESEARCHING ANIMALS Proxy interviews

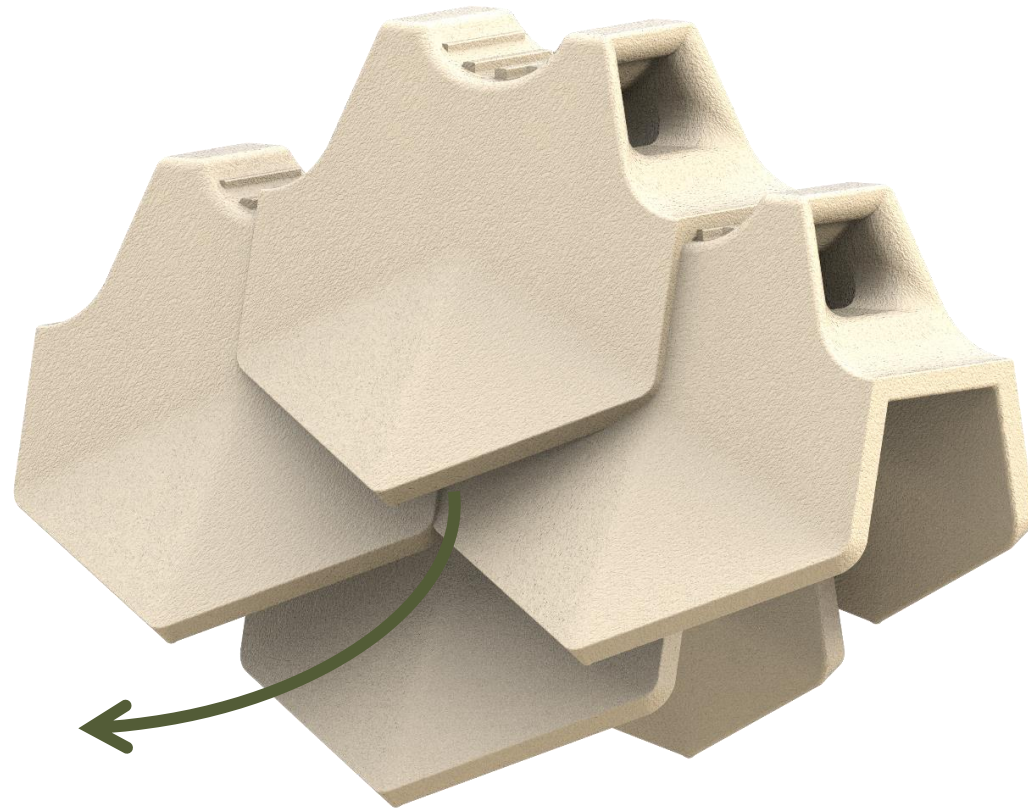
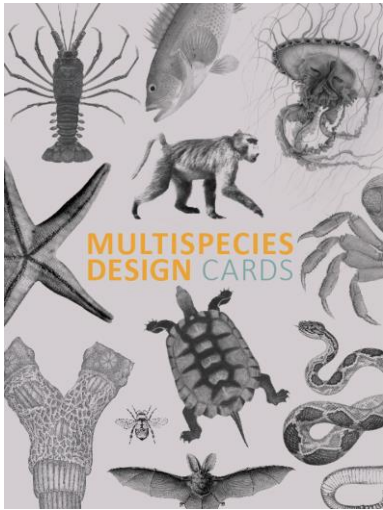
- Interview people studying the animal in question.
- Ask them to talk about the animal and also for the animal (as if they were the animal).

