

COVID -19: Agony and Opportunity

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Agony Predicted

“The much darker story remains to be told, probably not about this virus [SARS-CoV-1 in 2003] but about another. When the Next Big One comes, we can guess, it will likely conform to the same perverse pattern, high infectivity preceding notable symptoms. That will help it to move through cities and airports like an angel of death.”

- David Quammen, *Spillover: Animal Infections and the Next Human Pandemic* (London: Vintage, 2013), 208.



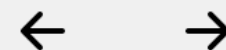
Global Cases
123 810 630

COVID-19 Agony

Global Deaths
126 411

Cases by Country/Region /Sovereignty

| | |
|------------|----------------|
| 29 870 995 | US |
| 12 047 526 | Brazil |
| 11 686 796 | India |
| 4 424 595 | Russia |
| 4 358 910 | France |
| 4 315 603 | United Kingdom |
| 3 390 181 | Italy |
| 3 228 803 | Spain |
| 3 035 338 | Turkey |
| 2 683 110 | Germany |



Lagre side som ...
Lagre side til Pocket
Send siden til enhet
Vis bakgrunnsbilde

543 057 deaths
US

295 425 deaths
Brazil

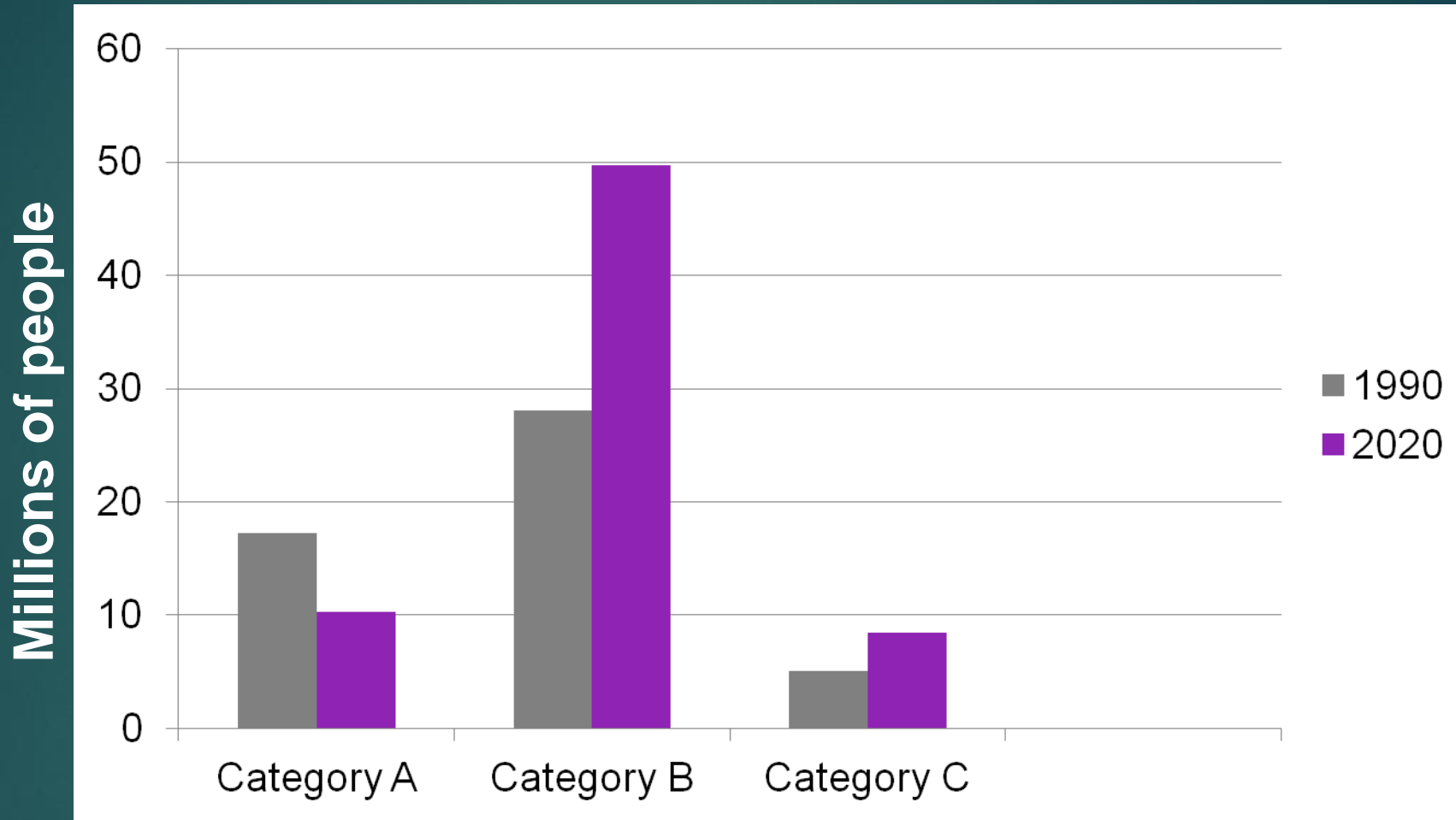
198 239 deaths
Mexico

160 166 deaths
India

126 411 deaths
United Kingdom

105 328 deaths
Italy

Global Trends in Human Mortality 1990-2020



Category A

Category B

Category C

communicable maternal, perinatal, and nutritional disorders

non-communicable disease

injury

A Future More Like the Past

1900

1950

1979

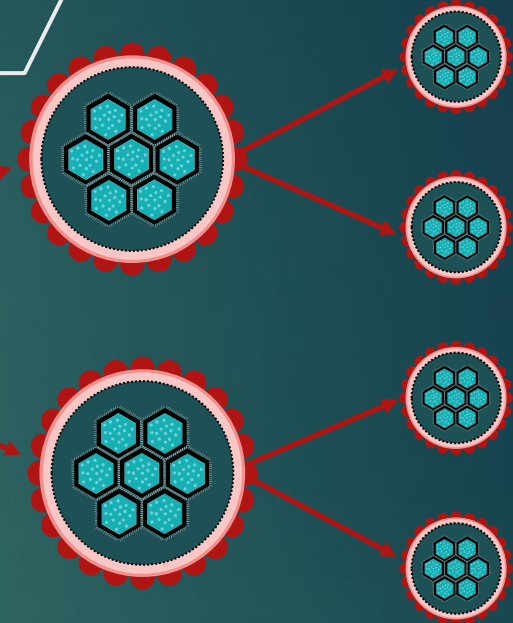
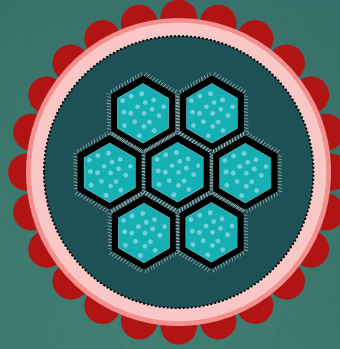
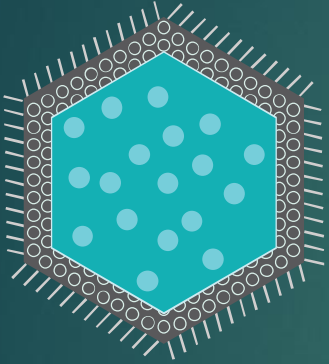
2019

Era of Infectious Disease

Era of “Lifestyle Disease”

