

FEATURED ESSAYS

The Contributions of Charles Tilly to the Social Sciences

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Evaluating Charles Tilly's contributions to the social sciences is not an easy task: "Chuck Tilly was a master of sociological thinking and methodology," wrote two of his former students when he passed away ten years ago; "But he was sufficiently concerned about getting to the heart and dynamics of questions and topics that he never permitted the blinkers of disciplinary orthodoxy to stand in his way"² (Michelson and Wellman 2008). This breadth helps to explain Tilly's greatness as a social scientist, although it makes synthesizing his contributions in his home discipline of sociology somewhat challenging—especially for a political scientist whose home discipline thinks of him

Collective Violence, Contentious Politics, and Social Change: A Charles Tilly Reader, edited by **Ernesto Castañeda** and **Cathy Lisa Schneider**. New York: Routledge, 2017. 395 pp. \$44.95 paper. ISBN: 9781612056715.

Contested Mediterranean Spaces: Ethnographic Essays in Honour of Charles Tilly, edited by **Maria Kousis**, **Tom Selwyn**, and **David Clark**. New York: Berghahn Books, 2011. 315 pp. \$120.00 cloth. ISBN: 9780857451323.

Regarding Tilly: Conflict, Power, and Collective Action, edited by **María J. Funes**. Lanham, MD: University Press of America, 2016. 302 pp. \$29.00 paper. ISBN: 9780761867845.

¹ Full disclosure: Before Tilly left us, the author coauthored two books and five articles with him and served as copy editor for his last book, *Contentious Performances*, when he was too ill to carry out the task. I am grateful to Eitan Alimi, María Jesús Funes, Ira Katznelson, Joseph LaPalombara, Doug McAdam, David S. Meyer, Ann Mische, Susan Tarrow, Barry Wellman, and Viviana Zelizer for offering the suggestions that have helped me to undertake this review. Barry and Beverly Wellman generously shared unpublished material that I have quoted below. I have also drawn on three of my own previous writings on Tilly's contributions: Tarrow 1995, 1998, and 2008.

² Among the vast number of obituaries that followed Tilly's death, perhaps the most telling were those collected by the Social Science Research Council (SSRC). See <https://www.ssrc.org/fellowships/view/the-albert-o-hirschman-prize/charles-tilly-2008-prize-recipient> and the collections of articles published in *The American Sociologist* 41:423–428 (2010). An essential source in scanning Tilly's scholarly output is the online bibliography put together by the SSRC after his death. For the bibliography, go to <http://essays.ssrc.org/tilly/resources>.

more as student of war and state-building than as a general social theorist.³ But on the tenth anniversary of his death, it seems like a good time to try.

³ An entire library of empirical essays and critical reviews of Tilly's work on the relations between war and state-building followed his publication of "War Making and State Making as Organized Crime" (1985) and *Coercion, Capital, and European States* (1990). After the publication of his *Coercion, Capital, and European States*, an entire literature developed "correcting Tilly." The most explicit "corrections" come from students of international relations. See, for example, Taylor and Botea (2008). It is ironic that, of all the work that Tilly did on political processes, his puckish essay "War Making and State Making as Organized Crime" is his most-cited work in political science and probably the only one read by most international relations scholars.

I will begin with Tilly's fabled indifference to "disciplinary orthodoxy," then turn to the issue of whether there were one or many Tillys, stopping to point to a few lacunae in his work, before examining some of the key shifts in his approach to social reality. I will argue that—beginning in the 1970s—Tilly's work evolved incrementally, but there was a fundamental shift in his ontology in the 1990s that dispensed with the remnants of his original structuralism and led to an outpouring of "relational" work over the last decade of his life. In the course of this discussion I will draw selectively on the contributions of these three books:

- Ernesto Castañeda and Cathy Lisa Schneider's *Collective Violence, Contentious Politics, and Social Change*, which makes careful selections from the vast body of Tilly's work, moving determinedly from subfield to subfield, from *The Vendée* to his work on states, war, and democracy, to inequality, political violence, and urban studies, ending with some of the down-to-earth philosophical reflections he penned toward the end of his life;
- Maria Kousis, Tom Selwyn, and David Clark's *Contested Mediterranean Spaces*, which takes a more specialized approach to Tilly's work, seeing him as an analyst of regional and urban interactions and of the "clusters of intercontinental contacts and networks" that they generate (pp. 1–2).
- María J. Funes's *Regarding Tilly*, which is a collection of reflections on Tilly's work by twenty scholars from different parts of the world, which may be—as the editors claim—"possibly the most synthetic, diverse and ambitious homage to Tilly published to date" (p. 15).⁴

