

A Generative Relational Theory of Temporal Injustice in Large-Scale Heterogeneous Systems

A Preliminary Discussion

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Abstract

This paper proposes a generative relational theory of temporal injustice for large-scale heterogeneous systems. Its premise, drawn from a companion theory of temporal emergence, is that in such systems the local temporal structures of the parts may be compatible wherever they overlap and assemble into no temporal structure of the whole, so that coordination proceeds under a structural obstruction and some party's temporal datum is overridden; the question of re-synchronization then gives way to the question of allocation. Applying the companion theory's notion of registration to institutions, the paper defines institutional registration, governing status, and divergence, and distinguishes three forms of temporal injustice: non-registration, in which a party's lived temporality is absent from every process of the institution governing them; subordination, in which it is registered and never governs; and unallocated obstruction, in which the override that coordination requires falls by default on the party whose mode no process resists. The three are argued to be independent and are tested on four sites. The paper states a working thesis that unrecoverable divergence concentrates on parties of least registration authority, with its dependencies and its falsifier, and proposes, under an explicit prohibition on the passage from structural necessity to justification, a criterion in constraint form: an institution may not require conformity to a governing temporality while leaving unregistered the temporality it thereby overrides. The criterion ranks no arrangement, aggregates no party's divergence against another's, and generates an asymmetric standing to contest. The paper is a preliminary discussion and its register is a conceding one.

Keywords: temporal injustice; institutional registration; governing temporality; heterogeneous relational systems; temporal justice

Draft. This is a working draft. It is circulated for comment, and its arguments, formulations, and open questions are subject to revision. Correction and criticism are welcome at huangwanhong@serendip.ngo.

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Use of generative artificial intelligence. Generative AI assistants (Anthropic’s Claude and OpenAI’s ChatGPT) were used extensively in preparing this manuscript: for literature survey, for drafting prose from the author’s specifications, for adversarial review of the argument, and for consistency and citation auditing and typesetting. No simulation or empirical result is used in this paper, and its arguments are discursive throughout; the table summarises the taxonomy argued in the text. Formulations and objections arose in the course of that exchange as well as from the author. Every claim, argument, and citation was reviewed and decided by the author, who is responsible for the content and for any errors. Bibliographic details are to be verified against the primary sources before reliance.

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1 Introduction

A worker on rotating shifts lives by a circadian mode that the employer's schedule overrides in every collision, and bears the gap as social jetlag; a farmer's income recurs by season under a repayment schedule whose calibration is the calendar alone; an applicant in a status determination spends years of biography conforming to procedural time while no process of the agency depends on what the years cost. Each is a case in which one temporality governs a party's actions and another temporality, the party's own, continues to run, unregistered or subordinate, in the party who lives by it. Cases of this kind have been described in depth. The literatures of temporal discipline, of the plurality of social rhythms, of acceleration and its unequal distribution, and of time as an unequally held resource, document temporal imposition as a historical object, an exercise of power, and a source of inequality. What they possess in description they lack in criterion. None of them states what, precisely, is wrong when one temporality is imposed on another, as distinct from unequal or constraining; an object locating the wrong is missing from all of them; and the case in which an institution wrongs a party temporally stands unseparated, in all of them, from the case in which coordination merely costs them.

The paper's premise is drawn from a companion theory of temporal emergence in large-scale heterogeneous systems [7]. That theory argues that in such systems the local temporal structures of the parts may be compatible wherever they overlap and assemble into no temporal structure of the whole; that this condition, temporal frustration, is a computable obstruction; and that it becomes available, and under generic conditions prevalent, as a heterogeneous system grows. If that is right, then in the systems this paper concerns the disorder the received framing calls desynchronization is a structural condition and cure is unavailable: coordination proceeds under obstruction, some party's temporal datum is overridden, and the question of re-synchronization gives way to the question of allocation. The paper exists because that question is open where the received framing had closed it.

The instrument the paper brings to the question is registration, taken from the companion theory: a structure exists for a system where some dynamic of the system depends on it. Applied to institutions, registration says that an institution can be temporally blind to a mode that a party it governs lives by, no process of the institution depending on anything about it; and once that possibility is fixed, three distinct wrongs come into view. A party's lived temporality may be null-registered by an institution that governs actions to which it is material, so that no channel exists in which a claim framed in its terms could be made; that is non-registration. The temporality may be registered and yield in every collision across every class of the party's actions, so that recognition is present and consequence absent; that is subordination. Or the system may be frustrated, coordination may proceed, and the override that coordination requires may be administered with no allocation, falling by default on whichever party's mode no process resists; that is unallocated obstruction. The paper argues that these are three, that they call for three different remedies, and that the third has, so far as the paper can find, no ancestor in the normative literature.

The framework within which the paper works is Generative Relational Being. **Generative Relational Being (GRB): A theory of how subject, meaning, value, creation, and normativity co-emerge through generative relational processes.** The present paper works out the GRB account for one relational structure, temporality, in its institutional setting: it takes the companion theory's account of how temporal structure emerges relationally, adds the relations that arise when an institution governs parties who live by temporalities of their own, and asks what wrongs are possible in those relations. Two commitments of the framework govern the paper throughout. Its descriptive claims and its normative claims are held apart, and the passage from the structural necessity of override to the acceptability of any

allocation of it is prohibited in terms; the paper states the prohibition in its own vocabulary and places it before every normative claim it makes. And its normative content takes constraint form: it rules arrangements out on stated grounds and declines to rank the arrangements it leaves standing, since a ranking would require a value function and a value function would readmit the prohibited passage as its optimizer.

The paper is a preliminary discussion, and its register is a conceding one. It offers a taxonomy, and concedes the structure of two of its three forms to Fricker and to the discipline literature respectively; it offers a working thesis about distribution, states the four dependencies on which the thesis rests and the observations that would refute it, and examines the thesis on four sites while claiming no more than consistency; it offers a criterion in constraint form and states the cost of that form; and it offers a standing rule and concedes its family to Fraser. Three things it does not do, and each is pointed to its own work. It contains no theory of temporal authority, of who holds the power to revise which mode governs and by what right; that is a successor paper. It does not treat the registers, markets, feeds, and model-mediated decision cycles, that couple into human temporal architectures at rates no earlier register had; that is a later, applied paper. And it contains no full theory of remedy, beyond the assignment of a remedy type to each form.

Its contributions, at differing confidence, are four. A taxonomy of temporal injustice into three forms, each decided by inspecting a definite relation between an institution and a party's lived mode, offered as a mapping and tested against four sites in Part III. A working thesis, offered for examination, that unrecoverable divergence concentrates on parties of least registration authority, with its argument, its dependencies, and its falsifier stated in Section 13. A proposed criterion, that an institution may not require conformity to a governing temporality while leaving unregistered the temporality it thereby overrides, whose form is shown in Section 16 to leave every satisfying arrangement equally acceptable, to apply party by party, and to generate standing. And an observation about form, that the criterion shares a shape with three others advanced in this series, offered as weak evidence with its alternative explanation named. Section 2 situates the paper and states the open problem; Section 3 fixes what is inherited from the companion theory; Section 4 develops the premise. Part II defines institutional registration, governing status, and divergence; Part III states the three forms and tests them; Part IV states the wall, the standing rule, the criterion, and the working thesis; Part V names the paper's empirical access, its limits, and its open questions.

2 Prior Accounts of Time, Power, and Coordination

This section situates the paper within existing work. Its objective is twofold: to state what established literatures already hold about time and power, so that the paper leaves it with its owners, and to delimit each literature's boundary, so that the open problem the paper addresses becomes visible at the point where the boundaries meet. The section proceeds in five groups: discipline and domination (Section 2.1), plurality and rhythm (Section 2.2), acceleration and desynchronization (Section 2.3), the distribution of time (Section 2.4), and the criterion literatures from which the paper draws its forms (Section 2.5). Section 2.6 states the open problem.

2.1 Discipline and Domination

Thompson's account of time, work-discipline, and industrial capitalism documented the imposition of clock time on populations whose work had been organized by task, and made the imposition of one temporal regime on another a historical object [12]. Bourdieu's analysis of waiting located a form of power in the capacity to make others wait, and in the hope and

anxiety through which the one who waits is held [3]. Auyero's ethnography of the poor's encounters with the state documented waiting as a routine and undramatic mode of political domination, in which compliance is produced through the uncertain passage of time itself [2].

The literature establishes that temporal imposition is real, historically specific, and an exercise of power. Its boundary is that the wrongness of the imposition is assumed. The accounts describe imposition, and describe it as domination, and contain no criterion by which an imposition that wrongs is separated from a coordination that merely constrains; the question of what, precisely, is wrong when one temporality is imposed on another is answered by the word domination and left unanalyzed.

2.2 Plurality and Rhythm

Zerubavel established the sociological study of socio-temporal order, the schedules, calendars, and rhythms through which social life is organized and through which its groups are bounded [15]. Lefebvre's rhythmanalysis proposed the study of the plural rhythms of the body, the city, and the institution, and named their disorder arrhythmia [8]. Adam's timescapes gave the picture of multiple temporalities interlaced in one social landscape [1].

The literature establishes that temporalities are plural, that they coexist and conflict, and that their coexistence has a describable structure. Its boundary is that the question of who yields, and by what right, lies outside its object: coexistence and conflict are described, and the resolution of conflict, which is where the paper's subject lies, is treated as a further fact about the landscape.

2.3 Acceleration and Desynchronization

Rosa's theory of social acceleration analyzed the unequal acceleration of technical, social, and lived tempos and named the resulting disorder desynchronization; his later work proposed resonance as its remedy [9, 10]. Sharma's chronopolitics turned from acceleration as a general condition to its unequal distribution: some populations, she argued, perform temporal labor, recalibrating their own time to serve the tempos of others, and the labor is unequally borne [11].

Sharma is the nearest ancestor of this paper. She named the recalibrating labor and its distribution, and Definition 7.2 gives that labor a quantity, divergence, in the vocabulary of modes. Her boundary is that she has the distribution and no criterion: temporal labor is documented as unequal, and the question of when its allocation wrongs someone, as distinct from being unequal, is not posed. Rosa's boundary is different in kind, and Section 4 develops it: his framing of desynchronization as pathology forecloses the distributive question, since a disorder that can be cured raises no question of who bears it.

2.4 The Distribution of Time

Goodin and his co-authors analyzed discretionary time, the time a person has beyond what is necessary to meet their needs, as a resource whose distribution is a matter of justice [6]. Wajcman analyzed the sense of being pressed for time under digital acceleration [13]. The time-poverty literature quantifies deficits of free time and their correlates.

The literature establishes that time is unequally distributed and that the inequality can be measured. Its boundary is that it treats time as a quantity, hours possessed or lacking, and the wrongs the present paper treats are wrongs in the structure of temporalities: a party may possess abundant discretionary time and live by a mode no institution registers, and the wrong of that non-registration persists under any quantity of free time.

