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## Changes from 20211231 to 20220208

Entire document: checked all external hyperlinks and updated their last referenced dates.

### Chapter 1, The Truth of Wisdom, second paragraph, footnote, the first sentence

"According to this "instrumental" approach to language, we use language to help us choose how to live well." was changed to:

"According to this "instrumental" approach to language, we use language to decide well in living well. We use conceptual tools for predicting well to solve given problems and those for explaining well to find better problems to solve."

### Chapter 1, The Truth of Wisdom, fourth paragraph

Changed "cheetahs" to "golden jackals" and "household cats" to "domestic dogs" in seventh sentence.

### Chapter 1, Ever More Complete Boundless Models, second paragraph, footnote

Changed "his most famous work (A Theory of Justice," to "In A Theory of Justice, (" in the first sentence.

## Chapter 1, Ever More Complete Boundless Models, fourth paragraph, footnote

Removed quotation marks around "Completeness" (2 occurrences).

### Chapter 1, The Learning Age, last paragraph

Changed "cybernetics" to "the science of goal-seeking (cybernetics)" in the second sentence.

### Chapter 1, The Learning Age, last paragraph, footnote

"For more on cybernetics, particularly on the differences between the ends of first-order, higher-order, and infinite-order cybernetics, see the scope of game theory section of the chapter on competing well." was changed to:

"Information theory and cybernetics both use the concept of "surprise" to do practical work. In information theory, a surprise conveys information. In cybernetics, it conveys information about the need to take corrective action. For more on cybernetics in this work, see the section on the scope of game theory in the chapter on competing well. For a history of the rise and fall of the cybernetic movement in modern science, read *The Cybernetics Moment: Or Why We Call Our Age the Information Age* (Kline, R., Baltimore: Johns Hopkins University Press, 2015)."

#### Chapter 3, Boundless Explanations of Quantum Mechanics, third paragraph

"Physicists have been trying to explain these strange behaviors in a way that rings true with everything else they currently know for as long as they have known about them. Most of these explanations fall into one of three basic classes. These are the *Copenhagen class*, the *hidden variables class*, and the *many worlds class*." was changed to:

"Physicists have been trying to explain these two strange behaviors in a way that rings true with everything else they know about physics for as long as they have known about them. Most of these explanations fall into one of three basic classes. These are the *Copenhagen class*, the *hidden-variables class*, and the *many-worlds class*."

#### Chapter 3, Boundless Explanations of Quantum Mechanics, fifth paragraph

"A defining feature of the hidden variables class is the belief that we will eventually be able to predict the behavior of individual quantum-level objects with certainty, which implies that the hidden variables that explain what we currently conceive as entanglement are local. This claim contradicts Bell's theorem, which states that local variables cannot explain everything quantum mechanics predicts. Decades of experiments have failed to disprove this theorem."

was changed to:

"A defining feature of the hidden-variables class is the claim that it is possible to predict the behavior of individual quantum-level objects with certainty. Doing so may call for knowledge of the position, condition, and rules governing all objects in the world. This level of knowledge rings true with Einstein's belief that "God does not play dice." Whether people will ever predict such behavior successfully is another matter. Bell's theorem, which has survived decades of experiments, states that local variables can never explain everything quantum mechanics predicts."

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## Chapter 3, Boundless Explanations of Quantum Mechanics, sixth paragraph

Changed "many worlds" to "many-worlds" and "our world" to "the world we perceive ("our world")" in the first sentence.

### Chapter 3, Boundless Explanations of Quantum Mechanics, last paragraph, last three sentences

"The concept of time here is absolute. This rings true with entanglement and people's ability to cooperate across space and time. As a tool for explaining how best to decide well, this concept of time does not compete with concepts of time for predicting well."

were promoted to a new paragraph and changed to:

"Note that the concept of time in this *normative* class of interpretations is absolute. This is logically consistent with entanglement and people's ability to cooperate across space and time in deciding well in living well. It is also logically consistent with the need to remove ever more waste from this process. However, it is not consistent with the claim that it is wise to invest in all research projects removing this waste. Deciding well calls for investing in research projects *well*."