MULTISPECIES
DESIGN CARDS

Conceptual designer Thomas Thwaites investigating what it might be like to live as a goat

In The Eye Of The Animal Iteota.com

לעצב עבור הצרכים הייחודיים של החיה



ANIMAL CLIENTS

Identifying needs

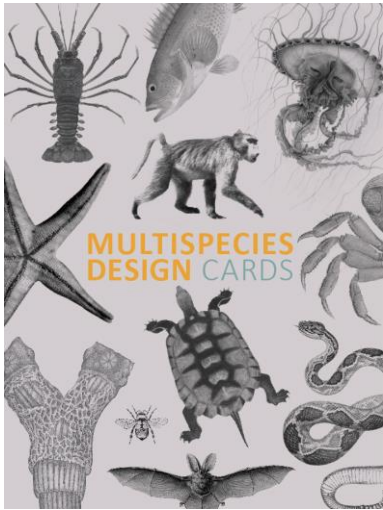
- Identify the needs of the animal you are designing for.
- What is missing for them in human habitats that exist in natural ones?
- What risks are present in human habitats that can be addressed by your design?

MULTISPECIES
DESIGN CARDS



עבודות סטודנטים קורס אדם-חיה-מכונה | נופר קן

להגדיר מחדש את מערכת היחסים הרצויה עם בעל החיים סביבנו



HUMAN-ANIMAL INTERACTIONS Addressing existing cultural baggage

- What are the stories we tell about the animal in the specific sociocultural context?
- Can your design challenge misconceptions and misunderstandings regarding the animal?
- Can it generate new narratives that focus on co-habitation and reconciliation?

MULTISPECIES
DESIGN CARDS

HUMAN-ANIMAL INTERACTIONS Opening communication channels

- Can your design help open up communication channels between humans and animals?
- Can it translate animal language and behaviour into cues understandable by humans and vice versa?

MULTISPECIES
DESIGN CARDS



עבודות סטודנטים קורס אדם-חיה-מכונה | הדר אוליאל

HUMAN-ANIMAL INTERACTIONS Seeking synergies

- Animals provide different ecosystem services in human habitats such as water filtering, pest control and weed removal.
- Try to look for synergies between the needs of humans and those of animals.

MULTISPECIES
DESIGN CARDS

HUMAN-ANIMAL INTERACTIONS Focusing on mutually beneficial interaction

- How does your design benefit animals as well as humans?
- Does it bring them closer together in a respectful way?

MULTISPECIES
DESIGN CARDS



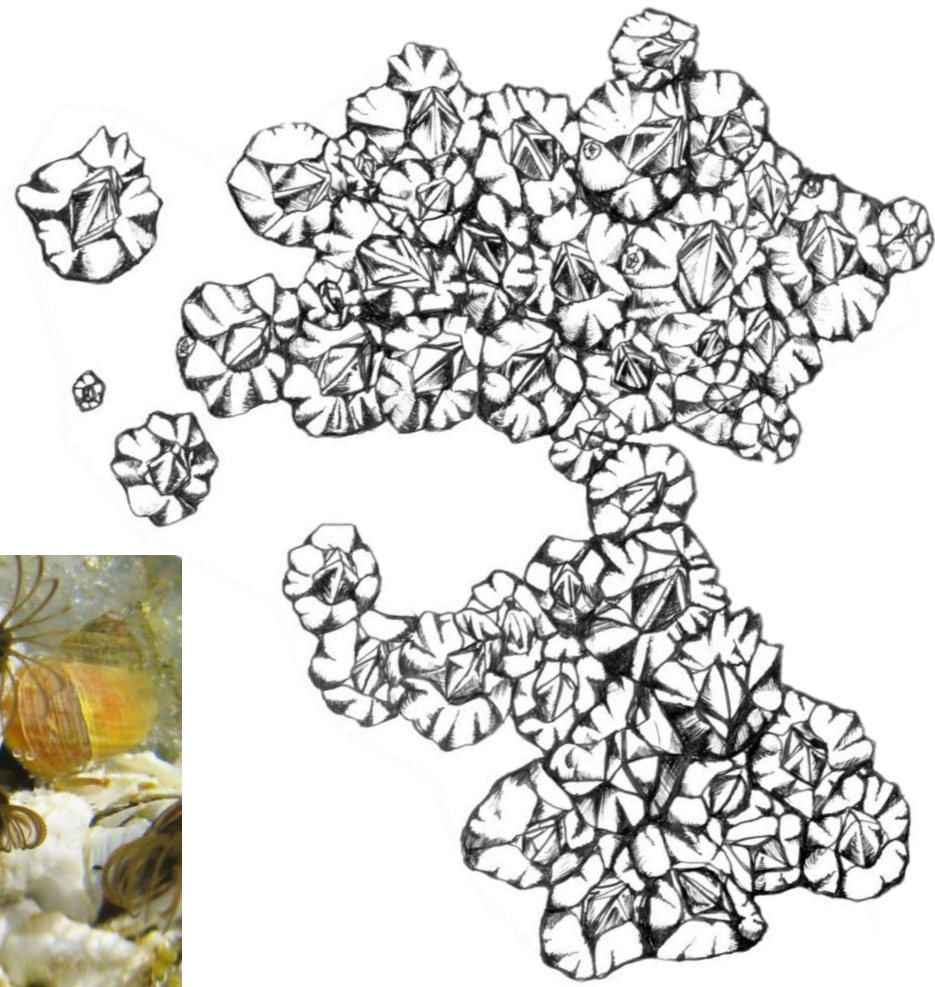
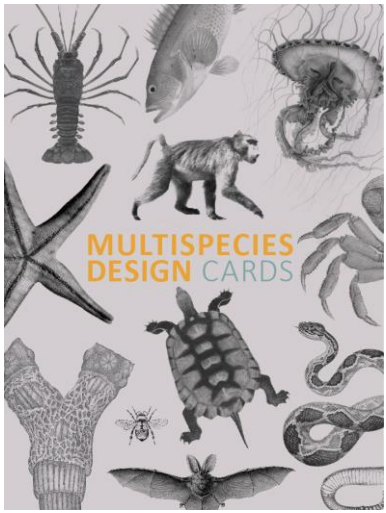
חיסון שפעת לאומי באמצעות יתושים

