

# The Structure of Contingency<sup>1</sup>

Ivan Ermakoff

*University of Wisconsin—Madison*

Can we identify and theorize contingency as a property of processes and situations? Applied to social and historical events, contingency denotes a mode of causality characterized by its indeterminate character. Conjunctural causation and period effects lack the specificity required to identify a distinctive class of processes. References to chance happenings offer no clue to analyze endogenous disruptions. Focusing on breaks in patterns of social relations and the role played by individual agency, the author distinguishes four types of impact—pyramidal, pivotal, sequential, and epistemic—and investigates how these relate to the possibility of indeterminacy through an Event Structure Analysis of the night of August 4, 1789, in Versailles. This empirical foray underscores the significance of junctures that are indeterminate with respect to their collective outcomes. The article grounds analytically this class of conjunctures with the concept of mutual uncertainty, gauges the phenomenal scope of this contingency in terms of action domains and group types, contrasts it with the notion of chance events, and draws its implications for the study of social and historical change.

The notion of contingency presents us with a quandary. We use it to designate what we do not know, what is outside the realm of an inquiry, or what eludes the grasp of an explanatory model (Carr 1963, p. 134; Gallie 1964, p. 92). In so doing, we make the notion a residual category: being outside of knowledge, outside of an inquiry, or outside of an explanatory

<sup>1</sup>I gratefully acknowledge support from the Graduate School at the University of Wisconsin—Madison for this research. I also would like to thank the *AJS* reviewers for the relevance of their comments and their willingness to pay serious attention to

model, contingency has no fixed place and no content proper. Its boundaries are indefinitely extensible. Whatever content it may have, it owes to the entity that makes it residual. It exists, so to speak, by proxy.

Yet, we also invoke contingency to characterize processes and events that could have not been or could have been otherwise (Leff 1969, p. 52; Griffin and Korstad 1995, p. 449; Shapiro and Bedi 2007, p.1). Underlying this usage is the implicit reference to a property or a set of properties that define a class of phenomena whose occurrence was anything but necessary. Implicitly, the notion has a positive meaning. Pointing to some form of indeterminacy lodged at the heart of the phenomena under consideration, it is supposed to tell us something about the nature of these phenomena.

As long as we use the notion along these two diverging tracks, it lacks consistency. Between the residual and the positive uses, no bridge is possible. If the category is residual, it has no positive meaning. If it has a positive meaning, it cannot be deemed residual. The goal of this article is to address this difficulty by examining which positive content, if any, can be assigned to the notion of social and historical contingency. Can we describe contingency as “a property peculiar to certain processes” (Boudon 1986, p. 181)? Should the search prove inconclusive, then the category is indeed best viewed as a shorthand for designating “what is outside” in the sense of “not accounted for.” If, however, we can identify and theorize the property of indeterminate processes and events that “could not be,” then the residual meaning is mistaken.

At stake in this inquiry is our ability to clearly delimit the scope of explanatory models that postulate causal invariants. In specifying whether some processes and conjunctures can be adequately characterized as indeterminate, we specify by the same token the conditions under which models that posit some constant relations between effects and causes are most likely to lose explanatory leverage. The point is crucial: we gauge the soundness of our models in light of their limits (Boudon 1986, p. 221; Hayek 1989, p. 3; Kuran 1991, p. 47). Arguments that help identify these limits pave the way for more reliable explanatory claims.

To this end, I first discuss conceptual leads intended to highlight different “aspects” of contingency (Hall 1999, pp. 159–66): conjunctural causation, temporal effects (period and sequence effects), chance, and individual agency. The notions of conjunctural causation and period effects are not specific enough if our aim is to assess the possibility of a positive understanding. By contrast, the category of chance happenings is amenable to a

---

the logic of the argument. Previous versions of this work were presented at the American Sociological Association and at the ISERP seminar at Columbia University. Direct correspondence to Ivan Ermakoff, Department of Sociology, University of Wisconsin—Madison, 8128 Social Science Building, 1180 Observatory Drive, Madison, Wisconsin 53706. E-mail: [ermakoff@ssc.wisc.edu](mailto:ermakoff@ssc.wisc.edu)

positive conception once we interpret it by reference to a criterion of causal independence: one causal series disrupts another unfolding independently. The reference to chance, furthermore, helps substantiate the notion of indeterminate sequence effects.

Yet, equating contingency with chance happenings without further ado is limiting in two respects. First, the claim of causal independence implies paying attention to disruptions *exogenous* to the system of action being considered. In the realm of social and historical phenomena, however, such a focus is too restrictive: in many instances, disruptive happenings are endogenous to the process that they contribute to derailing. If so, causal independence no longer applies. Second, the notion of chance happenings leaves open the question of how we should analyze the impact of disruptive happenings on collective outcomes. An exclusive focus on chance happenings moves the attention away from the identification of indeterminacy as a property *intrinsic* to processes and events.

These critical remarks set the ground for a conception that explores the issue of impact and the possibility of indeterminacy as an endogenous property of processes and conjunctures. Individual agency enters the analytical stage at this point: it is through their impact on the agency of particular individuals that incidental causes affect evolving action systems and thereby acquire collective significance. The role played by these particular individuals exemplifies the notion of “small” causes yielding “big” effects. The causes are individual, often punctual. Yet, their effects are collective and enduring. In more specific terms, the discrepancy between cause and effect reveals breaks in social causality, that is, the ways in which social relations are patterned and organized.

From this perspective, the clue to an understanding of causal disruption endogenous to social and historical processes lies in a systematic analysis of how factors affecting individual agency can bring about breaks in patterns of social relations. The article tackles this issue by distinguishing four types of impact: pyramidal, pivotal, sequential, and epistemic (Sec. II). These four types exemplify the notion of “small” causes yielding “big” effects. A pyramidal impact rests on the existence of a hierarchical system of power relations. Pivotal is the action that decisively shifts a balance of power. Sequential impact describes the alignment of individual stances on observed behavior. The impact is epistemic when it affects beliefs that actors presume they are sharing.

For each type, contingency takes on different meanings depending on whether we focus on the factors conditioning the impact of individual actors or whether we consider the collective outcome. Factors conditioning the impact of individual action can be said to be contingent if they are coincidental. More relevant to the current inquiry is whether an individual action makes collective behavior predictable or indeterminate. I pursue

this inquiry by considering one case that for exploratory and heuristic purposes presents several advantages: it exemplifies unexpected historical ruptures, has been well documented by participants and witnesses, is clearly confined in time, and stands out in the historiography as crucially significant. This event is the night session of the French National Assembly on August 4, 1789.

An event structure analysis (ESA) of August 4 brings into relief two successive temporal patterns highlighting the dynamic of the event (Sec. IV). In the first one, different scenarios of collective behavior coexist. None prevails. Each can be characterized as notional. The subsequent temporal pattern, however, is univocal: one type of collective behavior saturates the event as the delegates of the privileged status groups rush to abolish their own privileges. The formal representation yielded by ESA highlights the moment that instantiates the shift from one pattern to the other. When we narrow the focus down on this moment of transition, collective indecision comes to the fore. Those under challenge are at a standstill. As a consequence of their indecision and mutual dependence, the juncture is open ended. Moreover, both the emergence and the resolution of this moment of collective indeterminacy can be traced to the public stances taken by prominent actors. These happenings were endogenous to the collective dynamics. Their impact was epistemic: they affected actors' assessments of their peers' likely states of mind.

Thus, on August 4, 1789, collective indeterminacy punctuated the drastic reshuffling of patterns of social and political relations. Cast in analytical terms, contingency here designates the indeterminacy of open ended conjunctures (Sec. V). It is coterminous with the emergence of *mutual* uncertainty: situations in which the members of a group simultaneously make their actions conditional on one another's and are at a loss to figure out where they collectively stand.

This understanding of contingency vests the category with positive content, first, by theorizing it as a relational configuration—what Simmel (2009) calls a “pure form” (p. 28)—and, second, by identifying its empirical markers. The configuration of relations is one hollowed out by the exacerbation of interdependence in the absence of a group stance. Empirically, we gauge these moments of collective indetermination in light of different indicators. Actors' search for behavioral cues from peers, their wait-and-see attitude, and their desire to align with a collective stance directly document the emergence of mutual uncertainty. Expressions of ambivalence and surprise at one's own action provide post factum clues. Additionally, we can surmise conjunctures of mutual uncertainty through an analysis of incentive structures and the unprecedented character of the challenge.

In Section VI, the article explores the phenomenal scope of this class of situations by examining whether this class is conditional on a specific do-

main of action (e.g., politics) and a particular type of groups. Drawing on the case of high-tech scientific engineering (NASA and its contractors), I argue that the relational configuration distinctive of open-ended conjunctures is independent of the domain of action being considered and therefore of the type of interests at stake (economic, political, religious, scientific)—the “content” of relations in Simmel’s (2009) terminology. Furthermore, situations of mutual uncertainty can emerge in groups of various kinds, whether the groups in question are endowed with a formal structure (formal groups), have the status of imagined communities (abstract groups), or are the products of the circumstances (*ad hoc* groups).

The formal, abstract, and *ad hoc* dimensions matter insofar as they affect the likelihood, temporality, and intensity of collective indeterminacy. By standardizing their decisional procedures and, in this way, shaping the anticipation of collective resolutions, formal organizations do reduce the likelihood of mutual uncertainty, although they can never be immune to its sudden irruption. Mutual observation in *ad hoc* groups and formal groups shorten the temporality of moments of indetermination while intensifying individuals’ awareness of their predicament. In particular, *ad hoc* groups confronted with situations of emergency are vulnerable to flickering moments of uncertainty about prospects of coordinated action. Groups that exist as imagined communities and can be said to be abstract in that sense are for their part amenable to diffuse forms of indetermination extended in time.

This article combines an analytical with an empirical genre of investigation, and its contributions pertain to both genres. First, it offers a critical discussion of different takes on contingency, and it spells out the underpinnings and implications of these approaches. Second, this article engages the challenge posed by the presumption of indeterminate social and historical processes. It does so without falling back on the notion of chance happenings, that is, the notion of an arbitrary conjunction of causal factors. While we cannot theorize the conjunction of independent series, we can theorize the impact of incidental happenings and the possibility of causal breaks. This article elucidates this analytical challenge by specifying how a configuration of relations can generate its own indeterminacy. Thereby, it identifies a class of conjunctures that might produce surprising outcomes, and it expands the repertoire of analytical tools available to analyze large-scale changes (Sec. VII).

Third, I elaborate a typology of impacts that spells out the oft-asserted connection between contingency and individual agency. Doing so clarifies two semantic correlates of contingency: the contrast between effects and their causes and the consequential significance acquired by the vagaries of individual actions (Karl 1990, p. 6; Sewell 2005, p. 197). This typology of impacts is particularly relevant for the analysis of moments of rupture and transition processes.

The fourth contribution highlights methodological requirements. We assess the element of chance by examining whether the relevant chains of causation can be deemed independent and whether the removal of one single proximate cause would have prevented the outcome (Lebow 2000–2001, p. 597). The approach required for this assessment is necessarily retrospective. Assessing the indeterminacy of an open-ended situation, however, requires gauging the scope and intensity of mutual uncertainty. This implies a subjective and prospective standpoint (Sec. VII).

Fifth, the focus on the emergence and resolution of uncertainty provides an explanation of August 4 that is new and analytically grounded. “The meeting has baffled historians” (Fitzsimmons 2003, p. 16). Drawing on the concepts of notional scenarios, collective alignment, and epistemic impact, the empirical foray presented in Sections III and IV reconstructs the dynamic of collective interactions without postulating its outcome. In addition, this genetic approach, fully consistent with a phenomenological emphasis on actors’ beliefs and perceptions, recasts the collective effervescence displayed on this occasion (Durkheim 1995, p. 211) as the emergent feature of a process of alignment. Relief blended with joy as aristocrats and clergymen realized that they had collectively devised a response to the crisis they were facing. This finding calls into question sweeping and unqualified statements about the significance of emotions in collective action settings. It invites us to pay systematic attention to the etiology of emotional states and their connections to interactional dynamics.

## I. LEADS

When we use the notion by reference to social and historical processes, contingency denotes a lack of determination: no inherent necessity or master process drives the unfolding of events. These “could have happened differently than how they in fact happened” (Isaac, Street, and Knapp 1994, p. 118). The processes at play in such instances exemplify an “essential causal indeterminacy” (Griffin and Ragin 1994, p. 16). As a result, these processes elude the grip of what Traugott (2002) terms “etiological analyses,” that is, analyses that tend “to reduce historical causation to the operation of a few inexorable principles” (p. 173). For a positive conception, the challenge lies in explicating this indeterminate character.<sup>2</sup>

<sup>2</sup> There is no want of references to contingency in the literature on social processes. Yet, with a few exceptions, the category is left undefined. At times, it is elevated to the status of a central category without even being clarified. Then, it remains implicit and intuitive. Since it can be vested with many different meanings, it is also highly ambiguous, as I pointed out in the introduction: we do not know whether we should use it as a residual category or whether it has a positive content.

By “positive” conception, I mean a conception that identifies the properties of a phenomenal class in a way that makes these properties liable to systematic and refutable analysis. Two formal criteria may be considered for identifying a conception or a theory as “positive.” First, a positive conception should be able to trace empirically its object (traceability criterion). Second—and this second criterion follows the first one—a positive conception should be able to differentiate its referent from other empirical referents (differentiation criterion). In sum, a positive approach needs to be able to specify the empirical content of the category and make it traceable. At issue therefore is whether given these two positive criteria we can pin down the indeterminacy that sets contingency apart as a causal mode.

Taking my cues from Hall’s (1999, pp. 159–65) reflections on “how to take contingency seriously” (p. 159), I discuss four conceptual hints: conjunctural causation, historical time (period and sequence effects), chance happenings, and individual agency. I appraise these leads in light of their contributions to a positive conception and its requirements. Neither the reference to conjunctural causation nor the reference to time effects provides definite clues to trace empirically indeterminacy. Duly specified, the notion of chance happenings does put us on track. This conception, however, highlights only one facet of the problem, leaving unresolved the question of how happenstance translates into collective outcomes. The reference to individual agency takes on its analytical significance in this light: chance produces its effects by affecting the agency of particular individuals.

### A. Conjunctural Causation

According to a definition in terms of “conjunctural causation,” contingency “refers to situations in which complex events are determined by variable constellations of causal factors rather than a single factor or constant set of factors” (Steinmetz 1998, p. 173). To put it otherwise, “things happen because of constellations of factors, not because of a few fundamental effects acting independently” (Abbott 2001, p. 147). Interactions are the prevalent causal mode (Hall 1999, p. 162). Causation in this conception has therefore three main features: (1) no master process “acting independently” shapes outcomes; (2) different constellations of factors can account for the same outcomes (Ragin 1987, p. 25); (3) by way of consequence, explanatory models grounded in the hypothesis of some overarching main effect fail to capture the causal logic at play.

In contrast to the myriad contingency claims that remain undefined, this definition has the advantage of being explicit. Nonetheless, if our aim is to differentiate an empirical class of events and processes characterized by their indeterminate character, conjunctural causation lacks the specificity

required for this aim. Any social process involves different categories of actors endowed with their own trajectories, positions, and sets of interests. Through their interactions, these bring in different causalities. In short, social causality by definition is “conjunctural,” which means that a definition of contingency in terms of conjunctural causality fails the differentiation test. We would be at pain to identify a set of processes characterized as “contingent” on the basis of the “conjunctural” character of the constellation of factors that made them possible.

Nor does a conception cast in terms of “conjunctural causation” help us univocally pin down the indeterminate character of the process under scrutiny. While the notion of conjunctural causation emphasizes the variable character of the combinations of factors producing an outcome (Ragin 1987, p. 20), it leaves the etiology at work in these combinations open. Are they bound to happen? Or should we view them as indeterminate in some respects yet to be specified? “Conjunctural causation” as such does not tell us.<sup>3</sup> More troublesome, the notion is fully compatible with a deterministic understanding of conjunctures. Factors can be dynamically related to one another in a causal complex that has its own necessity.

## B. Period and Sequence Effects

The second lead conceptualizes contingency as a derivation of historical time (Hall 1999, pp. 163–64). This conception has two variants. One refers to the characteristics of the environment historically situated. “At a given time (and place), particular situational constraints and possibilities obtain” (p. 163). Thus, “the histories of individual firms . . . follow unique paths shaped by the contingencies of their environments” (Abbott 1988, p. 171). Analysts commonly describe these as “contextual,” “situational,” or “period” effects, depending on the temporal scope.

*Environmental factors.*—Casting contingency into the mold of environmental factors raises objections consonant with those elicited by conjunctural causation. For one thing, the etiology of these factors is a question mark. Are they the necessary offspring of the past? Do they coincide with, or induce, some rupture? The matter cannot be settled a priori. It calls for an investigation of emergence processes. Further, nothing in this conception points to a lack of necessity. Actually, the importance granted to situational conditions rests on the opposite presumption: were the condi-

<sup>3</sup> Alternating references to “coincidences” (pp. 25, 43) with references to “patterns of invariance and constant association” (p. 51; my emphasis), Ragin’s (1987) formulations convey divergent interpretations of this issue. Griffin and Ragin’s (1994, p. 16) equivalence between “contingency” and “complexity” offers no clarification either.

tions different, outcomes would be different as well. Abbott's (1988) language in the previous quote is telling: the environment can "shape" paths and trajectories (p. 171). In some instances, initial conditions set the course of a dynamic that can be modeled and predicted (Roth 1992, pp. 204–8; Noymer 2001; Biggs 2005, p. 1706).

*Order and disorder.*—A different take on temporal contingency shifts the focus to sequences, their evolution and effects (Abbott 1983, 1988; Hall 1999, p. 163). This lead follows up the claim that the order of a sequence affects its subsequent development. A sequence appears "as an evolving set of events whose further evolution reflects influences of varying temporal depth and order" (Abbott 1983, p. 131). We can gauge the possibility of its indeterminacy from two temporal standpoints: by examining how the order of the sequence—its enchainment—got produced (retrospective assessment) or by inquiring into the lack of determination of its future development at different points in its unfolding (prospective assessment).

Concerning the mode of production of a sequence, different types of enchainment are conceivable: sufficient cause, necessary cause, chance, and normative enchainment (Abbott 1983, pp. 132–33). If the occurrence and, by way of consequence, the timing of some sequentially influential happenings is the outcome of chance, the sequence bears the mark of the contingent. "Contingency must allow for the accidental interplay of separate sequences" (p. 134). Unsurprisingly, the ordering of a sequence accidentally produced defies systematic explanation. This line of argument, of course, assumes that we have a full-fledged definition of chance.

Assessing the indeterminacy of a sequence's future draws attention to agency considerations. Griffin (1993) makes this point clear in his sequential analysis of David Harris's lynching on April 23, 1930, in Bolivar County, Mississippi: when whites informed police officers that Harris had killed a white tenant farmer, they "introduced two contingencies—the possible involvement of these two law officers—which they could not control and which might have altered the course of the event" (p. 1117). Whether we are considering exogenous shocks or reactions endogenous to an unfolding sequence, such as those analyzed by Griffin (1993), the sequence is punctuated by decisional moments that engage actors' agency and have the capacity to "channel the direction of subsequent events" (Aminzade 1992, p. 463).

### C. Chance

Chance—our third lead—has different connotations depending on whether we focus on the random variation of repeatable occurrences or a single event (happenstance). We deem multiple occurrences random when all the causal factors entering the equation of their production interact on their own, so to speak: for each instance, causal factors are given a free hand.

We characterize a single event as the effect of pure chance when it results from the intersection of two or more independent causal series. These series are unfolding independently from one another, their intersection is unexpected and unpredictable.

