

EPILOGUE

FORMING FORM, FOLDING TIME (TOWARD DYNAMICS THROUGH AN ANTHROPOLOGY OF FORM)

Listen O Lord of the Meeting Rivers
Things standing shall fall
But the moving ever shall stay.

—Basavanna, twelfth-century CE Indian philosopher and poet

Part I: Forming Form

Thinking through my own anthropology of the past half-century I recognize an intermittent though abiding curiosity in the workings of phenomenal forms, formings of the social, some of which are more recognizable and identifiable by the people who shape and inhabit them for varying periods (for example, numerous “rituals” that I have discussed in detail elsewhere) while others, though less so, are discernible through analysis. In either instance and in their intermingling, phenomenal forms, social forms, are, paraphrasing Deleuze (1997: 91), those that show themselves in and through themselves. They *show themselves in and through themselves* as more or less distinct entities through their practice and through perceptions of their practice, though again these often cannot be distinguished and need not be. Clarity and fuzziness in worlds of practice coexist and often enable the existence of one another.

Nonetheless this is hardly sufficient to even begin theorizing about phenomenal forms. In the ways in which the thinking of anthropology is constituted, in order to theorize—social form, cultural form—the form in question is given a name that enters it into some regime of cultural contextualization, social relationships, rule-giving of some sort, ontological standing of some kind, and the like. Yet this kind of thinking says little about the form itself, the logics of form *qua* form, and issues of the order of, how does a form hold together as a form? Mainly from within itself, or mainly from outside itself? Is there something in, say, a particular form that in itself enables that form to continue for a while as it does, without turning for explanation in the first instance to some sort of stabilizing grounding that is external to this form—in my day this was grounding in culture, in tradition, values, norms, and now to multiple ontologies and to ethics? Such questions are hardly ever asked.

Yet it is questions like these that made me curious about whether something of a response might be found in the interiors of forms: in the ways these are put together, and in how these effect what it is that forms potentially can do within themselves and in relation to their external worlds—in other words, to search within their “own-ness.” In thinking about such questions I found little aid in various anthropologies (nor in other of the social sciences). Anthropologists do not conceptualize social phenomena through such ideas as “form” and “forming.” They still tend to move in the general directions of individual agency, social relationships, power, and collective activities and representations. The very idea that social forms may have degrees of autonomy from their social surrounds, and that this autonomy is related to how they come to be put together within themselves, is near to anathema within anthropologies where continuous connectedness and interdependencies are the rule, while their antinomies are perceived as destructive. This is even more so in the era of globalization, glocalization, and cosmopolitanism, producing anthropologies that emphasize expansiveness and the *inter*-relational rather than social interiority and the *intra*-relational.

Despite alterations of perspective in anthropology like the ontological turn that produces multiple ontologies, like actor-network theory (ANT), and others that produce multiple epistemologies, the foci and units used to discuss the social and the cultural remain more continuous than not with prior approaches. Claims to radical difference so often turn out to be academic exercises in hair-splitting that, following Freud and Lacan, can be called the narcissism of the minor difference. Put directly, intellectually I found myself quite alone in my attempts to discuss and theorize form, and have remained so.

From time to time I return to this problem that I am calling the interior organization of social or phenomenal forms. My intention in this Epilogue is to discuss how this recursiveness in my thinking developed, from the 1970s into the 2000s, beginning with my first monograph, *Work and Play Among the Aged* (1977), then turning to *Models and Mirrors* (1st ed. 1990, 2nd ed. 1998), followed by the introduction to *Ritual in Its Own Right* (Handelman and Lindquist 2005). I will give the most space to *Work and Play* for two reasons: it is the least known of my thoughts on

form, and much of what I wrote in the other two works mentioned here was already embryonic in *Work and Play*. In looking through these materials, one major lacuna became evident: in my endeavors to discuss the interiority of social forms there is hardly any mention of time. For all of my fascination with movement within the forming of form I did not see the relevance of time as such. Previewing my current thinking on time, I will argue that time may be a dynamic, perhaps a dynamic in its own right. All forms, animate and inanimate, are time-full and, as time-full, they are full of movement, given that their interiors always are in motion within themselves even as their exteriors are no less moving with time; and, given that there often are differences of temporal movement between these time-full interior and exterior movements. Whatever else they are, these time-full movements are a given, even as this given is a multiplicity that varies greatly among forms. In other words, time should always be on the agenda of the study of the social-cultural and not necessarily shoved into the category of dimensionality that greatly restricts the multiplicity of the fullness of time's motion.

Whether time-as-incessant-movement qualifies time as dynamic is indeed an issue, and one not easily answered if at all. Time perhaps might be understood as an “enabler” of the movement of time-full forms, interiorly and exteriorly. In the second part of this Epilogue I will pursue this line of thinking, at least to raise the issue of time and the forming of form into view. To wit: if the movement of time is continuous (yet changing) then is time critical to the enabling of form? If all “solidities” in conceptions of social ordering (like “structure,” “institution,” “community,” and the like) are time-full then is not their appearance of solidity due to the very movement of their interior times at different speeds and intensities, rather than to other qualities that position the appearance of solidity as chronological, yet outside of time-as-dynamic?

Before turning into my own work let me point to one kind of relatedness between form and time. All social, phenomenal forms have interiority. Have depth to differing degrees. Form without depth denies the very sociality of the social. Flatness of form speaks to the superficiality of the social. Degrees of depth, degrees of interiority, are critical to how forms come to be formed within themselves, and to how these formings relate to their external environments. Yet the opening and shaping of depth within the interiority of form should not be taken for granted. The phenomenologist, Merleau-Ponty, argued that Descartes understood space as an open, flat presence of measurable external relations, as a third dimension without depth. By contrast, Merleau-Ponty characterized depth as “both natal space and matrix of every other existing space,” indeed, as the “first” dimension that is the very source of the Cartesian dimensions, yet that is “*self-containing*” (Rosen 2015: 263, my emphasis, to which I will return). Thus for Merleau-Ponty (1962: 298) depth became the originating and most “existential” of all dimensions (see Johnson 1993: 86). Existence emerges from the natality of depth. This is “where relationships between objects [and, I add, between persons] as differential processes are formed.” (Somers-Hall 2009: 214).

Deleuze (in *Cinema Two: The Time-Image*) adds a significant moment of bridging to this opening of voluminosity, suggesting that Merleau-Ponty's idea of depth is not a spatial notion at all but is rather a temporal one—depth is a notion of *duration* that is not reducible to dimensions of space (Wambacq 2011: 327; see also Mazis 2010: 127–28). Time *is* depth so long as one does not reduce temporality to the shallow flatness of its linear, metric variant. Time and depth are inseparable. What could make more sense than this? If time were not depth-full then time would exist only as a metric of (chronological) passage; indeed time in its existential fullness would not exist (*pace* Julian Barbour [cf. Barbour 2009: 85–90]). In other words, existence is tightly braided into depth, time, and duration, and this is no less so for the existence of social forms in their own right. The existence of a social form is grounded intimately within its own depth(s) and duration, and duration-as-time is of course always moving, never fixed. Forms, time-full, are indeed *time-forms*: their own durations differ from one another, and these durations need not necessarily be linear. And depth, to whichever degree, is always created by the forming of form that itself becomes time-space folded into itself to varying degrees. As noted above, I will return to temporality and form in the second part of this Epilogue. For the moment it is sufficient to state this relationship so that the reader is aware of the tenor of that which is to come.

Evolving Thoughts on Emergence and the Forming of Form

Work and Play Among the Aged grew from intensive observations of interaction during a lengthy period in a number of workshops that employed the aged. As prosaic as this research sounds, it gave me insight into how human inter-action only sometimes could be reduced to individuals interacting through individual agency. Face-to-face interaction took the form of a sequence between beginning and ending. A simple point yet one with a powerful intimation: to wit, that I could treat an “interaction strip” (as Goffman sometimes called such sequences) as a unitary event in itself, however tiny this forming might be. Following Goffman (1961) I called such an occasion an “encounter.” Encounters came and went. Given their speed and their short duration they frequently were momentary compared to the ongoing lengthy durations of the workshops within which they occurred. Nonetheless I called the encounter an ephemeral yet *natural form* (rather than an analytical kind) of social organization since, regardless of the substance of an encounter, all encounters took a sequential *form* between discontinuity (onset) and discontinuity (closure) (see also Goffman 1983: 6).