Era of *Zoonotic*
Infectious
Disease

VIRUS TRANSMISSION AS ECOLOGY



VIRUS

CELL INFECTION

VIRUS
SPREAD

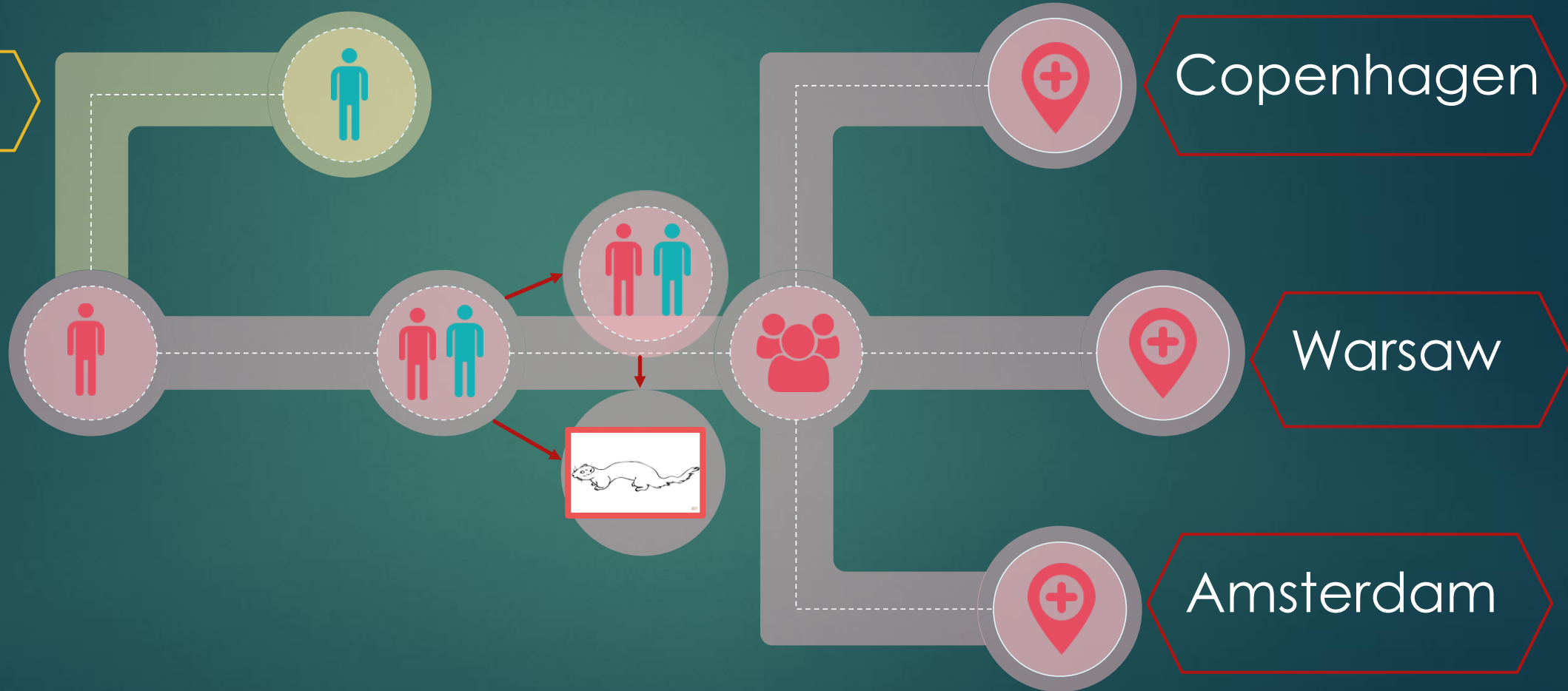
VIRUS SPREAD AS ECOLOGY

Wuhan



VIRUS SPREAD AS ECOLOGY

Wuhan



Copenhagen

Warsaw

Amsterdam

ZOONOTIC VIRAL ECOLOGY



Primary
Host

Intermediate
(amplifying)
host

Human
host

COVID-19

SARS-CoV-2



Inflammation, Immune cell recruitment



CXCLs, IL-6, IL-1

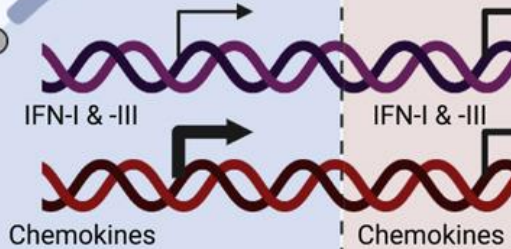
Low ISGs, Limited Antiviral State



IFN β , IFN λ



Viral RNA



IFN-I & -III

Chemokines

Inflammation, Immune cell recruitment

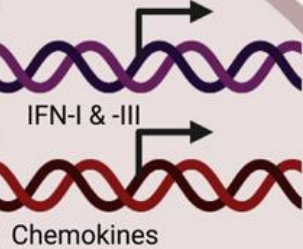


Chemokines

High ISGs, Potent Antiviral State



IFN β , IFN λ



IFN-I & -III

Chemokines

Common Respiratory viruses



Viral RNA



Immune Ecology

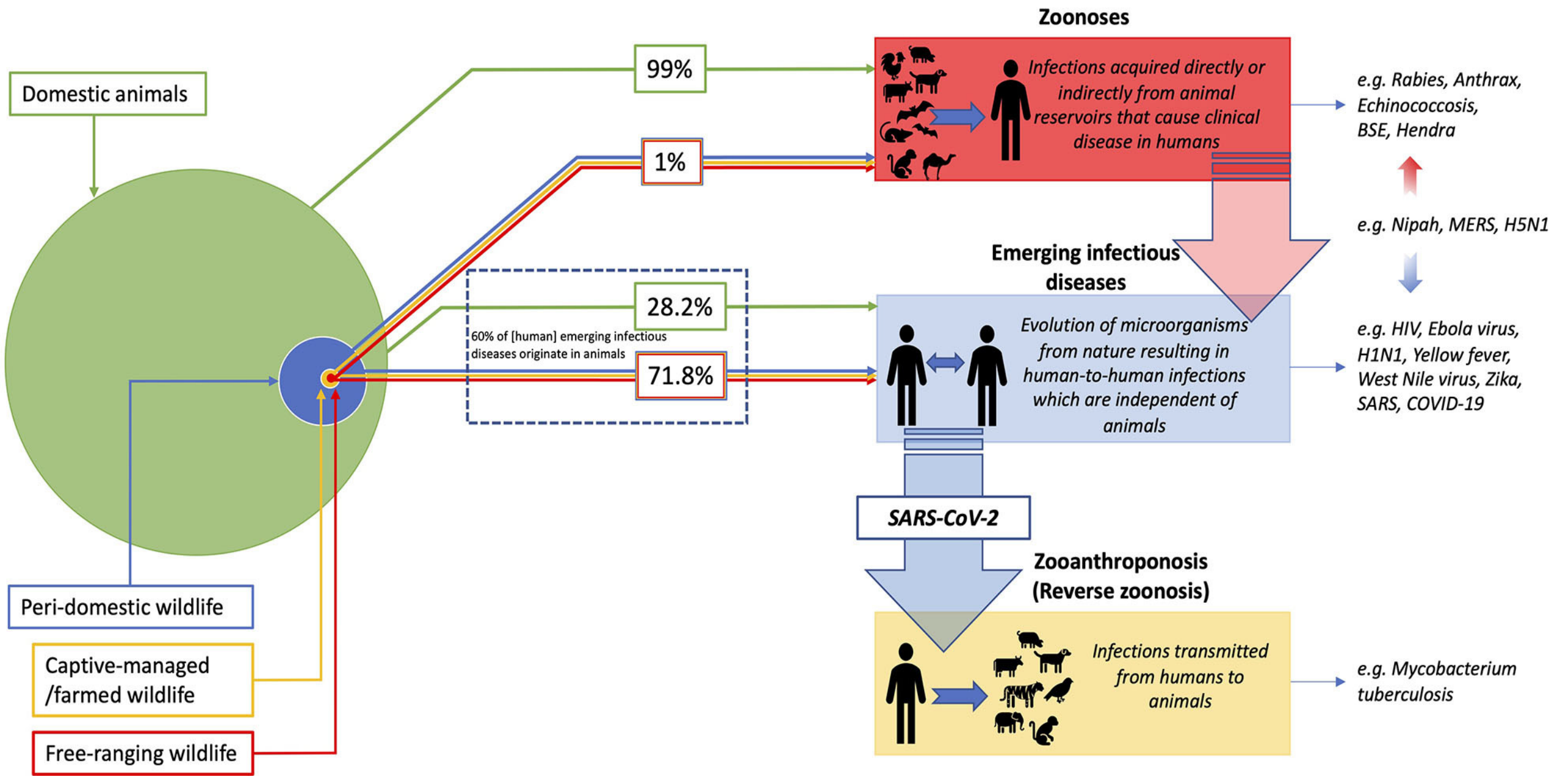
Agony with a Cause

“Make no mistake, they are connected, these disease outbreaks coming one after another. And they are not simply ***happening*** to us; they represent the unintended results of things we are ***doing***. They reflect the convergence of two forms of crisis on our planet. The first crisis is ecological, the second is medical.”

Quammen, *Spillover*, 39.



SPILLOVER



That's the salubrious thing about zoonotic diseases: They remind us, as St. Francis did, that we humans are inseparable from the natural world. In fact, there *is* no “natural world,” it's a bad and artificial phrase. There is only the world. Humankind is part of that world, as are the ebolaviruses, as are the influenzas and the HIVs, as are Nipah and Hendra and SARS, as are chimpanzees and bats and palm civets and bar-headed geese, as is the next murderous virus—the one we haven't yet detected.

Quammen, *Spillover*, 538.

“There Is Only the World”



Food systems are the most Important Issue for Biodiversity, Environment and One Health