All three volumes begin with substantial introductions by the editors, and all draw

⁴ More full disclosure: As an author, with Doug McAdam, of one of the chapters in that book, I of course cannot comment on this claim; but, as I argue below, Funes's is the most provocative effort to comprehend Tilly's contributions that I know of.

on Tilly's work from throughout his career but center on the broad field of contentious politics, leaving his contributions to the study of war and state-building somewhat in the background and, except for the Funes reader, giving little space to his ontological and epistemological writings. Scanning these books—as well as previous collections inspired by Tilly's work⁵—the question that immediately arises is: "Was there an Essential Tilly behind his enormous scholarly production and constant change of genres?" Castañeda and Schneider's categorical approach suggests multiplicity; Kousis and her colleagues' ethnographic approach implicitly suggests it, too—if only because of what they leave out; only the introduction to the Funes reader makes a claim for unity (p. 3). After examining the connections and the hinges between the various phases of Tilly's work, I will hazard a guess about whether there was one Tilly or many.

A Leaper over Barriers

Tilly once described his attitude to disciplinary boundaries with his tongue deeply embedded in his cheek, characterizing historians as residents of a zoo. Watching them at work, he joked, has

something in common with strolling from the polar bears to the emus to the armadillos. Each species of historian is confined to an artificially restricted habitat, fenced off from its natural predators and prey. In the historical zoo, however, the inmates often leap the barriers to run through the spectators, to invade other cages, and even occasionally to change themselves

⁵ A first effort, Michael Hanagan, Leslie Page Moch, and Wayne te Brake's edited book, *Challenging Authority*, appeared in 1998, before the final phase of Tilly's work was yet visible. A second was an unpublished conference, "The Tillyfest: An International Conference in Honour of Charles Tilly," organized by Barry Wellman and Beverly Wellman in October 1995. A third was a special issue of *Social Science History*, "In Honor of Charles Tilly," published in 2010.

from one sort of beast into another.”
(Hawtree 2008)

Tilly certainly leapt over barriers between disciplines, but he sometimes kicked them over as he did so. Look at his fabled introduction to *An Urban World* (1975); except for his intense interest in migration in that book, you might think him a sworn enemy of sociology. Similarly, while much of his work on the state was friendly to political science, one of his early books, *The Formation of National States in Western Europe* (1975), took aim at the giants of that field at the time.⁶ As for economics, his *Durable Inequality* (1998) was a dramatic indictment of individualistic interpretations of persistent inequality. And together with this author and Doug McAdam (2001), he attacked what he saw as the static structuralism of the social movement field at the turn of the century.

The methodological breadth in Tilly's work lends strength to the “many Tillys” hypothesis. Over the length of his career, we find quantitative and qualitative, long-term and short-term analyses of popular and institutional contention, interactive work on states, capital, and contention, survey work with immigrants, institutional analyses of regimes, and, finally, linguistic analysis of protest repertoires.⁷ His work constantly shifted from the very macro to determinedly micro levels of social reality, often trying to embed the latter within the former. This was a source of Tilly's broad influence, but it also makes his work difficult to get a bead on. Consider that one of Tilly's warmest admirers—William Sewell, Jr.—thought his first book, *The Vendée*, was “the model” of how to do social history (Sewell 2010), while another—this author—regarded

his last and very different book, *Contentious Performances* (2008), as his best. Will the real Chuck Tilly please step forward?

What kind of a social scientist was Tilly? Sociologists such as his students John Krinsky and Ann Mische see him as a formalist, pointing to his use of an evolving series of formalisms.⁸ Anthropologists such as those who contributed to the Kousis reader emphasize the local elements in his work. Political scientists remember him best—and criticize him most energetically—for his historical work on war and state-building. As for his reflections on social science, they cut through all these subject areas, ranging from down-to-earth discussions of how events should be coded⁹ to classifying the errors of “big structure” analysis (1984) to the heights of ontology and epistemology.

