

# CYNEFIN<sup>®</sup>

weaving sense-making  
into the fabric of  
our world



**DAVE SNOWDEN & FRIENDS**

Illustrated by Sue Borchardt

“ We’ve moved from the age of enlightenment to the age of entanglement where sense-making aided by imagination is now more critical than ever. This book helps re-orient us to Dave’s critical insights on complexity theory beautifully framed by his Cynefin Framework. ”

John Seely Brown



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## DAVE SNOWDEN & FRIENDS

**Edited by Riva Greenberg and Boudewijn Bertsch**

**Commissioned by Sonja Blignaut and Zhen Goh | Illustrated by Sue Borchardt**

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Milica Begovic

Elmi Bester

Sonja Blignaut

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Mary E. Boone

Greg Brougham

Anne Caspari & Johann Entz-  
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Coughlin, Keith Johnston &  
Jim Wicks

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Lou Hayes Jr.

Steve Holt

Trent Hone

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Steve McCrone & Ian Snape

Anne McMurray

Anna Panagiotou

Ann Pendleton-Jullian

Viv Read

Kendra Rosencrans

Dave Snowden

Peter Stanbridge

John Turner & Nigel Thurlow

Jesko von den Steinen

Juanita Uribe & Andrés Jiménez

Simon Wardley

Gary Wong & Michael Cheveldave

Jules Yim

## ACCLAIM FOR CYNEFIN®

“For many years I have been asking Dave to write a book to explain the Cynefin Framework. A book would allow many of us to benefit from concepts such as distributed cognition, exaptation, and contextual coherence. It gives me enormous pleasure that this day has arrived. You are reading the “Cynefin” book. I fully expect it will establish the Framework far beyond Dave’s loyal network of followers whom he has managed to grow around him and his ideas, with his passion, endless generosity, and openness.”

*- Andrea Tomasini: CEO, agile42*

“We have all moved from the age of enlightenment to the age of entanglement where sense-making aided by imagination is now more critical than ever. This book on the 21st anniversary of Cognitive Edge helps re-orient us to Dave’s critical insights on complexity theory beautifully framed by his Cynefin Framework. It also highlights the community that has been built off of his thinking – on the ground wrestling with the ideas and practice that have been evolving over the past two continually disruptive decades. Dave is an edge-thinker and this is an edge community in the best sense – one that is deeply inspiring. I look forward to reading all of the pieces and continuing to follow the work being done at a moment when this thinking and practice are more critical than ever.”

*- John Seely Brown: Former Chief Scientist Xerox Corporation and Director of Xerox Palo Alto Research Center (PARC)*

“The Cynefin Framework has been highly influential for planners and decision makers. Also impressive is the range of interventions crafted by the Cynefin community. In addition, I frequently refer back to the research project on team sense-making that I did with Dave Snowden and Chew Lock Pin.”

*- Gary Klein: International expert on psychology and cognition. Author of Sources of Power, and Founder of Klein Associates and Shadowbox LLC*

“Knowledge of Cynefin should be required by leaders and decision makers in all organizations. I was trained as an engineer and led to believe there is only one way to approach a project; analyze and plan, resource and cost, implement, and finally operate and maintain. Good for building bridges as well as IT systems. But then why do large multi-stakeholders IT projects and attempts to transfer best practice

from one organization to another often appear as wicked problems? Cynefin provides the answer – context determines the approach and choosing the wrong option often leads to unintended consequences. Dave’s insights on the complex domain are especially relevant as more and more of the challenges we face in a hyper-connected digital world will fall into this category.”

*- Les Hales M.A.(Cantab): Chair, Innovation and Technology Committee, British Chamber of Commerce Hong Kong*

“I am an engineering scientist and I study and co-create engineering designers, design thinkers, and innovation ecosystems in my practice. Cynefin has been a useful navigational tool for me, especially in terms of the symbol systems narrative and administrative aspects of design in contrast to the physical, energy, and thermodynamic aspects. In addition, Dave has been a wonderful and engaged collaborator, as well as an excellent educator. This latter role has been well captured and preserved in Dave’s generosity in maintaining a living history of the development of Cynefin seen through various lenses - Dave (Physics, Theology), Cynthia Kurtz (Biology, Ecology), Max Boissot (Architecture, Information), Ikejuro Nonaka (Administrative Thinking, Information Flow) to name a few. This has allowed me to use Cynefin as a conceptual translational instrument between and within several disciplines. In a parallel manner, I have interacted with other members of his team at Cognitive Edge, in particular Zhen Goh, and I have seen how SenseMaker complements Cynefin, and can be used as a pragmatic translational tool to shift beliefs between and within different anthropologically defined populations. This combination of a deep scientific instrument and a generative technological tool, coming from the same person and organization is a rare occurrence, and I must tip my hat to Dave’s integrity in keeping the instrument, the tool, and the people together this long, in short, for his sacrifice and perseverance.”

*- Ade Mabogunje: Center for Design Research, Stanford University*

“This book makes a contribution to close the gap between theory and practice. It represents a valuable contribution to making the science of complexity more accessible for business practitioners. It is filled with rich text from different application situations to share with readers more about “how to” work with and through complexity to reach well grounded insights.”

*Prof Marius Ungerer: Professor, Strategy, Change & Leadership*



# Cynefin®: weaving sense-making into the fabric of our world

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The Cynefin® sense-making Framework, brainchild of innovative thinker Dave Snowden, has never been more needed. The Framework empowers leaders across organizations, governments, and local communities, to work with uncertainty – to navigate complexity, create resilience, and thrive. As Snowden says, “The Framework guides us to make sense of the world, so that we can skillfully act in it.” Come with us on the remarkable 21-year journey of Cynefin, that enables people from all walks of life to improve – their situation, their work, their business, their relationships, and their environment. Cynefin practitioners share their wisdom, applications, and experiences using the Framework, across healthcare, leadership facilitation, organizational behavior, safety, software development, strategy, and well-being. You’ll discover how to not only ‘ride the rapids of complexity,’ but find in so doing, grace, power, and inexplicable opportunity.

By Dave Snowden and Friends

Editors: Riva Greenberg and Boudewijn Bertsch

Commissioning Editors: Zhen Goh and Sonja Blignaut

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*To everyone navigating uncertainty*

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## NOTE FROM THE EDITORS

Boudewijn discovered Dave Snowden's work through an article in the IBM Systems Journal in 2003, and was captivated. In February 2007 he attended a workshop with Dave Snowden and Michael Cheveldave in Calgary, Canada. He then had his moment of discovery, while we were dining in a restaurant, that managing type 1 diabetes lives mostly in the Complex domain. It was life-changing for both of us and we write about that incident in this book. In 2010 we presented the Cynefin Framework together at the American Association of Diabetes Educators' annual conference. Our audience was intrigued. The Framework has accompanied and informed our work in diabetes and Boudewijn's leadership development work since 2007.