### Chapter 3, Boundless Explanations of Quantum Mechanics, first paragraph

Changed "deciding well hinders" to "explaining well hinders" in the first sentence.

## Chapter 7, An Extraordinary Anomaly, fifth paragraph

"In addition to being a pioneer in game theory, von Neumann was a pioneer in the science of goal-seeking (*cybernetics*). He contributed to both first-order cybernetics (seeking well-defined ends, e.g., missile guidance) and higher-order cybernetics (seeking ill-defined ends, e.g., biological fitness). In seeking the mathematics of reason, he sought the rules underlying the whole of science. From the boundless view, he sought the reason of *infinite-order* cybernetics, of seeking the transcendent end of deciding well by breaking this end into transcendent factors. In terms of the boundless view, he sought boundless reason." was changed to:

"In addition to being a pioneer in game theory, von Neumann was a pioneer in *cybernetics* (the science of goal-seeking). He contributed to both *first-order* cybernetics (seeking well-defined ends, e.g., missile guidance) and *higher-order* cybernetics (seeking ill-defined ends, e.g., biological fitness). In seeking the mathematics of reason, he sought the rules underlying deciding well in living well (the whole of science). Regrettably, he died before completing this work.

"From the boundless view, von Neumann sought the reason of infinite-order cybernetics, of seeking the transcendent end of deciding well in living well by breaking this end into transcendent factors. In terms of the boundless view, he sought boundless reason."

## Chapter 7, The Grandest Possible Strategy, last paragraph

Deleted the sentence: "It calls for making our national goal deciding well." Changed "it also" to "this strategy" in the last sentence.

## Appendix A, The Big Picture, third paragraph, last blockquote

Changed "deciding well" to "deciding well in living well" in the second sentence.

## Appendix A, Ideal Forms, third paragraph

Changed "those that ring true with modern worldviews" to "modern ones" in the second sentence. Changed "However, he appears to have" to "He" and "boundless factors of this pursuit" to "Wisdom" in the third sentence of the footnote.

## Appendix A, Ideal Forms, fourth paragraph

Changed "view, mathematics is a form of science, the science of forms. Rather" to "view, rather" in the first two sentences.

Changed "empirically" to "in living well empirically" in the new second sentence.

#### Appendix A, Ideal Forms, first two paragraphs

Deleted "The best forms (patterns) for deciding well are independent of our beliefs." from the first paragraph. Changed "deciding well" to "deciding well in living well" in the second paragraph (2 occurrences). Moved these two paragraphs to the end of the section.

#### Appendix B, Smoothing Flows, last paragraph

Changed "greatest new" to "most useful" in the fourth sentence.

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## Appendix C, The Forgotten Role of Octagons, third paragraph

Changed "poetry, philosophy, jurisprudence, and theology" to "poetry ("Beauty"), philosophy ("Wisdom" and "Truth"), jurisprudence ("Justice"), and theology ("Wholeness")" in the third sentence.

## Changes from 2022028 to 20220521

Entire document: checked all external hyperlinks and updated their last referenced dates. Also, changed "ever better [noun] to ever-better [noun] in all text (9 occurrences). Abbreviated Bronowski footnotes.

### Preface, second paragraph

Changed "boundless view" to ""boundless" view of this work" in the fourth sentence.

### Acknowledgments, last paragraph

Changed "learning in financial decision making" to "the design of a visually-oriented computer language for learning in financial decision-making" in the first sentence.

### Introduction, eighth paragraph, last three sentences

"In this, they are like the details in compendious drawings of Mount Fuji. Bold strokes define the scene. Details help us to make sense of it."

were changed to:

"In this, they are like the details in compendious drawings of Mount Fuji in which perspectives and seasons change but the mountain itself does not. Bold strokes define the scenes. Details help us to make sense of them."

## Chapter 1, Frames Useful in Deciding Well, first two paragraphs

Changed "philosophical terms" to "modern Western philosophical terms" in all (2 occurrences).