למידע נוסף <

עבודות סטודנטים קורס אדם-חיה-מכונה | רובי גל



להנכיח את הטבע החבוי סביבנו



HUMAN-ANIMAL INTERACTIONS

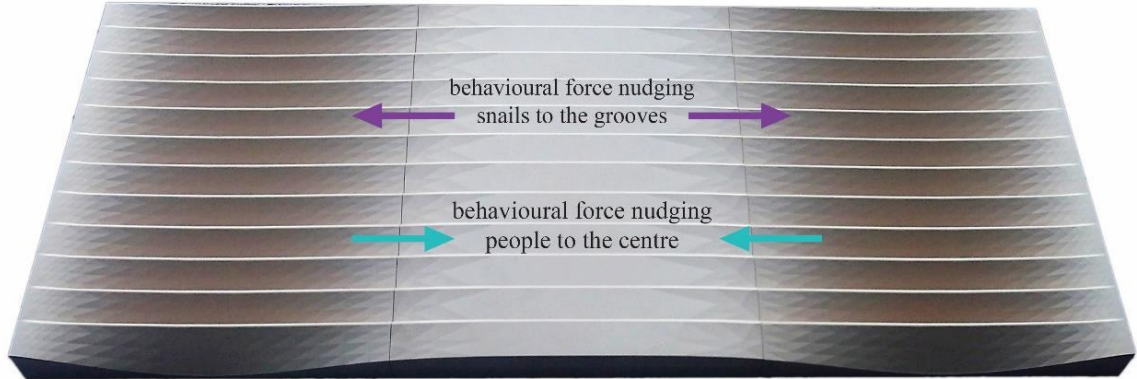
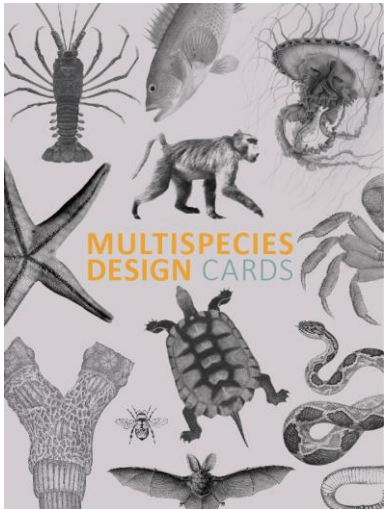
Representing animals in society

- Can your design help make the presence of urban wildlife more visible in cities?
- Can it highlight their needs?
- Can it highlight the benefits of living amongst animals?