2.5 The Criterion Literatures

Two literatures supply the forms on which the paper's constructions are modelled, and each is conceded in the section where its form is used. Fricker's account of hermeneutical injustice, the wrong of lacking the interpretive resources through which one's own experience can be made intelligible [5], supplies the structure of the first form, and Section 8 concedes it and states what the framework adds. Fraser's participatory parity, the requirement that arrangements permit all to participate as peers [4], supplies the structure within which the standing rule stands, and Section 15 concedes it and states the difference.

2.6 The Open Problem

The boundaries meet around an unoccupied position. The literatures of discipline, plurality, and acceleration hold the phenomenon, temporal imposition, plurality, and its unequal distribution, with the wrong assumed or unanalyzed; the literature of time's distribution holds a criterion, of quantity, that misses the structural wrong; the criterion literatures hold forms of wrong developed for other objects. Open between them stands a criterion of temporal injustice: distinct from inequality of time and from imposition as such, applicable to institutions, and locating the wrong at a definite place in the relation between an institution and the temporalities of those it governs. The remainder of the paper proposes one.

3 Inherited Machinery from the Theory of Temporal Emergence

This section imports, without restating, the constructs the paper draws from the parent theory, and states what the paper adds to each. Its objective is to fix the dependency exactly, so that a reader knows which of the paper's terms are inherited, where their definitions stand, and which are new. The section lists the four inherited constructs (Section 3.1), records the paper's additions (Section 3.2), and states the division of labor between the two papers (Section 3.3).

3.1 The Inherited Constructs

Four constructs are inherited, each with its definition in the parent theory and one sentence of content here.

Registration. A distinction is registered in a system when some dynamic of the system depends on it; a distinction available to a describer alone, with every dynamic of the system indifferent to it, is unregistered [7, Def. 4.1]. Registration is what separates the temporality a system possesses from the temporality projected onto it, and every construction of the parent theory is conducted over registered structure alone.

Temporal mode and mode system. A temporal mode is the structure a single registered equivalence relation over a system's history contributes to its temporality, comprising recurrence classes, calibration, and, where the further conditions hold, rhythm and phase [7, Def. 6.1]; a system's mode system is the family of its modes together with the registered relations among them [7, Def. 6.6]. Modes are as plural as the equivalence structures a system registers, and a single history supports many.

Calibration and refinement. Modes stand in registered relations: one mode calibrates another where its occurrences measure the other's separations, and one mode refines another where its classification partitions the other's cycles [7, Defs. 6.2, 6.4]. Rhythm and phase are, in the parent theory, relations between modes and never properties of a single one.

Temporal frustration. With respect to a cover of a system by subsystems and a kind of temporal datum, the system occupies one of three global statuses: a global clock, a global

relational temporal order, or temporal frustration, in which the parts' data are compatible wherever they overlap and assemble into no datum of the whole [7, Def. 15.1]. For phase data the obstruction is a cohomology class, computable as the sum of offsets around cycles [7, Prop. 15.2], and it becomes available and generic as the system grows [7, §15.4].

3.2 The Paper's Additions

To each inherited construct the paper adds something the parent theory had no occasion to define, and the additions are the paper's own.

To registration it adds an institutional reading (Section 5): an institution registers a mode of a party it governs when some process of the institution depends on that mode, and registration is graded, rich, thin, or null. To the mode system it adds a relation the parent theory did not need, governing status (Section 6): among the modes an institution registers, one decides the timing of a class of actions and the others yield, and the relation is action-class relative and revisable by rule. To the persistence of modes it adds a fact and a quantity (Section 7): an overridden mode continues to run, the disagreement between its calibration and the governing one is a registered quantity, divergence, located in the party who lives by both, and divergence divides into the recoverable and the unrecoverable. And to temporal frustration it adds the observation that a social system frustrated in the parent theory's sense is nonetheless required to coordinate, so that override follows as a structural necessity whose allocation the formalism leaves open (Section 10). The three forms of temporal injustice, the working thesis, the standing rule, and the criterion are then built on these additions and on the four constructs above alone.

3.3 Division of Labor

Remark 3.1. (The normative boundary between the papers). The parent theory is a theory of temporal organization: it says how temporal structure emerges in heterogeneous systems, and it contains no normative term. The present paper adds the normative layer, in Part IV alone, and every normative claim it makes is made under the separation stated in Section 14. Nothing in the parent theory is thereby given normative force: the parent theory's results are premises of descriptive claims here, and the passage from any of them to a claim about what an institution may do is made only through the criterion of Section 16.

4 The Genericity of Obstruction and the Displacement of the Coordination Question

This section states the premise on which the paper's normative Part depends and develops the disagreement with the received framing that the premise entails. Its objective is to show that in large-scale heterogeneous systems temporal frustration is a structural condition, that this closes the question of cure that the received framing poses, and that the closing displaces the normative question from re-synchronization to allocation. The section states the received framing (Section 4.1), imports the structural result (Section 4.2), draws the displacement (Section 4.3), and fixes the section's status under the wall of Section 14 (Section 4.4). The disagreement is conducted with a named theorist and is stated with the precision that respect requires.

4.1 The Received Framing

The most developed account of temporal disorder in contemporary social theory treats desynchronization as a pathology of late modernity. On Rosa's account, the acceleration of technical, social, and lived tempos proceeds at unequal rates across spheres, the spheres fall out of step, and the falling-out is a disorder, experienced as alienation and remediable, in principle, by the restoration of a responsive relation between the subject and the world, which he names resonance [9, 10]. Two features of the framing matter here. Desynchronization is a disorder: it is a departure from a condition of synchrony that is normal, or normative, or both. And its remedy is re-synchronization: whether through resonance or through the deceleration of the spheres that have run ahead, the response the framing calls for is the restoration of coordination.

The framing is powerful and it is conceded its object. What the paper disputes is its first feature, in the setting of large-scale heterogeneous systems, and the dispute proceeds through the parent theory.

4.2 The Structural Result

The parent theory argues that the assembly of local temporal structures into a temporal structure of the whole is governed by a descent condition, that its failure, temporal frustration, is a computable obstruction, and that the obstruction's availability depends on the topology of the system's cover [7, §15]. In a small system, covers are poor in independent cycles, descent is cheap, and local consistency implies global assembly. As a heterogeneous system grows, its covers acquire independent cycles, local consistency ceases to imply global assembly, and frustration becomes available and, under generic offsets among the parts, prevalent [7, §15.4]. Section 10.1 imported this result for the definition of the third form; the present section draws its consequence for the received framing.

Claim 4.1. (Working thesis, offered for examination). In large-scale heterogeneous systems, temporal frustration is structural: it arises from the topology of the system's cover under generic offsets, with every part functioning, and it is a standing condition of such systems in place of a departure from a normal state of synchrony.

The thesis and the received framing agree on the phenomenon and disagree on its status. Where the framing sees a disorder, the thesis sees a consequence of scale and heterogeneity that would obtain in any system of comparable topology, however well its parts were functioning. The disagreement is empirical in principle: the framing predicts that desynchronization recedes as the pathology is treated, and the thesis predicts that it recurs at scale whatever is done at the level of the parts, since the obstruction is a property of the cover.

4.3 The Displacement

If Claim 4.1 holds, the second feature of the received framing falls with the first. A remedy of re-synchronization presupposes that synchrony is available; where frustration is structural, global synchrony is unavailable by the topology of the system, and re-synchronization is, at best, the forcing of an assignment that overrides some party's datum (Claim 10.1). The question "how is the system to be re-synchronized" therefore has, in large-scale heterogeneous systems, no answer that does not override, and it becomes, on inspection, the question "whose datum is to be overridden."

That is the displacement, and it is the origin of this paper's subject. Under the received framing, the normative response to desynchronization is cure, and no distributive question

arises: if the disorder can be treated, the just response is to treat it, and asking who bears its cost is asking about a transient. Under Claim 4.1, cure is unavailable, override is permanent, and the only normative question left standing is the question of allocation: whose modes are registered, whose govern, and who bears the divergence when coordination proceeds under obstruction. The paper's three forms are the three answers to that question that wrong someone, and the paper exists because the question is open where the received framing had closed it.

4.4 Status under the Wall

Two things follow for the reading of the section, and both are fixed here. Claim 4.1 is descriptive: it states that frustration is structural and leaves open how the override it entails should be allocated; the inference from "some override is necessary" to "this override is acceptable" is the prohibited inference of Section 14, and the present section supplies its premise while forbidding its conclusion. And the disagreement with the received framing is a disagreement about status, conducted on the framing's own object; it concedes the phenomenology of desynchronization entire, and it disputes only that the phenomenon is a disorder, in the setting where the parent theory's result applies. Where that setting does not obtain, in systems small enough that descent is cheap, the received framing may well be right, and the paper claims nothing there.

5 Institutional Registration of Temporalities

This section carries the parent theory's central instrument into the institutional setting. Its objective is to define what it is for an institution to register a temporal mode, to show that registration is graded, and to record the observation on which the taxonomy of Part III rests: that institutions register the temporalities of those they govern selectively, and that the selection is a fact about institutional design. The section proceeds from the parent definition (Section 5.1) to the institutional definition (Section 5.2) to its gradation (Section 5.3) and to the observation (Section 5.4). The method is definitional, with examples chosen to be developed further in Section 12.

5.1 The Parent Notion

In the theory of temporal emergence from which this paper draws its machinery, a distinction between configurations of a system is *registered* when some dynamic of that system depends on it; a distinction available only to an external describer, with every dynamic of the system indifferent to it, is *unregistered* [7, Def. 4.1]. Registration is what separates the temporality a system possesses from the temporality a describer projects onto it, and every construction of that theory, from recurrence to rhythm to distributed temporal order, is conducted over registered structure alone. Two features of the parent notion transfer here unchanged. Registration is internal: it is a matter of what the system's own processes depend on. And registration is a relation between a structure and a system: a mode is registered *by* something, and the question of what registers it is always well posed.

5.2 The Institutional Definition

An institution is, for the purposes of this paper, a system of processes, rules, and roles that determines actions with respect to a population it governs: an employer with respect to its workforce, a creditor with respect to its debtors, an administrative agency with respect to

applicants, a care system with respect to those who give and receive care. Its processes are what may depend on temporal structure, and the parent notion applies to them directly.

Definition 5.1. (Institutional registration). An institution registers a temporal mode T of a party it governs when some process of the institution, a decision rule, a deadline, an eligibility criterion, an assessment, a schedule, or a remedy, depends on the recurrence, ordering, calibration, or phase of T : the process would proceed otherwise were T otherwise. A mode on which no process of the institution depends is unregistered by that institution, whatever its reality for the party who lives by it.

The definition takes the mode as belonging to the party and the registration as belonging to the institution, and it holds the two apart. A worker's circadian mode is a temporal structure of the worker, constituted and registered within the worker's own physiology in the parent theory's sense; whether the employer registers it is a further and separate question, answered by inspecting the employer's processes. Institutional registration is therefore always a question about whether an institution's processes are sensitive to it. A test follows directly: an institution registers T exactly when some counterfactual variation of T would change what some process of the institution does. Where no variation of the mode would change any institutional process, the mode is unregistered, and the party who lives by it faces the institution as an entity temporally blind to that part of their life.