## Chapter 1, The Wisdom of Effectiveness, second paragraph

Changed "include" to "include logical contradictions," in the third sentence.

#### Chapter 1, The Wisdom of Wisdom, last paragraph

Changed "disprove it is" to "disprove it is a member" in the third to last sentence.

## Chapter 1, The Truth of Wisdom, fourth paragraph

Changed "were" to "are" in the second and seventh sentences (2 occurrences).

#### Chapter 1, Ever More Complete Boundless Models

Changed title to "Ever-More-Complete Boundless Models."

Changed "better (more wisely)" to "more wisely" in the first sentence.

## Chapter 1, Ever-More Complete Boundless Models, last paragraph, last two sentences

"In the end, all that we presume is True in the science of deciding well is the reason underlying it. For a 500-year-old depiction of an instance of this universal form of reason, see Appendix C (Renascent Art)." were changed to:

"At the limit of imagination, all that we presume is True is the ideal set of basic rules for refining everyday thinking. In mathematical terms, members of this set are the axioms of the science of deciding well. For a 500-year-old depiction of a partially refined version of this ideal set of rules, see Appendix C (Renascent Art)."

#### Chapter 1, The Learning Age, last paragraph

Changed "theory of information" to "information theory" in the first sentence.

Deleted "the concept of" from the second sentence.

Added the following footnote to the end of the third sentence:

"13 During Ronald Reagan's second term, USA Secretary of State George Schultz reputedly asked USSR Foreign Secretary Eduard Schevernaski how the Soviet government planned to adapt to accelerating change while restricting access to fax machines and personal computers. Since then, the need to adapt quickly has shaken apart many centrally-planned political and economic organizations, beginning with the most sclerotic. Similarly, the Learning Age's insatiable demand for good people and good products promises to shake apart foolish cultural institutions and practices, likely starting with the most corrupt and corrupting."

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## Chapter 2, introduction, first paragraph

Changed "constraints in learning to live ever more wisely" to "mistakes in doing so" in the second sentence.

## Chapter 2, introduction, second paragraph, footnote

Changed "members of the Austrian School of evolutionary economics" to "leaders of the Austrian School (of evolutionary economics)" in the fourth sentence.

Changed "Austrian economist F. A. Hayek" to "F. A. Hayek" in the fifth sentence.

Changed "the science of forms, hence in the whole of science" to "science" in the last sentence.

## Chapter 2, Pleasure and Pain, fourth paragraph, last sentence

"This is good when we find pleasure in activities that are good for us, such as eating healthy foods, but bad when we find pleasure in things that are bad for us or others, such as masochistic or sadistic acts." was changed to:

"This is good when we find pleasure in such activities as eating healthy foods but bad when we find them in such activities as inflicting pain for the pleasure of inflicting pain."

## Chapter 2, Trust, second paragraph

Deleted "by lowering the cost of protecting knowledge" from the first sentence.

Changed "easily copy many forms of knowledge, which makes them" to "copy many forms of knowledge easily, which makes these forms" in the third sentence.

Changed "the theft" to "its theft" in the fourth sentence.

Changed "The" to "Further, the", "knowledge" to "knowledge resources", and "material resources as evidence and precedents are less clear-cut" to "material ones" in the fifth sentence.

Changed "using knowledge" to "using it" in the last sentence.

## Chapter 3, Three Approaches to Policy, second paragraph

Italicized "live well" in the first sentence.

## Chapter 3, Three Approaches to Policy, third paragraph

Italicized "decide well" in the first sentence.

## Chapter 3, The Beauty of Self-Referential Science, fifth paragraph

Italicized "certainty equivalents" in the fourth sentence.

Changed "is the better" to "is currently the better" in the last sentence.

#### Chapter 3, The Beauty of Self-Referential Science, both subsections

Changed "like" back to "as" where appropriate (8 occurrences).

## Chapter 3, Boundless Explanations of Quantum Mechanics, fourth paragraph

Changed "know" to "accurately know" in the first sentence.