So how did we become the editors of this book? We call Zhen Goh to the witness stand. She visited New York and had dinner with each of us on separate occasions. The relationship grew. Impressed that Riva had written three books, and knowing Boudewijn was a Snowden disciple, she asked if we would edit this book you're holding.

We are delighted to contribute to Cynefin's celebratory moment, but please do cut us a little slack as we are not professional editors. Like everyone who has contributed to this book, it was an act of love – and we gave it our best go. We have also done our best to honor the original voices of the authors herein, and their passion and largesse.

To the Cognitive Edge team, we express our sincere gratitude for letting us walk with you in the Complex domain birthing this book – while yes, even taking an occasional dip into the Chaotic and Confused domains.

To the reader we say: "Dip in wherever you like in this book." Make this book that celebrates the 21st year of the Cynefin Framework, our birthday gift to Dave, a gift also to yourself. Trust us, you will be rewarded.

Riva Greenberg and Boudewijn Bertsch  
Brooklyn, NY



# INTRODUCTION

**SONJA BLIGNAUT**



I vividly remember the first time I was introduced to Dave and his weird swoopy lined framework. It was 2002, the terrible events of 9/11 were still fresh in everyone's mind. United States Secretary of Defense, Donald Rumsfeld, famously stated in a news briefing, "As we know, there are known knowns, there are things we know we know. We also know there are known unknowns, that is to say, we know there are some things we do not know. But there are also unknown unknowns – the ones we don't know we don't know." And if one looks throughout the history of the U.S. and other free countries, it is the latter category that tends to be the hardest. <sup>(1)</sup> Those of us who knew Dave, and who had seen Cynefin domains described with similar phrases, often wondered if maybe Rumsfeld overheard one of Dave's talks at the Pentagon. But whether there was a connection or not, Cynefin provided a framework that situated the distinction Rumsfeld popularized.

I was a consultant, working for IBM and even then, I was increasingly disillusioned by what I considered to be the exploitative nature of big five consulting with its focus on selling best practices regardless of context or need. When Dave spoke about complexity, the centrality of context and 'chefs not recipes,' I felt an immediate resonance with the integrity of the approach, perhaps because of my background as a meteorologist. Thankfully, South Africa was deemed a geography that was 'safe-to-fail,' so along with one or two other nations, Dave was allowed to experiment here.

At the time, Cynefin was the new shiny object and it was a huge challenge to get involved in a linked project. Only the politically connected were chosen. Somehow, I managed to maneuver my way onto one of the more obscure projects at one of South Africa's large banks. However, it soon became apparent that the inherent integrity of seeing every context as unique, did not fit well within the business model of a traditional consulting firm. Cynefin's honeymoon period at IBM did not last very long. A few years later, Dave and I both left IBM at more or less the same time.

Since that time, the Cynefin Framework and its ecosystem of methods, including SenseMaker later on, has gifted me with a global network of like-minded people, opportunities to speak on international stages, and friendships with Dave and others that I value enormously. Had I not gone to listen to the irascible Welshman that day, I doubt my life would be as rich as it is today, a theme you will see repeated often throughout this book. For that reason, we could not let this 21st birthday go by without celebrating and paying homage.

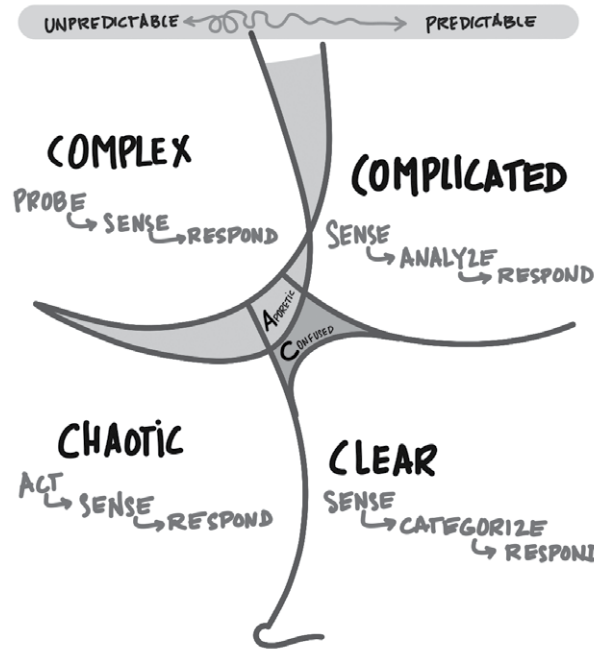


Figure 1. The Cynefin Framework version 2020

## WHAT IS IN A NAME?

Cynefin. When Dave Snowden impulsively decided to use this name for his fledgling Framework, he couldn't have known just how apt it would turn out to be. The way he tells the story, Cynefin was chosen while he was preparing for a debate with Ikujiro Nonaka. When Dave heard that Nonaka would be using a Japanese word with spiritual significance (Ba), he decided he needed a Welsh one to level the debating field. The rest, as they say, is history.

Cynefin is an enigmatic word with a meaning that is both broad and deep. It is a dynamic word that speaks of flow through time and space; a multiplicity of tangled connections; of community. It may be hard to pronounce, but once understood, it is equally hard to forget. <sup>(2)</sup>

Dave describes how “Cynefin is a Welsh word with no direct equivalent in English. As a noun, it is translated as habitat, as an adjective familiar, but dictionary definitions fail to do it justice. A better, and more poetic definition comes from the introduction to a collection of paintings by Kyffin Williams.” The meaning I prefer is a shortened, and possibly more poetic version that I have loved since the first time I heard it: “Place of Your Multiple Belongings.” The Framework that inspired this book certainly lives up to its name. It means different things to different people, but at its core is a set of principles that I will expand on in a later chapter. There are two that I’d like to highlight here: Bounded Applicability (most things have value if we understand the boundaries within which they are valid) and Coherent Heterogeneity (embracing as much diversity as we can without fragmenting or becoming incoherent). These two principles enable anyone to locate themselves and their unique contexts in the Framework. Cynefin is by its very nature inclusive. As my colleague Zhen Goh writes in her chapter where she reflects on Cynefin and Daoism, it is like an empty vessel that we can pour our contexts into. It is like water that can take many forms.

Indeed, as you will see in this book, Cynefin is a meta-framework that can be applied in almost any context. It is a sense-making framework that helps us untangle our intractable problems in an actionable way. At its most basic, Cynefin allows us to distinguish between three different kinds of systems: ordered systems that are governed and constrained in such a way that cause and effect relationships are either clear or discoverable through analysis; complex systems where causal relationships are entangled and dynamic and the only way to understand the system is to interact; and chaotic systems where there are no effective constraints, turbulence prevails and immediate stabilizing action is required.

Cynefin acknowledges that these different systemic contexts exist in parallel, and in that way avoids creating false dichotomies and polarization. Unlike other frameworks, Cynefin has undergone multiple evolutions over the years, detailed in the chronicle of the ‘three ages of Cynefin’ in this book. As Dave’s thinking evolves, so does the Framework. Some may find it frustrating, but the vitality of the Framework ensures its relevance and longevity. It may be because of this that it makes such an impact on those who engage with it. Many of the authors describe how their work, and sometimes their lives, were completely transformed by Cynefin. It may sound trite, but for me, at least, it is true.