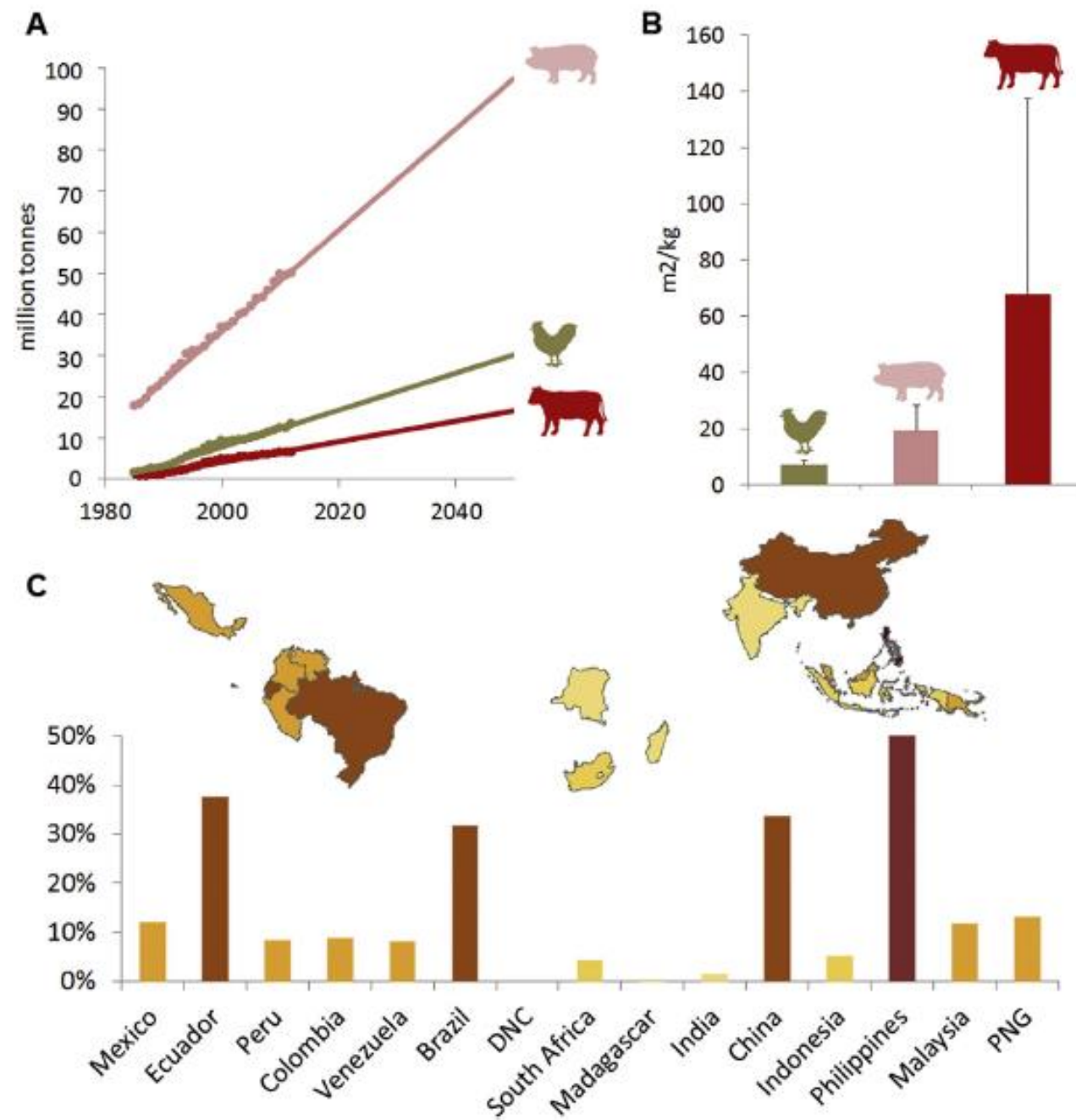


Fig. 3. Projected increases in area required to produce meat in developing megadiverse (DMD) countries by 2050. (a) Extrapolating recent (1985–2012) production data for beef, chicken, and pork (FAO, 2014) in each DMD country to 2050 (data for China shown) multiplied by (b) mean area required to produce livestock biomass (Röös et al., 2013) provides (c) an estimate of area in each country required to produce livestock in 2050 as a percentage increase beyond total current agricultural area (2012) (FAO, 2014). Agricultural area expansion needs can be met by internal expansion or by agricultural expansion in other countries and importation of feedcrops and/or meat products. This analysis addresses only beef, chicken, and pork. It does not include eggs, other meat sources, or dairy, which would increase area projections.

From Agony to Opportunity

1. Materiality
2. Faithfulness of God
3. Sabbath—especially the Sabbath Year
4. Ecological Hermeneutics
5. Compassion



Opportunity

#1 Materiality

[The] separation of the soul from the body and from the world is no disease of the fringe, no aberration, but a fracture that runs through the mentality of religion like a geologic fault. And this rift in the mentality of religion continues to characterize the modern mind, no matter how secular or worldly it becomes.