## Chapter 3, Boundless Explanations of Quantum Mechanics, last paragraph, second to last sentence

"This is logically consistent with entanglement and people's ability to cooperate across space and time in deciding well in living well. It is also logically consistent with the need to remove ever more waste from this process. However, it is not consistent with the claim that it is wise to invest in all research projects removing this waste. Deciding well calls for investing in research projects well." was changed to:

"This is consistent with entanglement and people's ability to cooperate across space and time in deciding well. It is also consistent with the need to refine our knowledge of deciding well *wisely*. Within the *problem-finding part* of grand strategies for deciding well, it is context "all the way up" to an ideal set of axioms, not theories "all the way down" to an ideal theory of everything."

#### Chapter 3, Expect Sudden Transitions to More Fluid Cultures, second paragraph

"From a modern view, we might begin to understand these phase transitions by gradually replacing sand grains in Per Bak's sandpile experiments with spheres of similar size and weight. However, this ignores learning from the example of others. From the boundless view, we might begin with sensitivity analysis of learning, forgetting, and revealing deceit functions in agent-based computer simulations. Such analysis can help us choose where best to invest in learning."

was demoted to a footnote.

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## Chapter 3, Expect Sudden Transitions to More Fluid Cultures, last paragraph

"A potentially fruitful research area concerns how ignoring the distinction between reductionist theories for predicting well and holistic theories for explaining well hinders deciding well. In general, engineering approaches to policymaking promote preferred behaviors, and modern evolutionary approaches protect established ones. From the boundless view, the most pernicious abuses of science are those in which people pursuing personal ends use reductionism to deceive others. Knowledge of boundless reason can help people see through such deceit. Boundless reason can help people identify defectors in the game of deciding well in living well."

was appended to the last footnote in the last chapter and changed to:

"Seats of power here include those occupied by scientists, particularly those who misuse reductionist models to achieve purely personal ends. Boundless reason can help people see through such deceit by helping them identify defectors in the game of deciding well."

## Chapter 5, Liberalism, last paragraph

Changed "look to" to "seek" in the last sentence.

### Chapter 5, The Explicit Experiment, last paragraph

Appended the following sentence to the end of the paragraph

"Evidence of this possibility includes Gabriel over the Whitehouse, the 1932 fascist film financed by William Randolph Hearst and recommended by Franklin Delano Roosevelt."

## Chapter 5, Liberalism, last paragraph

Changed "like fully human beings" to "as fully human beings decide" in the last sentence.

### Chapter 6, Maslow's Spiritual Needs, last paragraph

Changed "were living fully human lives" to "to be living fully human lives" in the third sentence.

Changed "the set of spiritual needs, which contain those things we need to be fully human," to "these spiritual needs" in the last sentence.

#### Chapter 6, Schweitzer's Mystical Oneness, first paragraph, first two sentences

"Unlike Maslow, Albert Schweitzer boldly identified our highest need as the need for union with the infinite Being. He called this the need for "mystical oneness.""

was changed to:

"Unlike Maslow, Albert Schweitzer boldly identified our highest need as the need to link or relink with something infinitely larger than ourselves. He called this object *the infinite Being* and union with this object *mystical oneness*."

#### Chapter 6, Einstein's Twin Warnings, first paragraph

Changed "something infinitely greater than ourselves," to "the infinite Being" in the second sentence.

#### Chapter 7, An Extraordinary Anomaly, second paragraph

Changed "symmetry, but he failed" to "symmetry but failed" in the first sentence.

Changed "find problems based on the belief" to "believe" in the second sentence.

## Chapter 7, An Extraordinary Anomaly, third paragraph

Changed "(rules)" to "(basic rules)" in the first sentence.

#### Chapter 7, An Extraordinary Anomaly, fifth paragraph

Changed "deciding well in living well (the whole of science)" to "the whole of science" in the third sentence.

## Chapter 7, The Scope of Strategy, first paragraph

Changed "north and south" to "north" in the second sentence.

#### Chapter 7, E-M Theory, last paragraph

Changed "dog fighter" to "dogfighter" in the second to last sentence.