## THE STORY OF THIS BOOK

It is ironic that this book is coming into being, and that the Framework is coming of age in 2020, a year when it seems the world has never been in more dire need of sense-making. The COVID-19 pandemic was already well underway in the early part of May this year when I realized that Cynefin is turning 21 in October. Even with everything going on, it seemed an occasion that was too momentous to let pass without a celebration. I contacted my colleague Zhen Goh with a harebrained idea... Why not ‘crowd-source’ a book as a surprise gift for Dave?

I don’t think either of us really knew what we were letting ourselves in for when she enthusiastically agreed! This book you are reading now is a testament to the incredible global community that has formed around the attractor that is Cynefin. Almost every person we approached to author a chapter said yes. Everyone, including our long-suffering editors, Boudewijn Bertsch and Riva Greenberg, and our wonderfully talented illustrator, Sue Borchardt, donated their time and generously shared their wisdom. In the midst of a global pandemic, with socio-political instability all around, climate change a growing concern, and every one of us dealing with the impact of a sudden shift to doing everything virtually, the community rallied to create, in a mere six months, what I believe is an important book for this time we are in.

## HOW TO READ THIS BOOK

To an extent, Cynefin resists hard definitions and prescriptive categories, so we chose not to provide a linear, categorized Table of Contents for this book. Instead, we decided to offer you multiple ways to find your way and interact with the content. The book starts off with an intimate autobiography of not only Cynefin but also the man who created it, Dave Snowden. Dave has authored a delightful piece chronicling the birth and evolution of Cynefin. It provides a rare glimpse into the life experiences, influences and context that shaped Dave’s thinking and led to its creation.

If you are new to Cynefin, you may want to start with Dave’s short description of Cynefin, and then read Dave’s origin story, my chapter on Cynefin principles, and Zhen Goh’s chapter, Cynefin & ... Otherwise, you can choose a temporal lens and explore the chapters based on how long the authors have been in this community. Or, you can follow your curiosity and explore how the chapters are tangled in interesting ways, whether via authors that are from the same geographies, or perhaps chapters that share similar principles. How you read this book is up to you. However, no matter how you navigate your way, you are sure to encounter unexpected insights and connections.

You will find 20 chapters mostly about the practical application of Cynefin in fields as diverse as healthcare, safety, strategy, facilitation and software development. Woven throughout these chapters, you will find poignant shorter Vignettes where each author shares delightful stories of the impact the Framework has had on their work, as well as their personal encounters with Cynefin and its creator.

## ACKNOWLEDGMENTS

There are so many people that deserve our appreciation and thanks for making this book a reality. This was a herculean, communal effort. A special thank you to:

- Boudewijn and Riva, without your generosity and fine editing skills, we would not have been able to create a book that we could be proud of, and that does Cynefin justice.
- Sue Borchardt, I almost couldn't believe it when you agreed to illustrate this book for us. More than just our illustrator, you were the glue that kept us together. Thank you for your generosity, energy and creativity.
- Marion Kiely, you are a cat herder of note! Thank you for helping us make our incredibly tight deadlines and for keeping everyone on track.
- Gustav Rischmüller, our intrepid designer. Thank you for putting up with us and for bringing your design brilliance to our buoyant, sometimes weird, ideas.
- To every one of our authors, there would not be a book without your contributions. Thank you for sharing your insight, putting up with our nagging, and above all, for helping take this work into the world.
- And finally to Dave, thank you for creating this body of knowledge and sharing yourself and your thinking so generously with the world.

Here's to the next 21 years!



## References

1. "Defense.gov News Transcript: DoD News Briefing – Secretary Rumsfeld and Gen. Myers, United States Department of Defense (defense.gov)".
2. <https://www.cognitive-edge.com/blog/origins-of-cynefin-by-any-other-name-would-it-smell-as-sweet/>



# FINDING YOUR WAY AROUND THIS BOOK

## **A CELEBRATION OF BEAUTIFULLY ENTANGLED COMPLEXITY**



This isn't the type of book you should read from front to back. Although you could, and it'll be great. You could also read it from back to front, or just dip in anywhere your finger falls. Or browse the Table of Contents on page 9 and flick to something that sounds interesting to you today.

Like Dave's fabled analogy of bramble bushes in a thicket to explain complexity-theory, every part of this book is connected to and affected by many other parts. View the book like the illustration on the next page, the berries as chapters, and the entangled branches as pathways to other berries. Follow a random twig to find a juicy piece. Trace a path to the next fruit. Discover that this inter-weaved reading contains berries of all sorts, and even allows you to change your mind at the end of a chapter, and pull on a different sprig to see what shakes out.

Get lost. Get found.

Enjoy!

WAYFINDING GUIDE (IF YOU WANT)

- If you are new to the Cynefin Framework or you just need some honing, read the first four chapters starting on page 31, then navigate back to this page to plan your journey if you so choose. Otherwise, just read on - the chapters are ordered alphabetically by author’s surname.
- **Chronological:** Read the chapters (*raspberry icon\**) and vignettes (*blueberry*) in descending order of the length of time the author (*clock*) has been involved with Cynefin.
- **Type of article:** Follow articles that are theoretical (typically a case study, description, or an application of a method – *thought bubble*) or narrative (a recollection or story about applying or learning Cynefin – *open book*).
- **Cynefin principles:** For more information, see the chapter on page 62 (*Cynefin Framework*):

Principle 1: Embrace messy coherence		Principle 2: Descriptive self-awareness & self-discovery		Principle 3. Timing and Flow	
1.1.	Playing in tension	2.1.	Beware of unintended consequences	3.1.	Time and cadence
1.2.	Heuristics not rules	2.2.	Be a mirror not an expert	3.2.	Flow and patterns
1.3.	Bounded applicability			3.3.	Liminality