Accordingly, chance can be historically significant in two ways. Random variation matters in interactive systems the dynamics of which is vulnerable to small changes in the initial distribution of interactions or positions. Through mechanisms of either positive or negative feedbacks, interactions undergo self-amplifying and, by way of consequence, nonlinear dynamics (Roth 1992, pp. 211–12; Biggs 2005, p. 1684). Hill (1997, pp. 197–201), for instance, illustrates formally with a prisoner's dilemma's interactive structure how, under certain conditions pertaining to the cost of switching strategies and the cost of getting information about the other players' types, a change in the number of conditional cooperators gives way to self-amplifying dynamics that generate radically different collective outcomes.

Happenstance takes its effect through the abrupt interruption, or deflection, of an ongoing sequence. King William III's horse stumbling over the underground track of a mole is a case in point. The course of happenings that led to the mole's digging a track was independent from the series of events that led King William III's horse to step on it (Gallie 1964, p. 92). Both series unfolded in separate phenomenal realms. Their intersection was therefore arbitrary. No "single, comprehensive causal system" can account for their coincidence (Gallie 1964, p. 92). Bury (1930) expresses the same idea with a fictional example: "if Napoleon at an early stage in his career had been killed by a meteorite, that would have been the purest of pure contingencies" (p. 67).

Both conceptions have the specificity required to pin down an empirical class. We can model an interactive system's sensitivity to initial conditions as we can model its nonlinear character as Biggs (2005) has done in the case of strike waves. Similarly, we can assess the contingency of a single event, or process, by assessing to which extent the removal of a proximate and independent factor, consistent with a minimal rewrite criterion, would unambiguously alter the outcome (Hawthorne 1991, pp. 158–59; Lebow 2000–2001, p. 597).

For our purpose, the chasm between these two understandings of chance is instructive. Once a self-reinforcing process has taken shape, this process follows its own determinative logic anchored in the feedback mechanism that propels it in the first place. The same remark applies to chaotic processes (Thom 1983, p. 16). The evolutionary pattern is deterministic. By contrast, happenstance draws attention to the indeterminacy of an arbitrary conjunction: the intersection of two unrelated causal series is indeterminate. It has no cause proper.

Conceptualizing contingency as happenstance thus offers a way out of the indistinctness of a definition in terms of conjunctural causation. We should be considering not factor constellations as such but those constellations involving causally independent series. This requires adopting a dynamic and genetic perspective. Contingency thus defined denotes the confluence of two or more “streams” of independent causes (Lebow 2000–2001, p. 596). “Any phenomenon of interest may be subject not only to regularities, but also to happenstance, potentially of the most bizarre and unpredictable sort” (Hall 1999, p. 161).<sup>4</sup> Should we then conclude that once we have demonstrated causal independence, we have settled the issue of indeterminacy? Two considerations suggest otherwise.

(1) Claims of contingency grounded in the reference to happenstance (systematically defined) presume that factors disrupting a causal sequence (a mole’s burrow, the shape of Cleopatra’s nose, a meteorite) are exogenous to this sequence and the action system being disrupted. In this conception, the indeterminacy brought about by a chance happening resides outside the dynamics of the process that is cut short or goes into a tailspin. Yet, in numerous instances, accidents are endogenous to the action system that they disrupt.

Consider the discharge of a rifle in a situation of tense face-to-face confrontation between two groups such as the one that took place on February 23, 1848, in front of the Ministry of Foreign Affairs in Paris (boulevard des Capucines; Traugott 2002, p. 15; Haydu 2010, p. 30). The shot generated panic among the soldiers, who started to shoot on the crowd. After several minutes, 50 people lay dead. This was the beginning of the February 1848 revolution. The discharge may have been accidental (e.g., the outcome of a nervous lapse on the part of a soldier). Yet, it seems difficult to argue that it was contingent in the sense of being coincidental. The context made it probable.<sup>5</sup>

Confining our positive understanding of contingency to the causal indeterminacy of happenstances would therefore preclude the examination of forms of indeterminacy that may be endogenous to evolving action sys-

<sup>4</sup> Evolutionary stochastic models formally demonstrate the possibility of highly significant shifts in patterned macro behaviors resulting from the conjunction of random variations in individual behaviors independent from one another. These random perturbations take the form of idiosyncratic deviations from established patterns (e.g. norms, conventions, and contract types). In these models, the dynamic path is characterized by the relatively sudden emergence of a new pattern (“punctuated equilibrium effect”) (Young 1998, pp. 19–20).

<sup>5</sup> Haydu (2010) views “the initial shot” on the boulevard des Capucines on February 23, 1848, as “serendipitous” (p. 31). This characterization is questionable if the tension that pervaded the collective situation on the boulevard des Capucines made such a happening likely. Describing it as “serendipitous” obfuscates this endogenous dimension.

tems. This point is of particular importance if we want to probe whether contingency should also be conceptualized as a property intrinsic to collective processes.

(2) Even if we have good grounds to view a happening as purely coincidental, the key issue for our understanding of social and historical processes is not its coincidental character but its collective impact (Wood 2007, p. 236). How does this happening affect social relations and patterns of interactions? Sheer coincidences happen all the time. Most of the time they get resorbed in the flow of social processes (Sewell 1996, p. 843). Only those that durably affect social relations have historical significance. To figure out the underpinnings of this collective impact, the notion of causal independence is of no help. We more or less implicitly presume a discrepancy between effects and cause. But we cannot specify the *modus operandi* of this discrepancy simply by invoking a coincidence. Investigating impact brings us along the shores of a different factor: individual and collective agency. This is the fourth lead.

#### D. Agency

Claims of contingency grounded in references to agency emphasize a type of variability that eludes the purview of causal invariants (Sohrabi 2011, p. 29). Often this view of the contingent blends multiple threads at once. A positive reading invokes free wills. “The element of indeterminacy in human conduct makes contingency inseparable from history” (Leff 1969, p. 54).<sup>6</sup> Against all odds, an individual can opt for a line of conduct eschewing the grips of conditioning factors. Therein lies the fundamental indetermination of human agency—“fundamental” in the sense of being always possible as an intrinsic potentiality of the human condition.

A negative reading of the agency factor, however, reminds us of the frailty of human judgment: its vulnerability to sudden turnarounds, lack of information, and cognitive challenges. Mistakes, lapses, and misjudgments can never be ruled out. Even the best minds can be caught off guard and go astray. The “subjective contingencies [that] bulk large in every rapidly changing situation” are “contingencies due to ignorance and error” (Gallie 1964, p. 97). “Had Charles I not proved so inept at managing the affairs of the throne,” neither the enduring fiscal difficulties of the British Crown nor the wars against the Scots would have been fatal to the monarchy (Hall 1999, p. 158; Dray 1984).

<sup>6</sup> “[Explanations that derive from interpretive philosophy] make action central. They mix determinants and free acts. They embrace contingency” (Abbott 2001, p. 121). See also Hall (1992): in social life, “action may be held to be indeterminate in relation to any law” (p. 172).

Frequently intermingled with these two threads are considerations on the vagaries of action capacities. Circumstances can enhance, undermine, or cut short individuals' capacity to act. Consistency and forbearance, moreover, greatly vary across individuals. These are matters of personal ability. Hall (1999) characterizes this factor as "effort," that is, "variation in the strength of intentionality" (p. 164).<sup>7</sup> Effort mediates the impact of constraints and opportunities, "transforming the context and significance of subsequent actions." As a result, "the effortful character of social action undermines attempts to explain sociohistorical phenomena deterministically" (p. 164).

The focus on agentic factors, however, turns out to be either inconclusive or incomplete when we look for the empirical tracks of contingency. It is inconclusive because we cannot a priori rule out the possibility that individual conducts are the product of determinative processes—processes of which actors may not be aware, which they may not want to acknowledge to themselves and which we, analysts, might uncover through a systematic inquiry into behavior and thought patterns. For all its evocative power, free will remains either a postulate or a hypothesis as long as such an inquiry remains pending. Similarly, individual behaviors that at first glance appear idiosyncratic may turn out to be fully intelligible once we clarify the relational setting in which they take place.

The emphasis on agentic factors is incomplete insofar as the key analytical challenge lies less in acknowledging individual factors of variability, or their idiosyncratic character, than in theorizing the conditions under which such factors can be consequential and how they become consequential. Doing so implies studying the processes whereby agentic factors durably affect collective behavior and, by way of consequence, patterns of social relations. These effects do not take place outside the action systems that they are inflecting. They are part thereof. It is in conjunction with endogenous processes that exogenous shocks and chance happenings matter. This means that in order to systematically appraise the agentic side of contingency, we need to identify which relational configurations lend themselves to the impacts of individual factors.

## II. THEORIZING IMPACTS

When the focus is on the possibility of indeterminacy, the major drawback of conjunctural causation and contextual effects is their static and ubiqui-

<sup>7</sup> From a broader perspective taking account of fortitude and adequate knowledge, "effort" can be recast as an index of what Spinoza meant by *conatus* (the endeavor for self-preservation) and *virtue* (the ability to be the cause of one's own capacity; Spinoza 1996, pp. 75, 128, 132).

tous character. Hence, they offer no specific insight for understanding the possibility of indeterminate configurations. Happenstance does provide a tangible lead. However, in the case of social and historical processes, we cannot confine the inquiry to exogenous disruptions. Our focus should also be on accidents and actions endogenous to patterns of relations. These critical remarks set a twofold agenda centered on (1) the collective impact of disruptions and (2) the possibility that social and historical processes generate their own indeterminacy. We cannot hope to adequately tackle this agenda if we do not explore how agentic factors contribute to disruptions in patterns of social relations. Three observations ground this contention.

First, accidents become collectively significant by affecting the agency of particular individuals. These individuals act in a certain way or fail to act in a certain way because of some encounter, accident, or coincidence. This modification in turn affects the collective action and experience of many people. In most narratives, the focus is on individuals who already enjoy high visibility due to their political position (Caesar, Charles I, King William III, or Napoleon). It should be clear, however, that incidental happenings can produce their effects through the agency of much less visible individuals.<sup>8</sup> Spelling out this point requires a theory of impact.

Second, the role played by particular individuals exemplifies the discrepancy between effects and causes—a discrepancy that is often mentioned in connection to contingency: small causes pertaining to a few individuals have far-reaching and enduring consequences. “We invoke chance each time . . . the discrepancy between cause and effect (small cause and big effects) strikes us” (Aron [1938] 1986, p. 220).<sup>9</sup> The cause can be said to be “small” insofar as it involves one or a few individuals as well as their idiosyncrasies. The effects are large if measured by the number of people affected.<sup>10</sup>

<sup>8</sup> For the sake of clarity, a distinction can be drawn between “accidents” and “incidents.” “Accidents” are the product of chance. “Incidents” are causally trivial and depart from expected patterns, irrespective of the way in which they get produced (Ermakoff 2001, pp. 228–29).

<sup>9</sup> Explicitly evoking contingency, Sewell (2005) observes that “big and ponderous social processes are never entirely immune from being transformed by small alterations in volatile local social processes” (p. 110).

<sup>10</sup> Any claim about size implies the reference to a metric. Most of the time, statements contrasting effects and causes leave this metric unspecified. Notions of “small event,” “small causes,” and “large consequences” remain intuitive. One possible metric is a temporal one: an effect or a cause is “small” if it does not last. It is “big” if it lasts across time (Abbott 2001, p. 286). The more lasting the effect, the bigger it is. A temporal metric, however, is not enough when the focus is on effects and causes. A natural catastrophe or a massacre might take place in a few minutes. Yet, we view it as big in light of the number of people affected.

Third, this discrepancy between effect and cause is indicative of a break in causality. Causes that used to be small are now big through their effects. Causal patterns no longer operate as they used to. The same actions have consequences different from those enacted in the past. Subsumed to the idea of a change in causal regime is the idea of rupture. When Sewell (2005) mentions “small alterations *transforming* big and ponderous social processes” (p. 110; my emphasis), he is pointing to a break in causal patterns. The emphasis on cause-effect discrepancies redirects attention to the issue of breaks in social causality.

Changes affecting the agency of particular individuals, discrepancies between effects and causes, and causal breaks taking the form of ruptures in patterns of social relations: combined together these three observations invite us to investigate the nexus between individual agency and breaks in patterns of social relations. If indeed incidental happenings produce their effects by affecting the agency of particular individual actors, then we cannot avoid examining how individual agency, or the lack thereof, affects collective outcomes. Accordingly, I narrow the focus on situations in which factors affecting the agency of one or a few actors affect the behavior of many.

Four types of impact can be distinguished: pyramidal, pivotal, sequential, and epistemic. Each is conditional on a particular configuration of dispositions and relations. A pyramidal impact takes place in a situation in which the members of a collective have transferred control over their action to the same actor. An impact is sequential when the action of some individuals triggers the behavioral alignment of others. A pivotal impact describes how one or a few individuals, through their action, crucially alter a power balance. An action has epistemic impact if this action shifts the content of beliefs about other people’s beliefs.

#### A. Pyramidal

In the case of a pyramidal impact, a group draws its sense of direction and determination from one actor (or a small set of actors acting as one). The actor’s vision, subjective states, requests, commands, or directives shape the stand adopted by the group (Meinecke 1957, pp. 6–10; Kimeldorf 1988, pp. 21–37; Aminzade, Goldstone, and Perry 2001). Two scenarios are conceivable. (1) The group operates within the setting of a formally hierarchical organization, and the actor has been granted the right to determine the behavior of the group given the position she or he holds. (2) The group has no formal structure. Its members differentiate themselves in light of their statuses. In either case, individuals have transferred control over their own actions to one actor (Coleman 1990, p. 66).

The inability to act can also have a pyramidal impact when the actor to whom the members of a group have transferred control over their actions is not in a position to exercise his decisional capacity. The collective repercussions of Eugène Thomas's dismissal in June 1848 in France illustrate this flip side (Traugott 2002, pp. 155–60; Sewell 2005, p. 106). Thomas was the director of the National Workshops—a public work program for the unemployed set up by the French government in the wake of the February 1848 revolution. At the end of May, the conservative government dismissed him for political reasons. His dismissal led to considerable “disarray” among his subordinates (Traugott 2002, p. xxix). Ultimately, it paved the way to the collapse of the authority structure that he had skillfully set up within the workshops and to the mass involvement of the workshops' workers in the June 1848 revolt (Sewell 2005, p. 106).

### B. Pivotal

The simplest example of pivotal impact is one in which one or a few individuals through their action, or lack of action, reconfigure a balance of forces between two camps (Leff 1969, p. 52). The circumstances that allowed Hugenberg to set the strategic course of the German National People's party in June 1930 are a case in point: “Had two members not been absent from the decisive meeting of the German National People's party on 30th June 1930, Hugenberg would probably not have been able to lead it into an alliance with Hitler in the way in which he did; in that case Hitler could not have come to power by representing himself as leader of a parliamentary majority” (Leff [1969, p. 52] drawing on Meinecke [1963, pp. 61–62]). A pivotal impact presupposes that the camps in presence are well defined. This type of impact is most visible in legislative politics when the passing of a bill depends on the vote of one actor (Krehbiel 1998, p. 23).

### C. Sequential

An individual action has a sequential impact when it triggers a process of behavioral alignment. The action influences some individuals to endorse the same line of conduct. These, as they switch their behavior, motivate others to switch theirs as well. The process is based on observable information about behaviors and takes place sequentially. These two elements are key to the logic captured by various formal models of diffusion: threshold models of collective action (Granovetter 1978; Kuran 1991), cascade models (Bikhchandani, Hirshleifer, and Welch 1992, p. 996; Lohmann 1994, pp. 49–56), and wave models (e.g., Hedström 1994, p. 1163; Biggs 2005, p. 1689). The possibility and the scope of such sequences depend on the

ecology of information transmission and the distribution of action preferences within the group under consideration (Myers 2000, pp. 183–89; Andrews and Biggs 2006, p. 769).

Consider the sequence of events that led to the departure of the president of the Tunisian Republic, Zine El Abidine Ben Ali, in the winter of 2010. On December 10, 2010, after having been harassed by local police officers and after his complaint was rebuffed by the regional administration, Mohamed Bouazizi, a street vendor, immolated himself in front of the regional building (*gouvernerat*) in Sidi-Bouazid (Tunisia). This individual and desperate act of public protest vis-à-vis state agents elicited other acts of protest that paved the way to public demonstrations. Very quickly, the contest took on a mass-scale character. After three weeks of intense and violent demonstrations, Ben Ali fled the country (Hmed 2012).

#### D. Epistemic

An action has epistemic impact when it redraws expectations about collective outcomes in a way that crucially shapes the likelihoods of these outcomes and, by way of consequence, the lines of conduct adopted by the members of a group. “Epistemic” here characterizes beliefs that actors form about other people’s knowledge and beliefs (Ermakoff 2010*b*, p. 546). This impact rests on the twofold assumption that (1) all group members are aware of the action (common knowledge) and (2) it leads them to inferences about future outcomes that they can reasonably assume to be shared (common beliefs).<sup>11</sup>

The political deflagration provoked by Slobodan Milošević’s public endorsement of Serbs’ nationalistic grievances during his trip to Kosovo in April 1987 illustrates this impact. It was customary for high-ranking Communists, such as Milošević, to position themselves against nationalist slogans since these threatened the Yugoslav federation’s political integrity. Yet, on April 24, 1987, in response to a demonstration in Kosovo Polje, Milošević, who at this time occupied the function of president of the Serbian Communist party Presidium, publicly endorsed the validity of ethnic Serbs’ grievances in Kosovo (Cohen 2001, pp. 106–8; Jović 2009, p. 261). Reconfiguring the expectations of both party and nonparty members, his action suddenly opened up the possibility of a split in the Serbian leadership on the Kosovo issue (Magaš 1993, p. 197).

<sup>11</sup> Common knowledge implies the mutual certainty of shared knowledge. For instance, a group of people in physical proximity witnessing an event at the same point in time knows that all of them share the knowledge of this event. Common beliefs imply the presumptions of shared beliefs.

### E. Contrasts and Parallels

In giving pride of place to the possible impact of individuals who lack visibility or do not hold institutional positions, this typology corrects a vision of history centered on individuals whom, because of their political responsibilities, we naturally expect to “make” history. As these types underscore, individuals with varying degrees of prominence and institutional power can have a significant impact. Visibility is inherent to the pyramidal type since the actor is already a focal point for those who subsume their actions to her control. Likewise, an epistemic impact most often presumes some degree of prominence allowing group members to identify the actor taking a public stance (Ermakoff 2008, pp. 203–7). But, neither the pivotal nor the sequential types imply visibility. Mohamed Bouazizi, whose self-immolation in Sidi-Bouazid initiated large-scale protests in Tunisia, is a case in point.

An additional contrast concerns conditional factors. A pyramidal impact is premised on a preexisting pattern of transfers of control that is all the more consequential when individuals take these transfers for granted. When this is the case, the pattern has a structural dimension. By contrast, the factors conditioning the pivotal, sequential, and epistemic impacts can be circumstantial: unplanned absences and defections (pivotal impact), an adventitious collection of individual propensities in one location (sequential impact), or fluctuating beliefs and expectations (epistemic impact).<sup>12</sup>

Beyond these contrasted features, the key point for the purpose of the current inquiry bears on collective outcomes. Consider the case of Eugène Thomas’s being dismissed from the directorship of the National Workshop in June 1848 (Traugott 2002, pp. 155–60). The loss of agency at the top made the group lose its bearings. A pyramidal impact thus is Janus-faced: it can generate definite collective action, or it can generate in-between situations in which behaviors lack fixed anchors. Epistemic impacts yield the same observation. When shifts in beliefs and expectations produce more consensus, the collective future appears more certain (Ermakoff 2001, p. 224; 2008, pp. 301–2). Alternatively, events that undermine shared expectations make the future more indistinct. Anticipations of group stances lose their grip, and collective behavior becomes indeterminate. The indetermination is epistemic before it is behavioral. More specifically, it is behavioral because it is epistemic: behaviors become indeterminate as expectations lose their ground.