## Chapter 7, The Scope of Strategy, second paragraph

Changed "the special case" to "a special case" in the first sentence.

Changed "deciding" to "to decide" in the second sentence.

#### Chapter 8, Reunifying the Reason of Plato and Aristotle, last paragraph, footnote

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Changed "well" to "wisely" in all (3 occurrences). Changed "cells" to ""our" cells" in the last sentence.

### Chapter 8, Conclusion, second paragraph

Changed "to knowledge" to "to have knowledge" in the first sentence.

## Appendix B, Folding in Processes, eighth paragraph

Changed "including" to "which includes" in the last sentence.

## Appendix C, Imagining the Chief Designer, second to the last paragraph

Changed "alter knot pattern" to "alter decoration's knot pattern" in the last sentence.

## Changes from 20220521 to 20221015

Entire document: checked all external hyperlinks and updated their last referenced dates. Deleted two links to discontinued online Benjamin Franklin collected works references.

### Preface, first paragraph

Added "where deciding well is a matter of learning to decide ever more wisely" to the end of the fourth sentence. Added "in deciding well" to the end of the last sentence.

## Introduction, seventh paragraph

Added "where deciding well is a matter of learning to decide ever more wisely" to the end of the fourth sentence.

### Introduction, eighth paragraph

Changed "concept of beauty" to "formal concept of beauty" in the first sentence.

### Chapter 1, The Wisdom of Effectiveness, sixth paragraph, footnote

Changed "some" to "a given" in the first sentence.

### Chapter 1, The Truth of Wisdom, second to last paragraph

Changed "faceted models" to "models" in the fifth sentence.

#### Chapter 1, The Truth of Wisdom, second to last paragraph, footnote

Moved the footnote reference to the end of the sentence. Changed:

"8 Earlier versions of this work used the term 'multiplex' rather than 'faceted' to describe the complex (multiple-frame) model of deciding well. 'Multiplex' came from biologist Jack Cohen and mathematician Ian Stewart's book about the co-evolution of minds and environments, Figments of Reality: The Evolution of the Curious Mind (Cambridge, England: Cambridge University Press, 1997). Unfortunately, the authors overlooked the unity of virtue that emerges from removing waste from the process of deciding well." to:

"8 To call these timeless ends 'boundless factors of deciding well' suggests that the pursuits of these timeless ends are separate and distinct. They are not. In this respect, 'holographic facet' may be a better term, but it too has problems. Early versions of this work used the term 'multiplex' rather than 'faceted' to describe the complex (multiple-frame) model of deciding well. This term came from Jack Cohen and Ian Stewart's book about the co-evolution of minds and environments, Figments of Reality: The Evolution of the Curious Mind (Cambridge, England: Cambridge University Press, 1997). Regrettably, 'multiplex' expresses neither the existence nor "holographic" nature of the unity of virtue that emerges from removing waste from the process of deciding well."

## Chapter 1, The Truth of Wisdom, last paragraph

"We may call this complex approach to deciding well the boundless approach to deciding well, or simply the boundless approach. We also may call the complex view of this approach to deciding well the boundless view of deciding well, or simply the boundless view."

was changed to:

"We may call this complex approach to deciding well the boundless approach and the complex view of this approach the boundless view."

#### Chapter 1, The Truth of Wisdom, last paragraph, footnote, third and fourth sentences

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"Holographic facet' would better relate to the autostereogram metaphor used to describe the new paradigm of paradigms. However, this would likely lose people who do not understand holograms." was appended to the previous paragraph and changed to:

"In this respect, 'holographic facet' may be a better phrase, but it too has problems."

### Chapter 2, introduction, first paragraph

Changed "deciding well in the timeless pursuit of" to "the timeless pursuit of deciding well in" in the fifth sentence.

#### Chapter 3, Boundless Explanations of Quantum Mechanics, sixth paragraph, footnote

Changed "This" to "Recognizing the existence of this" in the fifth sentence.