LEGEND



Full-length chapter\*



Vignette



Narrative



Theoretical

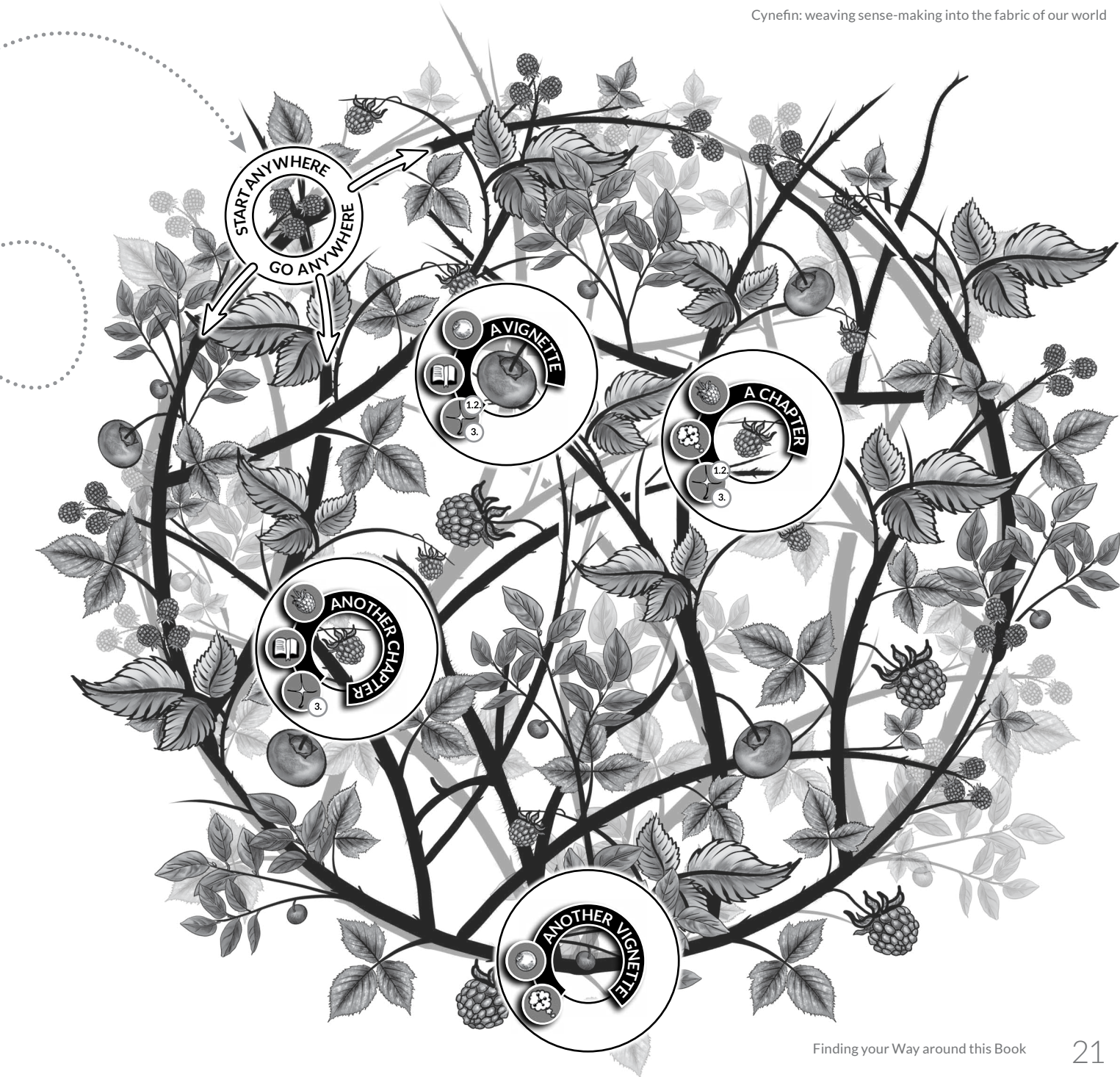


Chronology (*starts on p.149*)



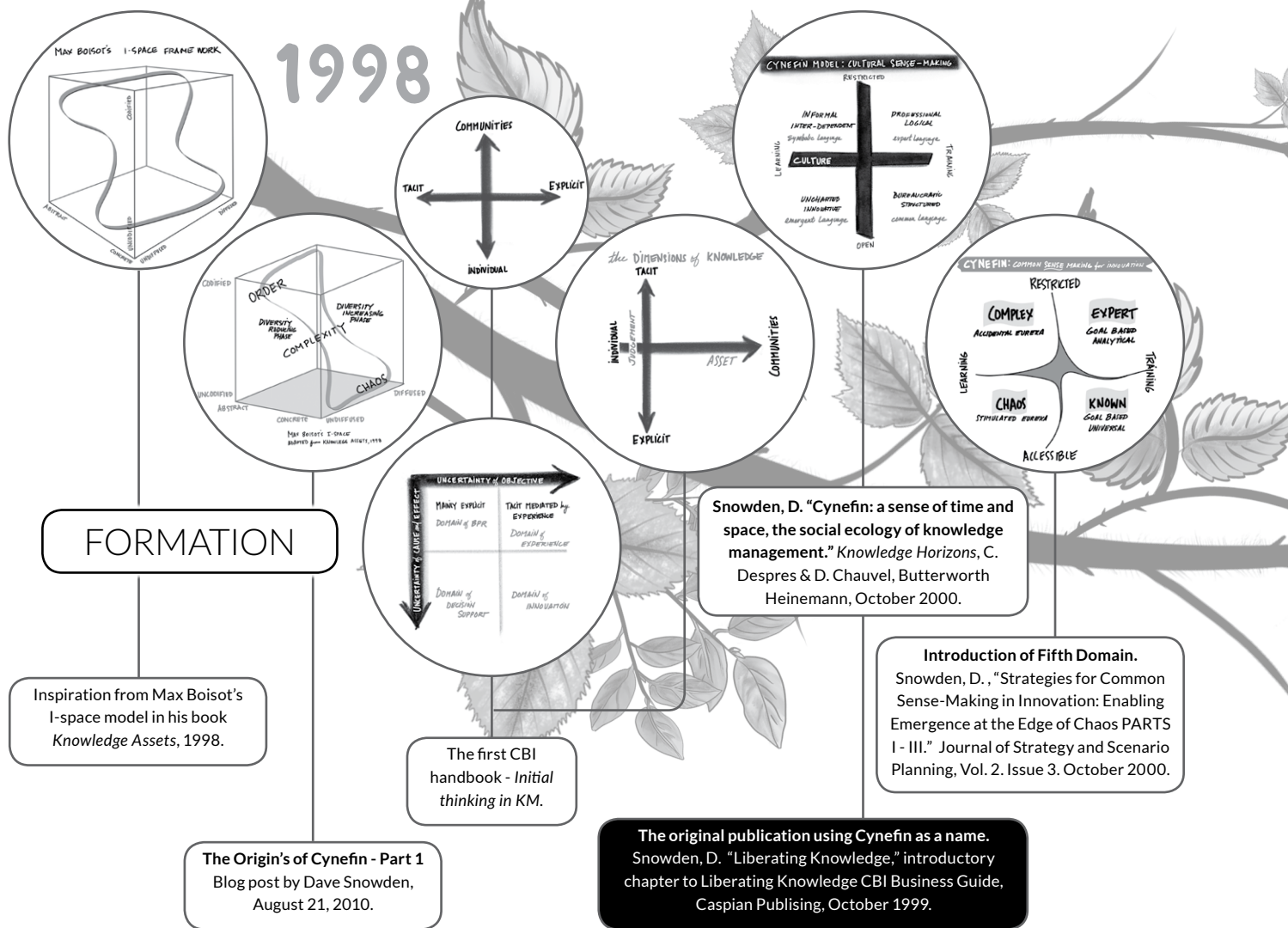
Cynefin Principles

*At the end of each chapter, use these guides to help you navigate to a next piece.*