<sup>12</sup> It would be mistaken to assume that these impacts are mutually exclusive. They can combine their effects in various sequences that amplify or undercut them. For instance, the pivotal and sequential impacts can elicit considerable uncertainty among those who as a result see their expectations crumble. The pyramidal and epistemic impacts can contribute further to this uncertainty or help resorb it.

I pursue this line of inquiry by paying close attention to individual actions that make the members of a group uncertain about their own behavior in a situation of interdependence. The group conjuncture becomes indeterminate as mutual uncertainty creeps in and actors realize their mutual inability to converge on one set of expectations. The following empirical inquiry fleshes out this argument by delving into one case that exemplifies the notion of rupture: August 4, 1789, in Versailles.

### III. RECASTING INDETERMINACY

#### A. Context

If we gauge the scope of a crisis by the exceptional character of a ruler's political initiatives, the crisis faced by Louis XVI in 1788 was obviously of the first magnitude. The French state was on the verge of bankruptcy and the fiscal reforms set forth by Louis's government were eliciting the staunch opposition of those who were to be taxed. As a way out of the deadlock, Louis in August 1788 resorted to having the representative assembly of his kingdom, the Estates-general, convene. The decision was indeed exceptional since this assembly had not met since 1614. In each district, the three status groups that constituted French society—the clergy (also designated as the first estate), the aristocracy (second estate), and the commoners (third estate)—met to elect their representatives (Markoff 1996, pp. 21–22; Jessenne and Hindie-Lemay 1998, pp. 17–18). In early May 1789 these groups gathered in Versailles for the opening of the assembly (May 5).

Soon, tensions mounted (Tackett 1996, pp. 136, 142–43). The overwhelming majority of the clergy and the nobility delegates opposed the third estate representatives' call for a vote by head. Refusing to meet with their commoner colleagues, they advocated a vote by order, which would have warranted the preservation of their political dominance. On June 17, the commoners proclaimed themselves a National Assembly. Three days later (June 20), they solemnly took a collective oath not to disband before a new constitution would be written.

Confronted with these radical developments, the king requested the delegates of the first two orders to join the assembly. In extending this call, Louis XVI *de facto* was giving his imprimatur to the principle of a vote by head. On July 12, learning that the king had dismissed the main architect of reform from his government, Parisians took to the streets and, two days later, stormed the Bastille prison (Sewell 1996, pp. 848–50). In response to these developments, the king rescinded his decision and took a more compromising stance toward the assembly.

Then in the last week of July, news reporting peasants' rebellions started to reach Paris. Revolts had been mounting since mid-July, reaching a peak on July 27 (Markoff 1996, pp. 300–301, 436–37; 1997, p. 1129). Peasants

were seeking to destroy certificates of seigneurial titles (Lefebvre 2005, p. 146). Several castles had been burned.<sup>13</sup> These alarming pieces of news motivated the formation of a commission in charge of preparing a decree to deal with the situation. On August 4 in the evening the delegates met to discuss the decree drafted by this commission—a decree devised to restore and maintain order in rural areas.

## B. Chronological Bare Bones

The session started with the reading of the projected decree asserting the “sacred rights of property” and emphasizing the need to have taxes paid in addition to restoring law and order (Hirsch 1978, p. 145). Immediately after this reading, two noble delegates spoke (see table 1 for an outline of the chronology). The first, the viscount de Noailles, related the violence to the peasants’ grievances. To restore peace, he proposed a motion in which the National Assembly proclaimed the principle of tax equality, made feudal dues redeemable, and abolished personal servitudes.<sup>14</sup> The duke d’Aiguillon was the next speaker. Acknowledging that the violence in different regions “[could] find its excuse in the vexations of which the People [was] victim,” he proposed that the National Assembly declare tax equality, suppress the exemptions benefiting corporate bodies, and make seigneurial dues redeemable at 30 years’ purchase.<sup>15</sup> Legislators spontaneously interpreted this speech as an endorsement of Noailles’s proposal.<sup>16</sup>

The first two statements were therefore calls for reforms on the part of two aristocratic delegates. “Upon this proposal to abolish the old order, two hundred deputies applauded with enthusiasm; but *the general mood was one of surprise and hesitancy*. One section of the Assembly was awaiting

<sup>13</sup> Report by Salomon to the National Assembly on August 3 (*Correspondance de MM. les députés des communes de la province d’Anjou avec leurs commettants relativement à l’assemblée nationale*, vol. 2 [Angers: Pavie, 1789], 8-LC2-145, p. 83).

<sup>14</sup> Assemblée Nationale (1789), pp. 3–6; reproduced in Kessel (1969, pp. 137–38) and Hirsch (1978, pp. 148–50). Several testimonies provide Noailles’s speech verbatim: Bailly (1821), pièces officielles (pp. 422–23), Ferrières (1821), pp. 183–85, and Lameth (1828), pp. 92–94.

<sup>15</sup> Assemblée Nationale (1789); reproduced in Hirsch (1978, pp. 148–50).

<sup>16</sup> “M. the duke d’Aiguillon reinforced [*a appuyé*] [Noailles’s] motion with a similar motion elaborated in writing, which showed that this great noble [seigneur] also had devised the project of getting to the root of the problem” (M. le duc d’Aiguillon a appuyé cette motion par une motion semblable développée dans un écrit, ce qui a prouvé que ce seigneur avait aussi formé le projet d’aller jusqu’ la racine du mal; reproduced in Mège 1890, p. 225). Charles élie Ferrières (1821, p. 185), Jean-Marie Alquier (letter dated August 8 reproduced in Perrin de Bousac [1983], p. 41), and Adrien Duquesnoy (1894, p. 266) use the same language to describe the impression conveyed by d’Aiguillon’s statement: “a appuyé.” (Unless otherwise noted, all translations are my own.)

TABLE 1  
EVENING SESSION OF THE ESTATE GENERALS, AUGUST 4, 1789: CHRONOLOGY

	Shorthand
News of peasants' revolts	News of peasants' revolts
Reading of decree project restoring law and order in rural areas	Reading of decree
Viscount of Noailles's motion calling for tax equality, redeemable feudal rights, and the abolition of personal servitudes	Noailles—feudal rights
Duke d'Aiguillon's motion calling for the extension of fiscal obligation to corporate bodies and proposing to make seigneurial dues redeemable	Aiguillon—redeemable rights
Aristocrats and clergymen are caught off guard	Aristocrats' indecision
Jérôme Legrand distinguishes between different types of feudal rights	Legrand
Le Guen denounces personal servitudes	Le Guen
Lapoule denounces personal servitudes	Lapoule
The aristocratic delegates voice their indignation	Aristocrats' indignation
Dupont de Nemours evokes the need for a law-and-order decree	Nemours—decree
The Duke de Châtelet endorses Noailles's motion and indicates that he is renouncing his feudal rights	Châtelet's exemplary renunciation
Several aristocrats adopt a stance similar to Châtelet's in a context of growing collective effervescence	Aristocrats' endorsement
Count Mathieu de Montmorency challenges the length of the debates and calls for a vote	Montmorency's call for a vote
Chairman (Le Chapelier) asks whether anybody else wants to take a stance	Chairman
Marquis de Foucauld L'Ardimalie calls for the abolition of pensions	Foucauld—pensions
Cottin indicates that he renounced his feudal rights and calls for the abolition of seigneurial justices	Cottin—seigneurial justices
Aristocrats endorse Foucauld L'Ardimalie's motion on pensions	Aristocrats endorse Foucauld
Bishop of Nancy asks that the sums of the feudal rights redeemed or abolished be employed for productive investments	Bishop Nancy
Bishop of Chartres calls for the abolition of the right to hunt	Bishop Chartres
Châtelet calls for the abolition of the tithe	Châtelet—tithe
Personal renunciations	Personal renunciations
Bishop of Aix on unfair indirect taxes	Bishop Aix
Calls for various abolitions	Calls for various abolitions
The marquis of Blacons renounces the corporate privileges of the Dauphiné province on behalf of his province	Blacons on Dauphiné's renunciation
The delegates of numerous provinces, districts, and cities commit themselves to renouncing corporate privileges	Corporate renunciations
Lally-Tolendal proclaims the king restorer of French liberty	Lally-Tolendal on king as restorer

with concern (*avec inquiétude*) which opposition would flare up (*éclater*). Another section was seeking with unease (*avec embarras*) the way of eluding a call which, in its eyes, was an attack.<sup>17</sup> The deputy Michel-René Maupetit evokes a moment of “commotion.”<sup>18</sup> A substantial minority—about “two hundred,” that is, less than 20% of the assembly—spontaneously endorsed his proposal. In his diary, the deputy Castellane observes that these first statements were vividly applauded “except by the overwhelming majority of the nobility and the clergy.”<sup>19</sup>

Following Noailles and d’Aiguillon three delegates from the third estate (Jérôme Legrand from Chateauroux, Le Guen de Kerengall from Brittany, and Lapoule from Besançon) delivered a moral, political, and, at times, graphic indictment of feudal obligations. The last two speeches elicited aristocrats’ protests. “The nobles protested with indignation against these blatant distortions.”<sup>20</sup> At this point, aristocrats did not seem willing to dismantle their social privileges. The next speaker, Dupont de Nemours, a third estate deputy, insisted on the need to put an end to the disorders and to promulgate the decree under consideration: citizens had to abide by the laws and property rights. Nemours, however, laid no specific proposal. A great noble, the Duke de Châtelet, then requested to speak.

His speech, a contemporary observer tells us, was a “violent” condemnation of feudality (Duquesnoy 1894, p. 266). Châtelet denounced feudal abuses and explained that he was voluntarily relinquishing them on his own domains. After he spoke, several great nobles rose up to announce that they too were endorsing the proposal to abolish feudal rights. The number and the pace of personal renunciations became so high that the secretaries of the assembly could not keep up. Participants recorded and remembered a profusion of statements in an atmosphere of considerable effervescence and emotion.<sup>21</sup>

<sup>17</sup> Account by Joseph Droz (1839, p. 327); quoted by Kessel (1969, p. 139); my emphasis.

<sup>18</sup> Letter dated August 5, 1789 (Maupetit 1903, p. 217).

<sup>19</sup> Castellane, *Journal des Etats Généraux*, 4121 (f 103), p. 203, Bibliothèque Nationale, Paris; quoted by Kessel (1969, p. 139).

<sup>20</sup> Ferrières (1821), p. 187. The account that Bailly inserted at the end of his *Memoirs* mentions the “murmurs” that “object (*révoquent en doute*) to the veracity of [Le Guen’s] assertions” and do not let Lapoule finish his speech (Bailly 1821, p. 429). The *Courier de Provence* (vol. 24, August 5–7, pp. 13–14) reports that the speeches of both Le Guen and Lapoule were interrupted by protests.

<sup>21</sup> Maupetit (1903), p. 218, Ferrières (1932), p. 114, and Ménard de la Groye (1989), p. 78. “Delegates were competing for generosity” (*Correspondance de MM. les députés des communes de la province d’Anjou*, vol. 2, p. 87). “A huge effervescence of generosity seized the assembly” (Journal anonyme de la noblesse, handwritten, O1 354, p. 313, Archives Nationales, Paris). “Every one stepped forward to divest himself of his ancient rights and pretensions” (letter of the commoner deputy Lepoutre to his wife dated August 5, reproduced in Jessenne and Hindie-Lemay [1998],

These statements accrued to the same effect: in openly declaring that they were renouncing seigneurial and feudal rights, the delegates were condemning the social system on which their status and wealth depended. The aristocratic delegates moved first. Members of the clergy followed suit and divested themselves of their privileges. In their wake, delegates of the third estate announced that they were forgoing the special rights of regions and cities.<sup>22</sup> Sanctioning this threefold wave of renunciations, the Duke de Liancourt proposed that a medal be molded “to make eternal the memory of the genuine union of all the orders” (Hirsch 1978, p. 178).

### C. Break(s)

Thus, the resolutions endorsed at this meeting put an end to a whole range of rights based on privilege.<sup>23</sup> The scope of the repudiation amounted to a statement about the illegitimacy of these rights. Testimonies written at the time of the event are adamant about its significance. The next day, the *Journal des États Généraux* (Journal of the Estates-general) described the event as a radical and threefold break producing a blank slate: “Within one night, feudal, aristocratic and parliamentary power [i.e., the power of the judicial parliaments] have been toppled and wiped out.”<sup>24</sup> “Tax equality has been ratified (*consacré*)” (Coroller du Moustoir, third estate deputy of

---

p. 75). “First the nobility, then the clergy and the deputies of the communes rivaled with each other for the sake of generosity” (Joseph-Michel Pellerin, *Journal de la tenue des États Généraux convoqués à Versailles pour le 27 avril 1789*, handwritten manuscript, April 1–October 15, 1789. Manuscript F 823, August 4, Bibliothèque Municipale, Versailles).

<sup>22</sup> Duke of Biron (1865), p. 23; Pellerin, handwritten journal, August 4, Bibliothèque Municipale, Versailles; *Courier de Provence*, vol. 24, August 5–7, pp. 13–22. It should be noted that since delegates were supposed to wear different types of apparel depending on the estate that they represented (Hindie-Lemay 1987, pp. 21–22), the audience had no difficulty identifying the speakers’ social status when it was not well known. Apparel distinctions were suppressed in October 1789 (Granié 1814, p. 123).

<sup>23</sup> Social relations in the old regime in France were embedded in a myriad of particular rights—highly diversified across regions—sanctioning the social dominance and political privileges of manorial lords (or seigneurs; Markoff 1996, pp. 43–46; Lefebvre 2005, p. 136). Seigneurial rights encompassed a vast array of activities and dues. Herbert (1921, p. 3) classifies them as (a) servitudes attached to persons or properties, (b) payments charged on the land, (c) seigneurial monopolies, and (d) rights of jurisdiction

<sup>24</sup> *Journal des États Généraux, convoqués par Louis XVI, le 27 avril 1789*, vol. 2 (Paris: Devaux et Gattey), August 5, 1789, p. 367. The periodical *Le Point du Jour* draws on a similar contrast: “It took one century for philosophy to shatter the foundations of this abhorrent regime; it only took a moment for the national assembly to wipe out even the marks of this odious and tyrannical servitude” (*Le Point du Jour ou Resultat de ce qui s’est passé la veille à l’Assemblée Nationale*, August 6, 1789, p. 15).

Brittany).<sup>25</sup> “Political equality now rests on indestructible bases” (letter dated August 5, 1789, from the deputies of Anjou to their constituents).<sup>26</sup> “Through a solemn decree, we have suppressed the feudal regime and all the rights that stemmed from it” (Pinelle, priest from Alsace, letter dated August 8, 1789).<sup>27</sup>

Furthermore, this session transformed patterns of political relations among the delegates. As mentioned earlier, soon after the assembly had started to convene, representatives of the first and the second estates had opposed delegates of the third estate on the issue of the voting procedure. This frontal opposition had been a key factor in the radicalization of the third estate delegates (Tackett 1996, pp. 142–46). Until early August, thus, “internal schisms” remained prevalent (Fitzsimmons 2003, p. 9). On August 4, by contrast, unanimity prevailed. Deputies emerged from this meeting as representatives, no longer of status groups but of the nation (Fitzsimmons 1987, pp. 288–89; 2003, pp. 16–18; Applewhite 1993, p. 17).<sup>28</sup>

Finally, the event reshuffled political affiliations and affinities (Markoff 1996, pp. 444–46; Tackett 1996, p. 174). Delegates of the clergy who had promoted the reunion with the third estate and, through this action, had put themselves on the reformers’ side resented the suppression of the title

<sup>25</sup> Letter dated August 5, 1789, reproduced in Kerviler (1886a, p. 65).

<sup>26</sup> *Correspondance de MM. les députés des communes de la province d’Anjou*, vol. 2, p. 85; quoted by Kessel (1969, p. 176).

<sup>27</sup> “Nous avons supprimé dans un décret solennel tout le régime féodal et les droits qui en résultaient” (quoted by Kessel 1969, p. 179). In his diary, the commoner deputy from Laon, François-Laurent Visme, speaks of a “happy revolution” (*Journal des Etats-Généraux*, député du Tiers état de Laon, n.a. 12938, handwritten journal, p. 47, Bibliothèque Nationale, Paris).

<sup>28</sup> “Whilst dissensions reigned amongst those whose common interest should have brought them together, we were far from thinking that so intense a joy, so moving a harmony, so unanimous a patriotism such as the ones that characterize this night session, forever memorable, could take place between persons who till now had regarded themselves as divided by their interests” (*Correspondance de MM. les députés des communes de la province d’Anjou*, vol. 2, p. 85). To express this new sense of unity, deputies often draw on family metaphors: the third estate deputies of Marseille envision France as “a common family enjoying the same rights and bearing the same obligations on an absolutely equal footing” (Letter dated August 5, 1789, by the Marseille third estate deputies, reproduced handwritten in *Lettres Rescues par les commissaires du tiers Etat depuis le 1er May 1789 Jusques au 19 Janvier 1790*, BB 361, Archives municipales de Marseille, p. 38). Pellerin evokes the “virtuous speakers of the three orders gathered in one family” (Pellerin, handwritten journal, August 4, Bibliothèque Municipale, Versailles) “whose children will be equals in rights and happiness” (*Bulletin de l’Assemblée Nationale*, no 30. La Nouvelle constitution du Royaume. Du mardi 4 août 1789, à huit heures du soir . . . Librairie rue de la Harpe. De l’imprimerie de Grange, p. 3); “the whole France is now joined together in the bosom of the same mother” (Coroller du Moustoir [1886], letter dated August 5, reproduced in Kerviler [1886a], p. 65); “now there is a federative pact between all French people and between all the provinces of France” (Delaville Le Roulx [1886], letter reproduced in Kerviler [1886b], p. 332).

(the granting of a portion of the crop to the parish priest).<sup>29</sup> Some liberal aristocrats reconsidered their stance (Montlosier 1830, pp. 251–52). Representatives started to signal their political affiliations through their location in the assembly (Gauchet 1989, p. 821).<sup>30</sup>

Unsurprisingly, given these different facets of the rupture, historians view this event as the revolutionary breakthrough that ended feudalism in France. “[August 4, 1789] marks the moment when a juridical and social order, forged over centuries, composed of a hierarchy of separate orders, corps, and communities, and defined by privileges, somehow *evaporated*” (Furet 1989, p. 107). Sewell (1985) deems the event as “the crucial turning point of the Revolution both as a class struggle and as an ideological transformation” (p. 67). Yet, despite the attention that it elicited, the event remains a historical puzzle (Fitzsimmons 2003, p. 16). “The national assembly [was] the scene of a sequence of events as unexpected, dramatic, and *mysterious* as the Great fear in the countryside” (Markoff 1996, p. 427; my emphasis). A priori, it should not have happened given the social composition of the National Assembly (Kessel 1969, p. 136) and the acuity of the antagonisms expressed in the previous weeks.