5.3 The Gradation of Registration

Registration is graded, and the gradation matters for everything that follows. An institution may register a mode richly: the fiscal year is registered by a tax authority through accounting periods, filing deadlines, reporting cycles, and penalty schedules, so that many processes depend on many of its features. It may register a mode thinly: an employer registers a worker's circadian mode through a fatigue rule limiting consecutive night shifts, so that one process depends on one coarse feature of the mode and no process depends on its phase, its recovery dynamics, or its interaction with the worker's other rhythms. It may register a mode through a single threshold: an administrative agency registers biographical time through an age of majority, a limitation period, or a maximum duration of eligibility, so that a rich mode enters institutional process at one point and is unregistered along its whole remaining course. And it may register a mode in no way at all.

Three grades will suffice for the argument, and are fixed here: *rich* registration, in which multiple processes depend on multiple features of the mode; *thin* registration, in which some process depends on some coarse feature; and *null* registration, in which no process depends on the mode. The forms of temporal injustice distinguished in Part III differ, among other things, in the grade of registration at which they arise: null registration is the condition of the first form, and thin or rich registration without governing status is the condition of the second.

5.4 The Selectivity of Institutional Registration

The examples above already display a pattern, and the pattern is recorded here as an observation on which later sections build.

Claim 5.2. (Observation on selectivity). Institutions register the temporal modes of the parties they govern selectively, and the selection is a fact about the institution's design. Across the four settings taken up in Section 12, the modes richly registered are, characteristically, those the institution itself operates by, and the modes thinly or null registered are those the governed party lives by and the institution does not.

Employment registers the shift schedule richly and the worker's circadian mode thinly. Credit registers maturity richly and the debtor's income recurrence, its seasonality and its own calibration, thinly or not at all in the standard instrument. Administrative process registers procedural time richly, through deadlines, stages, and durations, and registers the applicant's biographical time through thresholds alone. Care institutions register their own schedules richly and the rhythms of care, of the cared-for and of the carer, in ways that vary from thin to null. In each setting the institution's own temporal architecture is present in its processes in detail, and the party's is present coarsely or absent.

The claim is an observation and is offered as such. It states a pattern in the design of institutions, and it leaves open whether the pattern wrongs anyone. The wrong, where there is one, is located in Part III, and the normative claim that would call the pattern unjust is deferred, with all normative claims of this paper, to Part IV. What Section 5 supplies is the object those Parts operate on: the registration relation between an institution and the temporalities of those it governs, graded, inspectable process by process, and selective in a documentable way.

6 Governing Status and the Determination of Action

This section defines a relation among registered modes that the parent theory had no occasion to define: the relation of governing. Its objective is to fix what it means for one temporal mode, among several an institution registers, to decide when actions occur; to show that this status is relative to a class of actions and revisable by rule; and to hold the definition strictly on the descriptive side, so that the normative question of what may govern arrives only in Part IV. The section gives the definition (Section 6.1), develops its relativity to action classes (Section 6.2), records its revisability (Section 6.3), and declares its boundary (Section 6.4).

6.1 The Definition

An institution that registers several temporal modes must, where those modes conflict, act on one of them. A payroll process registers both the pay period and the worker's request for leave; a filing rule registers both the court calendar and the party's illness; when the two supply different answers to when an action is to occur, the process is built to follow one. That construction is what the definition names.

Definition 6.1. (Governing status). Among the temporal modes an institution registers, a mode T has *governing status* with respect to a class of actions A when the calibration of T decides when actions in A occur, so that in any collision between T and another registered mode over the timing of an action in A , the other mode yields. A registered mode that yields in every collision within A is *subordinate* with respect to A .

The definition names an arrangement built into process. Governing status is a fact about which mode's calibration a process is written to follow when calibrations disagree, and it is inspectable in the same way registration is: by asking what the process does when the modes it registers diverge. A mode may be richly registered and yield always; a leave policy may depend on many features of a worker's circumstances and yet be written to yield, in every collision, to the production schedule. Registration and governing status are therefore distinct relations, and Part III separates two forms of temporal injustice exactly at their difference.

6.2 Relativity to Action Classes

Governing status is relative to a class of actions, and the relativity is not a qualification added for safety; it describes how institutions in fact operate. The fiscal calendar governs the timing of payments and filings within a firm and leaves the timing of its meetings to whatever governs that; the court calendar governs the timing of submissions and hearings and leaves the timing of a party's contract to whatever governs that; a school calendar governs enrolment and examination and leaves the timing of a family's care arrangements to whatever governs those. Within one institution, distinct modes may govern distinct action classes, and a mode subordinate in one class may govern in another.

Two consequences follow for the analysis. First, subordination is always subordination with respect to something, and a party's temporal situation within an institution is described by the profile of governing statuses across the action classes that touch them, with no single verdict of "governed" or "governing." Second, the case that Part III treats as an injustice is a specific profile: a mode the party lives by that is subordinate across every action class relevant to that party, so that its yielding is total for them, in place of the ordinary case in which modes trade governing status across classes.

6.3 Revisability by Rule

Claim 6.2. (Observation on revisability). Governing status is a property of arrangement and is revisable: which registered mode a process follows in a collision is decided, in institutions, by rule, and can be changed by rule. Legislated limits on shift length, protected leave, statutory grace periods, and stays of proceedings are, in the vocabulary of Definition 6.1, changes in the governing status of a mode over a class of actions, enacted by rule.

The observation records that governing status is, in institutions, a decision. That the pay period governs leave is a choice written into a process, revisable by rewriting the process, and its revisability is demonstrated whenever a rule shifts governing status from one mode to another. Two things follow. Governing status is attributable: some rule, and some author of the rule, made a mode govern. And governing status is contestable: what a rule made, a rule can remake, and the party whose mode yields has, at minimum, something definite to contest. Both consequences are taken up in Part IV; the present section records only that they are available.

6.4 Boundary of the Definition

The definition is descriptive, and its boundary is fixed here in the strictest terms available. To say that a mode governs a class of actions within an institution is to report an arrangement: that a process is written to follow one calibration over another when the two disagree. It leaves open whether the arrangement is warranted, and it supplies no reason for the arrangement it reports. Every question of the form "what may govern" is deferred, without exception, to Part IV, and no sentence of Sections 6 through 12 is to be read as answering it. The boundary is drawn with this severity because the vocabulary of governing invites its violation: an arrangement in which one mode governs can be redescribed, with no change of fact, as an arrangement that "works," and the redescription is the point at which description begins to do normative work. Section 14 states the prohibition fully; the present section builds it into the object.

7 Persistence of the Overridden Mode

This section states the analytical fact on which the paper turns. When a temporal mode a party lives by is subordinate, or is unregistered, within an institution that governs their actions, the mode continues to run: its recurrence, ordering, and calibration proceed on their own registration within the party, unaltered by the institution's failure to follow them. The section's objective is to fix this fact, to define the quantity it produces, which this paper calls divergence, to distinguish recoverable from unrecoverable divergence, and to record the conjecture about where the unrecoverable kind is found. The section proceeds from the fact (Section 7.1) to the definition (Section 7.2) to the distinction (Section 7.3) to the conjecture (Section 7.4).

7.1 The Fact of Persistence

A mode is a structure constituted and registered within the system that carries it [7, Def. 6.1]. A worker's circadian mode is registered within the worker's physiology: hormonal, thermal, and behavioral processes depend on its phase, and no employer's process is among the dynamics that constitute it. An institution's registration or non-registration of that mode therefore leaves the mode's own constitution untouched. When the employer's schedule governs and the circadian mode yields in every collision, the schedule decides when the worker acts and the circadian mode continues to decide when the worker's physiology does what it does. The two run together, and their calibrations disagree.

The same fact holds for every mode considered in this paper. Seasonal recurrence in agricultural income proceeds under a repayment schedule whose processes are indifferent to it. Developmental sequence in a child proceeds under an administrative process that registers only an age threshold. Biographical order, the succession of formation, partnership, work, and ageing, proceeds through years of status determination that register procedural stages alone. In each case the institution's arrangement leaves the overridden mode running in its own shape; it keeps its own registration and its own course, and what changes is that another mode's calibration decides the party's actions.

Claim 7.1. (Observation on persistence). A temporal mode that an institution leaves unregistered, or registers and subordinates, continues to run in the party who lives by it, with its recurrence, ordering, and calibration intact.

7.2 The Definition of Divergence

Two calibrations running together and disagreeing produce a definite quantity, and it is defined in the units of the mode that yields.

Definition 7.2. (Divergence). Where a governing mode T_g decides the timing of a party's actions and a mode T_p the party lives by is subordinate or unregistered, the *divergence* borne by the party is the registered gap between the actions T_g requires and the actions T_p 's calibration would produce, measured in the units of T_p and located in the party who lives by T_p .

Three features of the definition carry the paper's later argument. Divergence is measured in the overridden mode's units: hours of circadian displacement, seasons of income shortfall against a fixed maturity, years of biographical time spent in procedural waiting. It is measured there because that is where the disagreement is registered; the governing mode, by construction, registers no gap, since its own requirements are met. Divergence is located in a party: the disagreement between two calibrations exists only in the entity that lives by

both, and that entity is a person, a household, or a community, and it is located there in place of the institution or “the system.” And divergence is a quantity, and so admits of more and less, of accumulation, and, in Section 7.3, of a distinction in kind.

Claim 7.3. (Observation on the condition of the injury). The divergence a party bears arises from the persistence of the overridden mode, and would vanish were that mode to cease. A worker whose circadian mode had been reset to the shift schedule would bear no circadian divergence; a debtor whose income had no seasonality would bear no seasonal divergence against maturity. The integrity of the overridden mode is the condition of the injury: what is harmed persists intact, and the harm consists in its persisting under a calibration that overrides it.

Claim 7.3 corrects a picture the vocabulary of imposition invites. On that picture the institution’s time deforms the party’s time, bending it into conformity, and the harm lies in the bending. On the account given here the party’s mode keeps its shape and its course, and the harm is the standing disagreement between an intact mode and a governing one, borne in the party who lives by both. The correction matters for remedy, and Section 7.3 shows why: what persists intact under override may or may not return to its own course when the override lifts, and that difference is the difference the paper most needs.

7.3 Recoverable and Unrecoverable Divergence

Definition 7.4. (Recoverable and unrecoverable divergence). Divergence borne by a party is *recoverable* when the overridden mode’s structure and course return intact once the governing requirement is lifted, so that the divergence closes; it is *unrecoverable* when the overridden mode’s course has been altered, consumed, or foreclosed by the period of override, so that lifting the requirement leaves a residue that no subsequent arrangement returns.

The distinction is one of kind. A meeting moved to accommodate a schedule, a filing delayed and then made, a payment deferred and then made in season: the overridden mode is followed once the governing requirement is relaxed, and what the party bore was the interval. Circadian architecture disrupted across years of rotating shifts, with the documented sequelae; a developmental window passed during a period of institutional waiting; a decade of biography spent in a status that barred work and family formation alike: the overridden mode continued to run throughout, and its running consumed the very time that lifting the requirement would have restored. The overridden mode’s persistence, which Claim 7.3 named as the condition of the injury, is here the reason the injury can be permanent: because the mode kept running, its course advanced, and the advance is what no later arrangement returns.