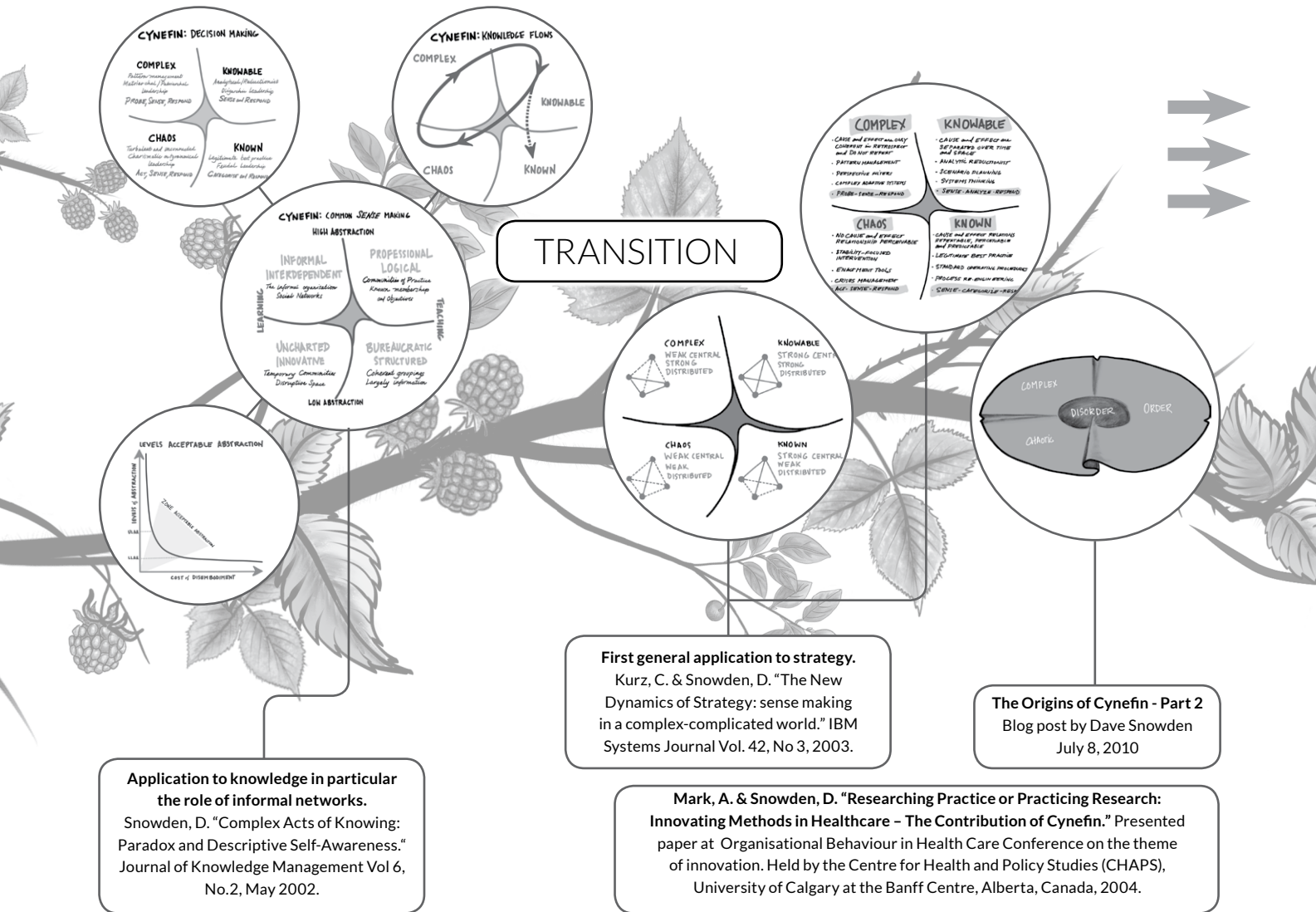


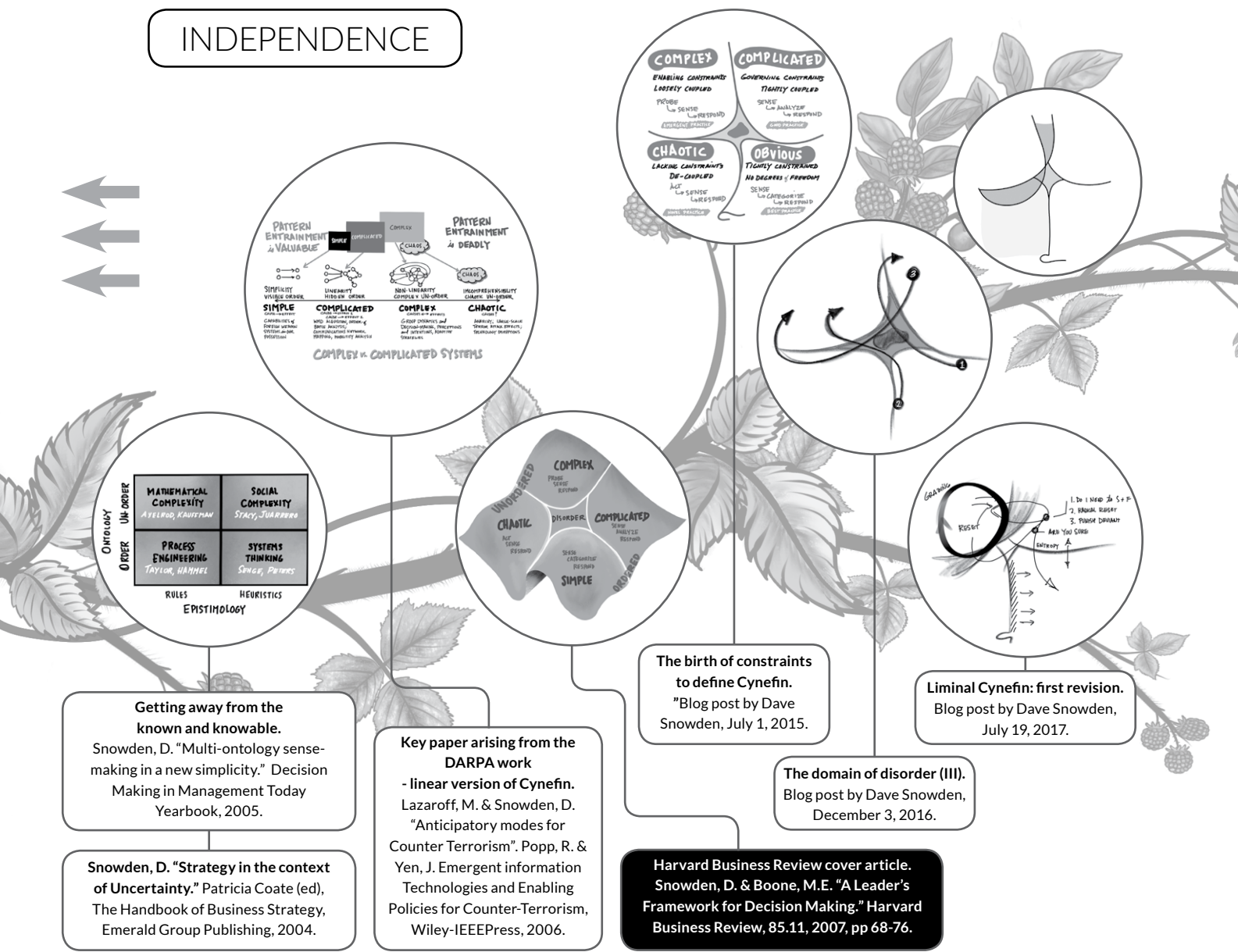
# A TIME-LINE OF CYNEFIN

## A LOOK AT 21 YEARS OF EVOLUTION



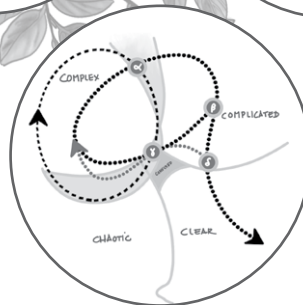
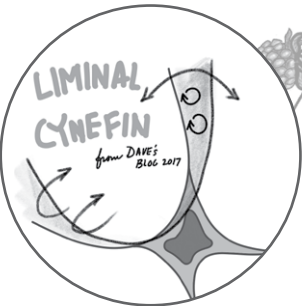
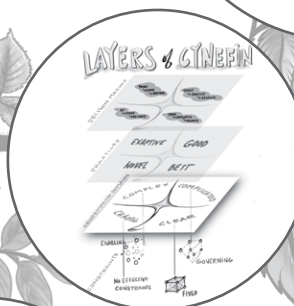
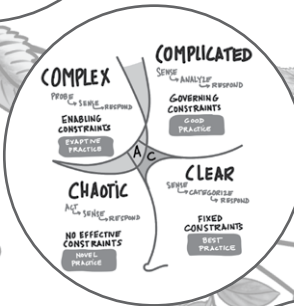
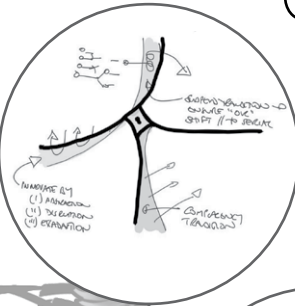
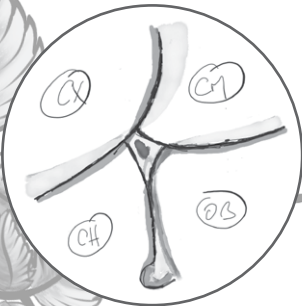
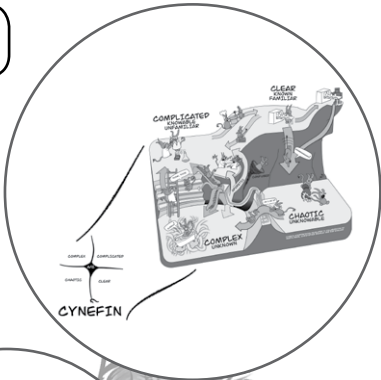






COMPLETION?

2020



**Cynefin St David's Day 2019.**  
Blog post by Dave Snowden,  
April 18, 2019.

**Liminal Cynefin.**  
Blog post by Dave Snowden,  
June 20, 2017.

**Liminal Cynefin.**  
Blog post by Dave Snowden,  
June 20, 2017.

**Liminal Cynefin: first revision.**  
Blog post by Dave Snowden,  
July 19, 2017.

**Liminal Cynefin: first revision.**  
Blog post by Dave Snowden,  
July 19, 2017.

**Liminal Cynefin.**  
 Tweeted by Dave Snowden,  
 August 23, 2017.

**Liminal Cynefin.**  
 Tweeted by Dave Snowden,  
 August 23, 2017.

**First chapter to combine  
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### Additional publications 2010-2017

**Snowden, D. "Good Fences make Good Neighbours." W.B. Rouse, K.R. Boff & P. Sanderson, Eds. Complex Socio-Technical Systems: Understanding and Influencing Casuality of Change, Amsterdam, IOS Press, 2012.**

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# GLOSSARY

## BRUSH UP ON SOME TERMINOLOGY



### **Abduction (Referring to “abductive reasoning”)**

The logic of hunches, involving inferring from available patterns and information. In abductive reasoning, we accept that all findings are “best explanations” rather than absolute truths, and that uncertainty is an inherent element. Findings are derived from a sense of plausibility. Abductive reasoning is often compared with deductive reasoning, which is seen as a “top-down logic,” where conclusions are reached by applying rules in a reductive manner until the logic becomes necessarily true. Here findings are derived from probability. Abductive reasoning is also compared with inductive reasoning, which is seen as a “bottom-up logic,” where hypotheses are tested against evidence. Here findings are derived from a sense of possibility.