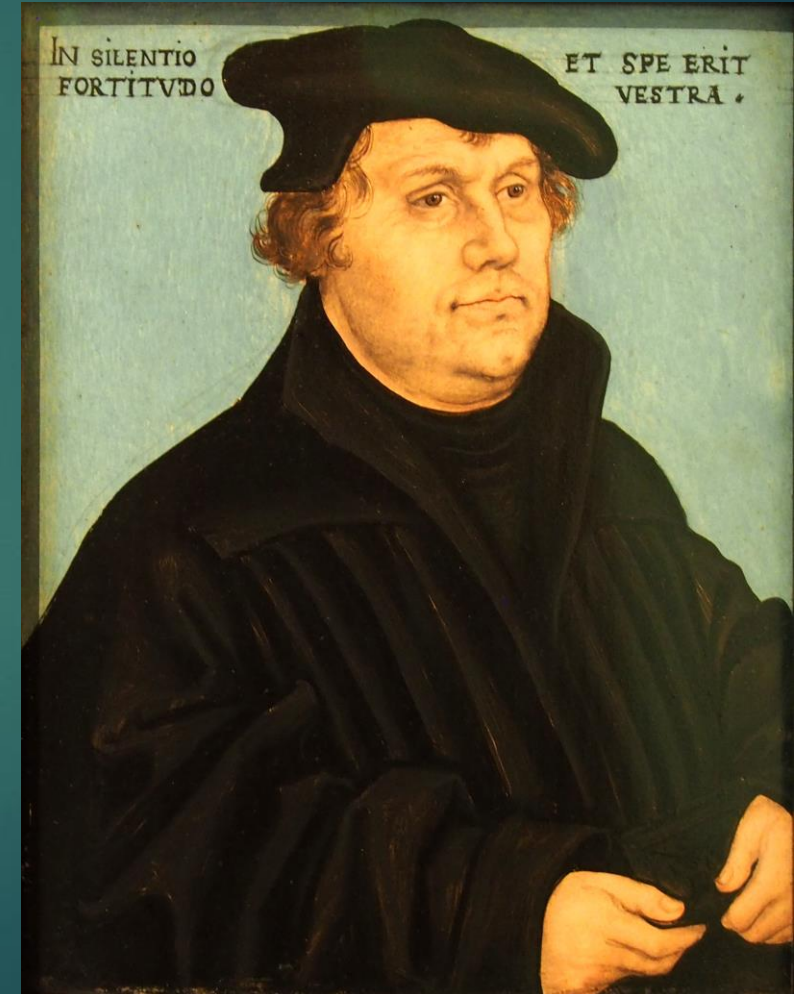
Wendell Berry, *The Unsettling of America: Culture and Agriculture* (New York: Avon Books, 1979), 108.



Opportunity

2 Faithfulness of God

I am not ashamed of the gospel, because it is the power of God for the salvation of everyone who believes: first for the Jew, then for the Gentile. For in the gospel a righteousness from God is revealed, ***a righteousness that is by faith from first to last***, just as it is written: ***“The righteous will live by faith”*** (Rom. 1:16-17, NIV).



God's Right-Making Revealed



For the right-making (*dikaiosynē*) of God
is revealed [*apokalyptetai*] in it
from faithfulness for faithfulness
(*ek pisteōs eis pistin*)
as it is written,
**The righteous shall live
by (my) faithfulness.**

(Rom 1:16-17, translation mine)

Opportunity

3 Sabbath (Sabbath Year)

“For six years you are to sow your fields and harvest the crops, but the seventh year you shall let it rest and lie fallow, so that the poor of your people may eat; and what they leave the wild animals may eat. You shall do the same with your vineyard, and with your olive orchard (Exod. 23:10–11).

