

## Introduction

### How to Study a Disorderly World in an Orderly Fashion

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It is easy to get results, but difficult to get answers.

(Aschwande 2015)

These are tumultuous times, yet again: a failed insurrection in the world's oldest democracy, a pandemic costing lives and disrupting global supply chains, an ascending China altering geopolitical dynamics, and global warming threatening our very planet. What makes understanding our present so challenging is its constantly changing and hence historical nature. And it has not slowed down much since Karl Marx and Friedrich Engels – describing nineteenth-century capitalism – wrote in their *Communist Manifesto*: “all fixed, fast-frozen relations . . . are swept away; all new formed ones become antiquated before they can ossify. All solid melts into air.”<sup>1</sup> History transforms not only our world but also our research agendas. History thus requires close attention.

This book offers social scientists who work with comparative historical analysis (CHA) guidance on how to leverage the methodological riches of history. Like historians, CHA scholars use the past to formulate research questions, describe complex social processes, and generate new inductive insights. And, like social scientists, they compare those patterns to formulate generalizable and testable theories. CHA builds a bridge between the fascinating but disorderly world of history – which historians explore – and the slightly blander but more orderly world of methodology – which social scientists construct to test hypotheses. And CHA builds this bridge between exploration and testing to translate results into answers.

CHA's dual emphasis on exploring and testing reflects its problem-driven nature and resulting commitment to put questions before methods. It creates an intellectually vibrant community, united by the belief that the noise chronicled by daily headlines is more readily understood when placed in a longer-term historical context. It shares the conviction that history, despite its noisiness, is just as knowledge-generating as the rigors of math. Yet this community lacks a synthesis of the different ways its members leverage history's methodological riches. Several factors contribute to this gap.

<sup>1</sup> Marx and Engels (1986), 83.

With devotees in sociology, political science, economics, and history, CHA is spoken in different vernaculars that frequently require translation for us to realize that, for example, an exogenous shock in economics, a critical juncture in political science, an event in sociology, and discontinuity in history all refer to the same thing – a moment of historical change. CHA also engages in the ontological triage necessary to facilitate the conversation between history and social science, between exploration and testing. This triage involves aligning methods, which prefer an orderly, stationary, and more math-friendly world, with history, which is disorderly and full of moving objects, and thus requires more interpretivist sensibilities. Understanding the methodological implications of using history ultimately necessitates explicating a grammar of time.

The grammar analogy is meant to highlight several features of CHA. Grammars analyze cultural phenomena – language – that emerged independently of one another in different places. The same goes for CHA. It established itself in different disciplines independent of one another and therefore subsumes different traditions that are distinct without necessarily being unique. Grammars also incorporate time to capture change. The conjugation of verbs differentiates degrees of the past and their relationship to the present and the future. And the past perfect tense even makes the past come alive by identifying activities that were *ongoing in* the past rather than having just *occurred in* the past. Grammars also consider geography, since their rules vary with each language. And etymology, a cognate discipline of grammar, recognizes that language itself is a changing and hence historical phenomenon. Finally, learning grammars is peculiar because it involves understanding more systematically what we already mastered intuitively. It requires paying attention to the scaffold of language, which neither is particularly elegant nor serves many uses after we have learned a language.

Readers may wonder why they should learn a semi-orderly grammar of time when they could invest in more highly valued statistical skills. To those readers I can only reply, “just bear with me,” as you will be introduced to a research tradition that has thrived for almost two centuries, has produced numerous classics, and complements existing methodologies. CHA pays particular attention to the pre-testing stage of the research process: this stage involves description, conceptualization, formulating questions, and theorizing, which produce test-worthy hypotheses. The function the pre-testing stage plays in social inquiry has been discounted in recent years, as attention has shifted to ever more complex causal inference strategies. CHA offers a corrective to this trend by ensuring that our ability to produce answers keeps up with our capacity to generate results.

To readers who are still skeptical of CHA’s methodological contributions, let me preview the three central ones presented in this book. First, CHA uses

distinct exploratory tools and leverages history for inductive insights. It employs what historians call *historical thinking* to figure out what is going on, look for interesting patterns, formulate new research questions, and update existing foreknowledge. Second, CHA is very attentive to *time* and employs a distinct temporal vocabulary, which is essential for studying the unfolding of historical processes. Third, CHA embraces a *heterodox conception of methodology* that configures the exploratory and confirmatory stages of the research process into distinct strands.

## 1.1 Historical Thinking

There are numerous everyday reasons to be interested in history. Historians tell good and insightful stories. Their work appeals to our curiosity as to where our families, communities, nations came from, what obstacles they overcame, and how their past shaped their present. Historians offer a second, more polished draft of history, which clarifies the first one, typically still very noisy, written by journalists and contextualizing our rapidly changing world.