#### IV. EVENT STRUCTURE

The previous account has been factual and descriptive, with an attempt to gauge the significance of the event with regard to the notion of causal break. I now examine whether, and in which respects, a rupture in patterns of social and political relations can be said to be contingent. To this end, I consider actors’ experience of the event and the temporal configuration

<sup>29</sup> In May–July, identifying himself with the “patriotic clergy,” the abbé Emmanuel Barbotin viewed the high clergy opposing the reunification with the third estate as the “enemy” (Barbotin 1910, pp. 16–17). In a letter dated August 23, 1789, he explains that August 4 made him “drunk” with sadness (“J’ai été chagrin tout mon saoul depuis le 4 août”; p. 53). “The assembly, or at least the majority thereof, seems to have vowed the fall (*la perte*) of the clergy” (p. 52). Similarly, much to the surprise of his contemporaries, Sieyès, the author of *What Is the Third Estate?* criticized the abolition of the tithe (see the testimony of Montlosier [1830], pp. 254–55). In *What Is the Third Estate?* Sieyès had made himself the fierce critique of privileges and the promoter of equality before the law. Contemporaries had a hard time understanding his defense of the tithe (Sewell 1994, p. 18). Bertrand Barère, a commoner deputy, described Sieyès’ stance on the tithe as an example of hypocrisy (Barère 1842, p. 271).

<sup>30</sup> In the August 29 entry of his journal, the Baron de Gauville records the emergence of a group “attached to their religion and the King” who were locating themselves on the right of the president’s assembly: “one hundred fifty members of the clergy, as many from the nobility and eighty-five from the Third Estate” (Gauville 1864, p. 20). It should be noted that this new seating pattern gave way to the distinction between the Left and the Right in politics (Gauchet 1992, pp. 398–400; Sirinelli and Vigne 1992, p. xii).

revealed by an ESA (Heise 1989; Griffin 1993). This analysis brings into relief two temporal regimes: one characterized by several emerging collective scenarios vying with one another; the other marked by the prevalence of one single collective behavior. When we narrow the focus down on the moment of transition between these two regimes, collective indecision comes to the fore as both a factor of indeterminacy and the condition of possibility of a drastic shift in stance.

### A. Endogeneity

Nothing in the initial setup of the event announced the abolition of feudal, seigneurial, and corporate privileges. Nor did this setup announce the proclamation of social and political equality. As mentioned earlier, the session was to be devoted to a decree promoting law and order in the countryside. It started accordingly with a reading of this decree. Given the session's official agenda, the delegates expected their debates to be centered on the decree and its implementation. They were thoroughly puzzled by the turn it took (Markoff 1996, p. 427; Tackett 1996, p. 174; Fitzsimmons 2003, pp. 15–16). Ferrières, deputy of the nobility, evokes “stunned outlooks” (*regards étonnés*; 1821, p. 190).

The most dumbfounded were those who had never imagined themselves taking part in the repudiation of seigneurial rights. “But what have we done? Is there anyone who knows?”<sup>31</sup> Acute contemporary observers, such as Thibaudeau, noted this ambivalence right after the meeting: “On August 5, as they woke up, [the delegates] reflected on the accomplishment of the night. Then came forward the assessment of the losses, vanities, regret and repentance. How could they have yielded to this excess of fever? They could not understand it. They were ashamed of it.”<sup>32</sup> Condorcet observed: “People have been unaware of the surprise which the main actors of this revolution experienced after the session.”<sup>33</sup>

<sup>31</sup> According to Condorcet, this statement was made by the Duke de Biron (Condorcet 1824, p. 60; see Markoff 1996, p. 432). Beaulieu (1801) views the event as an “insurrection of the nobility against itself” (p. 89). Tackett's (1996, pp. 173–74) classification of political positions underscores that about half (46%) of the deputies participating on August 4 could be classified as belonging to either the moderate/conservative wing of the assembly or the extreme right.

<sup>32</sup> Thibaudeau, *Mémoire avant ma nomination à la Convention* (quoted by Mège 1890, p. 43). Thibaudeau was the son of a commoner deputy and a regular eye-witness of the sessions. Lacrosette's historical account emphasizes this point as well: “As early as the next morning, most of the deputies from the nobility or the clergy showed themselves surprised, anxious, almost confused” (1821, p. 142).

<sup>33</sup> Condorcet (1824), p. 60 (quoted by Kessel 1969, p. 173). Etienne Dumont, who witnessed the session and reported it on behalf of the *Courier de Provence*, makes consonant observations: “The next day [the delegates] started to reflect upon what they had done” (1832, p. 146).

Quite revealingly, even those who were advancing an agenda geared to fiscal equality, and had engaged in some coordination and planning, were taken aback by the outcome. They had not anticipated a shift of such amplitude. Never would they have imagined that in one single stroke the whole array of privileges, particularistic rights, and feudal servitudes could be canceled off (Tackett 1996, p. 174). Referring to the first speech that called for the abolition of feudal rights, the commoner deputy Visme notes: "We did not anticipate the happy consequences that would result from it."<sup>34</sup> Similarly the third estate deputies Ménard de la Groye and Malouet describe the event as "the least expected."<sup>35</sup> Their colleague Michel René Maupetit in the assembly wrote: "What a victory, *beyond any hope*, which the national assembly scored against old prejudice!" (1903, p. 221; my emphasis).

These few observations are consistent with the hypothesis of a lack of determination or necessity: the event was not directed or "prompted" toward its outcome. No preestablished script structured its unfolding. Rather, actors drastically shifted their stance in the course of the evening. The shift, fully unexpected, was endogenous to their interactions. It was both product and factor of this dynamics. Equally worthy of note, this collective dynamics, once it gained momentum, seemed unstoppable or without restraint. Ferrières reports the following episode: "Lally-Tolendal, who was dispassionately witnessing these extravagances passed on a note to Chapelier [the session chairman] where he had written: 'no one is in control of himself. Call it a day' (*Levez la séance*)" (1821, p. 189).

## B. Notional Scenarios

An ESA refines, and sheds light on, these observations by outlining the temporal structure of these interactions. Figure 1, yielded by the Ethno program, displays the network of necessary antecedents that can be identified within the sequence. Each line indicates a positive answer to the question, Was the preceding happening a prerequisite for the subsequent one?

Two temporal regimes are clearly distinguishable in this graphic representation. In the first one, the event is a bundle of three different collective scenarios intersecting each other. Scenario 1 is a discussion of the decree restoring law and order in rural areas. Scenario 2 is geared to the renunciation of privileges and the promulgation of tax equality. Scenario 3 implies conflict, cleavage, and polarization. All three are present in the event

<sup>34</sup> Visme, handwritten journal, p. 47, Bibliothèque Nationale, Paris. Visme adds: "One will have a hard time believing what happened in four hours."

<sup>35</sup> Biauzat (1890), p. 231, and Ménard de la Groye (1989), p. 78. "In their testimonies of that night, the representatives were distinctly aware of the historical significance of what they had done, but were stunned and overwhelmed that it had come to pass and quite at a loss to explain it" (Tackett 1996, p. 174).

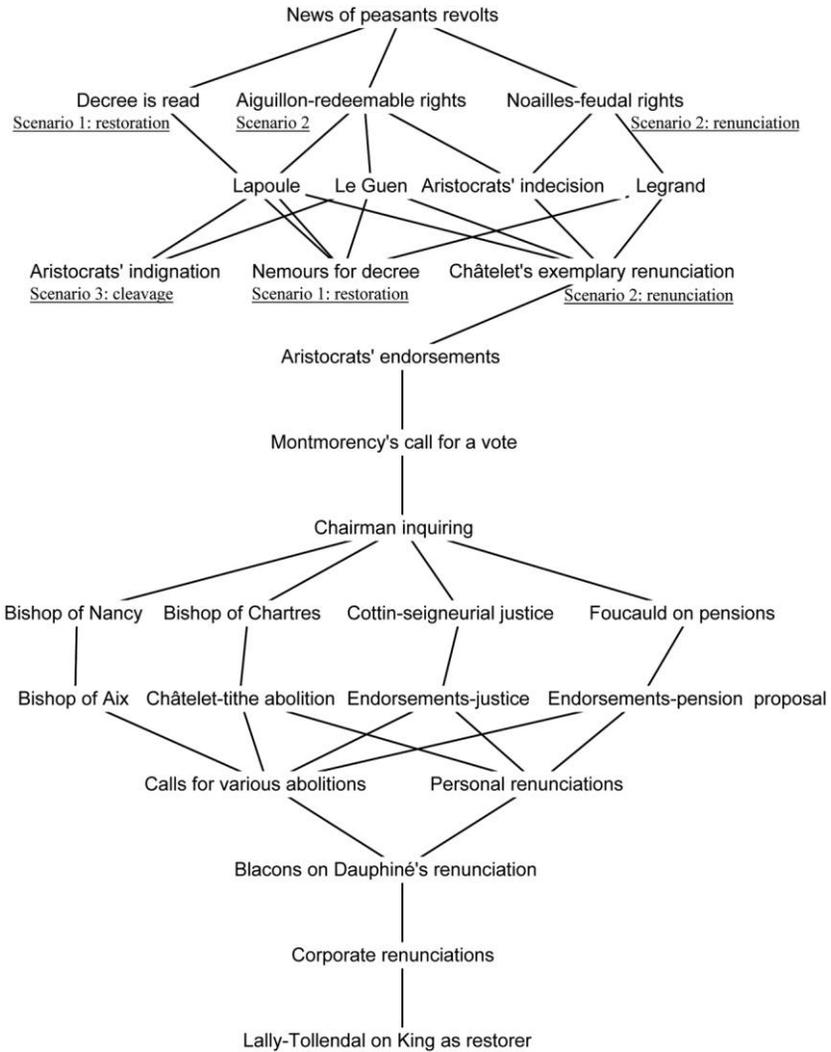


FIG. 1.—Event structure analysis of the night session of the French National Assembly, August 4, 1789

as concrete possibilities brought about by specific actions. In figure 1, they appear as networks of interrelated prerequisites. Dupont de Nemours revives scenario 1 when he insists on the need to promulgate a law-and-order decree. Noailles and d'Aiguillon instantiate scenario 2 through their proposal for reforms. Scenario 3 gets actualized by the indignation voiced by aristocrats in reaction to Le Guen's and Lapoule's speeches.

The second temporal regime is dominated by one single collective stance geared to renunciations—both personal and collective—and proposals abolishing a wide range of practices and customs exemplifying social and tax inequalities. Scenario 2 now saturates the event. Dupont's request that the debate be centered on the decree leads nowhere (Droz 1839, p. 327; Kessel 1969, p. 145). Aristocrats for their part let their indignation evaporate (Markoff 1996, p. 458). Instead, they align themselves with and expand the reformist stances taken by their prominent peers. In the wake of and in conjunction with, this alignment, scenario 2 gets expanded to privileges enjoyed by the first and the third estates, thereby becoming the exclusive scenario at play (fig. 1).

### C. Nodal Point

Let us focus on the moment of transition between these two regimes. Châtelet's public stance stands out as the nodal point (fig. 1): his statement initiated a flow of endorsements that led to further proposals and motions. Independent testimonies corroborate this claim. A journalist who witnessed the session speaks of a "patriotic act that awakened everybody."<sup>36</sup> The count of Castellane's diary refers to "a sudden change." The change obviously contrasted with the reservation and indecision that the same Castellane noted among aristocrats and churchmen right after Noailles's and d'Aiguillon's speeches.<sup>37</sup>

Similarly, in his personal notes, Duquesnoy, deputy of the third estate, recorded the force of Châtelet's speech, observing that he was applauded several times and that members of the nobility requested a motion out of his statement (Duquesnoy 1894, p. 266). His colleague Joseph-Michel Pellerin also draws a connection between Châtelet's statement and the inflexion of the collective dynamic: "As he declared that he supported the motion, [Châtelet] announced that he had abandoned his own rights. *This is not a small sacrifice*. MM the Duke de la Rochefoucauld, de Custine, de Foucault and many other great landholders hastened [*se pressèrent*] to endorse the motion without any restriction" (Pellerin 1883, p. 110; my emphasis).<sup>38</sup>

Remember the context that preceded Châtelet's stance. The delegates from the second estate (nobility) had been caught off guard by Noailles's and d'Aiguillon's proposals: two of their own were setting forth a proposal for reform and equality. These two delegates were prominent in terms of status. They were also commonly viewed as liberals (Lacretelle

<sup>36</sup>"Cet acte de patriotisme a réveillé tous les esprits" (quoted by Kessel 1969, p. 147).

<sup>37</sup>Castellane, *Journal des Etats Généraux*, pp. 202–3.

<sup>38</sup>Both Kessel (1969, pp. 147–48) and Tackett (1996, p. 172) identify this juncture as the turning point in the collective dynamic.

1821, p. 136; Murphy and Higonnet 1973, p. 236). Undoubtedly, their liberal credentials could only raise the suspicion of their more conservative aristocratic peers. Still, their convergence was striking: Noailles's and d'Aiguillon's status and position a priori set them apart. As a younger son, Noailles had no personal fortune (Lefebvre 2005, p. 160). D'Aiguillon, however, was one of the richest landowners of the realm (Fitzsimmons 1987, p. 286).<sup>39</sup> And yet, despite this difference in positions, they both advocated forgoing feudal and seigneurial privileges.

Thus, while the commoners had cheered these proposals for reform, aristocrats had remained silent. They were taken aback: two great nobles with very different interests at stake were proposing that the nobility devolve some of its immemorial rights. This call for reform, which was coming from their own camp, was unsettling, eliciting surprise and indecision (Hirsch 1978, p. 150). They did not know what to think and which stance to take. Their silence betrayed their hesitation. The four speeches delivered right after (by Legrand, Le Guen, Lapoule, and Dupont) could not address this indecision and the broader question of a collective stance: these speeches conveyed the stances of third estate representatives. They were not emanating from their own ranks.

Châtelet is the first aristocratic delegate to explicitly address Noailles's and d'Aiguillon's proposals. He is responding to them.<sup>40</sup> He is also the first delegate to personally renounce his privileges (Kessel 1969, p. 147). Through this public commitment he is enacting their proposal, suddenly giving it credence and, in so doing, opening the gate to a powerful process of alignment. This observation is consistent with the claim that the impact of public statements is a function of the speaker's visibility, the counterintuitive character of the stance taken and the speaker's strategic credentials (Ermakoff 2008, pp. 204–9).

First, as colonel of the French guards, Châtelet had high visibility and prominence. His aristocratic peers could reasonably assume that his political profile was common belief and that any statement on his part would elicit their own collective attention. Second, his political profile situated him at the opposing end of Noailles and d'Aiguillon: his past military responsibilities in the French Guard made him a possible agent of repression (Markoff 1996, p. 445), and he was commonly regarded as close to reactionary cir-

<sup>39</sup> Michelet (1952) describes him as the “richest seigneur in terms of feudal properties second to the king” (p. 212). See the assessment provided by the commoner deputy Pellerin: d'Aiguillon supported Noailles's motion “with zeal, even though he had so much interest in fighting it” (Pellerin 1883, p. 109).

<sup>40</sup> “[Châtelet] indicates his regret that in the motion to destroy feudal rights the viscount of Noailles and the duke of Aiguillon preceded him” (Ferrières 1821, p. 187).

cles (Kessel 1969, p. 146). Yet, he was endorsing Noailles's and d'Aiguillon's proposals.

Third, he had displayed opportunism in the past: in the wake of the July 14 Parisian insurrection, he resigned from his position at the head of the French Guard. This information was public knowledge and could be assumed to be quite fresh in the delegates' collective memory.<sup>41</sup> Hence, he had shown that he could change his stand, depending on his assessment of the risks involved. At this juncture, assessing the risks meant assessing the chances that the privileged orders could still impose their status quo. Those among his peers who viewed themselves as sensible enough to make their stance conditional on the balance of forces could therefore view him as emblematic of themselves.

If he had endorsed a policy of repression Châtelet would have indicated that he expected enough collective resolution to make this option a viable one. In backing off, he was signaling that a repression policy was too risky. Furthermore, his endorsement of a compromise and renunciation policy was very clear. Not only was he endorsing Noailles's and d'Aiguillon's proposals. He was also publicly enacting this proposal by renouncing his own seigniorial rights. His stance was therefore unambiguous. Gaultier de Biauzat, for instance, describes Châtelet's stance as "exemplary" because of his personal renunciation (Biauzat 1890, p. 225).

Since, furthermore, in contrast to the previous speakers (Kessel 1969, p. 147), Châtelet did not seem to have prepared his speech, his aristocratic peers could easily relate to his stance: was he not indicating through this improvised statement that he too had been caught off guard? Given his public affiliation with the reactionary camp, his past record, and his response to the challenge on the spot, Châtelet's announcement was providing his peers with a way out of their uncertainty and wavering: his stance was making the renunciation option credible for those who, like him, were individually exposed and did not dissociate their fate from that of their status group.

#### D. Indecision and Indeterminacy

Had Châtelet, or any other great noble identified with the conservative camp, opposed Noailles's and d'Aiguillon's call for reforms, the prospect of polarization across and within status groups would have been actualized. Conservative aristocrats would have felt legitimized in their reaction of indignation to Le Guen's and Lapoule's graphic descriptions of feudal

<sup>41</sup> Châtelet's resignation was, e.g., reported by the *Journal de Paris*, no. 202, July 21, p. 909.

abuses. These aristocrats' opposition in turn would have fueled recriminations and antagonisms on the part of third estate delegates. Scenario 3 (conflict, cleavage, and polarization), not scenario 2 (the renunciation of privileges), would have had the upper hand.

This is not the only possible counterfactual scenario that can be envisioned at this juncture in the collective dynamic. Another great noble identified as a liberal could have taken a stand in support of Noailles's and d'Aiguillon's proposals. This additional support would have produced more hesitancy, maybe some rallying. For the reasons outlined earlier, it could hardly have sparked the drastic shift observed in the wake of Châtelet's statement. Conversely, opposition to reform on the part of a liberal would have engendered more confusion and uncertainty.

We could ask why these counterfactual scenarios did not happen and conclude that the reasons were either accidental or beyond the reach of our knowledge. We could also portray Châtelet's decision to step forward as the outcome of free will or, more prosaically, as a reflection of "practical judgment," which Leff (1969, p. 54) and Hawthorne (1991, pp. 14–15) relate to the indeterminacy of human conduct. In any case, the answers to these queries would remain hypothetical and inconclusive: How do we know whether Châtelet's idiosyncratic psychological dispositions drove him to step forward to publicly and unambiguously endorse a reformist stance? Which accidental factors led him to speak before any of his conservative peers had the time to express reservation, caution, or opposition?

The point of importance is that these alternative scenarios were possible because at this juncture aristocratic delegates were holding their immediate future in abeyance and, in so doing, were making themselves available to different options. Their silence betrayed confusion and indecision. Suspending their own individual stance, they could observe others suspend it as well. This shared realization made the conjuncture open-ended. The group could go different ways. This explains why public statements such as the stand taken by Châtelet could have such an impact. Indecision experienced as a collective state opened up the range of possibilities. In particular, it created the possibility of a radical shift in stance. The conjuncture was indeterminate in the specific sense of being open-ended with regard to its immediate futures.

### E. Generalizing

We can generalize the logic at play in this sequence by subsuming actors and their actions into broader categories (table 2). I categorize actors by reference to the stakes they have in the event. Two classes of stakeholders can be distinguished: some challenge a status quo that they view as detrimental to their material or ideological interests. These are the "challengers."