Recoverability is a property of the pairing of a mode with a period of override, and it is empirically accessible: it is measured by what returns when the override lifts, and Section 17 names the records in which it can be read.

7.4 Conjecture on the Location of Unrecoverable Divergence

Claim 7.5. (Conjecture on location). Unrecoverable divergence is characteristically borne in physiological, developmental, and biographical modes, whose course under override is consumed; recoverable divergence is characteristically borne in social and economic modes, whose course under override is deferred.

The conjecture is offered as such and rests, at this stage, on the character of the examples. Physiological, developmental, and biographical modes share a property the others

lack: their calibration counts something that does not accumulate for later use. A season of income can be earned later; a season of a child's development cannot be developed later, and a year of adult life spent waiting is a year of that life. Social and economic modes, by contrast, are for the most part deferrable in their own terms, and their divergence, however costly, closes. Section 12 tests the conjecture against four sites, and Section 13 builds on it: if unrecoverable divergence is characteristically borne in the modes named here, then the question of who bears unrecoverable divergence becomes the question of whose physiological, developmental, and biographical modes are subordinate or unregistered in the institutions governing them, and that question has an answer the paper is prepared to state as its working thesis.

8 Non-Registration of a Lived Temporality

This section states the first of the three forms of temporal injustice the paper distinguishes. Its objective is to define the form, to show that its wrong is prior to any decision and independent of any outcome, and to concede the philosophical form on which it is modelled, hermeneutical injustice, while stating what the present framework adds. The section proceeds from the definition (Section 8.1) to the character of the wrong (Section 8.2) to the concession and the addition (Section 8.3) to the sites where the form is found (Section 8.4).

8.1 The Definition

Definition 8.1. (Non-registration). A party suffers non-registration of a lived temporality within an institution when a temporal mode T_p the party lives by is null-registered by that institution (Definition 5.1) while the institution governs a class of the party's actions to whose timing T_p is material. No process of the institution depends on T_p ; the institution's determinations of the party's actions proceed as though T_p did not exist; and T_p continues to run in the party (Claim 7.1).

Two clauses in the definition confine it. The mode must be one the party lives by, in the sense that the party's own registered dynamics depend on it; the definition covers no case in which a party merely prefers a schedule. And the mode must be material to the timing of actions the institution governs; an institution that null-registers a mode irrelevant to anything it decides commits no wrong of this form. Within those clauses, the form is exact: it is the absence, in an institution's processes, of any dependency on a temporality that is real for the party and material to what the institution decides about them.

8.2 The Character of the Wrong

The wrong of non-registration is prior to any decision. Where an institution registers a party's mode and decides against it, the party has lost a contest; where an institution null-registers the mode, no contest was available. A claim framed in the mode's terms, that a schedule falls in the wrong phase, that a deadline consumes a season, that a duration spans a developmental window, has no process to enter: it is not weighed and found wanting, it is unregistrable. The party faces the institution, in respect of that mode, as an entity temporally blind to that part of their life, and the blindness is a fact about the institution's design (Claim 5.2).

Claim 8.2. (Working thesis, offered for examination). Non-registration is a temporal injustice independent of outcome. A party may fare well under a non-registering institution, the governing calibration happening to align with the mode the institution ignores, and remain

wronged in this form; the wrong consists in the absence of any process in which the mode could count, whatever the incidental alignment.

The thesis distinguishes this form from a distributive one, and the distinction is what makes it a form of injustice in its own right. If the wrong were the divergence borne, then a party whose unregistered mode happened to align with the governing calibration would bear no divergence and suffer no wrong. Claim 8.2 holds otherwise: the alignment is incidental, the party has no standing within the institution to preserve it, and the institution may at any time change its calibration with no process in which the mode's disruption could register. What is absent is a channel, and a channel is absent whether or not it is, at the moment, needed.

8.3 Concession and Addition

The form is modelled on hermeneutical injustice as Fricker defined it: the wrong of lacking the collective interpretive resources through which one's own experience can be made intelligible, so that a harm cannot be named, and hence cannot be raised, within the shared understanding [5]. Non-registration is the temporal instance of that structure and is conceded as such. A party whose lived temporality no institutional process depends on is in a position of exactly Fricker's shape: their situation is real, and the framework within which claims are heard contains no term for it.

What the present framework adds is stated with the same precision. It adds a locatable object: where hermeneutical injustice is a gap in a collective interpretive resource, whose location is diffuse, non-registration is a specific absent dependency in a specific institution's processes, and Definition 5.1 says exactly where to look. It adds a test: an institution registers a mode exactly when some variation of the mode would change what some process of the institution does (Section 5.2), so the presence or absence of the wrong is decided by inspection of process, where hermeneutical injustice is decided by an assessment of collective understanding. And it adds a remedy type: since the wrong is an absent dependency, its remedy is registration, the introduction of a process that depends on the mode, and Section 11 shows that this remedy is specific to the form and distinct from the remedies the other two forms require. The concession leaves Fricker owning the structure of the wrong; the addition locates it, tests for it, and names what would remove it, in the institutional case.

8.4 Sites

Three sites, developed in Section 12, exhibit the form. Ecological and seasonal time in land and resource processes: a claim heard on a filing schedule whose processes depend on the filing calendar alone, and are indifferent to the seasonal, generational, and ecological temporalities the claimant lives by. Recovery time in return-to-work assessment: an assessment whose processes depend on a fixed interval alone, and are indifferent to the recovery mode of the person assessed. Care time in employment records: a record whose processes depend on hours worked alone, and are indifferent to the rhythms of care the worker also lives by. In each site the party's mode is real, material to what the institution decides, and absent from every process by which the institution decides it.

9 Registration without Governing Status

This section states the second form. Its objective is to define subordination as a standing arrangement in which a party's lived temporality is registered by an institution and yields

always, to separate it from the ordinary precedence of one mode over another within a single class of actions, and to argue that its wrong and its remedy differ from those of non-registration. The section proceeds from the definition (Section 9.1) to the separation from precedence (Section 9.2) to the character of the wrong (Section 9.3) to the distinctness of its remedy (Section 9.4).

9.1 The Definition

Definition 9.1. (Subordination). A party suffers subordination of a lived temporality within an institution when a temporal mode T_p the party lives by is registered by that institution, thinly or richly, and is subordinate (Definition 6.1) across every class of the party's actions to whose timing T_p is material: in every collision between T_p and the governing mode, within every such class, T_p yields.

The definition requires registration, and thereby separates the form from the first: the institution's processes depend on the mode, the mode has entered institutional determination, and the party's claims framed in the mode's terms have a process to enter. It then requires that the mode yield in every collision, across the whole range of the party's actions to which it is material. Recognition is present, in the sense that the institution registers the mode; consequence is absent, in the sense that registration is silent when it collides with the governing calibration.

9.2 Separation from Precedence

Section 6.2 recorded that institutions in fact distribute governing status across action classes, and that a mode subordinate in one class ordinarily governs in another. That ordinary distribution is precedence, and it is ordinary coordination: the court calendar governs filing and the party's illness governs whether they attend, and each mode yields in the other's domain. Subordination in the sense of Definition 9.1 is the total case: the party's mode yields in every class relevant to it, and there is no domain within the institution in which its calibration decides anything.

The separation is drawn by the quantifier, and it is decisive for the analysis. Precedence within a class is a fact about a process; subordination across all classes is a fact about the party's standing within the institution as a whole. A worker whose circadian mode yields to the production schedule for the timing of shifts, while governing the timing of their breaks, faces precedence; a worker whose circadian mode is registered through a fatigue rule and yields to the production schedule for shifts, breaks, overtime, rotation, and leave alike faces subordination. The distinction is inspectable in the same way registration and governing status are: by taking the profile of governing statuses across the action classes that touch the party (Section 6.2) and asking whether the party's mode governs anywhere in it.

9.3 The Character of the Wrong

The wrong of subordination differs from that of non-registration in its structure. Where non-registration denies a channel, subordination supplies one and empties it: the mode enters process and is written to lose. The party can raise a claim in the mode's terms, and the claim, having been heard, yields, by construction of the process, in every instance. Two consequences follow. The party bears divergence (Definition 7.2) as in the first form, since the governing mode decides their actions and their own mode continues to run; and the party bears it under an arrangement that has acknowledged the mode, so that the yielding is a decision, in the sense of Claim 6.2, and is attributable to whoever wrote the process.

Claim 9.2. (Working thesis, offered for examination). Subordination is a distinct wrong from non-registration. Its wrong lies in the arrangement of governing status among registered modes, and it can be remedied only by change in that arrangement, where non-registration is remedied by change in registration. An institution that responds to a charge of non-registration by registering the mode, and then writes the mode to yield in every collision, has removed the first form and instituted the second.

9.4 The Distinctness of the Remedy

Claim 9.2 carries the reason the paper distinguishes three forms in place of a single undifferentiated temporal injustice. The three differ in what would remove them, and an institution can pass from one to another while leaving both in place. Registration cures non-registration and can leave subordination in place; the fatigue rule that registers a circadian mode, and yields to the schedule in every collision, is exactly this passage. A change of governing status, in some class of actions relevant to the party, cures subordination in that class; protected leave that governs the timing of work over a defined period is exactly this change, and Claim 6.2 recorded that such changes are made, in institutions, by rule. What the two remedies share is that each operates on a definite relation, registration in the one case and governing status in the other, and Section 11 assembles the three forms and their three remedies into a single table, where the third form, and its remedy, allocation, complete the set.

10 Coordination under Unallocated Obstruction

This section states the third form, and the one that draws most directly on the parent theory. Its objective is to import the parent theory's result that a large heterogeneous system may be locally coherent and globally unassignable, to show that coordination under this condition requires the override of some party's temporal datum, to record that the formalism is silent on which datum yields, and to define the form of injustice that arises when the override is administered with no allocation. The section proceeds from the imported result (Section 10.1) to the necessity of override (Section 10.2) to the formal silence (Section 10.3) to the definition (Section 10.4) to its separation from the second form (Section 10.5).

10.1 The Imported Result

The parent theory distinguishes three global statuses a system may occupy with respect to a kind of temporal datum: a global clock, in which one structure is universally read; a global relational temporal order, in which the local temporal data of the system's parts assemble into a datum of the whole; and temporal frustration, in which the parts' data are compatible wherever they overlap and fail to assemble [7, Def. 15.1]. For phase data the obstruction to assembly is computable: the pairwise offsets between overlapping parts form a cocycle on the nerve of the cover, assembly succeeds exactly when it is a coboundary, and frustration is a nonvanishing class, evaluated as the sum of offsets around independent cycles [7, Prop. 15.2]. And the parent theory establishes that this third status is available, and under generic offsets prevalent, exactly in large-scale heterogeneous systems, whose covers acquire independent cycles as they grow [7, §15.4]. Section 4 develops the consequence for the coordination question; the present section takes the result as given.