### **Anthro-complexity**

The study of complexity as it is experienced in human systems, rather than mechanistic or natural (animal and geological) systems. Human systems have a higher degree of complexity for many reasons, including, for instance, the different behavioral patterns that identity-structures create and how they act within different contexts.

### **Aporia (Aporetic)**

The Oxford English Dictionary defines the adjective ‘aporetic,’ as “to be at a loss,” “impassable,” and “inclined to doubt, or to raise objections.” It defines the noun form ‘aporia,’ as the “state of the aporetic” and “a perplexity or difficulty.” In philosophy, an aporia is a philosophical puzzle or a seemingly impasse in an inquiry, often arising as a result of equally plausible, yet inconsistent, premises (i.e., a paradox).



**Coherence**

Something that appears to make sense as a whole, and in relation to available patterns.

**Constraint**

In plain English, a constraint is often thought of as a limitation or restriction. However, in the Cynefin use of the term, a constraint refers to how we contain, couple, and link things. A constraint can therefore also be enabling, as much as limiting.

**Complex facilitation**

An approach to facilitation designed to encourage emergence and allow for diversity. In contrast, more traditional rules of facilitation create planned activities with no variability in mind. In complex facilitation, we disrupt regular group dynamics, and facilitate through encouraging emergence and flow.

**Cynefin**

A sense-making framework. See the *What Cynefin is in Five Paragraphs* chapter on page 58 for a more comprehensive explanation.

**Disintermediation**

Reducing intermediary interpretation of data and information to put decision-makers in contact with raw data, rather than pre-analyzed insights.

**Epistemic justice**

Fairness in knowledge and how knowledge is produced. This draws on British philosopher Miranda Fricker's identification of the unfairness built into systems of knowledge production (epistemic injustice), where certain viewpoints and personas are more represented and hold more power. Epistemic justice is the practice of correcting such imbalances.

### **Epistemology**

The philosophical study of the nature, origin, and limits of human knowledge. In other words, how we know what we know.