Tilly's ecumenism meant that his achievements were differentially received in the main disciplines to which he contributed. In the three books under review here we get very different mixes of these interests. In Castañeda and Schneider's reader, his contributions to “contentious politics” take pride of place;¹⁰ in Kousis, Selwyn, and Clark's *Contested Mediterranean Spaces*, contention is lodged in a number of other topics; Funes's *Regarding Tilly*, the most catholic of the books under review, devotes 79 pages to his contributions to the social sciences, 56 to revolutions and national states, 72 to

⁶ I refer to the Committee on Comparative Politics, led by Gabriel Almond, which, under the aegis of the SSRC, published a series of books on what was then the popular theme of “political development.” With casual chutzpah, Tilly published his noted *Formation* book within that series.

⁷ Tilly's breadth was even reflected in his taste in music. Not only did that range from jazz to Gregorian chants, but his favorite composer, as Viviana Zelizer recalls, was Mozart, because he too contributed to many different fields and wrote in varying genres (2010:423).

⁸ See Krinsky and Mische's “Formations and Formalisms: Charles Tilly and the Paradox of the Actor” (2013). Also see Mische's “Relational Sociology, Culture and Agency” (2011), which places Tilly in what she calls the “New York School” of relational sociologists. In a personal communication, Mische argues that Tilly was not a formalist, but “needed to use formalisms because his data and historical materials were so rich.” My thanks to Professor Mische for this enlightening reflection.

⁹ Tilly could even get theoretical leverage out of discussing how to code events: see his “Event Catalogs as Theories,” the fifth chapter in *Explaining Social Processes* (2008).

¹⁰ Over half of the Castañeda and Schneider selections fit within this rubric. The other half is divided roughly among state-making (34 pages), inequality (40 pages), migration, race, and ethnicity (64 pages), and “narratives and explanations” (28 pages).

collective action and contemporary contentious politics, and 62 to the analysis of political violence.¹¹

Underlying Tilly's contributions to the social sciences was his ability to bring different methodological approaches, insights from different disciplines, varying styles of work, and an immense store of historical knowledge to his work. That catholicity grew as his work shifted from the largely archival approach of his first book, *The Vendée* (1964), to the mixed methods employed in his work on contentious politics in the 1980s and 1990s, to the mechanism-laden approach in *Dynamics of Contention*, to the linguistic analysis in *Contentious Performances* toward the end of his life.

When we turn the pages of Castañeda and Schneider's book, we can see why they chose a categorical approach to Tilly's work: there is just so much material to select from! But in doing so, they elide the question of whether there was one or many Tillys. The Kousis reader draws mainly on contributions by anthropologists, so it is not surprising that much of the work in that book comes from the local level.¹² The Funes reader is the only one of the three that gives concerted attention to Tilly's thinking about the social sciences.

Is organizing Tilly's work around his contributions to various subfields, as Schneider and Castañeda do, the best way to understand Tilly's work? I'm not sure. For one thing, it makes it hard to see how often he transported insights from one genre of his work to another. A first example is urbanization, which was a key process as early as *The Vendée*, again in his book *An Urban World* (1974, Chapter 2), and then

again in *Coercion, Capital, and European States* (1990, Chapter 2), where cities are the key site for the creation of modern democratic capitalism. A second reached out from his work on contentious politics to his books on democracy.¹³ Castañeda and Schneider's subject-based approach also elides Tilly's evolution from a largely structuralist ontology in the early work to the interactional approach that he came to call "relational realism" during the last decade of his life (more on this below).¹⁴

Nor does the overwhelmingly ethnographic approach of Kousis and her collaborators fully capture the evolution of Tilly's *oeuvre*.¹⁵ In their introduction, the editors work hard to link their book to Tilly's interest in the connections among politics, capital, and identity (p. 1). But not much of this comes through in the substantive contributions, which are rich and flavorful but have little to say about these connections. Of the three books, only the Funes reader attempts to identify an essence in Tilly's work, which she finds in two continuities: his recurring interest in political violence and "the centrality of the epistemological-theoretical dimension in his work" (pp. 13–14). Let us turn to the "one or many Tillys" question now.

Will the Real Charles Tilly Please Step Forward?

One commonality in Tilly's *oeuvre* was how he worked his way through material, for example, his famous knack for introducing even his most technical work with pithy historical or literary anecdotes.¹⁶ Then there was his unwillingness to reach closure on any of the subjects he worked on. Typical was the preface to *An Urban World*, where he admitted that "A kind of impatience has

¹¹ The volume closes with an excellent compilation and review of Tilly's bibliography by year, compiled by Alberto Martín Pérez.