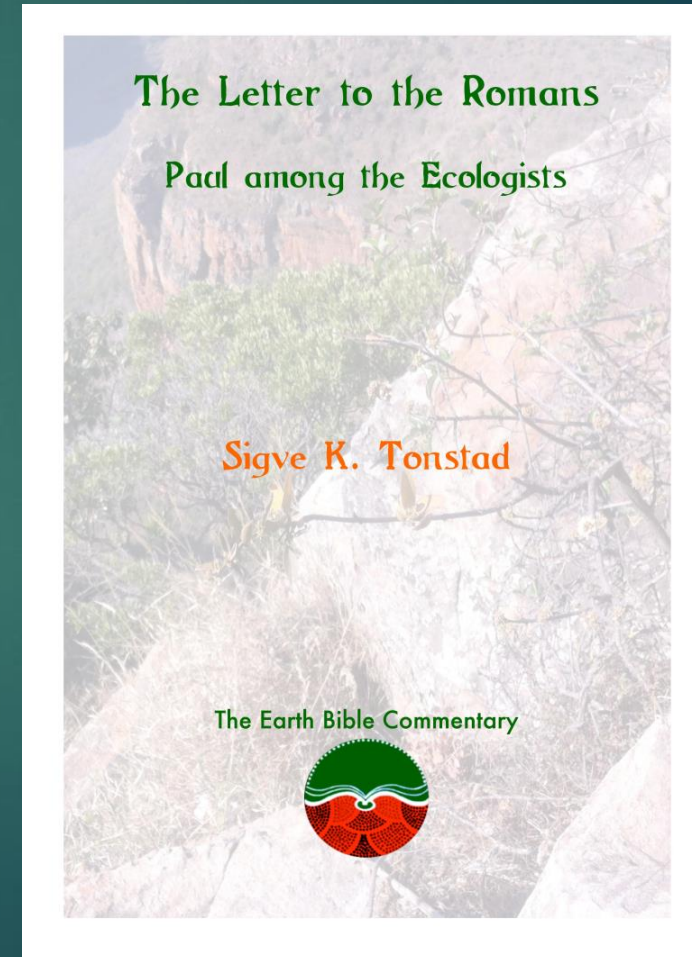
“The land is to have a year of rest” (Lev. 25:5).



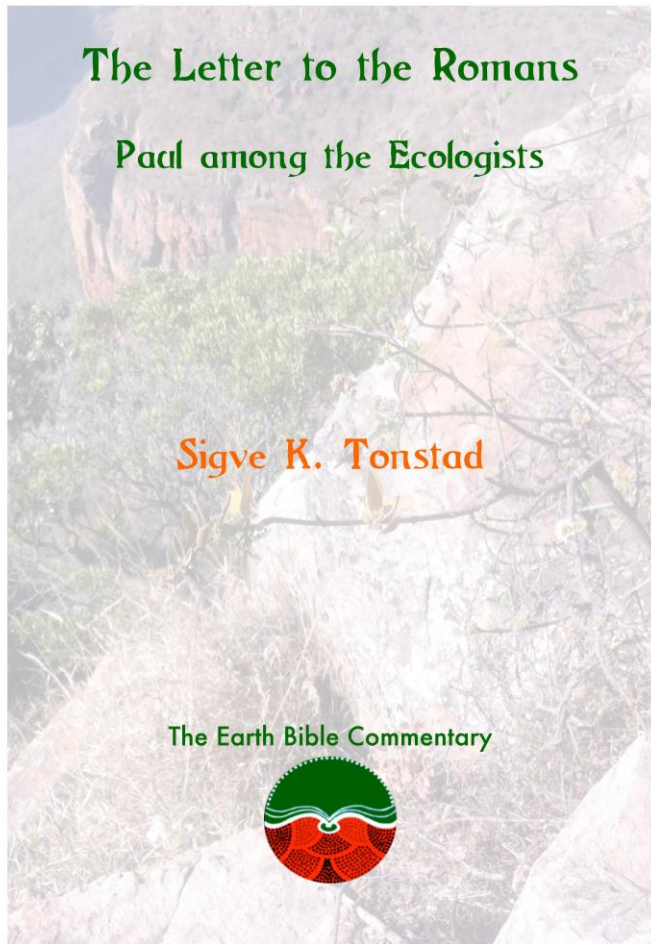
Opportunity

#4 Ecological Hermeneutics

- ❑ To “restore the ecological givenness that traditional interpretations have ignored or taken away” (p xi).



Crisis of Curriculum: Ecology and Theology



This commentary on Romans exemplifies how far ecological readings of the Bible have developed over the past 20 years. Cognizant of the problems of simply green-washing cherry-picked texts, Tonstad offers a serious study of this theologically dense and influential letter.