### **Exaptive**

The utilisation of an evolutionary feature for a use other than it was initially designed or developed for. Or, radical repurposing.

### **Exaptive practice**

The practice of applying exaptive principles. This is typically utilized for radical repurposing and innovation.

### **Feedforward**

Learning from the future, or information regarding how things can potentially evolve or shift in the future. (Contrast with feedback which learns from the past). “Feedforwards” are useful for on-going adjustments ahead of time.

### **Hermeneutic (in the context of hermeneutical injustice)**

A methodology of interpretation and interpretive meaning. Hermeneutical injustice refers to the challenges that disadvantaged groups face when trying to understand and communicate their experiences to others; there is a lack of concepts that resonates with their own sense of meaning. These experiences of injustice are usually embedded within a culture’s shared meaning structure and reflective of the dominant members of the culture.

### **Heuristics**

The term comes from Ancient Greek to mean “I discover.” Heuristics refer to strategies for problem solving that derive from learned patterns and previous experiences. Heuristics can also be referred to as “rules of thumb.” They are mental shortcuts that ease the cognitive load making a decision.

**Liminality**

“Liminal” comes from the Latin root, limen or limin, meaning ‘threshold.’ A liminal space is an ‘in-between’ space, where you have left something behind, but what is emerging has not yet formed.” In anthropology, this is the stage between phases, where agents are between a pre-ritual and post-ritual transition, and their sense of identity/status is suspended in-between. Within Cynefin, this refers to the liminal zones where things are transitioning between domains.

**Ontology, Ontological**

Related to the philosophical study of being (existence, reality, becoming and being). Or, the study of “what is.”

**Phenomenology**

The philosophical study of consciousness and experiences from the first person perspective.

**Polymorphic**

The ability of a thing to take on multiple forms and uses.

**Premature convergence**

Reaching a consensus too early, or before a problem space has been properly explored.

**Psychosocial work environment**

Aspects that influence psychological safety and the well-being of employees while at work.

## **Scaffolding**

A temporary support, or design structure, that is used to support the construction or maintenance of a system. In physical construction, for example, constructing buildings, these take on the form of temporary physical structures. However, in human systems, scaffolding is used more broadly and includes social supports. An example is the scaffolding of learners inspired by developmental psychologist Lev Vygotsky: when teachers scaffold learners by providing support and encouragement, learners can perform beyond their current abilities. These supports are gradually reduced as learners become more adept and self-sufficient.

## **Sense-making**

Defined by Cognitive Edge as the way in which we make sense of the world in order for us to act in it. Sense-making, as Dave Snowden uses the term, differs slightly from sensemaking as situated in other schools. Snowden takes a more evolutionary approach (than Brenda Dervin's hermeneutic approach, Karl Weick's collective approach and Gary Klein's mental model approach) and considers sense-making a knowledge production activity: using data toward a shared understanding of problem areas so as to generate the right action.



# CYNEFIN: A TALE THAT GREW IN THE TELLING

**DAVE SNOWDEN**



## **ABOUT THE AUTHOR**

Dave Snowden is a Welshman, known for his curmudgeonly style and his love for opera, rugby and mountain walks. He is the originator of the Cynefin Framework. His article with Mary E. Boone on leadership was featured on the cover of the *Harvard Business Review* in November 2007 and also won the Academy of Management award for the best practitioner paper in the same year. Dave divides his time between two roles: Founder Director and Chief Scientific Officer of Cognitive Edge, and the Founder and Head of the Cynefin Centre. His work is international in nature and covers government and industry looking at complex issues relating to organizational design and decision making. He has pioneered a science-based approach to organizations drawing on anthropology neuroscience and complex adaptive systems theory.



# CYNEFIN: A TALE THAT GREW IN THE TELLING

DAVE SNOWDEN



## THE SHORT ANECDOTAL ACCOUNT OF THE HISTORY OF THE CYNEFIN FRAMEWORK RECOUNTED BY ITS CREATOR

*Cynefin (pronounced kun-ev-in) is a Welsh word with no direct equivalent in English. As a noun it is translated as habitat, as an adjective acquainted or familiar, but dictionary definitions fail to do it justice. A better, and more poetic, definition comes from the introduction to a collection of paintings by Kyffin Williams, an artist whose use of oils creates a new awareness of the mountains of his native land and their relationship to the spirituality of its people: “It describes that relationship as the place of your birth and of your upbringing, the environment in which you live, and to which you are naturally acclimatised.”<sup>(1)</sup> It differs from the Japanese concept of ‘Ba’, which is a “shared space for emerging relationships” in that it links a community, into its shared history – or histories – in a way that paradoxically both limits the perception of that community while enabling an instinctive and intuitive ability to adapt to conditions of profound uncertainty.<sup>(2)</sup> In general, if a community is not physically, temporally, and spiritually rooted, then it is alienated from its environment, and will focus on survival rather than creativity and collaboration.*

*Opening paragraph of the first Cynefin article “The Social Ecology of Knowledge Management” published in Despres & Chauvel, Knowledge Horizons, 2000.<sup>(3)</sup>*

J.R.R. Tolkien starts his foreword to the second edition of *The Lord of the Rings* with the phrase, “This tale grew in the telling.”<sup>(4)</sup> He continues to explain that something that started as a sequel to the children’s book *The Hobbit* “was drawn irresistibly towards the older world” by which he means the mythology and legends of the Elder Days. As such, it developed “glimpses that had arisen unbidden of things higher or deeper or darker than its surface.”<sup>(5)</sup>

For my generation, *The Lord of the Rings* was a defining experience that opened up the whole genre of fantasy through which much inspiration can be gleaned. I find it very difficult not to make literary (and frequently fantasy) references when I deliver a keynote or have everyday conversation, as the richer meaning of such texts enhances any exchange. Over the decades, very few years have passed where I have not returned to Tolkien's three novel series in one form or another. My hardback, sixth impression of the second edition, is still with me from its original purchase in 1971, when I was in the Sixth Form of what is now the Alun School in Mold, or in Welsh, 'Yr Wyddgrug,' which means the prominent hill. That is a reference to Bailey Hill, which dominates the landscape of the market town where I grew up from the age of four.

I was able to buy the book thanks to a £60 book token, the tangible result of winning the Hayden Williams Prize for contributions to the broader community. My parents were probably happier with the kudos of the award ceremony in County Hall, as all pupils in Flintshire Schools were eligible for the one annual award. Still, for me, this was a once in a lifetime opportunity. Armed with what in current day purchasing power is over £800, I got my father to drive me to the nearest large bookshop. It happened to be just over the border in Liverpool. I loaded up the boot of his car with paperback Penguin classics and some mainly dystopian novels. Each book cost 0.40p, and my three hardback volumes of *The Lord of the Rings* (replacing a much thumbed single-volume paperback borrowed from my cousins in Cardiff) cost only £2.25 each. Overnight I acquired a library of well over a hundred books, and by the time I went to University less than a year later, I had read them all (frequently without understanding.) That was the start of a life-long love of Philosophy and History.