¹² Surprisingly, there is little attention in the Kousis et al. reader to Tilly's favorite local subject—migration—which, for obvious reasons, is a prime target for anthropologists today.

¹³ As Funes writes in her introduction, "the analysis of contentious popular action throughout history and the formation and development of democratic institutions follow parallel paths that converge [in Tilly's work] in a common place" (p. 4).

¹⁴ The hinge in this transformation was *Big Structures*, in which he still reads as a structuralist but levels careful criticisms at ultra-structuralists like Immanuel Wallerstein (1984).

¹⁵ A symptom of this elision is that only three of the contributors to the book actually reference Tilly's work.

¹⁶ How many sociologists do you know who would introduce a textbook on the sociology of the city with a quote from a play by Claudel (*An Urban World*, pp. 1–2)?

... driven me to construct a textbook-reader when the time is not ripe" (p. ix).¹⁷ Also typical was his indifference to the existing literature when he entered a new field, as was true of his two books on democratization, where—except for the work of Robert Dahl—he could not be bothered to cite the enormous canon on the topic.¹⁸

None of these conceits was central to Tilly's contributions, but together they reveal a core feature of how he worked: he regarded none of his books or articles as finished products, often returning to the same problem from a different angle and sometimes rejecting a conceptual distinction that others continued to use.¹⁹ This was one reason why he could write so fast—almost as fast as he read! But it also meant that he could return to an old subject years later with an approach he had learned in the interim, as he did thirteen years after publishing *Contentious Politics in Great Britain* when he carried out a linguistic analysis of the same dataset in *Contentious Performances*. In the latter work, Tilly drew on the linguistic coding methods pioneered by Roberto Franzosi, linking semantic grammars to network methods to get at the links among culture, relations, and the political process.²⁰ This was a long way from the archival

historiography he had employed in *The Vendée*. How did he get there?

Variations on a Methodological Theme

Tilly once reflected on a central theme in how he gathered data. "Over forty years or so," he mused in 1995 at a conference in his honor,

my professional work has consisted largely of collecting, coding, criticizing, recasting, analyzing, and explaining *standard stories* in the form of administrative correspondence, newspaper reports, life-history interviews, historians' published accounts, and similar materials [emphasis added].²¹

What does Tilly mean by "standard stories"? In the same speech, which would appear four years later as a book chapter (1999b), he tells us: They are "sequential, explanatory accounts of self-motivated human action—which are common in historical analysis." These he contrasted to "superior stories," which he eventually translated into the search for robust mechanisms and processes under the surface of the standard stories.

At first blush, this sounds like the method Tilly employed as he gobbled up scads of data in the archives in France, first for *The Vendée*, and then for *The Contentious French* (1986). But the later work introduced the event-based methods that would influence generations of students of collective action—the systematic collection, enumeration, and analysis of contentious events. These were never simple event counts: in *The Contentious French* and in *Popular Contention in Great Britain*, Tilly strove to place the "stories" of "contentious gatherings" in their historical and institutional contexts (Tarrow 1995). From *The Vendée* onward, he was systematically embedding the events he studied in history, a procedure that many of his followers neglected and one that enabled him to relate events to institutional processes, to rulers' strategies, to opposing actors, and even to

¹⁷ This author can testify to Tilly's impatience: *Dynamics of Contention*, coauthored with Doug McAdam and myself, went to press much sooner than it should have because Tilly had three other projects he was impatient to begin and was unwilling to wait while we put the book through the final tweaking it needed.

¹⁸ When Doug McAdam and I began working with Tilly on *Dynamics of Contention*, he advised us not to begin our draft chapters with reviews of the literature, using the argument that if we cited any of the works in the field we would have to cite all of them, lest we insult some of the major figures in that rich and contentious field.

¹⁹ An important example was his early distinction among "proactive," "reactive," and "competitive" forms of contention, which he later discarded in favor of a new typology.

²⁰ I am grateful to Ann Mische for helping me to understand Tilly's "linguistic turn" in this way. For Franzosi's contributions, which were also heavily in debt to Tilly's work, see his *From Words to Numbers* (2005).

²¹ "Fluency through Fables," Tilly's address to the Tillyfest (1995). I am grateful to Barry Wellman and Beverly Wellman for unearthing a copy of this speech for my use in this article.

"Big Structures" like states and capitalism (Tilly 1984).