Furthermore, the form that an encounter developed was *emergent*, in that how an encounter developed could hardly be predicted from its onset—there was no straightforward linear, causal relationship in the interaction sequence. I recognized that the encounter could be studied “in terms of its own emergent sequential form” (Handelman 1977: 95)—the subtitle of the book is *Interaction, Replication and Emergence in*

a Jerusalem Setting. In doing so I found that “the sequential unfolding of a particular encounter is very much a function of the organizational form which that encounter [itself] develops” (Handelman 1977: 95; see also Handelman 1973).¹ In other words, however an encounter developed, its properties, and so, too, its forming, were emergent. Moreover, these emerging properties were continually becoming part of the encounter, affecting the forming of its emergence in ongoing ways. As I wrote many years later, “Encounters are formed through the interaction of their creators, but they also shape this interaction as it is occurring. Therefore encounters are not reducible to the contributions—the particular life conditions, decisions, strategies, moves, emotions—of the participants. The forming of interaction cannot be reduced to versions of methodological individualism . . . interaction [that is] understood as the addition of discrete, individual acts, each with its own individual intention—without destroying the idea of the encounter,” as a naturally existing, phenomenal, social form (Handelman 2006b).²

More than forty years ago I had not heard of complexity theory, yet influenced by Gregory Bateson’s thinking at the Josiah Macy Jr. conferences, and by his brilliant Epilogue to the second edition of his monograph, *Naven* (1958), I called this interactional recursivity “feedback” (yet, strangely, not fully recognizing the implications of the curving movement of feedback). The quietening of methodological individualism in processes of emergence has its parallel in the subduing of the transcendent subjectivism of much of phenomenology, as Holland (2012: 21) puts this. In my terms, the “active self” as the ground, touchstone, and impetus for the shaping of the phenomenal becomes sucked or folded within the curving shaping of form to which self and selves contribute but that comes to form them, momentarily, lengthily. In extreme instances (for which many ritual forms qualify) the very forming of selves may become part of the form itself (see, for example, Harrison 1993).³

There was a powerful autopoietic moment here that I missed, and I was unable to name what it was that I was after in studying the social life of phenomenal forms. Not a systemics of the social (of which some two decades later Niklas Luhmann produced the most sophisticated version). Neither was I taken by systems theory as such, but rather by something that in cosmoeses of multiplicity (to use Deleuze’s fertile term) potentially could move in the direction of systemics yet so, too, toward many other alternatives. That something, in a Deleuzian vein, was the generation of *variation*. Not the occasional generation of variation, but rather its ongoing generation in social life. That is, the continuous generation of immanent potentiation that generated variation. I felt early on that anthropologists did not give enough attention to the epistemologies of how variation and change were generated (perhaps continuously) from *within* a social setup, given that the primary anthropological focus was on impetuses for change coming from some sort of contact with the external.⁴

Today the idea of emergence is a buzzword of complexity theory and the non-linear (cf. Deacon 2006).⁵ This was hardly so when I used the term in my own way decades ago. As Holland (2012: 18) notes, emergence refers to, “the spontaneous

self-ordering of physical as well as social systems. Order emerges from chaos, without that order being imposed from above or pre-determined from before.” The neatest description of emergence that I know of comes from the physicist, Murray Gell-Mann (Horgan 1998: 214), a Nobel laureate. Gell-Mann said that emergence occurs when, “We don’t need something else in order to get something else.” In the practice of the encounter when “something” else emerges into (phenomenal) existence the encounter re-organizes, in other words re-adapts (or doesn’t) to enable itself to continue.⁶ This is not order out of chaos but rather the ongoing generation of usually minor variation that has the potential to become difference. Generally speaking, interaction emerged from within itself and brought self-variations to the fore. This, in a simple sense, is *self-organization*.⁷

Variation often emerged during the interaction within an encounter. Exact repetition in the very practice of the everyday was rare, even though this might be summarized as sameness by participants. As Michael Fisch (2013: 336) puts this in his brilliant study of how the mechanics of the Tokyo underground were turned into a self-organizing, technological system (one perceived by the Japanese computer engineers to have organic properties of internal self-adaptation to changing conditions), “irregularity is regular.” And the occurrence of “irregularity” is of course unpredictable. Moreover, the enabling of the self-organization of emergent properties seems to work most reliably and comprehensively when the “unit” producing these properties has relative autonomy (that can be termed “distributed autonomy” [Fisch 2013]). My guess is, and I will return to this when discussing “time,” that this relative autonomy also involved a *multiplicity* of time; that is, a multiplicity of local incidents on the underground that had their own temporal existences yet that potentially effected one another. With regard to the encounters that I observed in *Work and Play*, some had this resiliency, while others did not; yet in so many of them the irregular, that is, variation, was quite common. Most likely one should understand the generation of variation as elemental to human social life (as it is to biological life more generally) and, so, to consider regularity in human existence as exceptional and as an ongoing struggle to attain some sort of steadiness (for an earlier statement relating social life to a premise of indeterminacy see Moore 1975: 221, 233).

Though interaction during encounters generated variation, this was not yet the emergence of difference. Emergence was immanent, though the great bulk of variation was ignored by workshop members and only some variants, a few, were disentangled, elaborated and made into the reality of difference. Gregory Bateson’s maxim that a difference to be a difference has to make a difference was most relevant. In discussing encounters I realized that they varied in their capacities to sustain focused interaction, and that these capacities were no less emergent properties of encounters even as these themselves were emerging. This pointed toward ways of thinking that were within me though not yet with me, not for some years. To wit: that emergent forms of social existence differed in their capacity to sustain certain kinds of *life* and *living* within their forming; that this was related to the kinds of complexity that

emergent forms developed within themselves; and that the more complex formings were greater than the sum of their parts and could not be reduced to these. In other words, encounters that developed more complex interiors were more sustainable in part because the interaction of participants was shaped by the emergent encounter. One could say that the encounter as it formed began to *enfold* the participants within itself, rather than their fully directing the encounter through individual choices and decisions.⁸ Yet this too did not give me understanding of the ongoing formation of variation.

One of the few anthropologists at the time who for me exemplified a concern with questions of emergence and movement in social ordering was Victor Turner (another was Bruce Kapferer [see especially Kapferer 1972]). Yet Turner also exemplified difficulties that I had even with an anthropology that conceptualized movement yet that did not let go of points of rest and stability that often were (and are) called “structure” and the like. Doing a social structural kind of analysis amounts to a start . . . stop . . . start . . . stop anthropology. Stop: and set up the *hard* contrasts. Start: and activate the hard contrasts in relation to one another, calling processual that which moves *softly* amongst them. Stop: . . . and so forth. This kind of setup implies that the continual movement of the social within itself has to be frozen, has to be stilled in certain of its aspects so that the movement of other aspects can be attended to, an “all other things being equal” rendition of social ordering (that never exists in social life; see also Handelman 2007a). Simply put, the entirety is too complex and has to be simplified so that particular aspects can be isolated for analysis. Call this “methodological reductionism.”⁹ This entails a theorizing that rationalizes points or levels of rest as “structure,” even as other points become vectors of “process.” Turner, whom I cherished personally and professionally, was not radical enough in conceptualizing the very movement itself of emergence in dynamic terms, though at the time I did not phrase my reservations in this way. I should point out that what I am calling points of rest/structure are critical to our academic understandings of that which we call, in these and other terms, continuity *and* change, in which continuity is the expected and, even today, change is out of the ordinary if not necessarily problematic. However the critical positioning likely is that the generation of variation is continuous while the problematic is discovering how variation turns into change.

The quantum physicist and feminist, Karen Barad (2010: 249, see also 2007), asks: “How much of our understanding of the nature of change has been and continues to be caught up in the notion of continuity?” such that there is a “presumed radical disjuncture between continuity and discontinuity,” a division that parallels that of the “stop-start” of movement between structure and process that I indicated above. This kind of distinction over-reifies both continuity and discontinuity, another phrasing of rapid change. From encounters, though so micro-scale, I began to understand a little that it is indeed the potential for change through the ongoing emergence of variation that is continuous, and that a good deal of this potential is generated *within* forms that emerge rather than from external impetuses. This pointed me toward emergence

as continuous and to the within-ness of the emergence of form. This understanding of emergence differed from its general usage in complexity theory and the sciences as the appearance of an entirely new phenomenon that reorganizes any configuration that it appears within. That usage of emergence is closer to a singularity, as this is used in Chapter Three, this volume.