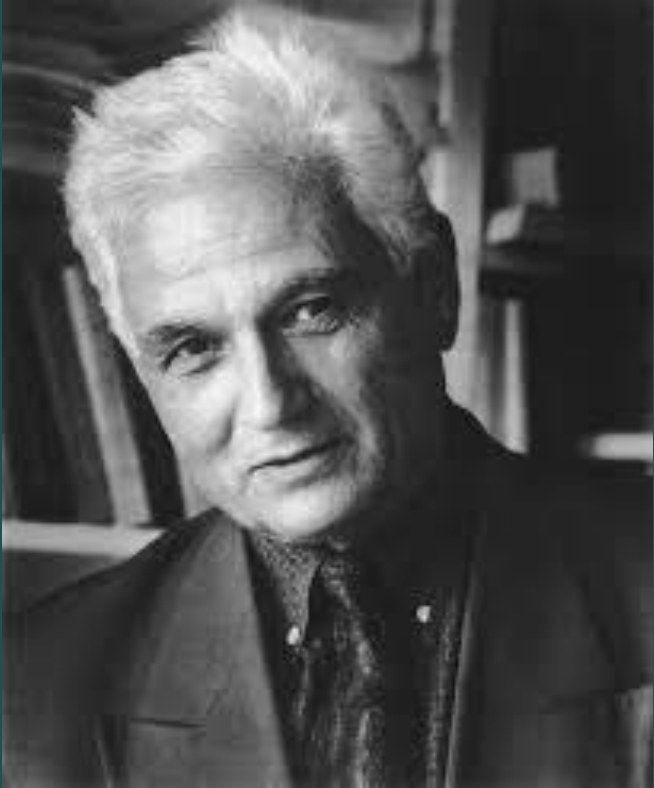
- Richard Goode, *Journal for the Study of the New Testament* 2018, vol. 40(5) 74-75

Tonstad has achieved a fresh reading of Paul and has included creative theological reflections that pertain to modern ecological concerns.

- James R. McConnell, *Review & Expositor* 2018, Vol 115(3) 422-423

Opportunity

5 Compassion



War is waged over the matter of compassion. This war is probably ageless . . . but it is passing through a critical phase. We are passing through that phase, and it passes through us. To think that war we find ourselves waging is not only a duty, a responsibility, an obligation, it is also a necessity, a constraint that, like it or not, directly or indirectly, no one can escape . . . The animal looks at us, and we are naked before it.

- Jacques Derrida (1930-2004), *The Animal That Therefore I Am*, p. 29.



Every body resisted (the
slaughterer) in its own fashion, tried
to escape and seemed to argue with
the Creator to its last breath.

— *Isaac Bashevis Singer* —

AZ QUOTES



"I did not become a vegetarian for my health, I did it for the health of the chickens."

Isaac Bashevis Singer

Nobel Laureate in Literature, 1978

Kafka: Stirrings of Compassion

Suddenly he began to speak to the fish in their illuminated tanks. “Now at last I can look at you in peace. I don’t eat you anymore.”

In Max Brod, *Franz Kafka: A Biography* (New York: Da Capo Press, 1995), p. 74.



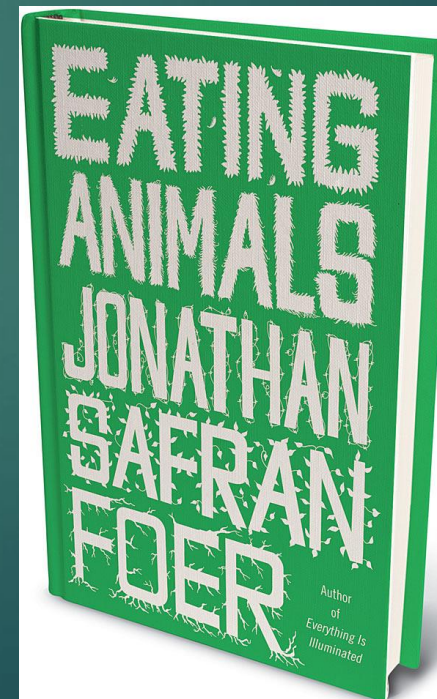
Waging War

“We have waged war, or rather let a war be waged, against all the animals we eat. This war is new and has a name: factory farming.”

Jonathan Safran Foer, *Eating Animals* (New York: Little, Brown, 2009), p. 33.

We have “focused the awesome power of modern genetic knowledge to bring into being animals that suffer *more*.”

Foer, *Eating Animals*, p. 159.



Compassion within the Community of Creation



But when the selfishness of taking the life of animals to gratify a perverted taste was presented to me by a Catholic woman, kneeling at my feet, I felt ashamed and distressed. I saw it in a new light, and I said, I will no longer patronize the butchers. I will no longer have the flesh of corpses on my table.

- Ellen G. White, Letter to Dr. Maxson, 1896

All Creation Groaning

We know that the whole non-human creation has been groaning in labor pains until now; and not only the non-human creation, but we ourselves, who have the first fruits of the Spirit, groan inwardly while we wait for adoption, the redemption of our body (Rom. 8:22-23, translation mine).



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