But in the course of his evolution, Tilly showed an increasing inclination to break structures down into mechanisms and processes. Thus, while *The Contentious French* took entire globs of French history as the contexts of analysis, *Popular Contention in Great Britain* placed the events he unearthed within shorter cycles of contention. These were not cycles in the traditional sense of, for example, political scientists' electoral cycles, but were defined by the institutional changes around which they clustered—for example, the cycle of contention around the first British reform act (Tarrow 1998).

This conjuncture between the micro and the macro finds rich reflection in the Funes reader, especially in the contributions of Eduardo González Calleja and of Salvador Aguilar and Funes (Introduction and Chapter 3). It was what set Tilly's event catalogues apart from both the "event history" approach of a Susan Olzak (1989) and from the "Great Events" of a Bill Sewell (1996). The linkage between micro-events excavated from primary sources and meso and macro processes was, from the beginning and to the end of his career, a hallmark of Tilly's approach. Nowhere was this more evident than in his discovery and use of the "repertoire of contention."

Regimes and Repertoires

A major innovation in linking micro to macro was the elaboration of the concept of the repertoire of contention. On the surface there was nothing new in this locution: Historians had been studying rick burnings, *charivaris*, forced illuminations, food riots, strike waves, rebellions, and revolutions for decades. What *was* new was to deliberately introduce cultural content into their study, with Tilly's growing emphasis on the *how*—rather than the *why*—of episodes of contention. The data he collected were micro-centered, but they were embedded in the evolution of forms of contention and their connections to different stages of capitalism and forms of regime (2006).

The concept of the repertoire was first enunciated in Tilly's *From Mobilization to Revolution*, published in 1978, but it was elaborated systematically in the 1990s, in *Popular*

Contention in Great Britain. There, he refined the concept into a set of cultural creations that both reflect structural developments and take on a life of their own. The latter occurred, for Tilly, as actors test the boundaries of the possible, elites respond to these innovations, new performances are refined and diffused, and new structures—like the social movement—evolve out of these interactions. "Political mobilization," as Ramón Máiz puts it in the Funes reader, "is considered [by Tilly] to be a phenomenon with its own autonomy and not merely a descriptive reflection of the changes in the organization of the production and structure of the state" (p. 50).

The importance of the repertoire, for Tilly, was to mediate between his macro-historical persuasion and his micro-political investigations. At the macro level, he strove to show how the repertoire evolved from a set of practices that were locally based, particular to specific sites, and often sponsored by elites to a set of practices that were supra-local, modular, and based on specialized organization (1995a:45–52). At the micro level, he became interested in how contention was conceived at various times, which led him to investigate the culture and language of contention.²²

Culture, for Tilly, was not a brooding omnipresence in the sky but was embedded in the relations between actors.²³ New ways of acting are almost always accretions to known forms of action, rather than new inventions. This left Tilly with the knotty problem of how to explain the major shifts in repertoires that occurred throughout history—for example, the invention of the strike or airline

²² Because Tilly developed the concept of the repertoire within the broad framework of contentious politics, some students of social movements missed its profoundly cultural content: for Tilly, the repertoire is not simply how people engage in collective action but what they *know how to do*, and what they know is culturally encoded. The failure to grasp and operationalize the concept of the repertoire in Tilly's work is one of the puzzling lacunae in the social movement literature.

²³ For an early recognition of the role of culture in Tilly's work, see Ewa Morawska and Willfried Spohn, in their "'Cultural Pluralism' in Historical Sociology: Recent Theoretical Directions" (1994).

hijacking. It also required him to collect data for long stretches of history, which few specialists had the resources or the energy to do. Only with the elaboration of automatic computerized data collection—which came too late for Tilly to employ it—can social scientists hope to elaborate and test his intuitions about the slow and varied evolution of the repertoire.

From Structures to Relations

What had changed in Tilly's work? In the 1970s, there was a first shift from "mono-causal structuralism" to what Ram6n M6az calls "interactive structuralism" (2016:43). In *The Vend6e*, urbanization had played the propulsive role; but by the 1970s and 1980s, Tilly was inferring a broader and more interactive set of changes in which economic transformations intersect with political organization and international factors. This led him first to question the "big structures" in much of the theoretical work on development (1984) and then to his work on war and state-building, first in "War Making and State Making as Organized Crime" (1985) and then in *Coercion, Capital, and European States* (1990).