TABLE 2  
GENERALIZING THE SEQUENCE, AUGUST 4, 1789

	Generalization
News of peasants' revolts	Challenge
Reading of decree project restoring law and order in rural areas	Restoration proposal
Viscount of Noailles's motion calling for tax equality, redeemable feudal rights, and the abolition of personal servitudes	Renunciation proposal
Duke d'Aiguillon's motion calling for the extension of fiscal obligation to corporate bodies and proposing to make seigneurial dues redeemable	Renunciation proposal
Aristocrats and clergymen are caught off guard	Target actors' indecision
Jérôme Legrand distinguishes between different types of feudal rights	Challenger's offensive
Le Guen denounces personal servitudes	Challenger's offensive
Lapoule denounces personal servitudes	Challenger's offensive
The aristocratic delegates voice their indignation	Target actor's opposition
Dupont de Nemours evokes the need for a law-and-order decree	Restoration proposal reminder
The Duke de Châtelet endorses Noailles's motion and indicates that he is renouncing his feudal rights	Prominent endorsement of renunciation
Several aristocrats adopt a stance similar to Châtelet's in a context of growing collective effervescence	Collective alignment
Count Mathieu de Montmorency challenges the length of the debates and calls for a vote	Request for stance
Chairman (Le Chapelier) asks whether anybody else wants to take a stance	Request for stance
Marquis de Foucauld L'Ardimalie calls for the abolition of pensions	Additional renunciation proposal
Cottin indicates that he renounced his feudal rights and calls for the abolition of seigneurial justices	Additional renunciation proposal
Aristocrats endorse Foucauld L'Ardimalie's motion on pensions	Prominent endorsements
Bishop of Nancy asks that the sums of the feudal rights redeemed or abolished be employed for productive investments	Additional renunciation proposal
Bishop of Chartres calls for the abolition of the right to hunt	Additional renunciation proposal
Châtelet calls for the abolition of the tithe	Additional renunciation proposal
Personal renunciations	Collective alignment
Bishop of Aix on unfair indirect taxes	Additional renunciation proposal
Calls for various abolitions	Additional renunciation proposal
The marquis of Blacons renounces the corporate privileges of the Dauphiné province on behalf of his province	Prominent endorsement
The delegates of numerous provinces, districts, and cities commit themselves to renouncing corporate privileges	Collective alignment
Lally-Tolendal proclaims the king restorer of French liberty	Statement of unity

Others have a vested interest in the status quo and, as such, are the target of the challenge. I characterize them as the “target actors.”<sup>42</sup>

Drawing on these classifications and collapsing temporally contiguous actions belonging to the same categories yields the following analytical reduction (table 2). The event starts with the proposal to restore the status quo (project of a decree maintaining law and order). Alternatively to this course of action, some target actors outline a renunciation proposal (Noailles’s and d’Aiguillon’s initiatives). This last stance generates indecision among target actors. Challengers go on the offensive (Le Guen’s and Lapoule’s speeches). Target actors’ vocal opposition to this offensive foreshadows cleavage. At this point, a prominent target actor endorses the renunciation proposal (Châtelet’s stance).

Figure 2, which represents this generalized sequence, distinctively brings into relief the three collective scenarios that constituted the first phase of the event (restoration, renunciation, cleavage) before renunciation crowded the other two out. It also depicts very clearly the shift from one temporal regime characterized by a multiplicity of collective options to a regime dominated by only one (i.e., collective alignment). More important, it identifies a class of situation of broader significance: one group challenges another. The group under challenge has to choose between restoring its position or renouncing it.

#### F. Situating Effervescence

Emotions ran high in the course of the night. Enthusiasm was “general” (Pellerin 1883, p. 110). The common deputy Charles Jean-Marie Alquier mentions “unimaginable expression of joy and gratitude.”<sup>43</sup> This effervescence contrasted with the antagonisms and sharp conflicts that had prevailed in the previous weeks. Consequently, it did not fail to impress actors, witnesses, and historians.<sup>44</sup> Should we then view aristocrats’ unexpected renunciation as stemming from an emotional intensity loaded with a sense of moral injunction? Referring specifically to the night of August 4, Durkheim (1995, p. 211) suggested this line of argument: individuals transcend their self-interested and material concerns when they partake in collective events that make them experience the moral force of societal imperatives.

<sup>42</sup> In the current case, actors could also be classified in terms of their social identity (commoners, nobles, churchmen). However, the level of generality achieved through this classification is lower than when we refer to the stakes they have in the event. This methodological remark is of broad relevance for the generalization of sequences formalized through ESA.

<sup>43</sup> Letter dated August 8, 1789, reproduced in Perrin de Bousae (1983), pp. 40–41.

<sup>44</sup> Furet (1989, p. 107) notes, however, that the importance granted to this emotional component in the historiography has varied across epochs.

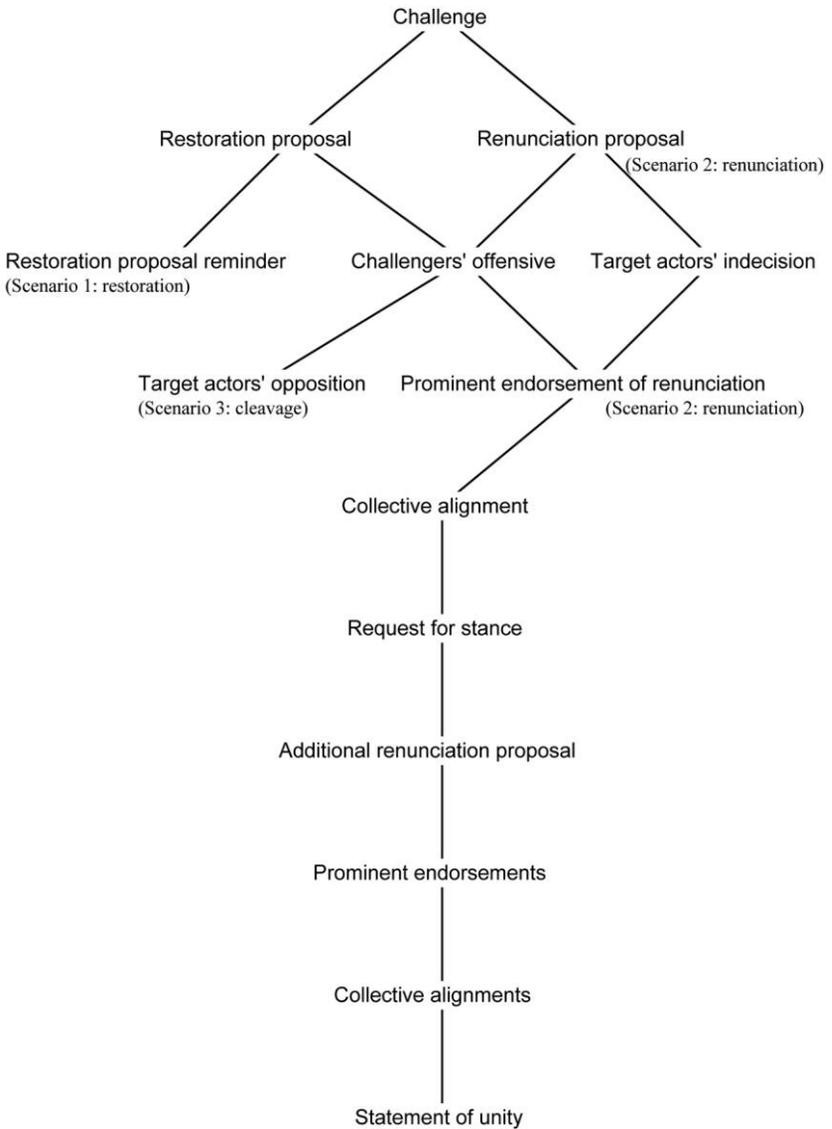


FIG. 2.—Generalized sequence

The emotional intensity of the night of August 4 is undeniable. The ecological and perceptual elements that Collins (1993, p. 203; 2001, p. 28) identifies as conducive to emotional energy and high moral solidarity were present on that night: the physical density of social interaction, the “bounded-

ness” of group interaction, the focus of attention, and the commonality of emotional mood. The delegates sharing the same space were acutely aware of each other’s presence and, even more important, of each other’s emotional engagement. Given these parameters, it seems at face value plausible to relate the surprising “tipping” of August 4 to the surge of “emotional flow” fostering feelings of solidarity (Durkheim 1995, p. 211; Collins 2001, p. 41).

In the current case, however, collective effervescence should be construed as the explanandum not the explanans. It emerged in the course of interactions that initially were not geared to joyful unanimity. Quite the contrary: as the ESA underscores (fig. 1), aristocrats’ indignation at the graphic indictments delivered by the commoners Le Guen and Lapoule for a while revived the prospect of a political confrontation. Metaphorically we can speak of a “flow,” but the metaphor should not obfuscate inter- and intra-group heterogeneity across time. Reform-minded delegates of the third estate were the first to express their enthusiasm. Aristocrats followed suit later after they experienced indecision. Some had reservations but did not dare express them publicly.<sup>45</sup> Church members joined subsequently.

A microanalytical approach suggests that the switch in mood observed among aristocrats cannot be understood without paying close attention to how these actors collectively shifted their perception of the situation. A policy of renunciation became socially and politically acceptable once their prominent peers endorsed it without eliciting opposition from their own ranks. Because it seemed now to enjoy consensus, this policy meant a way out of the crisis. The moment was therefore propitious to a sense of relief. Fueling this dynamic were expressions of approval conveyed by commoners: acclamations, applause, and demonstrative endorsements. These public gestures bestowed positive status upon those being acclaimed. They were a source of gratification independent of the statutory distinctions attached to a society of orders. Viewed in this light, unanimity reflected a generalized exchange of positive attributions transcending status hierarchies.

## V. VALIDATION

The previous analysis locates the contingent qua indeterminate character of a social and historical process in moments of uncertainty in which the members of a collective, making their expectations as well as their line of

<sup>45</sup> Michel Choiseul d’Aillecourt, *Compte rendu par M. de Choiseul d’Aillecourt, député du bailliage de Chaumont-en-Bassigy, à ses commettans* (1791), 8-LB39-5457, p. 219, Bibliothèque Nationale, Paris; Ferrières (1821), p. 189; Montlosier (1830), p. 239; Champagne (1846), p. 67. On this point and the broader issue of motive heterogeneity, see Elster (2007), who draws attention to the role played by fear, spite and self-interest in addition to enthusiasm.

conduct conditional on one another's, realize how dependent on each other and yet how collectively indecisive they are. This indeterminacy is indexed on the experience of mutual uncertainty. The members of the collective understand that their stance is in abeyance because they made this stance conditional on each other's. Through that process, they make themselves open to multiple scenarios. The higher the stakes, the higher the uncertainty. Mutual uncertainty is both an index and a factor of indeterminacy.

Does this conception satisfy the criteria of specificity and empirical traceability that a positive conception requires? Assessing the contingency of open-ended processes requires tracking down moments of collective indeterminacy resulting from mutual uncertainty. The most reliable indicators of contingency are those that directly document this experience: indicators that show people seeking behavioral cues from others, waiting to see which sense of direction might emerge from this information, finding themselves in a quagmire when expectations remain indeterminate, or wavering if cues are inconsistent and contradictory.<sup>46</sup>

The following account reported by Turner and Killian (1957, p. 59) is exemplary: "One day in church in the middle of the sermon, we heard a fire engine drive into the church parking lot, next to the sanctuary. There was an uncertain feeling—were we in danger? . . . I found myself looking left and right to see whether other people looked frightened about the situation. . . . What I saw was a lot of other people also looking about, *presumably in the same way I was!*" (my emphasis; quoted by Coleman 1990, pp. 199–200).

An unexpected and unfamiliar sound might indicate danger. What does it exactly mean, and correlatively what should be done about it? As the narrator asks himself the question, he simultaneously seeks to appraise the state of mind of those around him. Obviously, he is not considering making this assessment alone. At this stage he is even less considering acting on his own. For him, the question mark raised by the sound is posed to all. His silent call for clues is directed at the group as a whole ("looking left and right").

Yet, the narrator only gets one answer: those whom he is questioning are questioning him as well. He is being reflected back his own concerns and uncertainty. The primary characteristic of this moment is a lack of reso-

<sup>46</sup>Uncertainty can be behavioral or cognitive (Ermakoff 2008, p. 357). Behavioral uncertainty describes the fact of hesitating between different lines of conduct. Cognitive uncertainty describes the inability to assert knowledge. When this intended knowledge pertains to the future, uncertainty in a phenomenological sense can stem from (a) the incapacity to assign probabilities to future events or (b) the realization that no future event is certain given a reasonable assessment of likelihoods—what Knight designated alternatively as "uncertainty" and "risk" (Knight 1921, pp. 121–22). In the latter case (the actor assesses likelihoods), cognitive uncertainty is all the greater because the events being envisioned seem equally probable (Ermakoff 2008, p. 366).

lution. With a few notations, this account documents (1) a subjective state oriented toward others, (2) actors' realization of their mutual dependence, and (3) their sudden awareness of collective irresolution. One report is enough to capture the indeterminate character of the collective conjuncture.

Once these empirical markers have been made explicit, it becomes possible to identify cases that otherwise would have lacked visibility and analytical significance. Consider how members of the Central Committee of the Serbian Communist Party experienced the meeting that took place on September 23, 1987, in Belgrade. The purpose of the meeting was to examine the political controversy resulting from Milošević's stance on Kosovo. Slobodan Milošević confronted the president of Serbia, Ivan Stambolić, his former mentor. Ljubinka Trgovčević, a member of the central committee writes: "The atmosphere was terrible. . . . Some people carried two different speeches in their pockets, depending on how things turned out. You must realize that 90% of these people's careers and futures depended on the outcome of the meeting" (quoted by Silber and Little 1997, p. 46).

Actors, however, may not bequeath testimonies that are as informative in phenomenological terms as the one reported by Turner and Killian or Silber and Little. When such accounts are lacking, indirect evidence yielded by observations describing how post factum actors relate to their own actions can prove very telling. Quite revealing in this regard is actors' admission that they are taken aback by their own behaviors—individual and collective—whether they lament the outcome or experience it as exhilarating. They admit to having acted beyond themselves in ways that they had not, and could not have, expected. Their own behaviors caught their bearings and expectations off guard. Expressions of ambivalence and regret explicitly acknowledge a lack of authorship: it is they who acted, but their action was not really their own. It reflected a shift in stance in an open-ended collective conjuncture. The Duke of Biron stated it plainly in August 1789: "What have we done?"

If neither direct nor indirect evidence is available, it is still possible to assess the likelihood of mutual uncertainty by considering whether the situation under consideration is likely to generate an interest in coordination and whether the members of the group under challenge lack a script allowing them to figure out how to address the challenge. The situation must be such that interdependence is blatant and isolation risky (Schelling 1980, pp. 89–118).<sup>47</sup> In these conditions, alignment is the best individual strategy. But since no collective stance is apparent, actors do not know on which stance they should align.

<sup>47</sup> Any situation in which individual actors take into account the interests, beliefs, expectations, or behaviors of other individuals is a situation of interdependence. However, this interdependence is of very different kinds, depending on whether actors compete or intend to cooperate with one another.

VI. SCOPE

I have theorized contingency as the property of indeterminate conjunctures and specified the empirical markers of this type of conjuncture. Let us now gauge the phenomenal scope and likelihood of such conjunctures. Contingency as theorized in this article is not conceivable without the reference to a group: the indeterminacy that it describes reflects actors' mutual interest in aligning with a collective apprehended as referential. The question of scope and likelihood can thus be reformulated by examining which types of groups and which domains of action can undergo processes of that kind.

The report, analyzed earlier, that describes a church audience reacting to an unsettling sound does indicate that moments of indeterminacy opening the possibility of causal breaks are not confined to the organizational framework of representative institutions. This point can be documented further by considering the scientists and engineers confronted with a risky decision: the launching of the NASA *Challenger* shuttle and its tragic outcome in January 1986. This case shows that moments of indeterminacy can emerge in organized settings devised for the very purpose of avoiding the intrusion of chance. That is, even the most formally regulated organizations are not immune from the emergence of mutual uncertainty.

A. Standard Procedures Subverted

To gauge the phenomenal scope of contingency, suffice to observe its emergence in domains of action quite different from those of politics or religion. The following observations are centered on high-tech engineering: NASA and its contractors. Drawing on Vaughan's (1996) detailed analysis of the case, I examine the decisional process that led to the launching of the space shuttle *Challenger STA-51-L* on January 28, 1986. The case is tragic: one minute after the launch, the shuttle exploded. All seven crew members were killed.

On the eve of the launch, managers at the Kennedy Space Center (Cape Canaveral, Florida) requested that the manufacturer of the solid rocket motor (Morton Thiokol, located in Utah) assess how the cold expected for the launching date (the following morning) could affect the performance of the motor. Engineers from Thiokol conveyed their concerns that the low temperatures would decrease the resiliency of the joints of the boosters that powered the shuttle into orbit. They recommended that the shuttle not be launched on that day. To discuss the matter further, NASA managers planned a three-location teleconference involving personnel of the Kennedy Space Center, the Marshall Space Flight Center (Huntsville, Alabama), and Morton Thiokol at 8:15 p.m. on the same day. This teleconference involved 34 managers and engineers (Vaughan 1996, p. 299). Thiokol engineers pre-

sented their case. Managers in Huntsville and at the Cape challenged this assessment. The Thiokol group then caucused for 30 minutes.

This sequence of events was fully consistent with the standard procedures required for the assessment of technical information.<sup>48</sup> In the current instance, managers were following a procedure formalized as “level III Flight Risk Review” (FRR) in the NASA rules and regulations (Vaughan 1996, p. 340). NASA and its contractors are exemplars of a highly regulated organizational setting designed to minimize the element of risk. The sequence that led to the launching of the *Challenger* shuttle was no exception: the inquiry commission set up in the aftermath of the tragedy concluded that no rule had been breached (p. 339).

Yet, when we magnify the focus on the participants’ subjective orientations, all the characteristic features of contingency identified in the previous discussion become visible. Vaughan evokes an “unprecedented situation” (1996, pp. 291, 349) “of perhaps unparalleled uncertainty for those assembled” (p. 398). Undoubtedly, the uncertainty was technical. Most participants in the teleconference had only a partial knowledge of how the joints worked. They had expertise. This expertise was relevant—that is why they were participating in the teleconference—but it was limited. The significance of what they could say was therefore conditional on what others would say.

In other words, the incomplete information held by each, because it was incomplete, created a situation of mutual dependence (Vaughan 1996, pp. 357–58). Testimonies acknowledge this fact: “If everybody else had agreed to launch, I would not have stood up and said: ‘No, it’s outside the experience base, we can’t launch.’ However, if Thiokol had recommended which they did, not to launch, I would not have objected to that recommendation. . . . I did not have a firm position because I was not as current on all of the test data that had been generated in the last 6 to 12 months” (quoted by Vaughan 1996, p. 358).

In this context, concerns about isolation came forward along with a heightened awareness of mutual dependence. “[There have been times] when I have changed my position. . . . I’ll go along. And so I wasn’t sure how much of that has happened in everybody else’s minds. . . . The decision was to be made. . . . *I remember distinctly at the time wondering* whether I would have the courage, if asked, what I would do and whether I would be alone, I did not think I would be alone, but I was wondering if I would be, and if I would have the courage, I remember that distinctly, to stand up and say no” (quoted by Vaughan 1996, p. 367; my emphasis).

<sup>48</sup>On the notion of standard operating procedures, see Wagner-Pacifici (2000, p. 141).

While experiencing their mutual dependence, participants opposed to a launch decision were reluctant to speak up (Vaughan 1996, pp. 356–68). Their “silence” at this specific juncture reflected the lack of credence for a no-flight decision—a lack of credence publicly conveyed by individuals who, because of their organizational status as project managers, had institutional prominence (pp. 362–63). The latter’s statements were consistently prolaunch, and the participants did not fail to note this verbal consistency (p. 363). Even more significant for Thiokol engineers’ appraisal of the situation was the fact their own project manager (Al McDonald) right before the Thiokol caucus took a stance that they interpreted as in favor of a prolaunch assessment. This statement “dumbfounded the Thiokol engineers” (p. 363).