In 1977 Turner published a pathbreaking essay entitled, “Process, System, and Symbol: A New Anthropological Synthesis.” There he argued that “culture has to be seen as processual because it emerges in interaction and imposes meaning on the . . . systems (also dynamic) with which it interacts” (Turner 1977: 63). Turner understood culture as processual because “it” entailed “an endless series of negotiations among actors about the assignment of meaning . . .,” and because these negotiations never were completed (*ibid.*). He added that, “social interaction generates an emergent social reality distinct from and external to that of the individuals who produce it” (*ibid.*). Turner’s position here was not distant from that which I have outlined in earlier paragraphs. Yet he refused to part from “structure,” arguing that, “process is intimately bound up with structure and that an adequate analysis of social life necessitates a rigorous consideration of the relation between them” (Turner 1977: 65). When discussing time I will suggest that this sense of “structure” is in itself the equivalent of the movement of slow time while “process” in itself is the equivalent of the movement of time faster. To put this more directly: “structure” is a constellation of slow-time movement, and “process” a constellation of fast-time movement, but *all* move *all* the time, though at different speeds through variable intensities, while speed and intensity of course also shift and change.¹⁰ This is consequential for how long (if ever) we may have firm footing, as it were, through which to stand.

An emphasis on emergence in the forming of encounters raises the issue of whether this movement tends toward the linear or the nonlinear. One can question whether this issue is at all relevant to the organization of the social, belonging more to mathematics and to the physical sciences from whence it was taken. I think it is relevant. The historian, Alan Beyerchen (1992/93: 62) comments that: “Nonlinear phenomena are . . . usually regarded as recalcitrant misfits in our catalogue of norms, although they are actually more prevalent than phenomena that conform to the rules of linearity. This can seriously distort perceptions of what is central and what is marginal . . .” Linear progression applies most when the reality of social ordering is *ultimately* (and *only* ultimately) stable (is there such a state of being?). The drive or pull to linearity (though rarely its full actualization) is evident wherever bureaucratic logic (see Chapter Four, this volume) is in use. Thus Michael King (1993) points to the strong *physis*,¹¹ the internal drive, in western (and other) legal systems to achieve juridical finality that is rendered as definitive, categorical decisions of “guilt” or “innocence” (rather than one of guilt *and* innocence, as may be the case in a variety of “nonwestern” judicial setups).¹² Yet in most everyday realities the irregular is regular, as the Japanese cybernetic engineers put this;¹³ even though in American (and Israeli) social orderings (and elsewhere) Harold Garfinkel’s (1967) “etc. clause” bridges the

bottomless pit of interpretations of reality, enabling tacit knowledge (Polanyi 1958) to glide over many of the immanent, interpretive pitfalls of everyday life.

In the workshops, encounters that broke up quickly over some disagreement, over the expression of emotions that were painful, or over a history of rawness between the participants were closer to linearity in their emergent organization and progression. That is, these encounters lacked any self-correction as they proceeded. Ideas like self-correction again come from systems theory though here I am not referring to systems but rather to trajectories of emergence through which encounters embraced the participants within their emergent forms. Without any sort of self-correction the trajectory tended strongly toward the linear with a distinct lack of complexity as to how the encounter moved forward and crashed. When there was feedback, or, more accurately, degrees of curvature, complexity might have emerged and the encounter ramified, tending toward the nonlinear in the growth of its potential to sustain itself and to move in a multiplicity of trajectories.

In other terms, the contrast here between linear and nonlinear is that of the difference between a straight line (with minimal volume) and a curve (that is voluminous), as I put this in the introduction to *Ritual in Its Own Right*. Curvature and volume are critical to the interior growth of complexity and to its relative sustainability. Feedback *curves* back into the very trajectory of emergence through which it comes forth even as that trajectory moves forward.¹⁴ Within the voluminosity of curving, the forming of form turns toward itself from within itself, opening time-space for activity that had not existed before the encounter began. This becomes even more salient if we recognize that as curving creates volume within itself this volume creates (or rather, *is*) depth, and depth is time-full. Within this depth forming may curl within itself opening to a form potentially developing its own time within itself—to wit, a local time, and indeed a local time that may be out of sync with time outside this particular folding (local time will be discussed in Part Two of this chapter).

Consider the following encounter in which the jazz vocalist, Nina Simone, meets her guitarist-to-be, Al Schackman, as Simone (1992) describes this in her memoir, *I Put a Spell on You*: “I called the title of the first song, ‘Little Girl Blue.’ What happened next was one of the most amazing moments in my entire life. Al was right there with me from the first moment, as if we had been playing together all our lives. It was more than that even; it was as if we were one instrument split in two. We played Bach-type tunes for hours, and all the way through we hardly dared look at each other for fear that the whole thing would come tumbling down and we wouldn’t be able to pick it up again.” The two interact, and Simone says this was as if one instrument split in two; though the emergent property of the encounter is that of two instruments becoming one, splitting into two related through synecdoche, without the mediation of symbol, indeed a relatedness that may be called unmediated immediateness.¹⁵

Playing improv the two are enfolded by their encounter as it is emerging; and the encounter curves them into itself, opening volume, opening depth. And what happens to time? The two enter into what Alfred Schutz called “concert time” (Schutz

1962–66), within which time becomes different without going away. Or, more accurately, linear, metric time turns into the “local time” of the Simone-Schackman encounter, perhaps through changing rhythms and intensities. Thus their local time became nonlinear, unpredictable, without border or direction, enabling the two artists to continue their playful improv “for hours.” What comes first here, time or sociality? Is this a problem of the chicken and the egg? Without the change in the quality of time the encounter could not have emerged as it did. Without the budding sociality between the musicians, time would not have changed. The two cannot be separated, yet in my thinking the quality of time is at the very least an *enabler* here of the sociality that emerged.

In recasting my doctoral thesis on the workshops into *Work and Play* the significance of the confluence of curving, volume, depth, and (local) time in the emergence of form eluded me. Obviously, the encounter proceeded until it ceased to do so. Yet *how* did the emergent form hold itself together, to the extent that it did, while it existed? The usual understanding of this question was to phrase it in terms of a negotiated or constructed social order, of give-and-take, of exchange or transaction, interpreted by and managed by the participants mainly as individuals with agency, and/or as members of networks, and/or as representations of a cultural category or social unit. One way or another the phenomenological intentionality of social persons was at the forefront. By framing epistemological understanding of the question in this way the idea that form *qua* form, unless referenced in terms of highly embedded and repetitive forms such as “ritual” and the like, could have formative strength very rarely came to the fore.¹⁶ In more or less accepting this I did not really catch the consequences of the potential in-turning of the emergence of form, and in not doing so I missed the critical consequences of this in-turning. In *Models and Mirrors* I started to address this problematic.

Models and Mirrors and Ritual in Its Own Right: The Nuances of Folding

Models and Mirrors was conceived as a critique of the elementary idea in the social sciences and in religious studies that a multitude of social and cultural forms, temporary though often recurring, are all placed theoretically under the same roof called “ritual,” when in terms of the logics of their interior organization they are constituted in radically different ways that effect and affect what these events do and how they do this (Chapter One; see also Handelman 2006a). By grouping this multitude of forms under the same conceptual rubric and assuming that every social-cultural order has occasions that should be called “ritual,” and that all these occasions across all societies have attributes in common that make these occasions “ritual,” scholars continue to commit Whitehead’s fallacy of misplaced concreteness. They concretize the *functions* these events are assumed to have for social orders, thereby *a priori* establishing the relationships these events have to the ordering of the social-cultural.

Instead, I suggested concretizing the phenomenal-ness—or, to use a more accurate neologism, the phenomenality—of the forms of such occasions, analyzing their interior workings in order to understand their relationships to the social orders in which they are found. In other words, I suggested reversing the usual anthropological presumption that the interiors of all “ritual” occasions reflected and represented the social-cultural orders within which they are found. Instead of this, I argued, begin with the phenomenal form of the event and, within this, discover its relationship to social-cultural ordering (and, so, too, the Peircean logic of abduction might be awakened). I have been accused of an implicit functionalism in these formulations, yet I find the premises regarding “ritual” mentioned above to be far more functionalist, and explicitly so, than those premises I used to study public events and other phenomenal forms.

In Chapter Two of *Models and Mirrors* I argued how logics of organization differ among “rituals,” with profound consequences for the relationships between these events and the social orders that enable their existence. By beginning analysis with the phenomenal form I showed that certain forms do intentional transformation (i.e., make radical change) within themselves *through* the organization of their interior processes. These phenomenal forms may have degrees of self-correction shaped into their forms that enable them to adhere quite closely to the purposes for which they were activated. However other forms do little more than mirror or represent selected thematics of their socio-cultural surrounds. These latter forms are put together often using what I later called bureaucratic logic (this volume, Chapter Four), and usually have little or nothing in common with “ritual” events that do radical change within and through themselves.