By now, the casual reader may be wondering what this has to do with creating a sense-making framework of some twenty plus years standing? Well, the most obvious link is that Cynefin, as a framework, has been itself a two decade plus emergent and evolutionary process of development that grew in the telling, literally, through workshops and conference keynotes, all informed by reading and thinking. In this telling I will also draw out and elaborate on five, sometimes tangential connections, some looser than others, and finish with the three ages of Cynefin and its future trajectory.

## CYNEFIN IS AN ENTANGLEMENT OF THEORY & PRACTICE

When I put the first versions of the Framework together, I had no real idea what I was getting into. It was in the early days of knowledge management, and I was laying the foundations for what became known as Organic Knowledge Management. What now has become a much-cited framework used in a broad range of fields was then an outcome well beyond my imaginings. The Framework grew and developed through a complex mix of reading combined with practice. A significant strength of Cynefin is that it was not created, and then propagated, from a single based study or process. It evolved through a fluid entanglement of *sophia* and *phronesis* to reference Aristotle. The latter is a type of practical wisdom, translated by the Romans as *prudentia*, which comes from *providentia*, meaning foresight and sagacity. *Sophia* is a combination of *nous*, which has a sense of discernment and *epistēmē*, which in the modern day would be science: knowledge that is teachable and built through logic.

For Aristotle, both are associated with virtue, “Although the young may be experts in geometry and mathematics and similar branches of knowledge (*sophoi*), we do not consider that a young man can have Prudence (*phronimos*). The reason is that Prudence (*phronesis*) includes a knowledge of particular facts, derived from experience, which a young man does not possess, for experience is the fruit of years.” *Nous*, by the way, is one of those curious words; for Aristotle it was the ability to think rationally, but in collegial English, it often means *common-sense*, and both meanings are central to Cynefin.

Phronesis also links to the definition of sense-making, or *naturalising sense-making*, that I have developed over the years, namely: *How do we make sense of the world so that we can act in it?* With that definition comes the concept of sufficiency, how do we know that we know enough to determine the type of action we can take? After all, that is the primary function of Cynefin; at its heart, it is a decision support framework. I am using a hyphen in sense-making rather than the neologism created by Karl Weick. Weick, Dervin, Klein, Russel and myself are now identified in the literature as five distinct schools of sense-making/sensemaking and I’ve had the privilege of working with both Brenda Dervin and Gary Klein and can call them friends. <sup>(6)</sup>



## CYNEFIN AROSE AND DEVELOPED THROUGH TEACHING

The process of Cynefin's creation, I'm sure you realize by now, is a story of some magnitude. Much of the critical work was done on flip charts with groups of people in various states of bemusement as ideas came to me. I never understood why many academics do not want to teach. For me, teaching is a vital part of research; it is where ideas come together. Those flip charts may have seemed messy, but the mess was coherent and the process was not nearly as ad hoc as it may have looked at times. I've always used frameworks to force insight. It is an old trick of rhetoric, start in front of a large audience with the phrase, "There are three key aspects to [name subject]..." and even if you can only think of one as you begin, the other two will always come to what I call the prepared mind. My flip charts were all about forcing my mind (and often a part of the audience) to think differently and critically synthesize whatever emerged.

To this day, I frequently accept invitations to present at conferences or deliver a lecture on a subject or idea that is in an early stage of exploration. I do this knowing that the live audience, and consequent adrenaline surge, will create new insight. To be clear, that only works with preparation, if you have both read up on the subjects and practiced the material you are teaching. Experience counts over a significant length of time.

Of course, there were often catalyst points along the way. I remember one in particular, when the chaos fold or cliff at the base of Cynefin, manifested itself during an extended conversation with Max Boisot in Washington. I had played with, and talked about, the different types of boundaries with colleagues for some time before then, and there were lots of sketches in various notebooks. However, the critical moment of creation was when Max's, "What you are really talking about is..." exposition of René Thom's 1972 book, *Structural stability and morphogenesis*, validated and informed what I knew in practice: namely, that the boundary between order and chaos is materially different from the others.<sup>(7)</sup> That conversation happened to come after a harrowing session I had had at the Academy of Management in 2001. The price to me for receiving an award for original contributions to the field of Knowledge Management (KM) was to present the Cynefin Framework to a highly knowledgeable audience and then handle formal responses from Max and J. C. Spender.

One of the things that J.C. said at the time was that just as organizational theorist, Ikujiro Nonaka, had made the word *knowledge* problematic, I was making the word *meaning* problematic. For J.C. this was a good thing. It meant that a concept we thought was familiar was now being explored in novel ways. That proved significant in directing my own thinking, and the idea that we take the meaning of *meaning* for granted, and this directed much of the development of Cynefin.

## CYNEFIN REFLECTS MY TRANS-DISCIPLINARY UPBRINGING & READING

There is no single academic discipline behind Cynefin - it interweaves the sciences and the humanities. Cynefin was brought up and cultured by generalist thinking, just as I. Science and humanities interacted in my family life and daily discourse, and I doubt anyone without an upbringing in generalist thinking could have created it. My impulse to buy over a hundred books in a day came from being in a family and school that treasured learning and sought to avoid the narrow confines of specialization. My father was a veterinary surgeon, my mother, a linguist and teacher. Both were from working-class backgrounds and had fought in various ways for the right to a University Education. They were well-read in literature, and my mother was a political activist of the first order. I was on an Aldermaston March in a pram, and there is a picture somewhere of me as a baby on Bertrand Russell's knee. Family meals were not places for the faint-hearted or naive arguments. That also translated into school.

I still remember in 1965 at the age of eleven, walking to the front of the class wearing long trousers at school for the first time (only shorts were permitted in primary school regardless of the weather) to be handed a record card on which was printed "You support capital punishment," and told to speak on the subject for seven minutes, without preparation and with penalties for under- or overshooting.

Capital punishment was something I loathed even then. While it was only abolished in 1969, it was suspended in England and Wales that year, so it was a hot topic. The school I went to fostered a tradition of impromptu debate: debating either side of a contentious issue was something we did every week from the ages of eleven to eighteen. Today we see how debate without rancor is rare, and in a modern environment challenging. But for me I carried on in the House of Debates at Lancaster University, where I rose to the rank of Convenor. That simple process meant voraciously reading everything you could as you never knew what would come up. A good and steady habit that has served me well.

While I focused on science in the sixth form, I was as well-read as anyone studying English Literature and was still in love with History as a subject before moving on to Poetry. To this day, I am still reading in both the humanities and sciences regularly, using two fountain pens and different colored inks to mark passages and add comments. Much of Cynefin has come from me synthesizing knowledge, while thinking on my feet in front of a flip chart responding to questions. When I am working on something new, I often set myself up. I write a title and an abstract, which I know will (one) force me to complete some reading before the time and (two) create a situation that will force the synthesis of that material while I am in front of a live audience. A lot of that ability harks back to the confidence I developed during those years of debate in its many manifestations.