MULTISPECIES DESIGN CARDS



הפרדות רכות, סינרגטיות ומבוססות התנהגות



HUMAN-ANIMAL INTERACTIONS

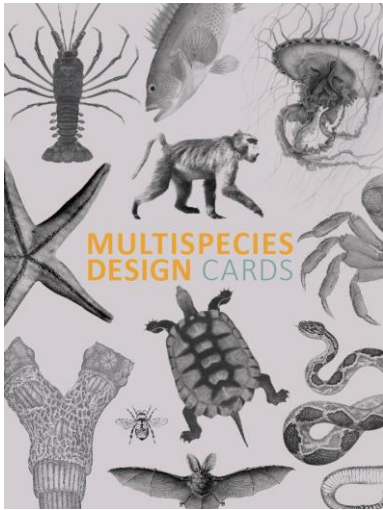
Soft reservation

- Some degree of separation between the animal and human uses of a structure is sometimes needed to keep humans and animals safe.
- Can this separation be achieved by addressing human and animal behaviour?
- Can hard barriers be avoided to leave room for interaction?

MULTISPECIES DESIGN CARDS



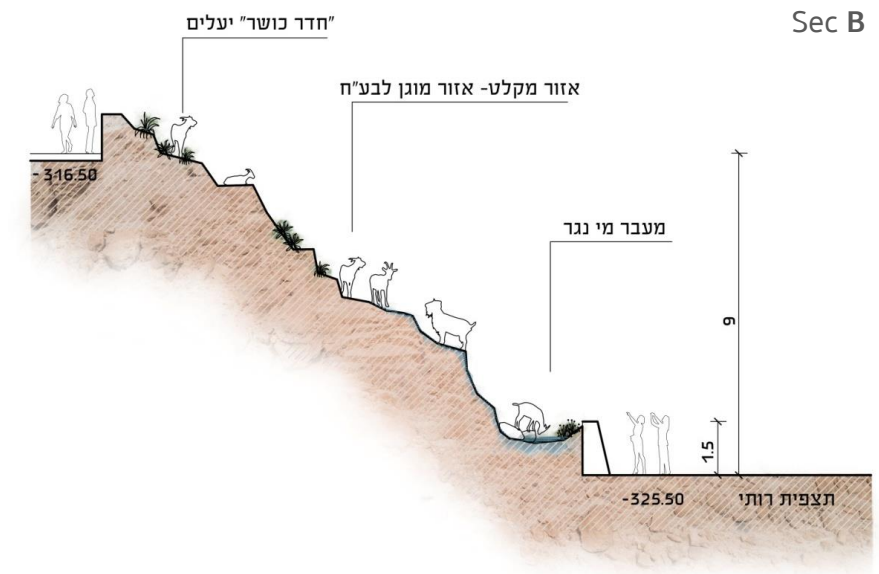
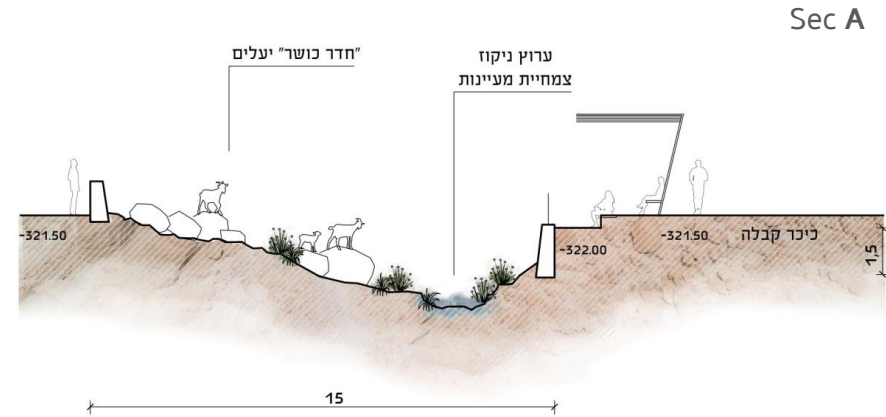
תכנון המשלב מפגש ואינטראקציה יחד עם שמירה על בעלי החיים