"War Making and State Making as Organized Crime" was only an *hors d'oeuvre* written to provoke those who saw the history of state-building in legal-rational terms. It was in *Coercion, Capital, and European States* that Tilly went beyond provocation to deduce a variety of historical mechanisms that grew out of war: *extraction* of a surplus and *construction of an administrative apparatus* to collect it; *production* of war-making materiel by the state; *protection* of the population that supplied the surplus and managed the economy; *adjudication* of disputes; and *distribution* of society's product, eventually leading to the welfare state (1990:97). Although there had been inklings of these processes in his past work, *Coercion, Capital, and European States* was the true beginning of Tilly's adhesion to an ontology of studying historical mechanisms and processes, which occupied the last decade of his life. It also led him to reach outside nation-state development to the international system in which states and capitalism evolved in competition with each other.

In this work, Tilly deduced three variants of state-building: a coercion-based route where cities were rare and resources were extracted from the countryside; a capital-based route, where cities were important sources of revenue and capitalists came to dominate the state; and a capital-coercion route, which produced the most successful states in the international system (1990, Chapter 5). States developed internally, but they developed as a result of interstate competition and survival of the fittest in which "the fittest" were those that could combine the coercive-rich and capital-rich paths.

Relational Realism

In their book, Casta~eda and Schneider point out that Tilly moved from a structuralist to a culturalist understanding later in his life (p. 10). However, the fundamental shift in Tilly's ontology was not from structure to culture—or even toward a blend of the two—but in a full ripening of his interest in "the social fabric, or how human relations are negotiated" (Funes 2016:83–91).

We see hints of this ontological shift as early as 1995. In the same Toronto speech in which he confessed to having been a teller of "standard stories" for most of his career, Tilly worried that

Few social processes actually have causal structures that conform to the logical requirements of standard stories . . . Analysts of social processes who wish to explain them must therefore translate material that comes to them largely in the form of standard stories created in the course of social interaction . . . into other idioms that better represent their actual causal structure. (1995b:3)

This realization held profound implications for the final decade of Tilly's work. As he said in 1995:

Teachers and writers of non-story sociology therefore have a choice between working within the stringent limits set by standard stories and instructing their audiences in the analysis of causal mechanisms and sequences that do not

correspond to standard stories. (1995b:3)

Where did this lead him? As Castañeda and Schneider write; “Tilly advocated for a relational sociology that emphasizes social relations as the crux of social life” (p. 6). “Relational realism” was built on *mechanisms*, which he defined as a delimited class of events that change relations among specified sets of elements in identical or closely similar ways over a variety of situations (2000). Mechanisms, for Tilly, can be environmental, dispositional, or relational. They congeal into processes, and processes are what lie behind the episodes that are the raw material of his historical sociology (p. 26). This distinction was found as early as his 1998 book, *Durable Inequality*, but ripened decisively in his *Annual Review of Political Science* article on mechanisms (2001), in *Dynamics of Contention* (McAdam et al. 2001), *Politics of Collective Violence* (2003), *Regimes and Repertoires* (2006), in his two books on democracy (2004 and 2007), and in *Contentious Performances* (2008). As Máiz summarizes this change in his chapter in the Funes book, Tilly’s thinking came to be increasingly based on “transactions, interactions, social bonds and exchanges, which are the common denominators of social life to be explained” (p. 56).

We find growing evidence of this “relational realism” in his methodological writings, both those collected in *Explaining Social Processes* (2008) and in *Identities, Boundaries, and Social Ties* (2005). We also find it in his growing interest in boundaries and identities. For if interactions are the stuff of social life, so are the boundaries that people construct around them. In an important essay drawing on both of their work, Tilly and Viviana Zelizer summed up the centrality of relations and transactions in social life:

Social interaction generates, informs, and then responds to a significant set of connected categories. Those categories depend on interaction among three elements: (1) socially maintained boundaries, (2) relations within the boundaries, and (3) relations across the boundaries. They regularly involve

mental accounting systems, of which short-term quid pro quo exchanges constitute only one special type. People complement mental accounting systems with earmarking practices; they establish subdivisions within ostensibly homogeneous money and other media by signaling commitment of media segments to distinct relations and transactions.²⁴ (Zelizer and Tilly 2006)

Readers who have followed Tilly’s career will recognize that—given such a broad agenda—there had to be paths of investigation that he gestured toward but that were not quite taken. For the other side of the coin of Tilly’s restless imagination was that he often left insights unexplored as he got excited about some new problem or moved away from blind spots when they proved recalcitrant to investigation. Three of these lacunae are especially interesting.