In *Models and Mirrors* I did not use the conceptual language of emergence since most of the phenomenal forms I reanalyzed were based on the ethnography of others, and these studies were primarily synchronic. Nonetheless, in beginning with the interiors of forms, and thinking of how cultural and social forms may be held together from within themselves, I was able to argue in greater detail that forms with more complex interior organization are relatively more self-sustainable than are simpler forms. Moreover, I proposed that greater interior complexity goes together with degrees of separation from the social surround. By this I meant that interior complexity of phenomenal forms goes together with relatively greater autonomy from their social surrounds. Interior complexity endows these forms with greater resilience against external pressures. This idea of (always) temporary, relative autonomy from the social surround was heretical in anthropology (and I think still is) yet it enabled me to propose a different understanding of rituals that are organized intentionally and interiorly to directly accomplish particular outcomes within and through their own workings.¹⁷ The capacity of such forms to activate controlled trajectories that may be causal is due in no small measure to their relative autonomy from their social surrounds. In archaic and tribal social orderings acts to influence cosmic ordering were largely limited to events precariously organized to control causality.¹⁸

The introduction to *Ritual in Its Own Right* was conceived when I was influenced by Deleuze's (1993) thinking on the fold in *The Fold: Leibniz and the Baroque*. Folding, as Deleuze (1995: 156–57) pointed out, is everywhere:

Straight lines are all alike, but folds vary, and all folding proceeds by differentiation. No two things are folded in the same way Folds are in this sense everywhere, without the fold being universal. It's a "differentiator," a "differential" The concept of fold is always something *singular*, and can only get anywhere by varying, branching out, taking new forms. You've only . . . to see and touch mountains as formed by their folding, for them to lose their solidity, and for millennia to turn back into what they are, not something permanent but *time* in its pure state, pliability. There's nothing more unsettling than the continual movement of something that seems fixed. (My emphases, echoed at numerous junctures by Michel Serres; e.g., Serres 1998: 107–8)

I modified Deleuze's conception of the fold for my purposes by reflecting on forming form as the distance between the straight line and the curve.¹⁹ As I wrote then, "The movement from the line to the curve is that of conditions of self-organization. Curving, the line becomes self-referential, opening space, acquiring depth. In relating to itself, the curve organizes itself in terms of itself, thereby enabling its existential and phenomenal self-organization as different from whatever exists outside the curve, while including this distinction within its self-referentiality" (Handelman 2005a: 14). Without the recursiveness of curvature, in other words of self-referentiality, phenomenal social forms cannot survive, as Bateson (1977: 242) implied.²⁰

Through folding I furthered the argument on phenomenal form by expressly addressing what I called the forming of form, focusing now on the practice of form taking shape, folding in particular situations, and on the emergence of complexity within the folding itself. Interestingly, social form—as in the little encounter—is initiated by individual agency, yet if the form emerges complexly then the shaping it acquires contains to different degrees its own Castoriadian *physis* (Castoriades 1997: 331, see note 8), its own impetus toward a kind of completion (though this is not necessarily complete in any hermetic or hermeneutic sense). I suggested that while no social form "has the autonomous existence of absolute difference . . . without minimal self-propelling difference, no social form exists as it does This *propensity* to self-organization is present in the most mundane of everyday behavior and interaction" (Handelman 2005a: 13). One can say that the forming of *form-in-itself*, as I noted earlier, speaks to the degrees to which the form may hold itself together from within itself, and to the form's interior sustainability and so to its precarity; while as this form is activated within itself, doing whatever it does, it becomes *form-for-itself*, an active force within the world. Thus I am saying indirectly that some phenomenal forms may be endowed by their creators with their own intentionality; and if these

forms are organized interiorly to accomplish this purposiveness then it may be more problematic for their practitioners to disrupt them.

In *Work and Play* I had thought that complexity developed through feedback, Norbert Wiener's cybernetic term. Later I recognized that feedback has the shallow thinness and flatness of a line turning back on its own linearity. Needed was a much fuller sense of form as volume potentially filling and fulfilling itself within itself. The idea of the "fold" supplied this sense of form curving into itself, folding into and enfolding itself as it emerges into fullness. Form curving into itself makes form self-referencing, self-reflexive. The self-referentiality of folding is critical to enabling the fold to contain itself, and so, too, to enabling the fold to open into volume within itself, and therefore critical to volume opening into depth within the fold. As noted, this depth is time. Put otherwise, the self-intersection of the fold demands *duration*. Folding can only occur through time, indeed *as time*, as time opens within the depth of the fold.²¹

Folding offered another improvement on "feedback." Through folding I could think in terms of *degrees of curving*, *degrees of interiority*, such that a fold can be understood in terms of degrees of closure, from the relatively open (and perhaps shallower) to the more fully self-intersecting, self-enclosing fold. By contrast, feedback requires the full return of a feedback loop into itself. Either there is feedback or there isn't. Although I did not go in this direction, folding better delineates the range of events and their interior complexities that I put forward in *Models and Mirrors* (Chapter Two). So, too, with regard to the resemblance of the interior of a fold to its social surround. In the instance of a more fully self-intersecting fold, the interior organization of the fold need have only a limited resemblance to the exterior environment (even as it folds elements or configurations of its surround into itself in order to affect these [Handelman 2005a: 11]). This is critical to my argument that certain events can be shaped as relatively autonomous from their exterior social surround, and that this self-enclosure enables these events to act on their exteriors in ways that are not simply representations of these surrounds. In other words, the interior of such a fold need not be reducible to the macro-order outside the fold. On the one hand the more fully self-intersecting a fold potentially is, the more relatively discontinuous is the fold from its social surround even as it acts on and through this, while on the other its self-referentiality as a more autonomous unit, one with greater own-ness, is heightened.

Dynamics of Form—Banana Time

I turn here to an instance of forming form through folding and self-organization that heads this discussion toward the movement of form that is time-full and dynamic. The ethnographic setting is a small industrial workshop within an American factory during the 1950s.²² Three middle-aged men, George, Ike, and Sammy, worked in a room on separate machines that punched-out material used elsewhere in the factory.

In terms of the process of production there was no necessary contact amongst them, and they could have become social isolates without this interfering with their work. One can characterize this as three linear trajectories of activity that did not necessarily intersect. Nonetheless there was interaction and a good deal of this amongst the three. What is interesting is the form that emerged from their interaction and how this was put together.

George and Ike came to work before Sammy and the two shared a pot of coffee made on George's hotplate. The ethnographer, Donald Roy, called this occasion "coffee time." After Sammy arrived, he declared "peach time," took out two peaches from his bag and divided the two among the three workers (note the difficulty here of dividing two peaches into three equal portions). Sammy daily brought a banana to work. Following the sharing of peach time, Ike stole the banana, yelled, "banana time," and gulped down the fruit. Sammy remonstrated with Ike, as did George. As Sammy continued to dress down Ike, the latter retaliated by opening wide the window facing Sammy's machine, letting in the cold air. Sammy bitterly complained that he would "catch a cold," and closed the window. Yet now George encouraged Ike against Sammy. The ethnographer termed this incident, "window time." George's alarm clock kept the work schedule and the alarm rang when lunchtime came. Ike stealthily turned the clock ahead by some minutes so that the three would break for lunch earlier. George of course discovered this and remonstrated with Ike. The ethnographer called this incident, "lunch time." Every afternoon a worker came to collect the output done by the three during that day. They told him of that day's adventures and all three quarreled with one another. The ethnographer called this "pick-up time." Later in the afternoon George and Ike ate pickled fish together, provided by Ike. This was "fish time." The series of times ended in the late afternoon when the three took turns going to the Coca-Cola machine in another section of the factory to buy drinks for himself and the others. This was "coke time."

All of the "times" described by the ethnographer emerged from the practice of daily life—none were called for by the process of production in the workshop. Moreover, while the process of production was linear the emergent "times" were not. Through these "times" the workers curved the morning into the afternoon such that the curve enclosed them almost fully during the working day. Both ends of the curve—the early morning and late afternoon—were made of "times" that resonated amongst themselves. All were occasions of the sharing of sustenance, of drink and food—in the early morning coffee time and peach time; in the late afternoon fish time and coke time. The morning times of sharing were created to first include George and Ike who came to work earlier, and then to include all three when Sammy entered, so that the three cooperated in food-sharing with one another. At the close of the curve this was done in reverse. With fish-time George and Ike first shared food and then with coke time all three shared buying Coca-Colas for one another.