10.2 The Necessity of Override

A frustrated system contains no fact of the form “the phase of the whole,” and a social system that is frustrated in this sense is nonetheless required to coordinate: schedules are set, deadlines are fixed, and actions are timed across parts whose temporal data assemble into no global datum. Two exits exist. The system may tolerate the frustration, leaving episodes with no system-wide temporal fact and coordinating locally within compatible neighborhoods. Or the system may force a global assignment, and forcing one requires that some part’s local datum be overridden: since the offsets around some cycle sum to a nonzero class, an assignment exists only if at least one offset is altered from what the parts’ own registrations supply, and altering an offset is overriding the temporal datum of at least one party on that cycle. Where coordination is required across the whole, the second exit is the one taken, and override follows as a structural necessity.

Claim 10.1. (Observation on the necessity of override). In a temporally frustrated system under a requirement of global coordination, some party’s local temporal datum is overridden. The necessity is structural: it follows from the nonvanishing obstruction together with the coordination requirement, and it holds with no party at fault and nothing malfunctioning.

10.3 The Formal Silence

The formalism from which the necessity of override follows is silent on its allocation.

Claim 10.2. (The formal silence). The obstruction class establishes that override is required and locates the cycles on which it must fall; it selects no party. Any offset on a frustrated cycle may be the one altered, and the assignment that results is, from the standpoint of the obstruction, as good as any other. Which datum yields is underdetermined by the structure that requires that some datum yield.

The silence is a formal fact, and it is stated as one; it is also the exact location of the third form of temporal injustice. Where a structure requires an act and leaves open who performs or bears it, the act is performed and borne according to whatever else is present, and what else is present, in institutions, is the arrangement of registration and governing status recorded in Sections 5 and 6. The silence of the obstruction is therefore filled, in practice, by the selectivity of registration (Claim 5.2): the datum that yields is the datum whose mode is least registered and least governing, since it is the one whose overriding no process resists.

10.4 The Definition

Definition 10.3. (Unallocated obstruction). A party suffers unallocated obstruction within an institution when the institution coordinates across a temporally frustrated system of which the party is a part, the coordination overrides the party’s local temporal datum, and the override is administered with no allocation rule: no registered process of the institution determines which party’s datum yields, and the party’s datum yields by default, through the absence of any process that would resist its overriding.

The form has two components, and the definition holds both. There is the override, which the party bears as divergence in the sense of Definition 7.2, recoverable or unrecoverable according to the mode overridden. And there is the absence of allocation, which is a wrong of a different kind: the institution has resolved a structural necessity by letting it fall where resistance was least, with no process in which the resulting allocation was made, could be inspected, or could be contested. The wrong of the third form is as much the

absence of allocation as its result. A party overridden under an allocation rule made in a process that registered their mode bears divergence and has a determinate arrangement to contest; a party overridden by default bears divergence and has, in the institution, no arrangement at all, only an outcome.

10.5 Separation from Subordination

The third form is separated from the second by the presence of an arrangement. Subordination (Definition 9.1) is a settled arrangement: the party's mode is registered and written to yield, the yielding is a decision, and the decision is attributable and contestable (Claim 6.2). Unallocated obstruction is override with no arrangement: the yielding stands unwritten and undecided, and is the residue of a structural necessity distributed by whatever gradient of registration and governing status happened to exist. The two can coincide, since a subordinate mode is also the mode most likely to yield by default under obstruction, and Section 12 finds them together in more than one site. They remain distinct in what would remove them: subordination is removed by a change of governing status, and unallocated obstruction is removed by the institution of an allocation rule, a registered process that determines, under obstruction, whose datum yields and on what ground. Section 11 places this remedy alongside the other two.

11 Distinctness of the Three Forms

This section assembles the three forms and argues that they are three. Its objective is to give each form one criterion, to show that the forms are mutually independent, so that any subset may be present in a single arrangement, and to place the forms, their wrongs, their remedies, and their conceded ancestry in one table for the sites of Section 12 to be classified against. The section states the criteria (Section 11.1), argues the independence (Section 11.2), and presents the table with its reading (Section 11.3).

11.1 The Deciding Relation of Each Form

Each form is decided by inspecting a definite relation between an institution and a party's lived temporal mode. Non-registration is decided by the registration relation: whether any process of the institution depends on the mode (Definition 5.1); the form is present exactly at null registration of a material mode. Subordination is decided by the governing relation: whether the registered mode governs any class of the party's actions to which it is material (Definitions 6.1 and 9.1); the form is present exactly at registration with total yielding. Unallocated obstruction is decided by the allocation relation: whether, under temporal frustration, any registered process determines which party's datum yields (Definition 10.3); the form is present exactly at override by default. Three relations, three inspections, three forms.

11.2 Mutual Independence

Claim 11.1. (Working thesis, offered for examination). The three forms of temporal injustice are mutually independent: each can be present in the absence of the other two, and a single institutional arrangement may exhibit any subset of the three.

The thesis is argued by exhibiting, for each form, an arrangement in which it stands alone. Non-registration alone: an institution null-registers a party's mode, the governing calibration happens to align with it, and the system is temporally coherent, so no obstruction

Table 1: The three forms of temporal injustice: what the institution does with the party’s lived mode, the relation inspected, the located wrong, the remedy type, and the prior work to which the form’s structure is conceded. Each row is a distinct form; a single arrangement may occupy any subset of the rows.

Form	Institution’s treatment of the mode	Relation inspected	Located wrong	Remedy type	Conceded ancestry
Non-registration (§8)	No process depends on it	Registration (Def. 5.1)	Absence of any channel; independent of outcome	Registration: a process that depends on the mode	Fricker, hermeneutical injustice
Subordination (§9)	Registered; written to yield in every relevant class	Governing status (Def. 6.1)	Channel present and emptied; yielding is a decision, attributable	Change of governing status in some relevant class	Sharma, temporal labour; Thompson, imposed discipline
Unallocated obstruction (§10)	Overridden by default under frustration	Allocation (Def. 10.3)	Override with no arrangement; falls where resistance is least	Allocation rule: a registered process determining whose datum yields	Parent theory, temporal frustration; no normative ancestor

arises and no override falls; the party is wronged in the first form (Claim 8.2) and in no other. Subordination alone: an institution registers a party’s mode richly and writes it to yield in every relevant class, under a system with a global clock in which no frustration exists; the party’s mode enters process and yields always, and the second form is present alone. Unallocated obstruction alone: an institution registers every party’s mode fully and lets each govern its own classes, the system is nonetheless frustrated at scale (Section 10.1), coordination overrides some datum by default, and the third form is present with the first two absent, since registration is complete and governing status is distributed. The three exhibits argue independence; the sites of Section 12 exhibit the subsets that arise in practice, up to the site in which all three coincide.

11.3 The Table and Its Reading

Table 1 assembles the three forms.

Three readings of the table carry into the rest of the paper. The remedy column is where the three forms most visibly separate: registration, change of governing status, and an allocation rule are distinct operations on distinct relations, and Claim 9.2 recorded that an institution can perform the first and thereby institute the second; the same passage exists between the second and the third, since a change of governing status that resolves subordination in one class leaves the default allocation under obstruction untouched. The ancestry column records where each form’s structure is conceded, and the third row records that the third form has, so far as this paper can find, no normative ancestor: the descriptive literature documents override abundantly, and the isolation of the absence of allocation as the wrong is missing throughout it. And the located-wrong column supplies the classification key for Section 12: each site is examined for whether the party’s mode is absent from process, present and emptied, or overridden by default, and the answer, form by form, is the site’s classification. If a site resists that classification, the taxonomy is incomplete, and Section 12 states this as the test it performs.

12 Sites of Temporal Injustice

This section examines four sites in which the forms of Part III arise, and it does two things at once. It classifies each site against Table 1, so that the taxonomy is tested against cases: if a site resists classification into the three forms, the taxonomy is incomplete, and the section states this as the test it performs. And it examines each site for the kind of divergence borne and by whom, so that Claim 7.5 and the working thesis of Section 13 receive a first examination. Each site is treated under four heads: the modes and their registration, the classification by form, the divergence and its recoverability, and the evidence type on which the account rests, labelled as formally modelled, empirically documented, or doctrinal. The sites are shift work (Section 12.1), debt maturity (Section 12.2), status determination (Section 12.3), and care (Section 12.4); Section 12.5 states the result of the test.

12.1 Shift Work and the Circadian Mode

Modes and registration. The worker lives by a circadian mode, constituted in physiology and registered there richly. The employer registers the shift schedule richly, its every feature entering process, and registers the circadian mode thinly, through fatigue rules that limit consecutive nights or mandate rest intervals, so that one process depends on one coarse feature and no process depends on phase, chronotype, or recovery dynamics. Governing status over the timing of work, breaks, rotation, and overtime lies with the schedule; the circadian mode yields in every collision.

Classification. Subordination (Definition 9.1): the mode is registered and yields always. In scheduling under demand variation, where shifts are set to cover fluctuating load across a workforce whose circadian modes are heterogeneous, the site also exhibits unallocated obstruction (Definition 10.3): the system of workers and demand is frustrated, coverage forces an assignment, and which worker's mode yields is decided by no registered process, falling by default on those with least schedule control.

Divergence. The gap between the schedule's requirement and the circadian mode's calibration is exactly what chronobiology measures as social jetlag, the discrepancy between social and biological time, defined and quantified in the population as the difference between the midpoint of sleep on work days and on free days [14]. Its recoverability divides by duration: a period of night work followed by return to a day schedule is followed by re-entrainment, and the divergence closes; years of rotating shifts are associated with sequelae that re-entrainment does not remove, and the divergence, in the physiological mode, is unrecoverable in the sense of Definition 7.4. The party who bears it is the worker of least schedule control, which is the party of least registration authority in this institution.

Evidence type. Empirically documented, in the chronobiological literature; the classification is the framework's.

12.2 Debt Maturity and Income Recurrence

Modes and registration. The debtor lives by an income mode with its own recurrence, seasonal in agriculture, project-based in freelance work, irregular in casual employment. The creditor registers maturity richly, its schedule, its grace, its default trigger, and registers the debtor's income recurrence in the standard instrument thinly or null: the repayment schedule depends on the calendar alone, and stands indifferent to when the debtor's income in fact recurs.

Classification. Non-registration (Definition 8.1) in the standard instrument: the income mode is material to the timing of repayment and no process of the instrument depends on

it. Where an instrument registers seasonality, through harvest-timed repayment or income-contingent schedules, the form is removed and, if the registered mode still yields in every collision with maturity, subordination replaces it, which is the passage Claim 9.2 described.

Divergence. The gap between maturity's requirement and the income mode's calibration is borne by the debtor in the units of the income mode, seasons of shortfall against a fixed date. It is recoverable while the debtor can bridge it, the interval closing when income recurs; at default it becomes unrecoverable, since foreclosure, loss of collateral, or the reputational residue of default is a course consumed. The site thereby confirms the split within Claim 7.5: an economic mode's divergence is recoverable in its own terms and becomes unrecoverable exactly where it crosses into a biographical one.