## Chapter 3, Boundless Explanations of Quantum Mechanics, last paragraph

Changed "forms (including axioms)" to "forms" in the last sentence.

## Chapter 4, Refining Finding Problems to Solve, third paragraph, footnote

Changed "popular modern evolutionary" to "prevailing modern" in the last sentence.

## Chapter 4, Testing the Boundless Approach, paragraph

Changed "essential set of beliefs that support" to "set of rules of reason underlying" in the second sentence. Changed "beliefs" to "rules" in the last sentence.

### Chapter 7, An Extraordinary Anomaly, second to the last paragraph

Changed "transcendent" to "timeless" in the first sentence (2 occurrences).

## Chapter 5, Promoting Savings for Welfare, first paragraph

Changed "decide well" to "decide well, especially the ability to reason well" in the fourth sentence.

## Chapter 8, Proving Boundless Reason, title

Changed "Proving" to "Testing" in the section title.

### Chapter 8, Reunifying the Reason of Plato and Aristotle, last paragraph, first footnote

Changed "senescent and harmful" to "harmful (including senescent)" in the last sentence.

## Appendix A, headings

Restored the second heading from the first edition (deleted on 31 December 2017):

"In mathematics, the art of proposing a question must be held of higher value than solving it."—Georg Cantor"

"Georg Cantor, "De aequationibus secundi gradus indeterminatis" (Doctoral dissertation, University of Berlin, 1867)."

#### Appendix A, Ideal Forms, first paragraph

Changed "toward" to "and apriorism toward pragmatism and" in the first sentence.

Changed "empiricism and idealism" to "these qualities" in the second sentence.

### Appendix C, introduction, last paragraph, footnote, last two sentences

"The inspiration for seeing the decoration of the whole room came from this book. Its meaning did not." was changed to:

"The inspiration for considering the decoration of the whole room and much of the meaning of its details came from this book. The key role of octagons and its holy/holistic meaning did not."

## Appendix C, Forgotten Role of Octagons, third paragraph

Changed "form a cross" to "form a Greek cross" in all (2 occurrences).

## Appendix C, Forgotten Role of Octagons, last paragraph

Changed "central relation between Holy Wisdom and the fifth element" to "relation between Holy Wisdom and the fifth element at the center of the ceiling" in the first sentence.

## Appendix C, On the Theology Wall, first paragraph

Changed "the church's role on earth (the monstrance on the alter)" to "the monstrance on the altar" in the first sentence.

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### Appendix C, On the Theology Wall, first paragraph, last sentence

"Visually linking this wall's four circles to the ceiling's theology circle creates a matching Latin and Greek cross pattern on the ceiling with the Latin cross grounded in the monstrance on the altar and its center the crossed-key symbol of Vatican authority."

was changed to:

"Matching the Holy Spirit's cross pattern is a much larger one created by connecting the wall's vertical axis to the ceiling's wall-aligned Greek cross. Grounding this Latin cross is the altar's monstrance, which represents the church's role on earth."

### Appendix C, A Boundless View of the Whole, second paragraph

Changed "the floor's coherence" to "the floor's coherence (as a whole)" in the last sentence.

## Appendix C, A Boundless View of the Whole, third paragraph

Italicized "its inner borders' curvilinearity represents the pretense of completeness found in all rational (logical) models that pretend to depict the best path forward" in the third sentence.

## Appendix C, Imagining the Chief Designer, fourth paragraph

Changed "two shorter walls" to "two narrower walls" in the second sentence.

## Appendix C, Endless Renascence, first paragraph

Changed "sense of natural beauty" to "sense of beauty" in the second sentence.

## Changes from 20221015 to 22021230

Entire document: checked all external hyperlinks and updated their last referenced dates. Added additional information about public domain images.

## Preface, third paragraph

Changed "to learn" to "how to learn" in the fifth sentence.

#### Chapter 2, Three Common Mistakes, second paragraph

Changed "has also" to "later" in the fifth sentence.

## Chapter 3, Boundless Explanations of Quantum Mechanics, second paragraph

Changed "changes" to "by measuring it changes" in the fifth sentence.