Parallel to the straight, linear trajectories of production the workers created a curve that intersected with itself and that enclosed the workers through the working

day. As far as we know there was no reference to any factor in the social environment outside of this production space that would help explain the curvature that emerged within it. The curve opened volume within itself, one given to sociality. This volume was deep, containing eight distinct times that were repeated during every working day. And, so, this depth was organized through duration: the times were arranged temporally in a particular order of occurrence. With the depth of its interior volume this curve became a fold that enwrapped the three workers, opening a recursive time-space, that of sociality and the relational, that did not exist beforehand. It is no less important to emphasize that this phenomenon—the forming of form—emerged out of their practice and enfolded them reflexively within its emergent form. Reflexivity imbues whatever is enfolded with identity; in this instance reflexivity endowed the three workers with intense sociality toward one another.

The curving of this folding generated complexity in its organization. Inside the depth of this fold of sharing, solidarity, and strong relationships the three workers were in disharmony with one another. Within the curve of coffee time, peach time, fish time, and coke time the three shared sustenance and sociability; but the three argued and fought with one another during banana time, window time, lunch time, and pickup time. Daily recurring times of conflict were folded inside daily recurring times of sharing and solidarity—the increasing complexity of a fold within a fold. Thus the solidarity of the fold (that of times of sharing and reciprocity) contained the disharmony of the yet more interior fold (that of times of conflict).²³ One may argue that the very control of conflict encourages the generation of conflict that is controlled. Perhaps the fold acquires teleonomic properties as the fold regenerates itself over and again. In effect the three workers reflexively tested their relationships with one another over and over through the duration of times that curled into their sequencing and out again—times of sharing that curved into times of conflict that curled outward again into times of sharing.²⁴

We have something of a test of that which I am arguing because of what happened when the folding of times frayed, and its curvature straightened wholly into parallel lines of production. Sammy went on vacation (the triad became a dyad) and the relationship between George and Ike collapsed after Ike accidentally insulted George. For the next two weeks George and Ike operated their machines with hardly a word passing between them. Then Sammy returned to work and the straight lines recurved and self-intersected, resurrecting the fold through the following order of events: One afternoon George and Ike ate George's pickled fish together. Later that same afternoon Ike and Sammy began to kid one another, and Ike began to sing. In the following days the times of disharmony returned, folded into those of shared sustenance and cooperation. The resurrected fold took the recursive form of its predecessor, returning as another version of itself since its times somewhat differed. In particular an entirely new "time" emerged, one that clearly indexed Ike's error that had led to the collapse of the fold. Donald Roy describes this new time as follows: "Ike broke wind [farted], and put his head in his hands on the [work] block as Sammy grabbed a rod

and made a mock rush to open the window. He beat Ike on the head, and George threw some water on him [Ike], playfully.”

What happened here? The folding curvedness of the working day broke down; the curve straightening, becoming nonreflexive. This difference indeed made a difference. Without reflexivity sociality disappeared. Then Sammy returned and some sort of reorganization occurred. Yet I would speak of this as a still existing residue of self-organizing qualities in the workshop. Why self-organization? Because the original fold was highly self-reflexive for the three participants—they belonged together, had a togetherness of identity, and were aware of their joint mutuality. So that when, after the rupture, they were together again their reflexiveness of themselves as a unit of some kind again came to the fore. Through the three the patterning of the fold self-organized anew. Self-organization followed a change in form, as it often seems to do. The reflexiveness of the refolding curve comes through clearly in the addition of the new “time” to the self-organization of times—the new time undoubtedly self-references the breakdown of the folding curve (Ike farts, committing a *faux pas*) and includes its own self-correction (the chastising of Ike by George and Sammy, accompanied by Ike’s apologetic demeanor).

During this case, linearity turns into nonlinearity turns into linearity turns into nonlinearity . . . and each of these shifts is of great significance for the forming of form that holds the three participants together (and doesn’t) in their sociality and social relationships. Just because we as anthropologists are unaccustomed to thinking in such terms certainly (with all of the qualifications that indeed attend to certainty) suggests that we must not exclude them if they demonstrate just how dynamic is the human (always). In discussing time further on I will point to how important nonlinearity is to the human and that it enables movement that is so human.

There is a very delicate trajectory here during the forming of form that follows where agency is situated and how it is redistributed. It is a near given in Western social science (including anthropology) that agency is first and foremost located in the consciousness of the individual, and that it is active individuals who make choices and decisions. In this regard what I am calling the forming of form would be understood as the outcome of the choices and decisions of individuals. So, too, a near-standard social critique of self-organization in complexity theory is that it does not relate to human consciousness and, so, not to human agency. Thus, as Forbes-Pitt (2013: 107) comments on the “self” in self-organization, “‘self’ makes no reference to *individual* system elements, or to any kind of consciousness, it refers to the *system* under investigation” and to the dynamics of the interiority of the system—this is its *self*-organization. This in contrast to the “self” as it is used in social science—the embodied self of phenomenology and culture, the “self” whose human qualities emerge through that which Sheets-Johnstone (1999) calls “the primacy of movement.” These and other perspectives position the location of “self” within the embodied individual, a self expressed through interaction amongst individuals. Even as anthropologists have modified this to refer to “cultural selves,” to how selves in a certain cultural milieu are constituted

with different ontologies and qualities thereof than those in other milieus, nonetheless the location of qualities of “self” are entirely located in the acting individual. It is first and foremost the individual who has and who is responsible for agency.

In order to propose a modification of agency as the always primary prerogative of the individual self during the forming of form I make a brief detour here. Bialecki and Daswani (2015: 274) point to the importance of questioning “the Western assumptions of the bounded, singular, individual self, as the main form of [culturally] imagining the person.” Then, are there other ways in the world of inhabiting embodiment in relation to other embodiments that are unlike (or overlap with) the dominant Western assumption of the self-person? McKim Marriott’s shaping of the “dividual” in South India was foundational in this respect (see Marriott 1989 for an overview of thinking on this and related subjects).²⁵ No less significant was Valentine Daniels’s (1984) research in Tamil Nadu, demonstrating just how much of Marriott’s argument on the exchange of elements and qualities of life among persons, among persons and their natal earth, among persons and their homes, and so forth, occurs through the relatedness of interiorities that in my terms are intra-connected rather than interconnected. All domains in which life inheres—including the human, the deities, the apparently inanimate (soft matter, hard matter), and the moving (flora, water, wind)—exchange the elements and qualities through which life is constituted. This is that which enables the living cosmos.

In the logic of the Western conception of one self per individual interaction between individuals leaves from the interior of one individual to his exterior, passes over to the exterior of the other, enters the interior of this other where it is interpreted and responded to in the reverse order of its arrival. These inter-actional passages between the interiors and exteriors of persons are somewhat alien to South Indian self-personhood. The implications potentially are profound: for example, the elementary flows of life-substances and qualities in South India are in the first instance inherently *social*—cosmos must be social in its very existence, and any blockage of these (social) flows is fundamentally anti-social, indeed the extermination of the social in its worst, destructive sense. The South Indian social is not socially *constructed*, is not a social contract like the Western Hobbesian separation of individual and social order in order to put the latter together through the former; nor is it likely learned through childhood in quite the way suggested by the process philosophy of G. H. Mead and others, in terms of the development of self through taking the role of the other and seeing oneself through the eyes of the other, and so forth.²⁶ Given its intense intra-actions and intra-changes the South Indian cosmos is, one can say, naturally social.

To take an example of the blockage of flow mentioned above, South Indian sorcery results not merely from possession that shuts in and cuts off the individual from the sociality of her or his fellow human beings, resulting in extreme isolation. Rather, South Indian sorcery blocks the elementary intra-actional flows of living among persons and among all aspects of their total environments, and these flows like the cosmos they enliven are inherently social. The result is utterly destructive stasis for the

ensorcelled selfness yet, more than this, the damage of stasis for all those who were in continuous intra-actional flow with the afflicted. (For an outline of this argument see Handelman and Shulman 2004: 210–14.)

Where is agency, or more to the point *when* is agency, as the curve straightens and the fold implodes in the workshop? The three did not consciously design and plan the curve, the order of its contents, nor the symmetry and significance of its self-referential intersection. One can say that as the curve emerged through practice the three endowed direction, impetus, and intensities to its folding. Their curve of sociality had direction, moving into self-intersection near the end of the working day. Folding, their curve opened time-space that had not existed beforehand. Within its enfolding each daily “time” or event of the curve indexed its impetus toward the next. Curving moved through moments of rising and lessening intensity of activity that gave to it an unnamed yet definite self-identity. Thus once a logic of curving and folding emerged in the shop, the way through which folding shaped the activities within it, the impulses and pulsations it gave to these activities, continued without the always active and ongoing need for human agency.