Power and Other Problems

An important area of investigation that remains mysteriously latent in Tilly’s work was the systematic and explicit study of power. This may surprise readers who—as does this author—find power relations everywhere in his work: the power of rulers to extract taxes from citizens to fight their wars; the power to penetrate the periphery in order to control those citizens; the power to repress them when they refuse to pay these taxes or to be conscripted into the lord’s army; and the power to constrain contention by distinguishing behaviors that are forbidden from those that are permitted and those that are required.

Moreover, in Tilly’s work on contention we find power in movement, too: the power in numbers, in the forms of assembling for rights, in the adoption of new and innovative performances, in forging coalitions across different boundaries, and—most important—the power to shape or reshape the forms of regimes. All of these are impregnated with or are affected by power.

If power is everywhere in Tilly’s work, why does it need to be specified? I guess

²⁴ I am grateful to Viviana Zelizer for calling this key article to my attention.

the question is “what *kind* of power and how is it exercised?” One of Tilly’s peers, Michael Mann, spent the better part of three decades typologizing different forms of power in his magisterial *Sources of Social Power* (1986 to 2013). Not only that: in a foundational piece published at the beginning of his journey, he specified two main forms of state power—despotic and infrastructural—by which he distinguished the power of the state over civil society from the power that the state exercises from within civil society (Mann 1987; see Tarrow 2018 for an analysis).

Similarly, in the context of international relations, Joseph Nye distinguished between “hard” and “soft” power. And, in a recently published study, Lucia Seybert and Peter Katzenstein distinguish conceptually between “control power” and what they call “protean power,” which they define as “the effect of improvisational and innovative responses to uncertainty that arise from actors’ creativity and agility in response to uncertainty” (2018:4). Though these authors do not cite him, “protean power” is a remarkably Tillian idea, because Tilly meant something very much like it when he examined the power of ordinary people to advance their goals through innovations in the repertoire.

Specifying different forms of power might have helped the “relational” Tilly to make clearer how power from above interacts with power from below, which is another way of saying how institutional politics intersects with contentious politics. This was a distinction that Tilly made sharply in a sweeping review of James Scott’s *Seeing Like a State* (1999a). In this book, Scott famously distinguished between the abstract knowledge that leads states to engage in disastrous projects in the absence of the practical knowledge that resides at the base of society. For Tilly, what Scott missed was the interaction of power from above with power from below. “In fact,” he writes, “the two vary in partial independence, and in partial reinforcement, of each other” (Tilly 1999a:335).

True, Scott’s concern in *Seeing Like a State* was with knowledge and with the power to implement it. But Tilly was never happier than when he was expanding an author’s ideas beyond what that author imagined.

Drawing on the work of Eric Wolf, Alain Desrosières, and Viviana Zelizer,²⁵ he broadened the concept of forms of knowledge until they virtually blended into forms of power. For example, he writes,

When French regional governments of the seventeenth century faced rebellions against new or increased royal taxes . . . they generally routed whatever rebel forces had assembled, rounded up a few ringleaders, gave them spectacular public executions, held drum-head trials for some lesser participants, but simultaneously worked out settlements with regional and local leaders.

In the end, though possessed of definitive differences in power, “each side accommodated to the other” (ibid.:346–7).

It is not that Tilly was indifferent to the power relations between states and their citizens—far from it. But his historical and comparative scope was so broad that he never stopped to specify the *different forms of power* that grow out of the complex relations of power in modern societies. Thus, he sees the welfare state eventually growing out of the state’s efforts to build the infrastructure it first needed to fight its wars; but his account elides the fact that distributing welfare endows the state with a new kind of power—*infrastructural* power. And this is why infrastructural power grows more extensive as the state becomes more civilian in nature, while its despotic power—as Mann was at pains to point out—oscillates (Mann 1987).

A second lacuna in Tilly’s work is that the two main trunks of his lifetime of contributions—contentious politics and the role of war in state-making—show a striking lack of connection.²⁶ The former is at the core of how he is remembered in sociology, but the latter gained him the most attention in political science. Yet beyond a few careful examinations of how wars trigger domestic

²⁵ See Desrosières 1998; Wolf 1999; Zelizer 1994.