Evidence type. Doctrinal and descriptive; the account rests on the structure of standard credit instruments and on the documented incidence of default among debtors with irregular income, and the classification is the framework's.

12.3 Status Determination and Biographical Time

Modes and registration. The applicant in a status determination, for asylum, for residence, for a benefit, lives by biographical time, the succession of formation, partnership, work, and ageing, and by developmental time where children are involved. The agency registers procedural time richly, through stages, deadlines, durations, and appeals, and registers biographical time through thresholds alone, an age of majority, a maximum duration, a cutoff, so that a rich mode enters process at single points and is null-registered along its whole course. Governing status over every action the applicant may take, whether to work, to move, to marry, to enrol a child, lies with procedural time.

Classification. Non-registration and subordination together: biographical time is null-registered along its course and, where it enters through a threshold, registered thinly and yielding in every collision. Waiting is the mode of domination the site exhibits, and its structure has been documented in detail as a routine, undramatic exercise of power over those who wait [2]: the applicant's time is spent conforming to procedural time, and no process depends on what that spending costs in the applicant's own calibration.

Divergence. Unrecoverable in the strictest sense the paper recognizes: years of biography spent in a status that bars work and family formation alike are years of that biography, and a child's developmental window passed during determination is passed. The party who bears it is the applicant, whose registration authority within the agency is, by construction of the site, null.

Evidence type. Empirically documented, in the ethnography of waiting; the classification is the framework's.

12.4 Care Schedules and Institutional Schedules

Modes and registration. The carer lives by the rhythms of care, the feeding, sleeping, illness, and development of the cared-for, and by their own biographical and physiological modes; the employer, the school, and the health system each register their own schedules richly. Care rhythms are null-registered in the employment record, which depends on hours worked alone; where registered, through leave entitlements or flexible arrangements, they are registered thinly and yield, in the standard case, to the production schedule in every collision. And care sits at the intersection of several institutions whose schedules are mutually frustrated, the school day, the working day, and the clinic's hours assembling into no global datum, so that the carer's coordination among them overrides the carer's own datum by default.

Classification. All three forms. Non-registration in the employment record; subordination where care is registered through leave and yields; unallocated obstruction in the carer's coordination among institutions whose schedules are frustrated and each of which leaves the override unallocated. The site is the diagnostic one: it exhibits every row of Table 1, and it exhibits them in one party.

Divergence. Borne by the carer in physiological, biographical, and developmental modes together, the last on behalf of the cared-for; recoverable in its intervals and unrecoverable in its residue, the sleep debt, the career course foreclosed, the developmental window. The party who bears it is the carer, whose registration authority in the modes that matter here is null across all three institutions.

Evidence type. Descriptive, from the literatures on time use and on the temporal organization of care; the classification is the framework's.

12.5 Result of the Test

Each site classifies without remainder into the three forms, and no site required a fourth. The shift site is subordination with unallocated obstruction in scheduling; the debt site is non-registration passing to subordination where the instrument registers the income mode; the status site is non-registration with subordination at its thresholds; the care site is all three in one party. The taxonomy of Section 11 therefore passes its first test, on four sites chosen for their difference from one another, and its independence claim (Claim 11.1) is confirmed in the sense that the sites occupy distinct subsets of the rows. Claim 7.5 receives support in each site, with the debt site supplying the refinement that an economic mode's divergence becomes unrecoverable at the point where it crosses into a biographical one; and the working thesis of Section 13 is met, in each site, by a party of least registration authority bearing the unrecoverable divergence, which is consistent with the thesis and, on four sites, far from confirming it. The section supplies a first examination and no more, and Section 17 names what an examination at scale would require.

13 Concentration on Parties of Least Registration Authority

This section states the paper's working thesis. Its objective is to define the property of a party that the descriptive Parts have made available, registration authority, and to state, with its argument and its falsifier, the thesis that unrecoverable divergence concentrates on parties who lack it. The section defines the property (Section 13.1), states the thesis (Section 13.2), gives the argument (Section 13.3), states what would refute it (Section 13.4), and fixes the section's relation to the wall of Section 14 (Section 13.5). The method is argumentative; the thesis is offered for examination and its test is specified.

13.1 Registration Authority

Definition 13.1. (Registration authority). A party's *registration authority* within an institution is its capacity to have the temporal modes it lives by registered by that institution (Definition 5.1) and given governing status over the classes of its actions to which they are material (Definition 6.1). Registration authority is graded: a party may have its modes registered richly and governing widely, registered thinly and governing narrowly, or null-registered and governing nowhere.

The definition names a capacity, and locates it in the party's relation to an institution's design. Its content is drawn from Claim 5.2: institutions register richly the modes they operate

by, and the parties whose modes those are, the parties who set the schedule, write the maturity, fix the procedural calendar, possess registration authority in the highest grade, since their modes are the institution's own. Parties whose modes the institution registers thinly or null possess it in the lowest. Registration authority is thereby a descriptive quantity: it is read from the institution's processes, by asking whose modes those processes depend on and whose modes govern in collision, and no normative term enters its definition.

13.2 The Working Thesis

Claim 13.2. (Working thesis, offered for examination). Unrecoverable divergence (Definition 7.4) concentrates on parties of least registration authority. Across institutions governing heterogeneous populations, the parties whose lived temporalities are least registered and least governing bear, disproportionately, the divergence that does not close when the governing requirement lifts.

The thesis makes a claim about distribution and about kind together. It says more than that divergence falls unequally, which would be a claim the descriptive literature has already made in other vocabulary; it says that the divergence which falls on parties of least authority is characteristically the unrecoverable kind, so that the inequality is one of residue, beyond an inequality of interval. That is the claim the paper's apparatus makes available and the descriptive literature could not state, since it requires the distinction of Definition 7.4 and the conjecture of Claim 7.5.

13.3 The Argument

The argument runs through the three forms and Claim 7.5, and it is stated step by step so that each step's dependency is visible.

Where override is unallocated (Definition 10.3), it falls where resistance is least: the formal silence of Claim 10.2 is filled, in practice, by the selectivity of registration, and the datum that yields is the datum whose mode no process resists (Section 10.3). The party of least registration authority is, by Definition 13.1, the party whose modes no process resists on behalf of. Under obstruction without allocation, therefore, override falls on parties of least registration authority.

Where override is allocated, the allocation was made by rule, and rules are written in institutions by parties whose modes the institution registers, in processes that depend on those modes (Claim 5.2). An allocation rule made under this condition allocates override, characteristically, away from the modes it registers richly and toward the modes it registers thinly, since the former are present in the process that makes the rule and the latter are not. Under obstruction with allocation, therefore, override again falls, characteristically, on parties of least registration authority, by a route through design in place of default.

Where a party's mode is subordinated (Definition 9.1) or null-registered (Definition 8.1), the party bears divergence continuously, since the governing mode decides their actions and their own mode runs on; and the party bears it in the modes that are subordinated or null-registered, which are the modes the institution does not operate by. Claim 5.2 recorded which modes those characteristically are: the modes the governed party lives by and the institution does not, and Section 5.4 listed them, circadian, seasonal, developmental, biographical, and the rhythms of care.

Claim 7.5 conjectured that unrecoverable divergence is characteristically borne in physiological, developmental, and biographical modes, whose course under override is consumed. The modes on which override falls under the three forms are, by the preceding steps, characteristically the modes of parties of least registration authority; and those modes are, by

the list of Section 5.4, characteristically the physiological, developmental, and biographical ones. The divergence borne on them is therefore, by Claim 7.5, characteristically unrecoverable. The thesis follows: parties of least registration authority bear override in the modes whose divergence does not close.

The argument has four dependencies, and each is named so that the thesis can be tested at its joints: the selectivity observation (Claim 5.2), the filling of the formal silence by that selectivity (Section 10.3), the location conjecture (Claim 7.5), and the alignment, in the institutions considered, between the modes the governed party lives by and the modes whose divergence is unrecoverable. If any of the four fails in a given setting, the thesis fails there.

13.4 The Falsifier

The thesis is exposed to refutation, and its exposure is stated plainly. It fails empirically if unrecoverable divergence distributes without relation to registration authority: if, across the sites of Section 12 and others like them, parties whose modes the institution registers richly and lets govern bear unrecoverable divergence as often, and as heavily, as parties whose modes it registers thinly or null. It fails also in a weaker way if the divergence borne by parties of least authority proves, on inspection, characteristically recoverable, so that the inequality is one of interval alone and Claim 7.5 is wrong about where the residue lies. In either case the paper's contribution reduces to the taxonomy of Part III and the criterion of Section 16, and the distributive thesis is withdrawn. Section 12 conducts the first examination, on four sites; Section 17 names the records in which the thesis meets data at scale.

13.5 Status under the Wall

The thesis is descriptive throughout, and its status under Section 14 is fixed here. It states where unrecoverable divergence falls and by what route; it leaves open whether that distribution is acceptable, and the argument that it is unjust runs through Sections 15 and 16, whose criterion is violated by the two of the three forms in which the concentration is produced. The thesis is placed in the normative Part because it is the bridge between the taxonomy and the criterion's application: it says on whom the criterion's violations characteristically fall, and thereby who characteristically holds the standing of Claim 15.1. That is a claim about incidence, and incidence is a matter of fact.

14 The Separation of Structural Necessity from Justification

This section opens the normative Part by stating the prohibition on which everything in it depends. Its objective is to separate two claims that share a vocabulary and differ in kind: the descriptive claim, recorded in Section 10, that coordination under obstruction requires the override of some party's temporal datum, and any normative claim that a particular allocation of that override is thereby acceptable. The section states the prohibited inference (Section 14.1), gives the reason it is prohibited (Section 14.2), states the macro form in which it most often returns (Section 14.3), records a result about the location of capacity (Section 14.4), and explains its placement before the sections on standing and criterion (Section 14.5).

14.1 The Prohibited Inference

Claim 10.1 records a structural fact: in a temporally frustrated system under a coordination requirement, some party's datum yields, with every part functioning and no party at fault.

The fact is descriptive, and it is true. From it an inference is available that this paper prohibits, and it is stated in the paper's own vocabulary so that it can be recognized wherever it appears.

The prohibited inference. *Coordination requires that some mode yield; therefore this arrangement, in which this mode yields, is functional, and hence acceptable.*

The inference moves from a necessity that holds of *some* datum to a justification that attaches to *this* one, and the move is invalid on its face: the structural necessity is silent on allocation (Claim 10.2), so it supplies no reason for any particular allocation. But the paper prohibits the inference on a stronger ground than its invalidity, because in practice it is seldom stated as an inference. It is stated as a description: the arrangement is described as one that works, that keeps the system coherent, that resolves the frustration, and the description carries the justification without ever asserting it. Section 6.4 named this redescription as the point at which description begins to do normative work; the present section is the full statement of why it must be refused.