But there are also methodological reasons to be interested in history; and it is on these methodological offerings that the book focuses. CHA treats the *past as a domain of discovery* and uses the inductive insight that the past offers to update theories. It treats theories as frozen distillations of past historical experiences and historiographical insights. They function like probability distributions, which assume that history repeats itself and that yesterday's distributions provide inferential guidance for explaining tomorrow's events. Theories thus have a stationary, frozen quality that limits their capacity to address new historical phenomena. History protects theories from their potential obsolescence by unfreezing the past and looking at social reality in its full – but only partially explored – disorderliness. History offers social scientists what the telescope offers astronomers: an instrument for us to look outward from where we stand and discover new things that the myopia of our naked theoretical eye misses. It allowed, for example, international relations scholars to realize that their realist bipolar models became increasingly anachronistic after the end of the Cold War.

CHA leverages the exploratory potential of the past through *historical thinking* (Wineburg 2001). Historical thinking uses the past to ascertain whether the latest headline is something unprecedentedly new, whether it is a mutation that rhymes with earlier events, or whether it is something that repeats itself, and, if so, for how long. It uses the past to enter an ontological universe where history – backgrounded and frozen by theories and methods – comes alive and can be explored. It leverages dates to compare the past with

the present, to look for patterns, generate new questions, or update older ones, by now potentially obsolete. Historical thinking also pays attention to geography by probing whether a phenomenon is exceptional and geographically bounded or universal and uniform across geography.

CHA borrows the historical and geographic sensibilities of historical thinking to build a bridge between a constantly changing, inescapably historical world and a largely static, history-free methodological apparatus employed to study it. It realizes that building this bridge requires attention to the ontological assumptions embedded in theories and methods that scholars bring to a research question, and also to the ontological properties of the phenomenon under study. *Different methods permit answering different questions, and different questions require different methods.* The proper alignment of questions and methods necessitates close attention to ontological matters. CHA is mindful of such matters because it starts from the default assumption that God assigned all the easy research questions to physicists (Berstein et al. 2000), thus allowing them to translate their orderly and historyless world into elegant mathematical theorems without having to worry about any ontological translation problems. CHA, however, does not fret about having drawn the short straw when God assigned research topics, but instead delights in exploring this disorderly world in much of its complexity, even if this means engaging in ontological triage. CHA makes such exploration an integral part of the research process, because studying a constantly changing world requires continuously updating your research questions.

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## 1.2 Temporal Vocabulary

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Thinking historically invariably requires paying attention to time. And understanding time is necessary for analyzing phenomena that move through time and thereby become qualitatively transformed by it. CHA's attention to time is arguably its most distinguishing but also its most complicating feature. It is complicating because time is elusive, frequently banished behind *ceteris paribus* assumptions, and thus becomes too frozen to be explored. CHA confronts these challenges by using a precise temporal vocabulary to navigate the complexities of an unfrozen history and leveraging data visualizations to discern temporal patterns more readily. It thus taps into a long-standing tradition, exemplified by Charles Minard's 1869 graph of Napoleon's ill-fated 1812 Russian campaign (see Figure I.1). This deservedly famous graph offers a helpful initial survey of CHA's temporal vocabulary, on which the three opening chapters elaborate. Readers, particularly those unfamiliar with historical thinking, will thus require a bit of patience to develop their temporal literacy.



At the height of his power, Napoleon assembled 685,000 soldiers, the largest army to have been mobilized up to that point in history, to march eastward, land a decisive blow on Russia, and cement France's hegemony in Europe. The campaign proved disastrous: within a year, 500,000 of these soldiers had perished, Napoleon had abdicated his throne and remained exiled on the island of Elba, and France had lost its military dominance. Napoleon's Russian campaign is one of those historical turning points that CHA loves to study.

CHA draws on *historical time* to analyze such key moments. Historical time is closely linked to two fundamental questions that CHA shares with historians: on what dates did an event or series of events occur, and what patterns do they form? To identify patterns, CHA asks a series of follow-up questions. How much or how little continuity is there between events in a set? What events are linked to discontinuities? Do events converge across different geographic units of analysis? And what notion of causality is appropriate for explaining historical transformations? The common denominator of these questions is the effort to explicate patterns from moving objects, to describe how the past differs from the present, and thereby to understand the most elusive of social phenomena: change.