HUMAN-ANIMAL INTERACTIONS
Soft reservation

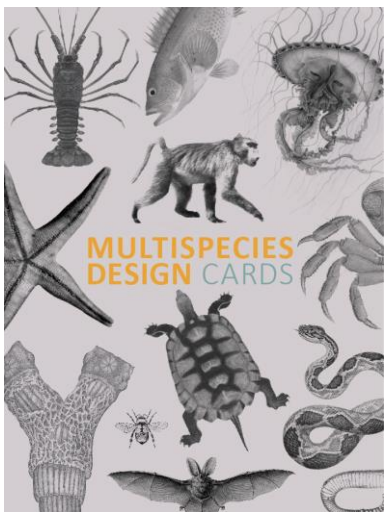
- Some degree of separation between the animal and human uses of a structure is sometimes needed to keep humans and animals safe.
- Can this separation be achieved by addressing human and animal behaviour?
- Can hard barriers be avoided to leave room for interaction?

MULTISPECIES DESIGN CARDS



Multispecies Design

A toolkit created to help in design projects involving nonhuman species



<p>ANIMAL CLIENTS Extending responsibility</p> <p>MULTISPECIES DESIGN</p>	<p>ANIMAL CLIENTS Extending responsibility</p> <ul style="list-style-type: none"> Extend to your animal clients the same respect and responsibility you would to your human clients. Respect their needs as well as their wild nature. Avoid interventions that pose health or safety risks, or that might create dependency on humans or technology. <p>MULTISPECIES DESIGN</p>	<p>ANIMAL CLIENTS Identifying needs</p> <p>MULTISPECIES DESIGN</p>	<p>ANIMAL CLIENTS Identifying needs</p> <ul style="list-style-type: none"> Identify the needs of the animal you are designing for. What is missing for them in human habitats that exist in natural ones? What risks are present in human habitats that can be addressed by your design? <p>MULTISPECIES DESIGN</p>	<p>ANIMAL CLIENTS Participatory animal design</p> <p>MULTISPECIES DESIGN</p>	<p>ANIMAL CLIENTS Participatory animal design</p> <ul style="list-style-type: none"> Animals will modify the designs as they interact with them. Take this into consideration and design for these modifications. <p>MULTISPECIES DESIGN</p>	<p>ANIMAL CLIENTS Representing animals in the design process</p> <p>MULTISPECIES DESIGN</p>	<p>ANIMAL CLIENTS Representing animals in the design process</p> <ul style="list-style-type: none"> Create animal personas and include them in stakeholder interaction maps of your product/service. While prototyping, assess the designs also from an animal's perspective. Get help from your animal spokesperson for this. <p>MULTISPECIES DESIGN</p>	<p>RESEARCHING ANIMALS Learning the science</p> <p>MULTISPECIES DESIGN</p>	<p>RESEARCHING ANIMALS Learning the science</p> <ul style="list-style-type: none"> Read papers and books, watch videos and talk to scientists studying the animal. <p>MULTISPECIES DESIGN</p>	
<p>RESEARCHING ANIMALS Multispecies Design Ethnography</p> <p>MULTISPECIES DESIGN</p>	<p>RESEARCHING ANIMALS Multispecies Design Ethnography</p> <ul style="list-style-type: none"> Spend time with your animal clients in the field. Use photos, videos, drawings and visual diaries to capture their interaction with their environments. Focus on eco-socio-technical interactions, i.e. interactions between animals, humans and manufactured objects. <p>MULTISPECIES DESIGN</p>	<p>RESEARCHING ANIMALS Proxy interviews</p> <p>MULTISPECIES DESIGN</p>	<p>RESEARCHING ANIMALS Proxy interviews</p> <ul style="list-style-type: none"> Interview people studying the animal in question. Ask them to talk about the animal and also for the animal (as if they were the animal). <p>MULTISPECIES DESIGN</p>	<p>RESEARCHING ANIMALS Identifying animal spokespersons</p> <p>MULTISPECIES DESIGN</p>	<p>RESEARCHING ANIMALS Identifying animal spokespersons</p> <ul style="list-style-type: none"> Where possible, identify animal spokespersons capable of speaking on behalf of the animal throughout the design process. <p>MULTISPECIES DESIGN</p>	<p>RESEARCHING ANIMALS Somatic