This last observation, based on actors’ own observations about themselves and their peers, deserves close attention: Thiokol engineers were “dumbfounded.” McDonald’s public stance had a profound impact on their state of mind. McDonald was a Thiokol project manager. He worked closely with engineers. Furthermore, when Thiokol engineers were collectively taking part in FRR meetings in other locations with NASA or other contractor’s employees, he is the one who would present their views. That is why they expected him to fully appraise their concerns (Vaughan 1996, p. 363). They thought that among the project managers he was the most likely to grasp their stance.<sup>49</sup> Yet, right before they caucused, they heard him—he was at the Cape on January 27, 1986—make a statement that they interpreted as prolaunch.

In light of McDonald’s status among Thiokol engineers and their own accounts of the impression that his public stance made on them, there is good grounds to describe the impact of his statement as epistemic. After they heard McDonald, Thiokol engineers had reasons to doubt their no-flight recommendation and to believe that their colleagues would doubt it as well. The moment was one of collective indecision. Silence prevailed among them while they caucused after the teleconference (Vaughan 1996, p. 365). The senior administrator aligned with a prolaunch stance and polled the three other managers who were present: those with engineering expertise who had previously backed up a no-flight recommendation aligned with a

<sup>49</sup>“Of perhaps *even greater significance to Thiokol’s definition of the situation . . .* was Al McDonald’s sole comment on the teleconference net. Made just before the caucus, McDonald was heard by all to make a prolaunch statement: Thiokol’s own Project Manager apparently agreed with Mulloy and Hardy that the joint would be redundant. McDonald’s statement dumbfounded the Thiokol engineers. They thought that he, of all their upper management, would be most likely to understand. He worked closely with the working engineers and was always their ‘voice’ when the engineers went to Huntsville for FRRs” (Vaughan 1996, p. 363; my emphasis).

prolaunch stance as well. The last one to give his opinion, the engineering manager, was unsure. “*He turned around and looked at the people that support him that put the engineering data together, and no one said anything*” (testimony quoted by Vaughan pp. 366–67; my emphasis).

This analysis has important implications for the study of organizational processes. Moments of collective indecision generated by mutual uncertainty such as the one experienced by Thiokol engineers on January 27, 1986, are moments in which rules, procedures, scripts, and norms get suspended. These are the moments of contingency: scripts lose their behavioral relevance, and standard procedures become spinning wheels that offer no leverage on the situation for those who confront it.<sup>50</sup> Regaining a sense of composure implies restating what the situation is all about. But the definition of the situation is very much a function of the stance—cognitive or behavioral—imputed to one’s peers. These are highly volatile situations subject to lapses, individual mishaps, and chance happenings as previously defined.<sup>51</sup>

Which normative understanding will come out of the confrontation and whether preexisting scripts or procedures will get reinstated depends on the outcome of this interactional dynamics. The type of counterfactuals produced by a focus on moments of contingency is therefore quite different from the counterfactuals inferred from accounts emphasizing the determinative impact of cultural or organizational scripts. The focus on contingency moments pins down the sudden susceptibility of collective behavior to individual agency factors. Actors’ uncertainty is incompatible with their “unthinkingly” reproducing cultural scripts, as Freeland (1997, p. 134) points out. By contrast, the causal significance of scripts, norms, or procedures implies that organization members do not depart from shared understandings informing their behaviors.<sup>52</sup>

<sup>50</sup>System environments characterized by interactive complexity and “tight coupling”—the components of the system affect each other in a short span of time—are prone to the emergence of sudden moments of confusion when the unexpected happens (Perrow 1999, pp. 4–10).

<sup>51</sup>It should be noted, e.g., that Al McDonald actually had reservations about the launch decision, spoke against it after the teleconference, and refused to sign the launch recommendation (Vaughan 1996, pp. 346–47, 368, 371).

<sup>52</sup>Vaughan states that engineers were “silenced by cultural understandings” (1996, p. 361). They deferred to cultural (i.e., shared) understandings about what counted as valid evidence, decisional precedence, and acceptable risk assessment procedure (pp. 380–81). Yet, the significance that Thiokol engineers grant to the statement of one of their own prominent peers (McDonald)—significance that Vaughan emphasizes (p. 363)—shows that a different statement from him would have altered the dynamic. Thiokol engineers paid particular attention to his stance, not so much because of his hierarchical position, as a cultural or normative understanding would invite us to believe, but because they perceived him as usually “voicing” their ex-

## B. Abstract Groups

Situations of mutual uncertainty involve a set of individuals experiencing a similar challenge and relating to one another presuming that they share this condition. The reference to a group and the presumption that this group is in a quagmire underpin this type of conjuncture. So far I have examined formally organized groups. It does not follow that contingency as theorized in this article does not occur outside the confines of this type of groups. In many cases, individuals need not directly interact or communicate with one another to realize that they are in the same boat: the collective dimension of the challenge is obvious either because it is indiscriminate (e.g., a natural disaster or a military occupation after defeat) or because the challenge is targeting a group explicitly identified as such. Those being targeted then have no difficulty establishing a relationship of homology among themselves.

That is why people who identify themselves with an “imagined community”—to borrow Anderson’s (2006) expression—may have good reasons to ask themselves where this “community” stands and whether it will hold firm in the face of a situation that openly challenges their bearings, identity, or self-proclaimed convictions. The group being considered in this situation is abstract. It is certified neither by formal membership criteria nor by a face-to-face interactive setting. Rather, the group exists because of representations and rituals known to be shared. As such it is a nominal construct.

Consider German Catholics confronting the political offensive mounted by Nazi party members in the wake of the March 1933 parliamentary elections. Throughout Germany rank-and-file Nazi activists made a bid for power, seeking to take over local governments, dismissing civil servants, and intimidating their political opponents (Ermakoff 2008, p. 66). For those German Catholics who affiliated themselves with the Center party (Zentrum) and had opposed Nazism in the past on both religious and political grounds, it was urgent to determine a cohesive line of conduct in the face of Nazi violence and intimidation. Center party voters were befuddled by the turn of events (Volk 1990, pp. 52–53). Yet, the leading organs of the Center party remained silent. The collective stance of German Catholics seemed indeterminate between compromise and opposition.

Contemporary documents do betray this call for directives and the ensuing sense of pervasive indecisiveness. Witness the circular letter that the general secretariat of the Center party for the Rhine region (Cologne) sent out on March 18, 1933: “In this time of political decisions, it is our stron-

---

perptise (p. 363). This specific observation fits the predictive claim about the profile of who is likely to retain the attention of actors experiencing mutual uncertainty (Ermakoff 2008, pp. 207–8).

gest desire to discuss the consequences that need to be drawn from the present situation as soon as possible with our friends and collaborators. *We ask for your understanding* if this is not possible yet. We hope to be able to extend to you an invitation to such a discussion in the next few days, after some negotiations have been settled” (my emphasis).<sup>53</sup> The letter acknowledges the time as one of decision. Yet, nothing is decided despite the need for a collective stance.

This point about abstract groups has two implications. First, moments of indeterminacy can linger over days and weeks. Ultimately, mutual uncertainty sets the temporality of these moments, and there is no reason to assume that they necessarily take place within very short spans of linear time. Conversely, situations of urgency and challenge expand moments that we would gauge as “short” by the standards of linear time. Getting out of their routine bounds, seconds, minutes, and hours get extended. For instance, a few glances might be enough to gauge the subjective states of many others. Still, when they turn out to be unsettling and when the stakes are high these perceptive moments break out of the regular experience of linear time.<sup>54</sup>

Second, actors can undergo collective indeterminacy even though they do not directly observe one another. Mutual observation is not a prerequisite for contingency. The key issue is whether these individuals view a collective situation or decision as problematic and have reasons to believe that others experience it in the same way. For this to happen, it suffices that they presume a homology of interests among themselves in the absence of a clearly defined line of conduct. This presumption may take place although they are not formally members of the same organizations.

A case in point is the challenge faced by members of different organizations affiliated with the East German Communist regime in the fall of 1989. Throughout the summer East Germans had emigrated en masse. In September 1989, this exodus went along with demonstrations calling for freedom and economic reforms. In response, state officials, chief among them Erich Honecker, were considering a policy of full-fledged repression similar to the one pursued by Chinese leaders a few weeks earlier—a policy that had resulted in a massacre in Beijing (June 4, 1989; Maier 1997, pp. 143–44; Pfaff 2006, pp. 115, 119, 122, 166–67). Accordingly, local officials confronted with popular expressions of dissent had taken steps for the use of force, ostensibly mobilizing organizations specialized in coercion and repression: paramilitary riot police, the army, and the party’s militia.

<sup>53</sup> Rheinische Zentrumspartei, Abteilung XXI-4, Stadtarchiv, Düsseldorf.

<sup>54</sup> For an experimental confirmation of the experience of expanded time in unexpected situations, see Tse et al. (2004).

Yet, indecision and disorientation were growing at different levels of the state and party organizations (Pfaff 2006, pp. 110–11, 132). Several factors contributed to this diffuse uncertainty: a lack of consensus among national and local party officials, the demonstrators' apparent resolve, and the fact that party leaders in Berlin were sending equivocal directives to their regional and local subordinates so that if things turned badly, they could blame these officials (pp. 170–71). These local officials in turn realized that they would be particularly exposed in case of tragedy. Adding to their prevarication was the fact that individuals speaking on behalf of the opposition movement were calling for nonviolence.

In Leipzig, this indecisiveness reached a climax right before the major demonstration expected on October 9, 1989. State agents were armed. "At this moment, everything was possible" (Leipzig district secret police chief, quoted by Pfaff [2006], p. 173). As for the generalized sequence abstracted from the August 4 case (fig. 2), civil servants and party members were facing a key challenge to their power and status. Different collective scenarios were possible on their side: a collective endorsement of a "Chinese solution," the adoption of a compromise stance, or a split within their own ranks. This was the moment of contingency.<sup>55</sup>

Given this uncertainty among themselves that they had come to realize (Pfaff 2006, p. 184), some midlevel party officials in conjunction with highly visible cultural figures issued a plea for dialogue (Leipzig, October 9, 1989), the so-called Appeal of the Leipzig Six. Two points are worth noting. First, these actors were not commonly viewed as proponents of a liberal course of action. Second, the impact of this public statement "far exceeded the authority of those who instigated it" (p. 183). This impact was epistemic in the sense that it reconfigured shared expectations among members of state and party organizations about what was likely to happen: tolerating demonstration seemed now the only feasible option. On the national level, the Leipzig events led to a cascade of similar local stances in favor of compromise (sequential impact), a cascade that ultimately paved the way to a peaceful transition to a non-Communist regime (Lohmann 1994, p. 88; Opp 1994, p. 102).

As these empirical observations suggest, situations of high confrontation are rife with moments in which groups are at a loss to figure out how they should behave given the situation they experience, its unprecedented character, and the risks they face. This observation applies to a broad range of situations, we investigate elite conflicts (Lachmann 2009), the emergence

<sup>55</sup> Focusing specifically on these moments of confrontation thus corroborates Aronson's (1993) early conjecture that there might be "possible worlds, close to ours, in which the GDR politburo orders the police to shoot on the demonstrators in Leipzig" (p. 19).

of revolutionary situations (Kurzman 2004; Ermakoff 2009), bargaining showdowns over constitutional rules (Elster 1996), or regime transitions (Przeworski 1988, 1991; O'Donnell and Schmitter 1986; Laitin 1998). If indeed the dynamics of group stances in these conjunctures are punctuated by junctures at which these groups, whether formally constituted or not, face the prospect of their breakdown, then studies of contention cannot simply look for long-run processes. They also need to investigate “the contingencies of the moment” (Markoff 1997, p. 1123).

### C. Ad Hoc and Improvised

What about groups without history? Are they likely to experience such conjunctures? These are groups that are improvised or the product of the circumstances: a set of individuals happens to engage in the same activity within the same space. They have not interacted in the past and are unlikely to interact again in the future. The group has no formal constitution. It is ad hoc. In such instances, physical proximity goes along with mutual observation. “Each participant becomes aware of each other’s awareness” (Collins 2001, p. 28).

Mutual observation—the ability for all group members to observe everybody else—matters to the extent that it conveys common knowledge, that is, knowledge that the members of a group mutually impute to themselves (I know that you know that I know . . . ; Lewis 1969, p. 56; Chwe 2001, pp. 30–36). Common knowledge settings not only provide the opportunity to witness other people’s behavioral stances. They also provide the opportunity to draw inferences about other people’s motivations and to assume that everybody else is engaged in the same inference process.

A common knowledge setting allows the conflation of the two moments that underpin the phenomenology of indeterminacy: the presumption of interdependence and the realization of a lack of collective stance. In this type of setting group members do not need to presume the subjective states of their peers: they can directly observe behavioral cues of these states. Direct observation thus intensifies their awareness of the challenge that lies ahead. Furthermore, as actors notice the mutual character of their uncertainty, they simultaneously take cognizance of the conditional character of their action. This conflation of moments hastens the temporality of such conjunctures. The pace gets high, and the time frame, short-term. Group members can go through multiple inflexion points in a short span of linear time. Mutual observation thus amplifies contingency in situations of challenge.

This argument explains why groups without history can also undergo such conjunctures however transient and fleeting these might be. Detailed empirical investigations show, for instance, that situations of sudden emergency, such as a fire alarm, do not necessarily lead to immediate and wide-

spread panic (Johnson 1987, p. 178). The collective dynamics much depends on how individuals assess the likelihood that other people will make their behaviors conditional on the line of conduct adopted by the crowd (Coleman 1990, p. 205). Indeterminacy becomes palpable when this assessment is up in the air. The moment of contingency is this moment of wavering. Mutual uncertainty here concerns the decision whether to make one's line of conduct conditional on the group dynamic.

## VII. IMPLICATIONS

Not all chance happenings are socially or historically significant. Most get absorbed in the flow of social processes. Some might disrupt these processes for a short while before being swallowed by social interactions. Incidental happenings that are consequential are those that induce shifts in patterns of relations. It is these shifts that retain our attention and that we need to theorize. The conception of contingency elaborated in this article complements the reference to chance and coincidence by shifting the focus to the issue of collective impacts. It suggests that coincidental causal constellations might produce such ruptures when they contribute to the emergence of open-ended collective situations.

This being said, we should be clear about the contrasts between these two modes of contingency. The first contrast is quite obvious. The contingency of chance happenings is predicated on causal independence. The indeterminacy of open-ended conjunctures rests on a configuration of interdependence. On this score, they stand at opposite ends. A second contrast concerns the type of impact at play in each mode. In the case of chance, a causal chain intersects with another that it disrupts. The impact lies in the interruption of a sequence. In the case of open-ended conjunctures, impact designates a negative modality of collective action: irresolution. The third contrast about types of indeterminacy is a corollary of the second one. The indeterminacy proper to chance happenings is that of a coincidence: a conjunction that has no cause. The indeterminacy inherent to open conjunctures is the indeterminacy of multiple futures coexisting synchronically at one point in time.

Fourth, these two conceptions imply different social ontologies. Chance happenings take place in a discrete universe. As soon as they happen, they are done. Open-ended conjunctures can last over time, and they vary in gradation: they are more or less open, depending on the scope (number of people) and intensity (perceived risks) of mutual uncertainty. Fifth, the contingency of chance and the contingency of open-ended conjunctures induce opposite approaches to time. We reconstruct the havoc brought about by an accident first by considering the disruption thus produced. The

perspective is retrospective and backward looking. We gauge the indeterminacy of collective conjuncture by following over time the emergence and closure of alternative futures as the members of a group perceive them. The perspective is forward looking.

Sixth, strategies of validation are dissimilar. We figure out the element of chance by assessing the independence of causal chains, the extent to which one factor had causal precedence, and the dependence of the outcome on a proximate and independent causal factor (Lebow 2000–2001, p. 597). We validate a claim about open-endedness by gauging the scope of mutual uncertainty among the members of a group. This requires identifying the group(s) involved in the conjuncture and group members' subjective orientations as these evolve across time. The approach is phenomenological. This phenomenology in turn blends with formal analysis when it identifies typical configurations of relations. I characterize the combination as "formal phenomenology."

Given the contours of these modes of contingency, what does this inquiry tell us about the status of our explanatory models? When these modes are at play, should we throw overboard the prospect of identifying regularities and patterns? The answer depends on the type of explanation we envision. Paradoxically, a positive understanding of contingency simultaneously makes indeterminacy empirically tangible while setting the ground for a systematic exploration of the collective processes that might emerge in such conjunctures. Far from discrediting systematic accounts, the approach expounded in this article invites us to differentiate types of causal explanations, their premises, and the parameters that condition their empirical relevance.

Following Abbott (1988), let us call "linear" those explanations that posit a uniform impact of attributes and conditions on behaviors. These explanations are premised on a linear conception of social causality: conditions and attributes exercise a force of their own—a force that individuals cannot but reckon or internalize. Behavioral regularities and thought patterns testify to the causal force of these factors. There might be variation in the extent to which individuals give way to, instantiate or convey these determinations. Still, a linear explanation proceeds assuming that the determinative logic imposed by attributes and conditions for the most part goes unimpeded.

This conception of social causality works best when people sharing attributes and conditions indeed display homogenous behaviors and have no incentive to deviate from these behavioral or thought patterns. This supposes well-established collective understandings about how to make sense of events and routines. People react in the same ways—their behaviors seem naturally "orchestrated" (Bourdieu 1988, p. 150)—because they enact

schemes of interpretation that, in their view, have collective validity. What they do matches what they think they should do. Expectations and behaviors validate each other.

The argument about contingency points to a different type of social causality: one in which interpretive schemes and behaviors are not tightly coupled, individuals are collectively reflecting on alternative lines of conduct, and interpretive schemes lose their taken-for-granted character. This mode of causality comes to the fore when shared expectations get disrupted. An event jeopardizes assumed regularities whatever the genus of this event: the sudden incapacity of an actor endowed with a position of leadership, a public statement signaling a shift in policy, or a surge in “transgressive contention” (Biggs 2005, p. 1684). For those under challenge, such conjunctures give way to an acute interest in both cognitive and behavioral coordination (Laitin 1998, p. 24; Ermakoff 2010*b*, p. 546).

These moments of indeterminacy thus bring into relief the causal significance of highly interactive processes whereby individual and collective actors reset the content of their beliefs and reconsider their behavioral stances. The decisional components of these processes can hardly be overemphasized (Oliver 1989, p. 11). Whether they opt for the status quo or not, actors have to be reflexive about what they are doing (Ermakoff 2010*b*, pp. 540–41; 2013, pp. 91–94). The situation asks them to decide in a situation characterized by the absence of a preestablished script and a crucial interest in coordination. Since the decisions to be made have no obvious content and will be interdependent, the logic of the process is highly endogenous and emancipates itself from the determinative logics of attributes and conditions.<sup>56</sup>

A phenomenology attuned to a formal analysis of relational configurations—what I called “formal phenomenology” earlier—helps identify the type of uncertainty at play: Do individuals experience uncertainty on their own, or do they relate it to the experience of others? If they do relate it to others, is this because they have the opportunity to directly observe it (see the notion of common knowledge setting defined above) or because they presume a community of interest with these others (as in the case of abstract groups)? Likewise, in contradistinction with calls for an “anti-explanation”

<sup>56</sup> Both moments of indeterminacy and processes determined by a self-amplifying mechanism exemplify this interactive and processual type of social causality (Hedström 1994; Biggs 2002, 2005; Koopmans 2004). The argument about contingency investigates moments that precede self-amplifying dynamics (e.g., the aristocrats’ indecision at the outset of the August 4, 1789, National Assembly meeting) as well as the relational configurations generated by these dynamics among those who do not take part in them and experience them as a challenge. In these moments, interdependence becomes at once objectified and amplified, not because of some self-reinforcing feedback mechanism but because it has no content.

posture (e.g., Kurzman 2004, pp. 165–66), a formal phenomenology of actors' subjective experience helps shed light on the processes that this experience can generate: the breakdown of the group, sequential alignment, inferential alignment based on local knowledge, or tacit coordination (Ermakoff 2007, p. 881; 2008). This formal specification in turn paves the way for a better understanding of the factors conditioning their likelihood (Ermakoff 2010a, pp. 102–4).