#### Chapter 5, The Explicit Experiment, fourth paragraph

Changed "Perhaps the most eloquent defender of this competing story is" to "One of the most eloquent advocates for this competing story was" in the third sentence.

## Chapter 6, Worldly Benefits of Detachment, last paragraph

Changed "now mythic" to "legendary" in the second sentence.

#### Chapter 7, An Extraordinary Anomaly, second paragraph

Changed "symmetry" to "timeless symmetry of the science" in the first sentence.

### Chapter 7, The Scope of Strategy, first paragraph

Changed "this" to "the popularity of this" in the last sentence.

#### Chapter 7, E-M Theory, second paragraph

Changed "Robert McNamara's F-111B" to "the naval version of the F-111" in the fourth sentence.

#### Chapter 7, The Scope of Evolution, first paragraph

Changed "cooperate" to "cooperate in pursuing the timeless end of deciding well" in the first sentence.

#### Chapter 7, The Scope of Evolution, second paragraph

Changed "cooperate" to "cooperate in pursuing the timeless end of deciding well" in the first sentence.

#### Appendix A, introduction, fourth paragraph

Changed "computer using an object-oriented programming language" to "computer" in the second sentence.

## Appendix A, Ideal Forms, second paragraph

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Changed "scheme for describing" to "scheme for representing" in the last sentence.

### Appendix C, The Forgotten Role of Octagons, second paragraph, footnote

"High-resolution photographs of this room are available online, e.g., Wikipedia <a href="http://en.wikipedia.org/wiki/Raphael\_Rooms">http://en.wikipedia.org/wiki/Raphael\_Rooms</a> (24 August 2022)." changed to:

"All images of this room were derived from Wikimedia Commons high-resolution images,

<a href="http://en.wikipedia.org/wiki/Raphael\_Rooms">http://en.wikipedia.org/wiki/Raphael\_Rooms</a> (24 December 2022). This includes the front cover and front matter images but not the nested octagon-within-square drawings (e.g., the back cover image), which are original."

(Paperback version includes the original work sentence on the copyright page rather than in this footnote.)

## Appendix C, A Boundless View of the Whole, third paragraph

Changed "position relative to the doors" to "symbology and position in the room" in the first sentence. Changed "interpretation rings" to "rings" in the last sentence.

## Appendix C, The Problem of Heraclitus, second paragraph, fifth sentence (in front of the colon):

Added the footnote: "5 This image was derived from a high-resolution Wikimedia Commons image, <a href="https://en.wikipedia.org/wiki/Vitruvian\_Man">https://en.wikipedia.org/wiki/Vitruvian\_Man</a> (24 December 2022)."

## Changes from 20221230 to 20221231

#### Entire document

Changed "deciding well in living well" to "deciding well" (9 occurrences). Arguably, the former appears to favor living well over linking well. (See chapter on Linking Well.)

## Acknowledgments, third paragraph

Changed "social scientists tell many stories about complex phenomenon, and that economists do not do dynamics well" to "economists do not do dynamics well and that social scientists tell many stories about the same complex phenomenon" in the fifth sentence.

## Chapter 7, The Scope of Evolution, second paragraph, footnote

Changed "yet unborn" to "future" in the fourth sentence.

#### Chapter 7, The Scope of Evolution, second paragraph, footnote, end

Added the sentence:

"In doing so, they will also make their people less attractive targets for such attacks."

#### Recent Changes to 20221231 version

#### All but Chapter 5 and Appendix A (3/25/2024)

Changed "Further," to "Furthermore," in all (9 occurrences).

# Chapter 1, Heading, quote reference (11/30/2024)

Changed "as Master Teacher Kong (Confucius)" to "in the West as Confucius (Master Teacher Kong)" in the last sentence.

## Chapter 1, Choosing Frames Well, first paragraph (12/24/2023)

Changed "learning from experience" to "learning" in the first sentence.