I surmise that in some way and to some degree the moving, folding curve existed in its own right as a fragile form, a transient phenomenon. One should not forget that form is force. That form is a line or trajectory of force, of forcefulness. And that, though neither concretized nor materialized in any common-sense way, when the force of form is absent after it has been present this absence is felt. This is to say that in the workshop the folding of form had some kind of agency—though only local agency—that self-organized *the lives of the three workers in the workshop who were enfolded within it*; and, moreover, that the force of the form could not be obtained by totaling together the various activities of the three. Put simply, the three created a social form that was vaster and deeper than themselves and their social relationships with one another in the shop. Form-in-itself, form existing, became form-for-itself, form-as-force in action through duration.

Yet what is concreteness? Anthropology has consistently concretized the physically invisible in order to presume the existence of the social and of cultural beliefs, ideas, norms, values, social relationships, community, social network, exchange, cosmologies, and on and on. It is these concretizations that largely enable social-cultural anthropology to exist as the kind of academic discipline that it is. Moreover, once concretized all of the above are assumed to exist even as particular concretizations are critiqued, and some fall out of favor as others rise in fashion. Concretizations have solidity, positions of rest, points of anchorage. They may even be felt as material. However, the sense of forming form that I am suggesting is anything but a point of rest or an anchorage. The forms I wrote of in *Work and Play*, in portions of *Models and Mirrors*, and in the introduction to *Ritual in Its Own Right*, are emergent and self-organizing movements, and often ones of force and duration.

Thus consider the following three examples of forming and folding in relation to concreteness. Diana Espirito Santo (2015) offers an alternative to the usual emphasis

on concreteness in anthropology in her discussion of “knowledge” among practitioners of Cuban *espiritismo*. Knowledge is fluid (*fluido*), independent of cognition, existing outside of persons, including practitioners of *espiritismo*. Perhaps knowledge is ontogenic potentiality. Using words, practitioners give thingness to *fluido*, to latent knowledge. Interacting with this flow of potentiality through words, mediums instigate “the self-organization and emergence of knowledge as new cosmology comes to the fore” (2015: 588). *Fluido* emerges as form that self-organizes as knowledge. Moreover, knowledge-form is substantive and is *seen* by the medium but *not* as a representation of knowledge nor as a metaphor; but rather, that “knowledge [itself] is . . . a moving, mutable, and emergent form of *seeing* itself” (2015: 589).

Bar-On Cohen (2009) writes of the *kibadachi* (rider’s stance) exercise in Japanese Shotokan karate. To enter the rider’s stance the participants stand in a circle, bend and flex their knees as a rider would atop a horse, and hold this position without moving. After no more than a few minutes the stance becomes grueling, torturous and painful. Yet the experienced participants hold the rider position for even ninety minutes. This strongly implies that some sort of forming of form emerges within the bodies of the participants and that this forming nonverbally intra-connects and relates together all the bodies in the participatory circle, enabling them to withstand the agony of the exercise. Yet this forming is not set, is not a “structure,” for it seems to continuously circulate through the participants. In a sense this forming is that of a loop whose moving through the participants is ongoing and recursive. One can say that this emergent forming enables the bodies of the participants to become folded *into* one another, or perhaps even folded *through* one another; and that this is their intra-connectedness, their intimate, simultaneous sharing of painful interior exertion that gives them the steadiness and steadfastness to endure as more than particular individuals and as more than a group of individuals. Yet by saying that these persons are folded into one another I am insisting that this process is one of a joining through involution and not one of encompassment.²⁷

Deborah Bird Rose discusses dance in ritual among the Aboriginal peoples of the Victoria River District in Australia. Bird Rose (2000: 292–93) writes,

Thus I learned that the body connects earth and air when you dance. The call comes from deep within and is propelled by the impact of your feet on the ground. It comes to feel as if the ground itself propels your voice into the night sky. That call starts somewhere below your feet and ends somewhere out in the world. The call is a motion, a sound wave of connection. You are dancing the earth, and the earth is dancing you, and so perhaps you are motion . . . a wave of connection . . . who is the dancer and who is the dance? . . . I find that [recursively] both are the dancer and the danced.

In my terms, the dancer’s feet are folding into the ground, the ground folding into the feet, perhaps folding through each other, perhaps becoming a single folding moving with oneness, perhaps in Barad’s terms entangling, creating greater complexity, as

does the forming of intra-folding among participants during *kibadachi*, and through the self-organizing of fluid knowledge-forming in Cuban *spiritismo*. All are concrete, all are not. The distinction is a red herring. The cleavage between objective and subjective loses its presumed distinctiveness once we recognize that motion and movement are continuously folding and shaping human beings, while points of rest and anchorage are kinds of motion in themselves and, so, related to duration and, so, to time.

An additional word on the workshop. After the fall the three workers re-created their enfolding self-intersecting sociality with its emotional rhythmic pulsation of rising and falling intensities and dense moments (of Times and time). This re-formed fold bore a strong resemblance to the previous one. One could ascribe this to memory, habit, micro-culture and the like, yet all of these are merely summarizing thoughts and weak explanations. Something more actively creative had happened. I am tempted to call this a moment of self-creation, of autopoiesis, of the unspoken synchronization of acts that index the emergence of form, now the three recreating the folding logic of their initial creation while using different materials for a similar forming. Here the three have a sense of selfness together, one of (unspoken) self-referentiality, of identity.²⁸

Within the workshop, production time continued as before, linear, shallow, even in tone, moving from the beginning of the working day to its end. Yet, within the forming of the fold, time shifted from the linear toward the recursive, the working day beginning and ending in the spirit of reflexive reciprocity and good fellowship. The usual way of dealing with this kind of shift in anthropology would be to say that the structuring of interaction in the workshop changed; that the workers positioned “times” throughout the workday, and that this gave to the time and the timing of “times” a subjective, experiential circularity even as objective, linear time dominated the length and substance of the workday.

However my sense is that the change is not structural, not a matter of the fixing of positions, of “times,” but one of changing movement, of a different kind of temporal motion that *enables* dynamically the arrangement of “times”; temporal motion that is recursive and, so, is self-reflexive. I entertain the likelihood that time curved around the workers as they began to practice sociality and its reciprocalness, a folding opened the depth of time-space for the “times” that the workers created, endowing recursive time within the folding with rhythmic pulsation through the intensities of the “times.” If so, then it is time as such that makes or enables the folding of local motion, thereby playing a significant role in the forming of local phenomenal forms.

Thus one can argue for the *multiplicity* of local phenomenal forms through the *multiplicity* of temporal movements without necessarily beginning from the premise that different cultures are likely to have different interpretations and understandings of time as a single dimension. Both the relativism of Nancy Munn’s (1992) review of the cultural anthropology of time and Alfred Gell’s (1992) use of the A-Series and B-Series time of analytic philosophy are premised on the one foundational movement of time, indeed on time as a dimension, varied in terms of interpretations of time in

different cultures and distinguished by objective and subjective perceptions of time. However if we take seriously at least some of the claims put forward by scholars of multiple ontologies then these may apply as well to time. In other words, instead of assuming (indeed, being able to assume) that there is always a single foundational movement of time, whether that of time measured metrically or time that is culturally perceived and subjectively felt, we should entertain the potentiality of a multiplicity of time movements that become more dominant or fade toward latency depending upon what manner of time movement enables certain kinds of actions and endeavors to become active. My guess is that the multiplicity of temporal movements will enable or will produce a multiplicity of phenomenal forms.

All of this requires discussion of temporality in the forming and folding of form. And this raises the question once more of whether time is a passive passage or a dynamic force, and what this says about the understanding of dynamics as time, through time. I think a beginning can be sought in the physical sciences, and I emphasize once more that I am not concerned with the science and its validity as such but rather with how the way its logics can give us an inkling into the relationship between time and organic life, including the human.

Part II: Folding Time

If the known laws of physics are extrapolated beyond
where they are valid, [then] where they are valid there
is a singularity.

—Graffiti on a bus stop sign, Mivtza Kadesh Street, Jerusalem,
29 July 2015

The Physical Time of the Universe Is Linear and Irreversible

Here the perspective on time of Ilya Prigogine—a Nobel laureate for his research on non-equilibrium thermodynamics and conditions far from equilibrium—is illuminating. Prigogine’s theorizing is especially persuasive to me because he links the evolution of the physical universe to the emergence of organic life, aligning the time of the organic with the time of the physical universe. I will suggest that it is with the existence of organic life and its dynamics of reproduction that the folding of temporal movement within phenomenal forms becomes especially salient. Furthermore, with the emergence of the social as the primary human form of organization the dynamics of social reproduction are tied intimately to generational, biological reproduction. Folding is integral both to biological time and to social time, especially as the movements of the biological and the social—perhaps most prominently through different sorts of reproduction—diverge from that of physical time. This difference is critical to an understanding of social ordering as always out of sync with itself even as it tries to reproduce itself, an ongoing breach within social ordering that may be irreparable.