It comes therefore as no surprise that the analysis of moments of indeterminacy is of relevance for the study of collective behavior and decision making, high contention, and transition processes. The moments of exacerbated interdependence described in this article punctuate the emergence, or collapse, of collective action (see Fantasia 1988, p. 82; Chong 1991, p. 119). When we put on retrospective lenses, we easily lose sight of these moments, so inclined we may be to bury them under layers of apparent necessities leading to the outcome.<sup>57</sup> Yet, analyzing these moments is key for understanding collective behavior and the processes at work in challenging times.

In drawing attention to these junctures, the current inquiry advances an agenda centered on the microanalytics of times of crisis, transitions, or abrupt changes, whether the focus is on organizations (Freeland 1997, 2001, chap. 3; Gibson 2011) or on politics (e.g., Chong 1991; Przeworski 1991; Jasper 2004). In the realm of politics, these are times in which elite politics coevolve with mass protests (Markoff 1997, pp. 1113–14; Oliver and Myers 2003, p. 3) and when formal groups interact with informal ones. The dynamics of these conjunctures rests on these groups' capacity for collective action and the stances they take. That is, intragroup processes condition intergroup politics. We cannot properly understand one without investigating the other (Ermakoff 2010b, p. 546). The theory of open conjunctures developed in this article is a step forward in that direction since it highlights the possibility of drastic shifts in collective stances and the conditions under which structural determinations get suspended.

## VIII. CONCLUSION

A positive conception of contingency ought to identify the specific properties of the events and processes that we deem contingent. These properties are specific, which means that we should be able to trace them empirically in light of indicators amenable to systematic study. This also means that if these properties have been duly specified, we should be able to dif-

<sup>57</sup> As Kalyvas (1999) notes in the case of the breakdown of Communist one-party regimes, “nondeterministic accounts remain the exception” (p. 333). Note that the characterization of these accounts is negative: they are “nondeterministic.” The key issue of course is to make clear what we mean when we invoke the absence of determination (e.g., the “indeterminacy of events” [Clemens 2007, p. 541]).

ferentiate this class of processes and events from other classes with which it may be easily conflated owing to apparent similarities.

Understanding contingency in terms of chance does satisfy these requirements, provided that we have a straightforward definition of chance as produced by the confluence of independent chains of causation. We can differentiate classes of outcomes that fit the criterion of causal independence from classes of outcomes that do not. Yet, equating contingency with a statement of causal independence unduly restricts the scope of social and historical indeterminacy. The focus on coincidences offers no hint for theorizing their impact. Furthermore, such a conception overlooks the significance of endogenous disruptions at odds with the assumption of causal independence.

To overcome these limitations, the argument expounded in this article is built on three observations. (1) Chance factors affect collective behaviors and social outcomes by affecting the agency of particular individuals. (2) Consequently, the causes at play, although “small” with regard to their human scope (e.g., a silence, a lapse, a moment of confusion; Ermakoff 2001, pp. 254–55) are “big” with regard to their effects. (3) The notion of a causal break is best adapted to understanding the impact of these incidental happenings. Causes that used to be inconsequential induce shifts in the causal pattern of collective processes through their effects on specific individual actions.

These three observations—individual agency as mediation, the discrepancy between effects and causes, and moments of causal breaks—motivated the distinction between four types of impact: pyramidal, pivotal, sequential, and epistemic. This typology redirects attention to the possibility of conjunctures the collective outcomes of which become open-ended. It is this possibility that I investigated by analyzing the causal structure of an event that was fully unexpected and that epitomizes the notion of ruptures in social causality: the night session of the French National Assembly on August 4, 1789. Punctuating the collective dynamics emerging in the course of this session were, first, a moment of collective indecision and, second, the resolution of this indeterminacy. Both moments illustrate the notion of epistemic impact.

Stated in broader analytical terms, the claim here is that collective indecisions underpinned by mutual dependence have indeterminate outcomes. The clue to this indeterminacy lies in a configuration of relations marked by actors’ mutual recognition of their uncertainty. As they acknowledge to themselves their lack of resolution, actors loosen up the relational patterns that until then had embedded their beliefs and behaviors. By the same token, they make themselves amenable to different causal regimes. Whether a shift of regime takes place depends on how these actors collectively resolve their uncertainty. These moments of social and historical in-

determinacy are most likely in contexts of disruption when habitual and institutional bearings lose their obviousness. For then actors can no longer take scripts and procedures for granted.

A collective conjuncture can therefore be said to be contingent in a positive sense by reference to this basic structure of indeterminacy: when a group, trapped in a state of mutual uncertainty, becomes open to different alternative futures. According to this approach, we get to the empirics of social and historical contingency through a close focus on actors' subjective experience and the possibility that their background assumptions might be unraveling. The group under consideration might be abstract, ad hoc, or formally constituted. At issue is whether people losing their bearings regain a sense of collective determination.

## APPENDIX

### Sources and Sequence

The minutes of the August 4, 1789, session have to be interpreted with caution. Rewritten after the event, they are patchy and they offer a "chaotic vision of the event" (Kessel 1969, p. 135). Furthermore, they do not provide a sure guide to the precise chronology of the statements delivered during these few hours beyond the reference to Dupont de Nemours's stance in favor of a law-and-order decree (Hirsch 1978, p. 158). In order to reconstruct this chronology, I have therefore relied on four additional types of documents: (1) diaries, letters, and accounts written by the delegates right after the session to inform their constituents or close correspondents (spouse, colleague, friend), (2) accounts published in periodicals on the basis of actors' or witnesses' experience, (3) memoirs, and (4) factual accounts of the event that their authors intended to be historical and for the purpose of which they drew on oral testimonies or primary sources or firsthand knowledge (see table A1).

The sequence summarized in table 1 is based on the systematic cross-checking of these sources. These make it possible to identify the sequence of statements and to correct some misrepresentations—misrepresentations to which contemporaries themselves lent credence by producing accounts geared to the unexpected outcome that they had just experienced. After Noailles and d'Aiguillon set forth motions addressing feudal rights and tax inequalities, four delegates of the third estate rose up to either push forward these motions (Legrand, Le Guen, Lapoule) or restate the need to suppress disorder in the countryside through repressive measures (Dupont de Nemours).

The stance taken by the Duke of Châtelet at this juncture initiated statements by fellow aristocrats to the same effect until the Duke of Mont-

morency requested a vote. The assembly's chairman inquired about the assembly's readiness for a vote. Delegates responded with various reform proposals about feudal prerogatives (seigneurial justice, tithes, hunting rights, pensions allowed by the king, venality of public offices) along with multiple personal renunciations. The breadth of these motions and renunciations in turn motivated delegates of provinces and districts enjoying special tax privileges to commit themselves to renouncing their privileges insofar as their mandates allowed them to do so. The sequence thus reconstructed is consistent with the chronologies outlined by Kessel (1969) and Hirsch (1978).

A close reading of the diaries, accounts, and letters written by representatives of the aristocracy and by witnesses who could directly observe them (e.g., Etienne Dumont covering the session on behalf of the *Courier de Provence*) underscores the reservations or indecision that Noailles's and d'Aiguillon's proposals elicited among these representatives. This observation goes counter to accounts suggesting that effervescence took hold of the assembly right after Noailles and d'Aiguillon set forth their motions. Applause was actually confined to the delegates of the third estate.

Furthermore, testimonies report no sign of effervescence when they describe the impact of the four speakers—all four representatives of the third estate—who followed them. Quite the contrary. Legrand's speech is depicted as a soporific dissertation on feudal rights. Le Guen's and Lapoule's indictments of feudal practices elicited expressions of antagonisms. Dupont de Nemours's attempt to bring the debate back to the need for a law-and-order decree "received little attention" (Droz 1839, p. 327). As Kessel (1969, p. 139) underlines, when, right after the session, third estate representatives trace the effusion that took hold of the assembly back to Noailles's speech, they anticipate a collective dynamics that will emerge at a later point. Their surprise and emotion color the event on which they report.

The diagram of action provided by figure 1 has been generated by answering questions about prerequisites for each focal action indicated in table 1 starting with precedents that have the longest string of prerequisites. Table A2 provides the rationale for these answers. For instance, the Ethno program asks whether the focal action "Foucauld on pensions" (i.e., the marquis de Foucauld L'Ardimalie's motion to abolish the pensions granted by the king to great nobles) requires the precedent "chairman inquiring" (i.e., the assembly's chairman probing his colleagues' readiness to take a stand before a vote; table A2). As Griffin (1993, p. 1107) points out, the Ethno program does not, properly speaking, reveal causal connections. It does, however, systematize the analyst's expert and contextual knowledge.

TABLE A1  
CATEGORIZED SOURCES

Document Type	Source
Minutes	Assemblée Nationale 1789; Foucauld L'Ardimalie 1789
Unpublished diaries and letters	Castellane, Journal anonyme de la noblesse, Joseph-Michel Pellerin, François-Laurent Visme, Lettres des députés du tiers état de Marseille
Contemporary periodicals	<i>Bulletin de l'Assemblée Nationale, Correspondance de MM. les députés des communes de la province d'Anjou, Courier de Provence, Journal de Paris, Journal des Etats Généraux, Le Point du Jour ou Resultat de ce qui s'est passé la veille à l'Assemblée Nationale</i>
Published memoirs, diaries, and letters	Michel Choiseul d'Aillecourt (1791), Bailly (1821), Ferrières (1821), Condorcet (1824), Lameth (1828), Montlosier (1830), Dumont (1832), Barère (1842), Champany (1846), Gauville (1864), Biron (1865), Pellerin (1883), Coroller du Moustoir (1886), Le Roulx (1886), Biauzat (1890), Mège (1890), Duquesnoy (1894), Maupetit (1903), Barbotin (1910), Ferrières (1932), Alquier (1983), Ménard de la Groye (1989), Lepoutre (1998)
Contemporaries' histories	Beaulieu (1801), Granié (1814), Lacretelle (1821), Droz (1839)

TABLE A2  
EVENING SESSION OF THE FRENCH NATIONAL ASSEMBLY, AUGUST 4, 1789:  
FOCAL ACTIONS AND PREREQUISITES

Shorthand	Prerequisites	Rationale
Decree is read	Peasants' revolts	Reports about social disorders in rural areas motivated the drafting of this decree
Noailles—feudal rights	Peasants' revolts	Noailles frames his motion as a policy response to peasants' grievances
Aiguillon—redeemable rights	Peasants' revolts	Aiguillon had prepared his motion before the session and would have read it even if Noailles had not stepped forward
Aristocrats' indecision	Aiguillon	Through their motions, Noailles and Aiguillon directly challenge their aristocratic colleagues' interests and expectations
Legrand	Noailles	In distinguishing between different types of feudal rights and stating that some of them cannot be redeemed since they are contrary to human nature, Legrand is responding to Noailles (Kessel 1969, p. 142)
Le Guen	Aiguillon	Le Guen denounces personal servitudes and, in so doing, is qualifying Aiguillon's motion

TABLE A2 (*Continued*)

Shorthand	Prerequisites	Rationale
Lapoule	Aiguillon	since the latter had overlooked the issue The same observation applies to Lapoule's graphic indictment of personal servitudes
Aristocrats' indignation	Le Guen, Lapoule	In the case of both Le Guen's and Lapoule's statements, representatives of the second estate signal that they are offended by these allegations
Nemours—decree	Legrand, Le Guen, Lapoule	Dupont de Nemours states the need for the decree read at the outset of the session
Châtelet's exemplary renunciation	Aristocrats' indecision, Legrand, Lapoule	The Duke de Châtelet is addressing his peers and is responding to Legrand and Lapoule: he is endorsing Noailles's motion and renouncing his seigneurial rights
Aristocrats' endorsement	Châtelet	Several aristocrats confirm Châtelet's endorsement in a context of growing collective effervescence
Montmorency's call for a vote	Aristocrats' endorsements	The Count Mathieu de Montmorency seeks to halt the process by calling for a vote
Chairman	Montmorency	The assembly's chairman (Le Chapelier) asks whether anybody else wants to take a stance
Foucauld—pensions	Chairman	In response to this chairman's request, Foucauld L'Ardimalie (1789, p. 1) calls for the abolition of the pensions granted by the king
Cottin—seigneurial justices	Chairman	Cottin calls for the abolition of seigneurial justices
Aristocrats endorse Foucauld	Foucauld—pensions	Aristocrats endorse Foucauld L'Ardimalie's motion on pensions
Bishop Nancy	Chairman	The bishop of Nancy asks that the sums of the feudal rights redeemed or abolished be employed for productive investments
Bishop Chartres	Chairman	The bishop of Chartres calls for the abolition of the right to hunt
Châtelet—tithe	Bishop Chartres	Châtelet is reacting to the Chartres bishop by calling for the abolition of the tithe
Personal renunciations	Aristocrats endorse Foucauld, Cottin—seigneurial justices, Châtelet on tithes	Contemporaries describe an uninterrupted series of personal renunciations
Bishop Aix	Aristocrats endorse Foucauld, Cottin—seigneurial justices, Châtelet on tithes	In this context, the bishop of Aix takes a stand on unfair indirect taxes

TABLE A2 (Continued)

Shorthand	Prerequisites	Rationale
Calls for various abolitions	Aristocrats endorse Foucauld, Cottin—seigneurial justices, Châtelet on tithes	Along with personal renunciations, numerous representatives call for the suppression of other types of social privileges
Blacons on Dauphiné's renunciation	Personal renunciations, Bishop Aix, calls for various abolitions	The delegates of the Dauphiné province coordinate to respond to the flow of personal renunciations and motions; one of their representatives, Count d'Agoult, asks that other provinces follow their steps (Egret 1950, p. 107)
Corporate renunciations	Blacons on Dauphiné's renunciation	In response to Agoult's call, representatives of districts and provinces enjoying tax prerogatives step forward to state their commitment to renouncing such prerogatives
Lally-Tolendal on the king as restorer	Corporate renunciations	Lally-Tolendal concludes the session by proclaiming the king restorer of French liberty

## REFERENCES

- Abbott, Andrew. 1983. "Sequences of Social Events: Concepts and Methods for the Analysis of Order." *Historical Methods* 16 (4): 129–47.
- . 1988. "Transcending General Linear Reality." *Sociological Theory* 6 (2): 169–86.
- . 2001. *Time Matters: On Theory and Method*. Chicago: University of Chicago Press.
- Aminzade, Ronald. 1992. "Historical Sociology and Time." *Sociological Methods and Research* 20 (4): 456–80.
- Aminzade, Ronald, Jack A. Goldstone, and Elizabeth Perry. 2001. "Leadership Dynamics and Dynamics of Contention." Pp. 126–54 in *Silence and Voice in the Study of Contentious Politics*, edited by Ronald Aminzade et al. Cambridge: Cambridge University Press.
- Anderson, Benedict. 2006. *Imagined Communities: Reflections on the Origin and Spread of Nationalism*. London: Verso.
- Andrews, Kenneth T., and Michael Biggs. 2006. "The Dynamics of Protest Diffusion: Movement Organizations, Social Networks, and News Media in the 1960 Sit-Ins." *American Sociological Review* 71 (5): 752–77.
- Applewhite, Harriet B. 1993. *Political Alignment in the French National Assembly, 1789–1991*. Baton Rouge: Louisiana State University.
- Arnason, Jóhann Páll. 1993. *The Future That Failed: Origins and Destinies of the Soviet Model*. London: Routledge.
- Aron, Raymond. (1938) 1986. *Introduction à la Philosophie de l'histoire*. Paris: Gallimard.
- Assemblée Nationale. 1789. *Procès-verbal de l'Assemblée nationale constituante*. No 40 bis. Du Mardi, 4 Août 1789, après-midi. Paris: Baudouin.
- Baillly, Jean Sylvain. 1821. *Mémoires*. Paris: Baudouin.
- Barbotin, Emmanuel. 1910. *Lettres de l'Abbé Barbotin, député à l'Assemblée constituante*. Published by A. Aulard. Paris: Cornély.
- Barère, Bertrand. 1842. *Mémoires*. Edited by Hippolyte Carnot. Paris: Labitte.

- Beaulieu, C. F. 1801. *Essais historiques sur les causes et les effets de la révolution de France: Avec des notes sur quelques événements et quelques institutions*, vol. 2. Paris: Maradan.
- Biauzat, Gaultier de. 1890. *Correspondance*. Edited by Francisque Mège. Vol. 2. Clermont-Ferrand: Bellet.
- Biggs, Michael. 2002. "Strikes as Sequences of Interaction: The American Strike Wave of 1886." *Social Science History* 26:583–617.
- . 2005. "Strikes as Forest Fires: Chicago and Paris in the Late Nineteenth Century." *American Journal of Sociology* 110:1684–1714.
- Bikhchandani, Sushil, David Hirshleifer, and Ivo Welch. 1992. "A Theory of Fads, Fashion, Custom, and Cultural Change as Informational Cascades." *Journal of Political Economy* 100:992–1026.
- Biron, Duc de. 1865. *Lettres sur les Etats Généraux de 1789 ou détail des séances de l'Assemblée de la Noblesse et des Trois ordres du 4 mai au 15 novembre*. Paris: Bachelin-Deflorenne.
- Boudon, Raymond. 1986. *Theories of Social Change: A Critical Appraisal*. Berkeley and Los Angeles: University of California Press.
- Bourdieu, Pierre. 1988. *Homo academicus*. Stanford, Calif.: Stanford University Press.
- Bury, J. B. 1930. *Selected Essays*. Edited by Harold Temperley. Cambridge: Cambridge University Press.
- Carr, Edward Hallett. 1963. *What Is History?* New York: Knopf.
- Champagny, M. de. 1846. *Souvenirs de M. de Champagny, duc de Cadore*. Paris: Renouard.
- Chong, Denis. 1991. *Collective Action and the Civil Rights Movement*. Chicago: University of Chicago Press.
- Chwe, Michael Suk-Young. 2001. *Rational Ritual: Culture, Coordination, and Common Knowledge*. Princeton, N.J.: Princeton University Press.
- Clemens, Elisabeth S. 2007. "Toward a Historicized Sociology: Theorizing Events, Processes, and Emergence." *Annual Review of Sociology* 33:527–49.
- Cohen, Lenard J. 2001. *Serpent in the Bosom: The Rise and Fall of Slobodan Milošević*. Boulder, Colo.: Westview Press.
- Coleman, James S. 1990. *Foundations of Social Theory*. Cambridge, Mass.: Harvard University Press.
- Collins, Randall. 1993. "Emotional Energy as the Common Denominator of Rational Action." *Rationality and Society* 5 (2): 203–30.
- . 2001. "Social Movements and the Focus of Emotional Attention." Pp. 27–44 in *Passionate Politics: Emotions and Social Movements*, edited by Jeff Goodwin, James M. Jasper, and Francesco Poletta. Chicago: University of Chicago Press.
- Condorcet, Jean-Antoine-Nicolas de Caritat. 1824. *Mémoires de Condorcet sur la révolution française: Extraits de sa correspondance et de celles de ses amis*. Paris: Ponthieu.
- Coroller du Moustoir. 1886. "Lettres." *Revue historique de l'ouest* 2:64–65.
- Dray, W. H. 1984. "Conflicting Interpretations in History: The Case of the English Civil War." Pp. 239–57 in *Hermeneutics: Questions and Prospects*, edited by Gary Shapiro and Alan Sica. Amherst: University of Massachusetts Press.
- Droz, Joseph. 1839. *Histoire du Règne de Louis XVI, pendant les années où l'on pouvait prévenir ou diriger la Révolution française, suivie des applications de la morale et de la politique*. Brussels: Wahlen.
- Dumont, Etienne. 1832. *Souvenirs sur Mirabeau et sur les deux premières Assemblées Législatives*. Ouvrage posthume publié par J. L. Duval. Paris: Gosselin.
- Duquesnoy, Adrien. 1894. *Journal sur l'Assemblée constituante: 3 mai 1789–3 avril 1790*. Paris: Picard.
- Durkheim, Émile. 1995. *The Elementary Forms of Religious Life*. Translated by Karen E. Fields. New York: Free Press.