Historians typically answer such questions with thick narratives – highly contextualized accounts retracing causal processes across multiple events – while CHA scholars are more theoretical and use data visualizations whenever possible. Minard, while not a card-carrying CHA scholar himself, provides such a visualization. He uses a so-called Sankey diagram, a sideways funnel, to track the shrinking size of the French army. This diagram is plotted against several events, indicated by the names of towns where military action took place, that connect the past – the wide brown mouth of funnel indicating the start of the campaign – with the present – the narrow black tail indicating its end. Arrayed in this way, the events create a quasi-chronology that replaces the dates of a traditional timeline.

This timeline highlights three qualities of historical time. First, it is anchored in dates that order events chronologically and thereby construct the historical process by connecting the past with the present. Second, Minard lumps the events into two broad phases: the advance, indicated by the brown segment of the funnel; and the retreat, symbolized by the black segment. Such truncations of historical processes, what historians call periodizations, make the past more legible by breaking it into periods of continuity, in which the past stays unchanged, and periods of discontinuity, in which the past qualitatively changes. These two phases are relevant because they convey information about Napoleon's changing military fortunes. Those fortunes become even

clearer if we extend the time horizon beyond what Minard's graph shows. We can frontend it with France's military power before the campaign and bookend it with the loss of France's hegemony after. Third, historical time views changes through time as irreversible because history does not repeat itself, even though it might, as Mark Twain pointed out, rhyme on occasion. France's military hegemony on the continent was gone for good after Napoleon's defeat, which marked a historical and permanent qualitative transformation.

Historical time focuses on the qualitative breaks that help us understand how the past is different from the present. It is less adept at capturing the five elements that mark the rhythms at which historical time unfolds: tempo, duration, timing, sequences, and stages. These elements make up *physical time* because they have context-independent and clock-like temporal characteristics that give them a material or physical-like quality. Historical and physical time complement each other. Historical time does not always unfold in a linear fashion but quickens its pace, stops for a while altogether, begins at a different starting point, changes the order of events, or is more disciplined and sticks to a specific sequence. Physical time draws attention to these rhythmic, non-linear qualities of historical time and, as Chapter 7 discusses, to complex non-linear causal dynamics.

Minard's graph captures the rhythmic, physical time elements of Napoleon's ill-fated campaign in several ways. The Sankey diagram tracks the dwindling size of his army as well as the slow tempo with which Napoleon lost his soldiers. This slowness reflects Russia's scorched earth strategy, through which its army avoided large-scale military encounters with the French that typically produce a fast but intermittent rise in death tolls. Russians deprived the French army of potential resupplies by burning harvests and towns, and thus contributed to a slower death by starvation. And if you zoom in closely enough, you see that the death rate accelerated whenever the French army crossed a river; thus you identify drowning as another, quicker source of death. Minard's graph captures the intent of extending the duration of the military campaign so as to lure Napoleon deep into Russia, to make escaping its unforgiving winters more difficult. Minard also adds at the bottom a regular line graph for the temperature. It captures the weather element of Russia's military strategy and highlights how the sequencing – another element of physical time – of the onset of winter and of the decision to withdraw played a significant role in Napoleon's defeat.

Minard's diagram hopefully provides a first glimpse at the centrality that unfreezing historical time assumes in exploring history, that visualizations acquire in interpreting historical patterns, and that unfreezing physical time earns in analyzing temporally complex, non-linear processes.

### 1.3 Varieties of Comparative Historical Analysis

CHA has a distinct origin story, as it was invented in different disciplines that were independent of one another while sharing an elective affinity, in that they all employed historical thinking and paid close attention to historical and physical time. CHA cannot be traced to a sole founder, a singular notion of causality, or a formalized set of testing techniques. Instead, it owes its origins to different disciplines that analyzed the ever-changing world and required a more heterodox tool set than the one employed by frequentist, set theoretic, or experimental methods. Theda Skocpol and Margaret Somers (1980) first recognized this heterodoxy when they identified CHA's three strands: eventful, *longue durée*, and macro-causal analysis.<sup>2</sup> Each offers distinct solutions for how to configure historical and physical time, as well as description and explanation. Subsequent chapters elaborate on these strands; for now, they are summarized in Table I.1.

*Eventful analysis* is the most exploratory and descriptive strand of CHA. It pays particular attention to a thick version of historical time, unfreezes the past to figure out what precisely is going on, and identifies historical continuities and discontinuities. Physical time plays a more marginal role. Its causal inference strategies are a bit more difficult to pin down. It employs what several scholars call “historical explanations,” which increasingly have been influenced by path dependency. Historical explanations are particularly well suited for explaining historical change. They recognize that change itself is too fluid to be easily explained and thus needs to be analytically differentiated into periods of discontinuity and periods of continuity. They explain discontinuities through a distinct set of analytical steps whose goal is to illuminate the generative process that produced a particular discontinuity. Similarly, historical explanations view continuity as something that needs to be explained rather than to be assumed, and explains it by looking for the increasing return mechanisms that reproduce a particular set of events.