Prigogine argues that “time precedes the universe” (Grana 2016: 231), and thus precedes any and all matter, inorganic and organic. In his theory there was no singularity like the Big Bang that created the universe. Instead there was a primordial, empty (quantum), unstable universe in which time was latent yet irreversible. In a sense this was a virtual universe that contained, or perhaps was, pure potentiality, the potential existence of matter, yet without matter. This unstable void broke down and substance, matter, came into existence, and with matter, so, too, did entropy. Matter moved within itself and within the universe as the bearer of entropy (Magnani 2016: 250). Time actualized with the entropic movement of matter and time moved like an arrow, *linearly* and *irreversibly* (Prigogine and Stengers 1984). As Magnani (ibid.) comments: “The meaning of irreversibility [in physics] undergoes a radical change, since irreversibility should no longer be linked to an evolution that leads inexorably toward an inert state of the universe (thermic death), but to its birth, or perhaps to an eternal succession of universes that are born everywhere and that head toward the infinite.” In other words, rather than moving temporally toward increasing disorder and thermal death the universe moves toward increasing complexity and its concomitant issues of organization.

For our purposes here it is sufficient to emphasize that it is precisely the irreversibility of the arrow of time that makes futurity open-ended, indeterminable, unknown. Irreversible time gives to the universe a changing, historical existence. As the sociologist, Barbara Adam (1998: 214) states succinctly, Prigogine established this conception of time “as a law of nature; and with it he changed the very meaning of the nature of a scientific law . . . laws themselves come to be understood as developing; and reversibility, far from being the most fundamental aspect of nature, comes to be recognized as a product of the consciousness of the human observer.”

The evolving, entropic complexity of the universe through lengthy durations produces that which Prigogine terms conditions-far-from-equilibrium. Through these conditions the universe is in continuous emergence, the dynamics of which amplify fluctuations while ordering their disordering. Through these fluctuations time no less may develop different trajectories though continuing linearly. Nonetheless, the existence of temporal fluctuations can be considered as potential multiplicities of the movement of time. It is important to emphasize that with Prigogine’s arrow of time the multiplicities that emerge from the indeterminacy of conditions-far-from-equilibrium are not undone or corrected. Were time subjective then, hypothetically, time could be shaped as circular; and so could correct or eliminate unstable complexities that are integral to the dynamics of emergence. Instead, developments must work out the consequences of their emergence that in turn contribute to increasing complexity. Prigogine (1997: 27) stated this as follows: “Irreversible processes [associated with the arrow of time] are as real as reversible processes described by the fundamental laws of physics; they do not correspond to approximations added to the basic laws. Irreversible processes play a fundamental constructive role in nature.”²⁹

In Prigogine's thinking, organic life emerged in conditions-far-from-equilibrium. As he put this (Prigogine 1997: 26–27): “Life is possible only in a nonequilibrium universe.” To look ahead for a moment, organic life is always a fluctuation since it must reproduce and repeat itself in order to continue to exist. That is, organic life fluctuates through time that is far-from-equilibrium. Prigogine's theorizing aligns the time of the evolving universe with the time through which the organic evolves. In my understanding this implies that all forms in the universe are time-full, yet indeterminate. Nothing exists outside of or beyond time. There is no point in saying that the social and the biological are entirely removed from the physical because they are alive and not inert matter. As noted, not only does everything inorganic and organic move through time but time no less moves through everything. Yet, in “moving through” different forms of the organization of substance, time is shaped by their interiors even as forms move through time together. This implies that forms inorganic and organic have their own interior time trajectories that are, or that are synchronized with the interior movement of these forms.

In my terms, Prigogine's theorizing posits time as an ontological movement of the universe, and I emphasize here the status of the ontological. The point being that if time is ontological rather than dimensional then the status of time is likely not to change when this is considered in the world of organic life, including the human. If Prigogine's arguments have value we then can ask whether the universe would exist without time. Does the existence of the universe depend in some way on the existence of time? Or is time a passive passage? Passive in the sense that we move through time, though that which we are as human beings is not made or shaped by time as such; in other words not by time of itself. If time is merely a passive passage then we and everything else are shaped by other forces and configurations—biological, social, cultural—and we use time simply as a measure to evaluate these forces and their changes. Time then indeed is a passive, pliant medium through which interaction occurs, yet time is not accountable for interaction that itself depends on forces understood as independent of time. The physicist, Lee Smolin (2007: 256–57), in calling for physics to return to the study of time, states that physics treated time as a frozen, measurable dimension of space.

The philosopher Elizabeth Grosz (1999a: 3) calls such time a “neutral medium” in which matter and life are framed, rather than time as a dynamic force in their framing. As a neutral medium time again is cast as a dimension that is a measure of movement rather than a mover of movement. Or, *is* time perhaps a dynamic movement, indeed a mover of movement that is more than or different from thinking of time as a dimension? As the fourth dimension? Grosz (1999a: 3) points out that thinkers as disparate as Darwin, Nietzsche, Bergson, and Deleuze all understood time as a *force* of chance, randomness, open-ended-ness, becoming; and that each “conceives of *time* as *difference*.”³⁰ These emphases fit well with the fluctuations of time that emerge through conditions-far-from-equilibrium, the conditions through which organic life exists.

Newton's and Einstein's conception of time as the fourth dimension continues to dominate anthropological thinking on time. This is present in such common-sense phrasings as "the flow of time" and "time unfolding," both of which are associated with that which is called "processual anthropology" in which "process" is critical to the (historical) temporality of anthropological analysis (Hodges 2014). Anthropologists in their research seem to accept that time is the fourth dimension; and therefore that this kind of time is an absolute baseline with which to compare and contrast cultural conceptions of time among other peoples with Western objective knowledge about time. In other words, that ideas of time among other peoples, while they may have powerful effects, are culturally subjective knowledge when compared with the objective knowledge gained by Western science. Yet as the historian, H. W. Brands (1992: 506), commented: Einstein did not say that space-time "really had four dimensions. What he said was that it was for human beings to think of space and time as being a four-dimensional continuum. The universe does not have four dimensions, or three dimensions, or eleven dimensions The dimensions are simply scaffolding erected by humans trying to measure the universe."³¹

So, too, it is practical for anthropologists to assume (and likely believe) that time as the fourth dimension is no less the objective undergirding of other cultures, while they, like ourselves, may well have different, subjective, experiential realities of time. In this sense the anthropological understanding of the living of time in other cultures often is categorized as belonging to the subjective realities of those moral and social orderings rather than to the scientific, objective reality of time as a linear medium of passive passage. So, say, an event to renew the cosmos, one intimately related to the movement of time, may well have culturally meaningful experiences for the people involved, yet does this objectively re-energize cosmos?

The philosopher, Jean Gebser (quoted in Simeonov 2015: 271–72), argued that time "is not a 'di-mension,' i.e., a dividing measure, but an *a-mension*, i.e., an element free from division and measurement . . . a basic phenomenon without spatial character. It is a *quality*, whereas the measurability of the spatial dimensions lets them appear as quantities."³² As commented on in note 4, following this line of thinking the Greek preposition "a-" can liberate us from slipping over and again into incipient dualisms like that of the linear/nonlinear (see Gebser 1984: 2). Perhaps "local times" should be referred to as a-linear, enabling time potentially to move into a variety of relationships with space within different social and cultural forms. This fits with Bergson's use of the mathematician G. B. Riemann's distinction between "quantitative," or discrete, and "qualitative," or continuous, multiplicities. "Quantitative multiplicities are numerical in nature, and take the form of the one and the many: their differences are homogeneous differences of *degree*, and such multiplicities therefore can be divided without occasioning a difference in kind. By contrast, qualitative multiplicities on division create heterogeneous differences" (Hodges 2008: 409). Hodges here quotes Deleuze (1991: 38) to wit that qualitative multiplicities are "of *differences in kind* . . . that cannot be reduced to numbers."³³

Duration and the Curving of Organic Time

Prigogine's understanding of cosmic time fits well with an important proposition of Henri Bergson. After Einstein's utter disparagement of Bergson's thinking during their so-called debate of 1922 (see Canales 2015) the philosopher's theorizing was ignored until quite recently. Bergson (1992: 93) argued that: "Time is something. *Therefore it acts.* Time is what hinders everything from being given at once. It retards, or rather it is retardation. It must, therefore, be elaboration. Would it not then be a vehicle of creation and of choice? Would not the existence of time prove that there is indetermination in things? Would not time be that indetermination itself?" [my emphasis]. To paraphrase: Time exists to stop everything from happening at once. By banishing simultaneity Bergson banished all relations, all forms, from existing outside of time. So, too, from this perspective time enables the separate existence of every "thing." Existing through time, all relations, all forms, have *duration*, and, moreover, their durations differ. The social anthropologist, Max Gluckman, argued something like this fifty years ago with regard to social life, and I will turn to this further on.