- Egret, Jean. 1950. *Révolution des notables: Mounier et les monarchiens, 1789*. Paris: Colin.
- Elster, Jon. 1996. "Introduction." Pp. 1–20 in *The Roundtable Talks and the Breakdown of Communism*, edited by Jon Elster. Chicago: University of Chicago Press.
- . 2007. "The Night of August 4, 1789: A Study of Social Interaction in Collective Decision-Making." *Revue européenne des sciences sociales* 45 (136): 71–94.
- Ermakoff, Ivan. 2001. "Strukturelle Zwänge und zufällige Geschehnisse." Pp. 224–56 in *Struktur und Ereignis*, edited by Andreas Suter and Manfred Hettling. Geschichte und Gesellschaft, Sonderheft 19. Göttingen: Vandenhoeck & Ruprecht.
- . 2007. Review of *The Unthinkable Revolution in Iran*, by Charles Kurzman. *American Journal of Sociology* 113 (3): 879–81.
- . 2008. *Ruling Oneself Out: A Theory of Collective Abdications*. Durham, N.C.: Duke University Press.
- . 2009. "Groups at the Crossroads: Turning Points and Contingency in Revolutionary Conjunctures." 104th Annual Meeting of the American Sociological Association, San Francisco, August.
- . 2010a. "Motives and Alignment." *Social Science History* 34 (1): 97–109.
- . 2010b. "Theory of Practice, Rational Choice and Historical Change." *Theory and Society* 39:527–53.
- . 2013. "Rational Choice May Take Over." Pp. 89–107 in *Bourdieu and Historical Analysis*, edited by Philip Gorski. Durham, N.C.: Duke University Press.
- Fantasia, Rick. 1988. *Cultures of Solidarity*. Berkeley and Los Angeles: University of California Press.
- Ferrières, Charles élie, marquis de. 1821. *Mémoires*. Vol. 1. Paris: Baudouin.
- . 1932. *Correspondance inédite (1789, 1790, 1791)*. Edited by Henri Carré. Paris: Colin.
- Fitzsimmons, Michael P. 1987. "Privilege and the Polity in France, 1786–1791." *American Historical Review* 92 (2): 269–95.
- . 2003. *The Night the Old Regime Ended: August 4, 1789 and the French Revolution*. University Park: Pennsylvania State University Press.
- Foucauld l'Ardimalie, Louis de. 1789. *Opinion du marquis de Foucauld l'Ardimalie, député de la noblesse de la province du Périgord, sur la motion de M. le vicomte de Noailles, concernant l'abolition de la féodalité, et le rachat des cens et rentes seigneuriales, etc. Du mardi 4 août 1789*. Paris: Baudouin.
- Freeland, Robert F. 1997. "Culture and Volition in Organizational Decision-Making." *Qualitative Sociology* 20 (1): 127–37.
- . 2001. *The Struggle for Control of the Modern Corporation: Organizational Change at General Motors, 1924–1970*. Cambridge: Cambridge University Press.
- Furet, François. 1989. "Night of August 4." Pp. 107–13 in *A Critical Dictionary of the French Revolution*, edited by François Furet and Mona Ozouf. Translated by Arthur Goldhammer. Cambridge, Mass.: Belknap Press of Harvard University Press.
- Gallie, W. B. 1964. *Philosophy and the Historical Understanding*. New York: Schocken.
- Gauchet, Marcel. 1989. "Rights of Man." Pp. 818–28 in *A Critical Dictionary of the French Revolution*, edited by François Furet and Mona Ozouf. Translated by Arthur Goldhammer. Cambridge, Mass.: Belknap Press of Harvard University Press.
- . 1992. "La droite et la gauche." Pp. 393–467 in *Les Lieux de mémoire*, vol. 3. Edited by Pierre Nora. Paris: Gallimard.
- Gauville, Louis Henri Charles de. 1864. *Journal du baron de Gauville, député de l'ordre de la noblesse aux états généraux, depuis le 4 mars 1789 jusqu'au 1er juillet 1790*. Paris: Gay.
- Gibson, David R. 2011. "Avoiding Catastrophe: The Interactional Production of Possibility during the Cuban Missile Crisis." *American Journal of Sociology* 117 (2): 361–419.

- Granié, Pierre. 1814. *Histoire des états-généraux: Ou, Assemblée nationale, en 1789, sous Louis XVI*. Paris: Au bureau du Journal des arts.
- Granovetter, Mark. 1978. "Threshold Models of Collective Behavior." *American Journal of Sociology* 83 (6): 1420–43.
- Griffin, Larry J. 1993. "Narrative, Event-Structure Analysis, and Causal Interpretation in Historical Sociology." *American Journal of Sociology* 98 (5): 1094–1133.
- Griffin, Larry J., and Robert R. Korstad. 1995. "Class as Race and Gender: Making and Breaking a Labor Union in the Jim Crow South." *Social Science History* 19 (4): 425–54.
- Griffin, Larry J., and Charles C. Ragin. 1994. "Some Observations on Formal Methods of Qualitative Analysis." *Sociological Methods and Research* 23 (1): 4–21.
- Hall, John R. 1992. "Where History and Sociology Meet: Forms of Discourse and Sociohistorical Inquiry." *Sociological Theory* 10 (2): 164–93.
- . 1999. *Cultures of Inquiry: From Epistemology to Discourse in Sociohistorical Research*. Cambridge: Cambridge University Press.
- Hawthorne, Geoffrey. 1991. *Plausible Worlds: Possibility and Understanding in History and the Social Sciences*. Cambridge: Cambridge University Press.
- Haydu, Jeffrey. 2010. "Reversals of Fortune: Path Dependence, Problem Solving, and Temporal Cases." *Theory and Society* 39 (1): 25–48.
- Hayek, Friedrich. 1989. "The Pretence of Knowledge." *American Economic Review* 79 (6): 3–7.
- Hedström, Peter. 1994. "Contagious Collectivities: On the Spatial Diffusion of Swedish Trade Unions, 1890–1940." *American Journal of Sociology* 99 (5): 1157–79.
- Heise, David R. 1989. "Modeling Event Structures." *Journal of Mathematical Sociology* 14 (2–3): 139–69.
- Herbert, Sidney. 1921. *The Fall of Feudalism in France*. New York: Methuen.
- Hill, Greg. 1997. "History, Necessity and Rational Choice Theory." *Rationality and Society* 9 (2): 189–213.
- Hindie-Lemay, Edna. 1987. *La Vie quotidienne des députés aux Etats Généraux 1789*. Paris: Hachette.
- Hirsch, Jean-Pierre. 1978. *La nuit du 4 août*. Paris: Gallimard/Julliard.
- Hmed, Choukri. 2012. "Réseaux dormants, contingence et structure: Genèses de la révolution tunisienne." *Revue Française de Science Politique* 62 (5–6): 797–820.
- Isaac, Larry W., Debra A. Street, and Stan J. Knapp. 1994. "Analyzing Historical Contingency with Formal Methods: The Case of the 'Relief Explosion' and 1968." *Sociological Methods and Research* 23 (1): 114–41.
- Jasper, James M. 2004. "A Strategic Approach to Collective Action: Looking for Agency in Social-Movement Choices." *Mobilization* 9 (1): 1–16.
- Jessenne, Jean-Pierre, and Edna Hindie-Lemay. 1998. *Député-paysan et fermière de Flandre en 1789: La correspondance des Lepoutre*. Villeneuve d'Ascq: Centre d'histoire de l'Europe du Nord-Ouest, Université Charles de Gaulle-Lille 3.
- Johnson, Norris R. 1987. "Panic and the Breakdown of Social Order: Popular Myth, Social Theory, Empirical Evidence." *Sociological Focus* 20 (3): 171–83.
- Jović, Dejan. 2009. *Yugoslavia: A State That Withered Away*. West Lafayette, Ind.: Purdue University Press.
- Kalyvas, Stathis N. 1999. "The Decay and Breakdown of Communist One-Party Systems." *Annual Review of Political Science* 2:323–43.
- Karl, Terry Lynn. 1990. "Dilemmas of Democratization in Latin America." *Comparative Politics* 23 (1): 1–21.
- Kerviler, R. 1886a. "Recherches et notices sur les députés de Bretagne aux états généraux Coroller du Moustoir." *Revue de l'Ouest*, May: 60–83.
- . 1886b. "Recherches et notices sur les députés de Bretagne aux états généraux: Delaville Le Roux." *Revue historique de l'Ouest*, November: 316–339.
- Kessel, Patrick. 1969. *La Nuit du 4 Août 1789*. Paris: Arthaud.

- Kimeldorf, Howard. 1988. *Reds or Rackets? The Making of Radical and Conservative Unions on the Waterfront*. Berkeley and Los Angeles: University of California Press.
- Knight, Frank H. 1921. *Risk, Uncertainty, and Profit*. Boston: Houghton Mifflin.
- Koopmans, Ruud. 2004. "Protest in Time and Space: The Evolution of Waves of Contention." Pp. 19–46 in *The Blackwell Companion to Social Movements*, edited by David A. Snow, Sarah A. Soule, and Hanspeter Kriesi. Malden, Mass.: Blackwell.
- Krehbiel, Keith. 1998. *Pivotal Politics: A Theory of U.S. Lawmaking*. Chicago: University of Chicago Press.
- Kuran, Timur. 1991. "Now out of Never: The Element of Surprise in the East European Revolution of 1989." *World Politics* 44:7–48.
- Kurzman, Charles. 2004. *The Unthinkable Revolution in Iran*. Cambridge, Mass.: Harvard University Press.
- Lachmann, Richard. 2009. "Greed and Contingency: State Fiscal Crises and Imperial Failure in Early Modern Europe." *American Journal of Sociology* 115 (1): 39–73.
- Lacretelle, Charles. 1821. *Histoire de l'Assemblée constituante*. Paris: Treuttel et Würtz.
- Laitin, David. 1998. *Identities in Formation: The Russian-Speaking Populations in the Near Abroad*. Ithaca, N.Y.: Cornell University Press.
- Lameth, Alexandre comte de. 1828. *Histoire de l'Assemblée constituante*, tome 1. Paris: Moutardier.
- Lebow, Richard Ned. 2000–2001. "Contingency, Catalysts, and International System Change." *Political Science Quarterly* 115 (4): 591–616.
- Lefebvre, Georges. 2005. *The Coming of the French Revolution*. Translated by R. R. Palmer. Princeton, N.J.: Princeton University Press.
- Leff, Gordon. 1969. *History and Social Theory*. London: Merlin.
- Le Roulx, Delaville. 1886. "Lettres." *Revue historique de l'ouest* 2:316–335.
- Lewis, David K. 1969. *Conventions: A Philosophical Study*. Cambridge, Mass.: Harvard University Press.
- Lohmann, Susanne. 1994. "The Dynamics of Informational Cascades: The Monday Demonstrations in Leipzig, East Germany, 1989–91." *World Politics* 47:41–101.
- Magaš, Branka. 1993. *The Destruction of Yugoslavia: Tracking the Break-up, 1980–1992*. New York: Verso.
- Maier, Charles S. 1997. *The Crisis of Communism and the End of East Germany*. Princeton, N.J.: Princeton University Press.
- Markoff, John. 1996. *The Abolition of Feudalism: Peasants, Lords, and Legislators in the French Revolution*. University Park: Pennsylvania State University Press.
- . 1997. "Peasants Help Destroy an Old Regime and Defy a New One: Some Lessons from (and for) the Study of Social Movements." *American Journal of Sociology* 102 (4): 1113–42.
- Maupetit, Michel René. 1903. *Lettres*. Edited by Quérouau-Lamérie. *Bulletin de la Commission historique et archéologique de la Mayenne* 19:205–50.
- Mège, Francisque. 1890. *Gaultier de Biauzat député du Tiers-Etat aux Etats-Généraux de 1789: Sa vie et sa correspondance*. Vol. 2. Clermont-Ferrand: Bellet.
- Meinecke, Friedrich. 1957. *Machiavellism: The Doctrine of Reason d'Etat and Its Place in Modern History*. Translated by Douglas Scott. London: Routledge & Kegan Paul.
- . 1963. *The German Catastrophe*. Boston: Beacon.
- Ménard de la Groye, François. 1989. *Correspondance (1789–1791)*. Edited by Florence Mirouze. Le Mans: Archives Départementales de la Sarthe.
- Michelet, Jules. 1952. *Histoire de la Révolution française*, vol. 1. Paris: Gallimard.
- Montlosier, François-Dominique de Reynaud de. 1830. *Mémoires de M. le comte de Montlosier sur la Révolution française, le Consulat, l'Empire, la Restauration et les principaux événements qui l'ont suivie, 1755–1830*. Paris: Dufey.
- Murphy, James, and Patrice Higonnet. 1973. "Les députés de la noblesse aux Etats généraux de 1789." *Revue d'histoire moderne et contemporaine* 20 (2): 230–47.

- Myers, Daniel J. 2000. "The Diffusion of Collective Violence: Infectiousness, Susceptibility, and Mass Media Networks." *American Journal of Sociology* 106 (1): 173–208.
- Noymer, Andrew. 2001. "The Transmission and Persistence of 'Urban Legends': Sociological Application of Age-Structured Epidemic Models." *Journal of Mathematical Sociology* 25 (3): 1–98.
- O'Donnell, Guillermo, and Philippe C. Schmitter. 1986. *Transitions from Authoritarian Rule: Tentative Conclusions about Uncertain Democracies*. Baltimore: Johns Hopkins University Press.
- Oliver, Pamela E. 1989. "Bringing the Crowd Back In: The Nonorganizational Elements of Social Movements." *Research in Social Movements, Conflict, and Change* 11:1–30.
- Oliver, Pamela E., and Daniel J. Myers. 2003. "The Coevolution of Social Movements." *Mobilization* 8:1–24.
- Opp, Karl-Dieter. 1994. "Repression and Revolutionary Action: East Germany in 1989." *Rationality and Society* 6 (1): 101–38.
- Pellerin, Joseph-Michel. 1883. *Correspondance inédite de J.-M. Pellerin, député du Tiers-état de la sénéchaussée de Guérande aux États-généraux (5 mai 1789–29 mai 1790)*. Edited by Gustave Bord. Paris: Sauton.
- Perrin de Boussac, Henri. 1983. *Un témoin de la Révolution et de l'Empire: Charles Jean-Marie Alquier (1752–1826)*. La Rochelle: Rumeur des Ages.
- Perrow C. 1999. *Normal Accidents: Living with High-Risk Technologies*. Princeton, N.J.: Princeton University Press.
- Pfaff, Steven. 2006. *Exit-Voice Dynamics and the Collapse of East Germany*. Durham, N.C.: Duke University Press.
- Przeworski, Adam. 1988. "Democracy as a Contingent Outcome of Conflict." Chap. 2 in *Constitutionalism and Democracy*, edited by Jon Elster and Rune Slagstad. Cambridge: Cambridge University Press.
- . 1991. *Democracy and the Market*. New York: Cambridge University Press.
- Ragin, Charles C. 1987. *The Comparative Method: Moving beyond Qualitative and Quantitative Strategies*. Berkeley and Los Angeles: University of California Press.
- Roth, Randolph. 1992. "Is History a Process? Nonlinearity, Revitalization Theory, and the Central Metaphor of Social Science History." *Social Science History* 16 (2): 197–243.
- Schelling, Thomas. 1980. *The Strategy of Conflict*, rev. ed. Cambridge, Mass.: Harvard University Press.
- Sewell, William H., Jr. 1985. "Ideologies and Social Revolutions: Reflections on the French Case." *Journal of Modern History* 57:56–85.
- . 1994. *A Rhetoric of Bourgeois Revolution: The Abbé Sieyès and What Is the Third Estate?* Durham, N.C.: Duke University Press.
- . 1996. "Historical Events as Transformations of Structures: Inventing Revolution at the Bastille." *Theory and Society* 25 (6): 841–88.
- . 2005. *Logics of History: Social Theory and Social Transformation*. Chicago: University of Chicago Press.
- Shapiro, Ian, and Sonu Bedi. 2007. "Introduction: Contingency's Challenge to Political Science." Pp. 1–18 in *Political Contingency: Studying the Unexpected, the Accidental, and the Unforeseen*, edited by Ian Shapiro and Sonu Bedi. New York: New York University Press.
- Silber, Laura, and Alan Little. 1997. *Yugoslavia: Death of a Nation*. London: Penguin.
- Simmel, Georg. 2009. *Sociology: Inquiries into the Construction of Social Forms*. Vol. 1, translated and edited by Anthony J. Blasi, Anton K. Jacobs, and Mathew Kanjirathinkal. Leiden: Brill.
- Sirinelli, Jean-François, and Eric Vigne. 1992. "Des droites et du politique." Pp. iii–xliii in *Histoire des droites en France*, vol. 1. Edited by Jean-François Sirinelli. Paris: Gallimard.

- Sohrabi, Nader. 2011. *Revolution and Constitutionalism in the Ottoman Empire and Iran*. Cambridge: Cambridge University Press.
- Spinoza, Benedict de. 1996. *Ethics*. Edited and translated by Edwin Curley with an introduction by Stuart Hampshire. London: Penguin.
- Steinmetz, George. 1998. "Critical Realism and Historical Sociology: A Review Article." *Comparative Studies in Society and History* 40 (1): 170–86.
- Tackett, Timothy. 1996. *Becoming a Revolutionary: The Deputies of the French National Assembly and the Emergence of a Revolutionary Culture, 1789–1790*. Princeton, N.J.: Princeton University Press.
- Thom, René. 1983. "Stop Chance! Silence Noise!" *SubStance* 12 (3): 11–21.
- Traugott, Mark. 2002. *Armies of the Poor: Determinants of Working-Class Participation in the Parisian Insurrection of June 1848*, rev. ed. New Brunswick, N.J.: Transaction.
- Tse, Peter Ulric, James Intriligator, Josée Rivest, and Pastrick Cavanagh. 2004. "Attention and the Subjective Expansion of Time." *Perception and Psychophysics* 66 (7): 1171–89.
- Turner, Ralph H., and Lewis M. Killian. 1957. *Collective Behavior*. Englewood Cliffs, N.J.: Prentice-Hall.
- Vaughan, Diane. 1996. *The Challenger Launch Decision: Risky Technology, Culture, and Deviance at NASA*. Chicago: University of Chicago Press.
- Volk, Ludwig. 1990. "Nationalsozialistischer Kirchenkampf und deutscher Episkopat." Pp. 49–92 in *Die Katholiken und das Dritte Reich*, edited by Klaus Gotto and Konrad Repgen. Mainz: Matthias-Grünwald.
- Wagner-Pacifci, Robin. 2000. *Theorizing the Standoff: Contingency in Action*. Cambridge: Cambridge University Press.
- Wood, Elisabeth Jean. 2007. "Modeling Contingency." Pp. 22–245 in *Political Contingency: Studying the Unexpected, the Accidental, and the Unforeseen*, edited by Ian Shapiro and Sonu Bedi. New York: New York University Press.
- Young, Peyton H. 1998. *Individual Strategy and Social Structure*. Princeton, N.J.: Princeton University Press.