*Long durée analysis* uses time series data and visualization tools to explore broader and longer-term, slower-moving patterns of change. It employs a refined vocabulary for differentiating among different trends that, just like Minard's graph, are particularly well suited for capturing elements of physical time. *Longue durée* analysis is the least developed strand in CHA and thus

<sup>2</sup> I relabel here Skocpol and Somers' original typology. I kept their macro-causal analysis label, but renamed parallel demonstration of theory 'longue durée analysis' and the contrast-oriented analysis 'eventful analysis'. This relabeling serves to better capture the temporal assumptions of the three approaches. It is also meant to reflect the evolution of CHA since Skocpol and Somers' original typology and its growing attention to time (for this evolution, see Kreuzer forthcoming).



**Table I.1** Varieties of comparative historical analysis

Assumptions About	Eventful Analysis	Longue Durée Analysis	Macro-Causal Analysis
Historical Time	Very central and thick. History very unfrozen. Focus on describing (dis)continuities.	Central. History slightly frozen. Focus on describing historical trends.	Less important. History partially frozen. Focus on understanding historical boundary conditions
Physical Time	Limited importance.	Important. Served to differentiate the rhythms of trends.	Important. Used as an explanatory factor.
Description vs. Explaining	Thick descriptive. Employs historical explanations, path dependency.	Thin descriptive, data visualization. No clear explanatory frame.	Description confined to updating theories. Focus on causal process tracing.
Example	Skocpol <i>Protecting Mother and Soldiers</i> (1995)	Skocpol <i>Diminished Democracy</i> (2013)	Skocpol <i>States and Social Revolutions</i> (1979)

CHA employs three distinct strands that can be differentiated according to the notions of time they employ and how they balance exploration and explanation. The examples point out that Skocpol uses all three strands across her different projects, thus underscoring CHA's commitment to align methods with questions.

lacks a well-established causal inference strategy. It is most widely used by economic historians, demographers, and environmental historians. At times, *longue durée* analysis favors evolutionary explanations or draws on complexity theory. CHA scholars view such theories skeptically, because they are difficult to distinguish from ahistorical functionalist explanations.

*Macro-causal analysis*, in turn, is the most established strand in CHA. It unfreezes physical time to foreground the causal effects of tempo, duration, timing, and sequencing. It points out that these causal effects are non-linear and require close attention to causal processes themselves – processes that are backgrounded by more traditional, linear notions of causality. Macro-causal analysis employs theorizing to update existing explanations and thereby constructs stronger empirical tests. It explains cross-sectional variations by developing historically bounded and theoretically grounded explanations that pay close attention to physical time. Macro-causal analysis uses causal process tracing as its primary form of causal inference strategy. Unlike historical explanations, which are favored by eventful analysis, causal process tracing assumes a more orderly world that resembles conventional hypothesis testing.

Part I explores the temporal foundations of CHA. It invites readers to put on an ontological veil of ignorance that allows them to explore social reality

more fully. It uses historical thinking as a make-belief to show how history, largely freed from theories and methodological concerns, engages with social reality in a more inductive and exploratory fashion. It then explicates two key elements of historical thinking – historical and physical time – and shows how they serve as key pillars of CHA. Part II discusses the more workman-like elements of historical thinking that help scholars go out into history and explore it. It shows how to use eventful, *longue durée* and macro-causal analysis for such exploratory purposes. Part III discusses the causal inference strategies employed by the respective strands.

Let me conclude with a brief reading note for the different audiences this book tries to reach. The book makes a scholarly contribution by trying to translate the various CHA vernaculars into a more systematic grammar. This is a work of methodological anthropology that loosely observes CHA research practices, labels them, and brings them in conversation with broader methodological discussions. Seasoned CHA scholars should be able to follow my analysis, even though they might disagree with some of it. But the book also addresses CHA novices who might be familiar with only one vernacular, may have read just a few CHA classics, or may be grappling with a historical project that they cannot shoehorn into existing methods. For such novices, the book will require patience, particularly Part I, which deals with the complexities of ontology and time. These newcomers will find their patience rewarded in the final two sections, which are more application-based. For readers still struggling with, or with little background in, qualitative methods, the book provides a companion webpage that includes diagnostic tests, a glossary, an annotated bibliography contextualizing each chapter, and application exercises. I sincerely hope that the book is accessible to these different audiences, so that they come to appreciate CHA's comparative advantage in the study of macro-historical phenomena and its methodological ecumenism, which is capable of renewing conversations with existing, more orthodox methodologies and ultimately of linking up with a two-century-old research tradition that demonstrates history's enduring contributions to social inquiry.