design research</p> <p>MULTISPECIES DESIGN</p>	<p>RESEARCHING ANIMALS Somatic design research</p> <ul style="list-style-type: none"> Experiment in seeing and experiencing the world from the animal's perspective. Use your imagination, role playing, movement props or any other means you can think of to help you with this. Change your viewpoint to the height of the animal and move in the environment at the animal's pace. <p>MULTISPECIES DESIGN</p>	<p>HUMAN-ANIMAL INTERACTIONS Representing animals in society</p> <p>MULTISPECIES DESIGN</p>	<p>HUMAN-ANIMAL INTERACTIONS Representing animals in society</p> <ul style="list-style-type: none"> Can your design help make the presence of urban wildlife more visible in cities? Can it highlight their needs? Can it highlight the benefits of living amongst animals? <p>MULTISPECIES DESIGN</p>	
<p>MULTISPECIES DESIGN CARDS</p> <p>Wild animals have mostly gone unnoticed within the design and planning of human habitats. Today, more than ever, we need thoughtful interventions and empathy towards them-to rethink how their needs can be addressed and without various fields of design.</p> <p>These cards were created to assist in design processes that involve wild animal species living in proximity and overlap with human systems.</p> <p>The cards are divided into four categories offering guidelines to treating animals as clients of design: researching animals as a design context, integrating human-animal interactions and designing for co-existence.</p> <p>There is no wrong way to use the cards-find out what works best for you.</p> <p>I hope you find them helpful!</p> <p>for more info visit danimetcalf.com</p>	<p>HUMAN-ANIMAL INTERACTIONS Focusing on mutually beneficial interaction</p> <p>MULTISPECIES DESIGN</p>	<p>HUMAN-ANIMAL INTERACTIONS Focusing on mutually beneficial interaction</p> <ul style="list-style-type: none"> How does your design benefit animals as well as humans? Does it bring them closer together in a respectful way? <p>MULTISPECIES DESIGN</p>	<p>HUMAN-ANIMAL INTERACTIONS Soft reservation</p> <p>MULTISPECIES DESIGN</p>	<p>HUMAN-ANIMAL INTERACTIONS Soft reservation</p> <ul style="list-style-type: none"> Some degree of separation between the animal and human uses of a structure is sometimes needed to keep humans and animals safe. Can this separation be achieved by addressing human and animal behaviour? Can hard barriers be avoided to leave room for interaction? <p>MULTISPECIES DESIGN</p>	<p>HUMAN-ANIMAL INTERACTIONS Addressing existing cultural baggage</p> <p>MULTISPECIES DESIGN</p>	<p>HUMAN-ANIMAL INTERACTIONS Addressing existing cultural baggage</p> <ul style="list-style-type: none"> What are the stories we tell about the animal in the specific socio-cultural context? Can your design challenge misconceptions and misunderstandings regarding the animal? Can it generate new narratives that focus on co-habitation and reconciliation? <p>MULTISPECIES DESIGN</p>	<p>HUMAN-ANIMAL INTERACTIONS Avoiding domestication</p> <p>MULTISPECIES DESIGN</p>	<p>HUMAN-ANIMAL INTERACTIONS Avoiding domestication</p> <ul style="list-style-type: none"> Some wild animals can be turned into pets; this is not the goal in Multispecies Design. Respect the animal's wild nature and avoid design that may lead to domestication. <p>MULTISPECIES DESIGN</p>	<p>HUMAN-ANIMAL INTERACTIONS Opening communication channels</p> <p>MULTISPECIES DESIGN</p>	<p>HUMAN-ANIMAL INTERACTIONS Opening communication channels</p> <ul style="list-style-type: none"> Can your design help open up communication channels between humans and animals? Can it translate animal language and behaviour into cues understandable by humans and vice versa? <p>MULTISPECIES DESIGN</p>