14.2 The Reason for the Prohibition

To describe an arrangement as functional is to give it a reason, and to give it a reason is to give it legitimacy. The move from "some mode must yield" to "this mode's yielding is functional" converts a dynamical fact into a justification, and once the conversion is made, the arrangement has been placed beyond contest on the ground of a fact that in truth supports no arrangement over any other. The dynamical explanation and the normative justification must be held apart, and held apart with particular care in a framework whose vocabulary, generativity, coherence, coordination, is shared between them, since a shared vocabulary is what makes the conversion invisible.

The prohibition is therefore stated as a rule for reading and writing every sentence of this Part. Any sentence in which the necessity of override, the coherence of the system, or the functioning of an arrangement is offered as a ground for the acceptability of that arrangement violates the rule and is to be struck. What may be said of an arrangement, descriptively, is that it coordinates, that it allocates override in a certain way, that it registers or fails to register certain modes, and that it distributes divergence in a certain pattern. What may be said of it normatively is settled by Sections 15 and 16, and by nothing in the description.

14.3 The Macro Form

The inference returns most often in a form that appears to concern the whole and no party in particular, and the form is stated so that it too can be recognized. *The system's temporal coherence requires it:* the arrangement in which these modes yield is what permits the system, the firm, the court, the economy, to coordinate at all, and the coordination is a good that the arrangement serves. The macro form is the same inference. It converts the descriptive fact that a global assignment was forced (Section 10.2) into a justification of the assignment that was made, and it does so by treating the coherence of the whole as a ground that the parts' overriding serves. The framework of this paper permits no such ground. That a system's coherence was purchased by a certain party's override is a fact about how the coherence was obtained; it is no reason why it should have been obtained that way, and the parent theory itself, in establishing that many assignments resolve the same obstruction, removes the pretence that this one was required.

14.4 The Location of Capacity

One result of the descriptive Parts belongs here because it disarms the macro form at its source.

Claim 14.1. (Observation on the location of capacity). Capacity attributed to a system is realized by located parties. Where a system is described as coping with obstruction, tolerating divergence, or absorbing a mismatch, the coping, tolerating, and absorbing are done by the parties in whom the divergence is located (Definition 7.2), since divergence exists there alone. The description “the system copes” names a person, or a household, or a community, and names it inexactly.

The observation follows from the definition of divergence and restates them; its use is to make the macro form’s grammar visible. Sentences whose subject is the system, and whose predicate is a capacity to withstand override, are sentences about parties whose subject has been replaced. Restoring the subject is a purely descriptive correction, and once it is made, the macro form is seen to say: *these parties’ bearing of divergence is what permits coordination, and coordination is a good, so their bearing of it is acceptable*. Stated with its subject restored, the inference is the prohibited one, and its prohibition applies.

14.5 Placement

The section is placed before Section 15, on standing, and Section 16, on the criterion, by design. Standing is a normative status, and the sections that confer it are the sections in which the prohibited inference would do the most damage if it entered: a reader who arrives at “the party who bears the divergence holds standing to contest” having accepted, tacitly, that the arrangement is functional will read the standing as a courtesy extended within a settled order. The wall is placed first so that no reader meets standing without it. Everything normative that follows is written under the rule of Section 14.2, and the rule is the reason the normative content of this paper takes the constraint form that Section 16 gives it: a form that rules arrangements out on stated grounds and declines, throughout, to rank the arrangements it leaves standing.

15 Standing to Contest a Governing Temporality

This section states who may contest a temporal arrangement. Its objective is to derive an asymmetric standing rule from the descriptive Parts and the criterion of Section 16, to show that the asymmetry is what makes the rule survive the capture of an institution’s ordinary processes, and to concede the ancestor structure, participatory parity, while stating the difference. The section derives the rule (Section 15.1), argues for its asymmetry (Section 15.2), makes the concession (Section 15.3), and states the rule’s reach in each of the three forms (Section 15.4).

15.1 The Standing Rule

Three results of the earlier Parts fix where standing lies. Divergence is located in a party, and there alone (Definition 7.2, Claim 14.1). Governing status is a decision, attributable and contestable (Claim 6.2). And a violation of Proposed criterion 16.1 wrongs a definite party in a definite relation, the party whose mode was overridden unregistered (Section 16.2). Together these locate the party who has something to contest and the matter they have to contest, and the standing rule records the location.

Claim 15.1. (Proposed standing rule). The party in whom the divergence produced by a governing temporality is located holds standing to contest the arrangement that produces it: the registration of their mode, the governing status assigned over it, and, under obstruction, the allocation by which their datum yields. The party whose mode governs acquires no standing from the fact of governing; governing status is an arrangement made by rule (Claim 6.2), and the beneficiary of a rule holds no standing in the rule's own right.

The rule is directional. It runs from the party who bears to the arrangement they bear, and it leaves the party the arrangement favors where it found them. Its ground is the location of divergence: the party in whom the gap between two calibrations is registered is the party in whom the arrangement's cost exists, and standing follows the cost.

15.2 The Asymmetry and Its Function

The asymmetry of the rule is its function, and the function is stated so that the asymmetry is seen as a construction. A symmetric standing rule, one under which every party to an arrangement holds standing to contest it, requires, to have effect, that the arrangement's ordinary processes be disposed to hear the contest; where those processes are the processes of the institution whose arrangement is contested, and where that institution registers richly the modes it operates by and thinly the modes the governed party lives by (Claim 5.2), symmetric standing is standing exercised in a forum designed around the mode one is contesting. A symmetric rule is therefore captured by the institution's registration profile, and the capture is complete exactly in the cases the paper is about, in which the party's mode is registered thinly or not at all.

An asymmetric rule survives the capture because it does not depend on the disposition of the forum. It says who holds standing and what they hold it over, and it says so on the ground of where divergence is located, which is a fact about the parties and independent of any process's willingness to hear it. That the standing may go unheard is a further wrong, and it is a wrong of the first form: an institution that registers no process in which the standing can be exercised has null-registered, in respect of contest, the very mode whose override conferred the standing. The asymmetric rule thereby folds back into the criterion: an institution satisfying Proposed criterion 16.1 has registered the overridden mode, and registration in the sense that satisfies the criterion (Section 16.3) is registration on which the arrangement depends, which is registration through which contest can enter.

15.3 Concession

The ancestor structure is participatory parity as Fraser states it: the requirement that social arrangements permit all members to participate as peers, so that justice is assessed by whether an arrangement obstructs parity of participation [4]. The present rule inherits from parity the placement of the normative question in participation, in who may enter the determination of an arrangement, and concedes that placement. It differs from parity by construction, in the direction the previous subsection explained. Parity is symmetric: it asks that all participate as peers, and it locates the wrong in the obstruction of anyone's peer participation. The standing rule of Claim 15.1 is asymmetric: it confers standing on the party who bears divergence and withholds it from the party whose mode governs, and it locates the wrong in the override of a mode that lacked registration. The asymmetry is what parity, in the temporal case, cannot supply and what the capture argument of Section 15.2 shows to be required. Parity is therefore conceded as the family within which the rule stands, and the rule is offered as the member of that family that survives an institution's control over the forum in which parity would be exercised.

15.4 Reach across the Three Forms

The rule reaches each form through its located wrong (Table 1). Under non-registration the party holds standing to contest the absence of registration itself: the matter contested is that no process depends on the mode, and the standing exists although, by the form's definition, no process of the institution is available in which to exercise it; the rule thereby names the wrong exactly, since it confers a standing the institution has arranged to be unexercisable. Under subordination the party holds standing to contest the arrangement of governing status: the matter contested is the decision, attributable under Claim 6.2, that the mode yields in every relevant class, and the standing is exercisable in whatever process the registration supplies. Under unallocated obstruction the party holds standing to contest the absence of an allocation rule: the matter contested is that their datum yielded by default, with no process that determined it should, and the standing is a standing to require that such a process exist. In each form the standing runs from the party who bears to the relation in which the wrong is located, and in no form does it run the other way.

16 The Constraint Form of the Requirement

This section states the paper's normative criterion. Its objective is to propose one requirement on institutions, in constraint form, to show that the requirement ranks no arrangement, aggregates no party's divergence against another's, and generates the standing that Section 15 states, and to show what the requirement forbids in each of the three forms. The section states the criterion (Section 16.1), sets out its form (Section 16.2), applies it to the three forms (Section 16.3), records an observation about its relation to other criteria of the series (Section 16.4), and states its cost (Section 16.5).

16.1 The Criterion

Proposed criterion 16.1. (Registration under governance). An institution may not require a party's conformity to a governing temporality while leaving unregistered the temporality of that party which the governing temporality thereby overrides. Where an institution's processes decide the timing of a party's actions by the calibration of a mode T_g , and a mode T_p the party lives by is material to those actions and yields to T_g , the institution's processes must depend on T_p : the overridden mode must be registered by the institution that overrides it.

The criterion is stated with deliberate modesty. It does not say that T_p should govern, or that T_g should not; it does not say how divergence should be distributed, or that any party's divergence is too great; it says only that an institution which requires conformity to one temporality must register the temporality it thereby overrides. Its content is that override without registration is impermissible: whatever an institution decides about the timing of a party's actions, it may not decide it in processes that stand indifferent to the temporality the decision overrides.

16.2 The Form of the Criterion

Three properties fix the criterion's form, and each is a consequence of the rule of Section 14.2.

The criterion ranks nothing. It divides arrangements into those that satisfy it and those that do not, and among the arrangements that satisfy it, it is silent: two institutions both of which register the modes they override are, so far as the criterion says, equally acceptable, however differently they allocate governing status or distribute divergence. The silence is

deliberate. A criterion that ranked arrangements would require a total ordering over them, and a total ordering is a value function; a value function over temporal arrangements would place the coherence of the whole, or the aggregate divergence, or some other system-level quantity in the position of an objective, and the macro form of the prohibited inference (Section 14.3) would re-enter as its optimizer.

The criterion aggregates nothing. It attaches to the relation between an institution and each party severally: for each party, the mode overridden must be registered. It permits no trade in which one party's divergence is set against another's, no summation of divergence across a population, and no arrangement justified on the ground that its total divergence is lower than an alternative's. Interpersonal aggregation is the signature of the utilitarian form, whatever vocabulary carries it, and the criterion is constructed to be incapable of it: it can be checked, party by party, with no quantity that spans parties ever formed.

The criterion generates standing. Where it is violated, a definite party is wronged in a definite relation, the party whose mode was overridden unregistered, and that party has, in the violation, a definite matter to contest. Section 15 states the resulting standing rule; the present section records that the criterion supplies its ground.

16.3 Application to the Three Forms

The criterion is stated once and applies to each form differently, and its differing application is the reason it can be a single criterion over a three-fold taxonomy.

On non-registration (Definition 8.1) the criterion bears directly: it forbids the form outright. Where an institution governs a party's actions and null-registers a mode material to them, the party conforms to a governing temporality while the overridden one is unregistered, and the criterion is violated by definition. The remedy the taxonomy assigned to the form, registration, is exactly what the criterion requires.