²⁶ I have tried to connect these two trunks of Tilly’s heritage in *War, States, and Contention*, which appeared too late for him to have greeted it with his usual combination of wit and appreciation.

contention, Tilly never systematically connected these two pillars of his work. The key mechanisms of state-building in his *Coercion, Capital, and European States*—extraction, protection, and the adjudication of conflicts—might have served as starting points for such a connection; but by the time that book was published, Tilly was already deeply engaged in his work on British contention, which set him on a new methodological path more oriented toward the micro-politics of protest than toward the macro-politics of war and state-building.

A final lacuna is Tilly's failure to follow up on the insights in *Durable Inequality*, just as it was to become a burning policy issue in the United States and elsewhere. *Durable Inequality* was the first of his books to put the mechanism-based ontology he adopted in the 1990s to work. Mechanisms like exploitation, emulation, opportunity hoarding, and adaptation helped him to tell "superior stories" in which "complex processes producing social boundaries and collective identity" produce durable inequalities (Máiz 2016:58). Had Tilly followed that book up with more sustained empirical analyses, his work might have provided important guidelines for students of inequality today.

But these are cavils. Much more could be written about the contributions of this major figure to the social sciences than I have had the space to explore here. I only want to add one transversal comment to what has already been said: despite his enormous bibliography, Tilly's attitude toward academia was essentially that of a *teacher*. Much of his best work was pedagogical—working things out on paper both for himself and for his readers. This was why some of the germs of future books and articles often emerged from comments at conferences, in seminars, and even from after-dinner speeches, like the one that produced his metaphor about "standard" and "superior stories." I want to close this review with a typically Tillian "superior story."

When he was a graduate student at Harvard, Tilly asked a well-known professor (he never named him in my hearing) to look at a paper he had written. Weeks went by, and when there was no response from the professor, never shy, Tilly walked up to

him and asked if he had had time to read the paper. In an attempt at humor, the professor responded, "No; I'm too busy being an important professor." "Do you mean," responded Chuck, "that you don't want to *continue* being an important professor?"

Chuck always had time to read everybody's paper—always carefully and often overnight; that was how he became, and will remain, an important—and a very human—professor.

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The Arrival of Social Science Genomics

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"The genetics revolution may be well underway," write Dalton Conley and Jason Fletcher in *The Genome Factor*, "but the social genomics revolution is just getting started" (p. 11). They are not alone in their excitement for recent developments bringing together social science and genetic research. Decades from now, folks may well look back at this time as the start of a golden age for the field.

Of course, declaring the rise of social genomics is bound to make many sociologists nervous. Sociology often identifies itself as a style of explanation, with references to genetic differences considered the quintessential "Not Sociology" explanation. References to genetic differences are also regarded, with abundant historical justification, as dangerous for many of the moral and ideological commitments that sociologists overwhelmingly share. Sociologists at the intersection of critical race theory and science studies have been particularly vocal opponents of any role for genomic data in social science. A recent book by Catherine Bliss, *Social by Nature*, contends that social science genomics needs a "wake-up call" about the naïveté of its approach and its implication in social harm.

Conley and Fletcher provide a commendable overview to social science genomics and anticipate some of the criticisms that Bliss raises. But *The Genome Factor* is written for a broad audience, and here I wish to discuss social science genomics in a way directed more specifically to sociologists. I will focus especially on what I regard as the most promising development for social scientists: polygenic scores. I will talk first about the science of polygenic scores and then about some of the policy and moral questions at hand, offering pointers to *The Genome Factor*,

Social by Nature, and several other books along the way.

Why is now different?

Social science genomics has so far unfolded like a three-act play. Act I relied on the statistical model of data on twins, adoptees, and other familial relationships. The fundamental empirical product was a *heritability* estimate, intended as the proportion of variation in an outcome among members of a population that is due, in one way or another, to genetic differences. This paradigm generated an enormous number of studies cataloging substantial genetic influence nearly everywhere it looked. The same tools that quantified the heritability of height and schizophrenia also showed the heritability of abilities, attitudes, experiences, and attainments.

Act I proceeded without direct measures of genes themselves. This indirectness was one reason the field struggled to overcome its skeptics, who could latch onto one or another assumption as grounds for doubts about the enterprise. Worse, applying these tools to more complex questions about genetic influence required adding yet more assumptions, making already indirect inferences even more so.

Act II opens with molecular data on genetic differences becoming available. This phase began with researchers having data only on a very small number of sites on the genome, for only a few dozen or hundred—later, a few thousand—participants. The logic of analysis was otherwise familiar—more familiar than for the variance decomposition methods that dominated Act I. Papers posed hypotheses about