<p>Image credits</p> <p>Extending responsibility: Illustration by Susanna Kopp Identifying needs: Illustration by Susanna Kopp Participatory animal design: Illustration by Charles Drake Representing animals in the design process: Source unknown Learning the science: Illustration by Charles Drake Multispecies Design Ethnography: Illustration by Charles Drake Proxy interviews: Illustration by Charles Drake Identifying animal spokespersons: Illustration by Charles Drake Somatic design research: Photo by Michael Mautz Representing animals in society: Illustration by Michael Mautz Focusing on mutually beneficial interaction: Illustration by Kristin Wehrli Soft reservation: Illustration by Kristin Wehrli Addressing existing cultural baggage: Illustration by Kristin Wehrli Avoiding domestication: Illustration by Kristin Wehrli Opening communication channels: Illustration by Kristin Wehrli Seeking synergies: Illustration by Kristin Wehrli Open-ended design: Illustration by Kristin Wehrli Ecology of reference: Illustration by Kristin Wehrli Connectivity: Illustration by Kristin Wehrli Embrace complexity: Illustration by Kristin Wehrli</p>	<p>HUMAN-ANIMAL INTERACTIONS Seeking synergies</p> <p>MULTISPECIES DESIGN</p>	<p>HUMAN-ANIMAL INTERACTIONS Seeking synergies</p> <ul style="list-style-type: none"> Animals provide different ecosystem services in human habitats such as water filtering, pest control and weed removal. Try to look for synergies between the needs of humans and those of animals. <p>MULTISPECIES DESIGN</p>	<p>DESIGN LIKE AN ECOSYSTEM Open-ended design</p> <p>MULTISPECIES DESIGN</p>	<p>DESIGN LIKE AN ECOSYSTEM Open-ended design</p> <ul style="list-style-type: none"> Think of your design as part of an ever-changing system and accept that you will not have full control over all its outcomes. Can your design follow and change according to natural processes such as ecological succession, weathering and climate change? <p>MULTISPECIES DESIGN</p>	<p>DESIGN LIKE AN ECOSYSTEM Ecology of reference</p> <p>MULTISPECIES DESIGN</p>	<p>DESIGN LIKE AN ECOSYSTEM Ecology of reference</p> <ul style="list-style-type: none"> Some animals and plants are "pre-adapted" for certain conditions in urban environments because of their similarity to natural features. When addressing a specific area or feature in a built environment try to find your ecology of reference, i.e. a natural ecosystem with similar morphological, chemical or climatic features. <p>MULTISPECIES DESIGN</p>	<p>DESIGN LIKE AN ECOSYSTEM Connectivity</p> <p>MULTISPECIES DESIGN</p>	<p>DESIGN LIKE AN ECOSYSTEM Connectivity</p> <ul style="list-style-type: none"> Grey features in urban areas are often adjacent or in proximity to green ones. Can your design intervention help connect separated green areas and increase habitat connectivity? <p>MULTISPECIES DESIGN</p>	<p>DESIGN LIKE AN ECOSYSTEM Embrace complexity</p> <p>MULTISPECIES DESIGN</p>	<p>DESIGN LIKE AN ECOSYSTEM Embrace complexity</p> <ul style="list-style-type: none"> Complexity on all levels often leads to more biodiversity. Include complexity of form and materials in your designs to offer more diverse options and niches for animals. <p>MULTISPECIES DESIGN</p>

תודה!