On subordination (Definition 9.1) the criterion bears conditionally. The subordinated mode is registered, so the criterion's letter is satisfied; the criterion's force is that the subordination must be an arrangement made in the registered presence of the mode it subordinates. What the criterion forbids is subordination instituted in processes that register the mode in name and depend on it in no way that touches the collision, registration so thin that the mode's presence in process is nominal. The criterion therefore reads back into the grades of Section 5.3: registration that satisfies it must be registration on which the governing arrangement itself depends, so that the arrangement was made with the subordinated mode among its determinants, and the yielding is a decision made in the mode's presence.

On unallocated obstruction (Definition 10.3) the criterion bears through allocation. Override by default is override in which no registered process determined whose datum yields; the criterion requires that the overridden mode be registered by the overriding institution, and an institution that overrides by default has, in respect of the datum it overrode, no process that registered it at the point of override. Satisfying the criterion under obstruction therefore requires the remedy the taxonomy assigned: an allocation rule, a registered process that determines, under obstruction, whose datum yields, and that depends, in determining it, on the modes it allocates among.

16.4 Relation to Criteria of the Series

The criterion shares a form with three others advanced in this series, and the resemblance is recorded as an observation carrying weak evidential weight. The criterion of generative sufficiency in the theory of participation asks whether an arrangement preserves the capacity of the affected relations to generate a further determination of the matter it settles; the regenerability criterion in the theory of interpretive justice asks the same of an interpretation; the

closure criterion in the theory of value conversion asks the same of a conversion. Proposed criterion 16.1 asks whether an institution's temporal arrangement preserves the capacity of the overridden mode's bearer to have that mode enter the determination of their actions, and it does so by requiring that the mode be registered where it is overridden. In each case an act is assessed by what it does to a relation's capacity to produce a further determination of the matter the act settled. The recurrence is offered as weak evidence that the form is a feature of the object, generative relational systems, and the alternative explanation is stated with it: the four criteria have one author working in one framework, and the recurrence may be a feature of the method.

16.5 The Cost of the Form

The cost of a constraint-form criterion is stated plainly, since concealing it would be a version of the inference the paper prohibits. The criterion cannot say what a good temporal arrangement is. It rules out arrangements that override unregistered modes, and among the arrangements it leaves standing it makes no distinction: it cannot rank two institutions both of which register what they override, cannot say which allocation rule under obstruction is better, and gives no guidance where no mode is overridden unregistered. An institution seeking to know what it should do receives from the criterion a floor and no direction above it. The floor is what the paper claims, and the claim is that a floor of this form is what can be stated without value function, without aggregation, and without the prohibited inference; whether more can be said, in a form that avoids all three, is recorded among the open questions of Section 18.

17 Empirical Access

This section names how the paper's descriptive claims meet data. Its objective is to state, for each claim that has empirical content, what would test it and in which records the test would be conducted, and to state plainly that the paper contains no new data. The section treats the operationalization of the paper's quantities (Section 17.1), the records in which each is read (Section 17.2), the transfer of the parent theory's perturbative logic (Section 17.3), and the limits of what is offered (Section 17.4).

17.1 Operationalization

Four quantities carry the paper's empirical content, and each admits an operational reading. Registration (Definition 5.1) is read from an institution's rules and processes by the counterfactual test of Section 5.2: for a given mode of a governed party, does any process of the institution change under variation of the mode; the grade of registration is the count and depth of the processes that do. Governing status (Definition 6.1) is read from the same processes by inspecting what they do in collision: which mode's calibration a process follows when the modes it registers disagree, action class by action class. Divergence (Definition 7.2) is read in the overridden mode's units, and its recoverability (Definition 7.4) is read by what returns when the governing requirement is lifted. Registration authority (Definition 13.1) is read as the presence of a party's modes in the institution's rules and their governing status there, and it is a property of the party's position, comparable across parties within an institution.

17.2 Records

The records differ by site and by quantity, and Section 12 named several. Divergence in physiological modes is read in the chronobiological record, where social jetlag has an established measure and a documented relation to schedule [14], and where recoverability is read in re-entrainment under schedule change and in the persistence of sequelae under long exposure. Divergence in the rhythms of care and in employment is read in time-use records, which register the allocation of hours across care, work, and rest and, longitudinally, what returns when arrangements change. Divergence in biographical time is read in administrative durations, the length of status determinations and the ages and life events they span, set against what those spans foreclose. Registration and governing status are read in the rules themselves, in employment contracts, credit instruments, procedural codes, and institutional schedules, and their reading is documentary. Registration authority is read comparatively across parties in the same records, and the working thesis of Section 13 is tested by relating it, across parties, to the incidence of unrecoverable divergence.

17.3 Transfer of the Perturbative Logic

The parent theory attributes temporal organization among drivers, components, and relations by intervening on each severally and reading the resulting degradation profile [7, §17]. The logic transfers. An institution's arrangement of governing status is an intervention variable: where a rule changes which mode governs a class of actions, protected leave, a shift-length limit, a harvest-timed repayment schedule, the divergence borne by the affected parties before and after the change is the measured response, and its recoverability is read in whether the divergence borne before the change closes after it. Natural experiments of this kind exist wherever governing status has been revised by rule, and Claim 6.2 recorded that it often is. What such an experiment tests is the paper's structure of claims together: that divergence is located in the party and measurable in the party's mode, that it responds to a change of governing status, and that its recoverable and unrecoverable components separate under the change.

17.4 Limits of the Offer

The paper contains no new data. It states what would test its claims and where, and it reads four sites against records already published; it conducts no measurement of its own. Two limits are added to that one. The operational readings above are readings of the paper's definitions and have not been validated as measures; whether registration authority, in particular, can be scaled comparably across institutions is open. And the working thesis is a claim about incidence across populations, and four sites, however consistent, are four; Section 12.5 claimed consistency and no more, and the present section names what confirmation at scale would require: the relation between registration authority and unrecoverable divergence, read across parties in the records above, in a range of institutions wide enough that the four dependencies of Section 13.3 are each exposed to failure.

18 Limits and Open Questions

This section names what the paper does not do and what it leaves open. Its objective is to fix the boundary of the claims made, so that each is read as reaching exactly as far as its argument, and to state the questions that the argument raises and does not answer, in an order that runs from the most local to the one the whole framework turns on. The section states the limits (Section 18.1) and the open questions (Section 18.2).

18.1 Limits

Four limits bound the paper. It contains no theory of temporal authority: it says who holds standing to contest which mode governs, and it leaves to a successor paper who holds the power to revise governing status, on what ground such revision is legitimate, or how the reform of a temporal arrangement is to be conducted; that is the subject of a successor paper, for which the present one supplies the objects. It does not treat the registers, markets, feeds, and model-mediated decision cycles, that couple into human temporal architectures at rates no earlier register had; the paper's institutions are conventional ones, and whether its three forms and its criterion transfer to algorithmic registration is a later question. It contains no procedure for assessing registration authority in a given case beyond the operational reading of Section 17.1, and that reading is unvalidated. And its criterion, being in constraint form, is silent on ranking: it rules arrangements out and makes no distinction among those it leaves standing, and an institution seeking to know what a good temporal arrangement is receives from the paper a floor and no direction above it.

18.2 Open Questions

Eight questions are open, and are recorded so that the paper's successors have them stated.

- (1) Whether the three forms exhaust temporal injustice. Four sites classified without remainder (Section 12.5); whether a wider range does, and whether a case exists in which an institution wrongs a party temporally in none of the three ways, is open.
- (2) Whether Claim 7.5 is right about the location of unrecoverable divergence, and in particular whether the debt site's refinement, that an economic mode's divergence becomes unrecoverable at its crossing into a biographical one, generalizes to a rule about when recoverable divergence becomes unrecoverable.
- (3) Whether the four dependencies of the concentration argument (Section 13.3) hold across institutions of different kinds, and which of them fails first where the thesis fails.
- (4) Whether the criterion of Section 16 can be strengthened, in a form that still leaves satisfying arrangements unranked and still applies party by party, to say more than that the overridden mode must be registered; whether, for instance, a requirement on the grade of registration, or on the process by which allocation is made under obstruction, can be stated without readmitting a value function.
- (5) Whether the asymmetric standing rule of Section 15 can be given institutional form: what a process would look like that registered a mode for the purpose of contest without thereby making the contest a courtesy within a settled arrangement.
- (6) Whether the family-of-criteria observation of Section 16.4 is a fact about generative relational systems or a fact about one author's method, and what would decide between the two.
- (7) Whether the paper's three forms and its criterion transfer to registration by algorithmic systems, whose processes depend on modes in ways that stand outside written rules and outside the direct reach of the counterfactual test of Section 5.2.
- (8) What sustains registration across changes in institutional occupancy. Institutions register, richly, the modes their occupants operate by (Claim 5.2); as occupancy changes, the registered modes drift toward those of the new occupants, and the modes of the governed drift toward null, with no act of exclusion by anyone. The question is what

property of an arrangement, if any, holds a governed party's mode registered when no occupant lives by it, and it is the question the generative relational framework turns on in every domain it has been applied to: how a relational structure preserves the capacity to be reopened by parties who no longer occupy the position from which it was made.

19 Conclusion

This section states what the paper has proposed, in the order in which its parts depend on one another, and names what passes out of it. The paper began from a premise drawn from the theory of temporal emergence: that in large-scale heterogeneous systems temporal frustration is structural, so that coordination proceeds under obstruction, some party's temporal datum is overridden, and the question of re-synchronization gives way to the question of allocation. On that premise it built three objects, institutional registration, governing status, and divergence, and from them three forms of temporal injustice: non-registration, in which a party's lived temporality is absent from every process of the institution governing them; subordination, in which it is present and yields always; and unallocated obstruction, in which the override that coordination requires falls by default on whichever party's mode no process resists. It argued that the three are independent, tested the taxonomy on four sites, and found each site classifiable without remainder. It stated, with its dependencies and its falsifier, a working thesis that unrecoverable divergence concentrates on parties of least registration authority, and found four sites consistent with it. And it proposed, under an explicit prohibition on the passage from structural necessity to justification, a criterion in constraint form, that an institution may not require conformity to a governing temporality while leaving unregistered the temporality it thereby overrides, together with the asymmetric standing that the criterion generates.

Three things pass out of the paper. To the successor paper on temporal authority it hands its objects and its silence: registration, governing status, and divergence as the terms in which the revision of a temporal arrangement can be described, and the question of who may revise governing status, which this paper declined to answer, as that paper's subject. To empirical work it hands the operational readings of Section 17, the records in which the paper's quantities are read, and the relation between registration authority and unrecoverable divergence as the test on which the working thesis stands or is withdrawn. And to the justice series within which the paper stands it hands one more criterion of the same form, an act assessed by what it does to a relation's capacity to produce a further determination of the matter the act settled, offered as weak evidence that the form belongs to the object.

The paper's premise is also its closing claim. In systems where obstruction is permanent, justice in respect of time is a question of allocation; allocation is a question of whose temporality is registered by the institutions that coordinate; and an institution that overrides a temporality it has not registered has wronged the party who lives by it, whatever the coordination it thereby achieved.

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