## Chapter 1, The Wisdom of Effectiveness, sixth paragraph (7/22/2024)

Changed "turns simple closed-ended problems into complex open-ended ones" to "creates overwhelmingly complex open-ended problems" in the last sentence.

## Chapter 4, Modern Policy Mistakes, sixth paragraph (10/27/2023)

Changed "self-similar relation between temporal and boundless ends in deciding well, we may speculate that these networks are at least weakly fractal" to "noisy" relation between chosen temporal ends and the

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boundless end of deciding well, we may speculate that these networks are at least somewhat fractal" in the second to last sentence.

### Chapter 7, Heading, quote reference (11/30/2024)

Changed "as Master Sun (Sunzi or Sun Tze)" to "as Sunzi or Sun Tze (Master Sun)" in the last sentence.

## Chapter 7, An Extraordinary Anomaly, second to last paragraph (8/28/2024)

Changed "by breaking this end into timeless factors. In terms of the boundless view" to "In short" in the last sentence.

## Chapter 7, Scope of Strategy, first paragraph (6/6/2024)

Changed "the north" to "flank attacks" in the second sentence.

## Chapter 7, E-M Theory, first paragraph (6/22/2024)

Deleted "at the Fighter Weapons School" from the third sentence.

## Chapter 7, The Grandest Possible Strategy, first paragraph, footnote (10/21/2024)

"14 Boyd was aware of the logical contradictions that applying his strategy to itself would create. He avoided this problem by taking a postmodern approach to learning. For more about Boyd's approach, read Frans Osinga's *Science, Strategy and War: The Strategic Theory of John Boyd* (New York: Routledge, 2007)." was deleted.

# Chapter 7, The Grandest Possible Strategy, last paragraph (1/30/2024)

Deleted "described in this work" from the first sentence.

Changed "In light of" to "Not forgetting" in the last sentence.

## Chapter 8, ABRIDGED VERSION ONLY, Testing Boundless Reason, last paragraph, end

Added the footnote: "\*\* A complexity science adage states that when you find a power-low distribution, look for an underlying self-similar process. For more about this possibility, see Benoit Mandelbrot and Richard Hudson, *The (Mis)behavior of Markets: A Fractal View of Financial Turbulence* (New York: Basic Books, 2004). Note that this curiously labeled footnote contains material found in the last footnote in the believing well chapter, which is not included in the abridged version."

## Chapter 8, Reunifying the Reason of Plato and Aristotle, first paragraph (9/7/2024)

Changed "best acquire this virtue using the science of science" to "use the science of science to acquire this virtue" in the second sentence.

#### Chapter 8, Reunifying the Reason of Plato and Aristotle, last paragraph (9/7/2024)

Changed "science of deciding well" to "self-referential science of deciding well" in the last sentence.

## Appendix A, Heading, Georg Cantor quote (6/15/2023)

Changed "proposing a question must be held of higher value than solving it" to "asking questions is more valuable than solving problems" in the quotation. Changed the name of his doctoral thesis to "A claim he defended in his doctoral examination." in the reference.

#### Appendix A, Heading, Georg Cantor quote reference (9/9/2023)

Changed "A claim" to An English translation of a claim" in the first sentence.

#### Appendix A, introduction, eighth paragraph, footnote (10/30/2024)

"Note that I2 in the first process and N2 in the second are line segments, which we may or may not classify as (degenerate) polygons. For simplicity, this analysis stops short of these two objects. Including them would add little to our understanding of the natural foundations of mathematics." was changed to: "Note that if we define polygons in terms of outside edges, line segments are degenerate (limiting case) polygons. For simplicity, this analysis stops short of these polygons (I3, Y3 using the replace-the-rightmost-vertex function, and N2). Including them in this example would add little to understanding the natural foundations of mathematics."

### Appendix C, Introduction, last paragraph, footnote (8/28/2024)

Changed "holy/holistic" to "boundlessly reasonable" in the last sentence.

## Appendix C, Imagining the Chief Designer, fourth paragraph (1/26/2024)

Changed "two narrower" to "jurisprudence and poetry" in the third sentence.