Duration too in the first instance is a qualitative multiplicity. This is saying that forms—biological, social, cultural—have their own durations, their own interior times, their own "local times." Further on I will argue that this is critical to understanding how time is folded within form yet no less shapes form from within its depths, recalling Deleuze's comment on Merleau-Ponty in Part One that depth is time.

If Prigogine posits time as an ontological movement of the universe then this is complemented by Merleau-Ponty's radical shift from the acceptance of Husserl's theory of a phenomenology of time—one that depends upon structures of human consciousness, upon our perception of time-consciousness that depends from and is experienced by ourselves as subject—to his apparent rejection of this. In Merleau-Ponty's final but unfinished work, *The Visible and the Invisible* (1968) he

expressly rejects his [own] *Phenomenology of Perception* for having retained the Husserlian philosophy of consciousness To say that he moves from phenomenology to ontology is to say that he rejects any privileging of the subject or consciousness as constituting time either as a perceptual object or through a lived experience Time now is characterized as an ontologically independent entity and not a construct disclosed by consciousness . . . this time is no longer an archetype of the self's non-objectivating self-awareness." (Kelly 2015).

Thus Merleau-Ponty (1968) stated bluntly, "The subject is time." Now in his thinking it is time that constitutes the subject, rather than the other way round. Time no longer provides any neat division between the human consciousness of the subject and the time of organism, or of any nonhuman living creature or, for that matter, the time of the object. Human Being did not invent time. The character of time as

weaving together being, the organic, and the inanimate through its movement is rendered profoundly by Borges (1964: 205) in his celebrated philosophical essay, “A New Refutation of Time.” After arguing, relentlessly so, that time does not exist, Borges concludes: “*And yet, and yet . . .* Time is the substance I am made of. Time is a river which sweeps me along, but I am the river; it is a tiger which destroys me, but I am the tiger; it is a fire which consumes me, but I am the fire. The world unfortunately is real; I unfortunately, am Borges.”

Nonetheless there are critical differences between multiplicities of physical time and the multiplicities of time of living organisms, and this is related to that which Bergson called duration. Grosz (2005: 10) comments that for Bergson duration is a *force*, “the force of temporality.” When Bergson banished simultaneity and insisted that every thing existed only through time he gave to duration the force to open time, in a sense to “stretch” time, and, so, to drive that which I called in Part One ongoing emergence, and the ongoing emergence of difference. Organic life of any kind in its existence and behavior is never in equilibrium and is always entropic through both physical time and biological time. Yet the life of biological time seeks negentropy, the reduction of entropy, the “turn” into itself, as it were, in order to accomplish the renewal of itself, keeping itself alive as a species of organism. In turning inward to accomplish negentropy, the organism or organisms (depending on the particular dynamic of reproduction) seek to reproduce and to repeat themselves.

In his *Difference and Repetition*, Deleuze argues intensively that repetition generates difference.³⁴ Discussing Deleuze on repetition, Bar-On Cohen (2014: 532) writes: “For Deleuze, a philosopher of difference, repetition is opposed to identity: identity is a tyrant who imposes external categories as a measurement of difference, but ‘difference’ as a concept emanating from repetition is not lodged between two distinctive states but rather *occurs from within itself* to become a condition of the emergent new” [my emphasis]. In my view, one signal impetus for the emergence of difference depends from duration. With Merleau-Ponty’s recanting of the time-consciousness of the subject as the foundation of human time, duration comes to the fore as ever-present in the interior and exterior movements of organic life.

Thus duration disrupts the possibility of exact repetition and makes this indeterminate. The ongoing physical time of duration moves a repetition toward a future time. Everything is with-time-through-time and there is always a duration between repetition and repetition regardless of whether this is the briefest of moments or the expectation of a repetition far into the future. Duration ruptures the continuousness or even the continuity of repetition. Once said, this is obvious. Yet apparently it first must be said. Thus no organism can close itself fully and entirely into itself, not externally, not internally. That the organism exists with-time-through-time makes it interactional and vulnerable to the entry of factors, internal, external, that potentially may alter its life and modify the next round of repetition throughout its lifetime. Therefore time in its moving enables, and perhaps is critical to, the emergence of difference; and, so, difference is inherent in repetition. In Part One, I wrote that the

forming of encounters in the workshop continually generated variations, yet that very few of these were taken up and elaborated by the workers. Whatever these elements, they entered the durational gap between one encounter and the next, and met their fate there. Repetitive human actions, repetitive human events, are all *time-forms* that will produce difference within themselves through the very actions of their mundane existence; and some of these, in Bateson's phrasing, will make a difference.

My sense is that human beings strive to live through the present continuous, holding to the continuity of their existence (see Handelman 2013). Yet our well-being depends on there being gaps in the continuousness of living consciously awake. We must sleep and sleep ruptures the linearity of the present continuous. So we live through the gaps in linear duration. We escape consciousness to experience the fluctuations of time through our own personal conditions-far-from-equilibrium away from the durations we experience consciously. We turn within our own "local" times folded within us when we sleep and when we daydream and, during these periods, these times organize our experience. Through these a-linear fluctuations of our "local" times we also avoid the precarity of tending to seek the shortest distances between two points, thereby avoiding losing the potentially valuable cognitive and emotional information of the scenic routes along the way (Bateson 1972).

The poet, Raymond McDaniel, offers himself as a case in point of what may happen if one cannot rupture the continuousness of the time of the organic, if one cannot escape fully for a period from the incessant movement of physical time. McDaniel is always aware and conscious. McDaniel sleeps normally and dreams and, simultaneously, is aware. Always aware, he knows what his sleeping-self dreams but the latter, asleep, is not aware of the former's awareness. As he says (2013: 211), "No, I am not sleepy. Were I failing to sleep I would be dead. I sleep perfectly well. What I cannot do is cease being aware, and so what I am is tired." McDaniel's awareness lives fully in the present continuous, through duration without rupture, which is saying he is aware (almost?) without duration. Thus,

the concept of a long time no longer makes any personal sense, for all its prior conceptual validity. In some immeasurable [qualitative] way, I am having one day. Not the same day repeatedly, not a day of exceptional duration, because nothing ever truly repeats and a day is only as long as whatever not-day allows . . . [yet] I no longer feel if any sliver of time is any longer than any other . . . it isn't as if I don't know how long it has been since I have seen a friend . . . it's just that I register ten minutes and ten years as having the same aspect, which is that of having occurred today. I would rather not dwell on that If there's an afterlife I am going to be very, very upset. (Ibid.)

McDaniel lives in his own "local" time that is folded within him, and that in various ways affects how he experiences his life and how he synchronizes himself with durational time outside of himself.

In my own knowing, and somewhat apposite to McDaniel's, there was a brief period when I became out of sync with time external to myself. A conundrum emerged that for me became one of, not "where was I" but rather "when was I?" It happened like this. In the late spring of 1994 I brought my slowly dying wife, Lea, to the United States for a second cycle of stereotactic radiosurgery. While there I picked up a book by N. E. Thing Enterprises entitled, *Magic Eye: A New Way of Looking at the World* (1993). The book consisted of two-dimensional illustrations that, when looked at in certain ways, suddenly acquired depth, becoming three-dimensional. Back in Jerusalem, curious, I learned to shift perspective from the two-dimensional to the deeper three-dimensional and back again. And then I slid deliberately into trying to shift from one perspective to the other as quickly as possible. The duration of a shift from two-dimensionality to three was about a second, and I repeated this shifting many, many times.

Then, abruptly, out of this activity something weird emerged. I suddenly was out of sync with moving time outside of myself. No matter where, I was perhaps a second more or less behind time in the temporal surround. And I could not catch up, could not erase this disjunction. I should add that I felt this disjunction primarily when my eyes were open. This may sound absurd, but with this teeny durational gap I immediately became disorientated, discombobulated. Disconcertingly, the very when-ness of my presence became an issue for me. I did not feel that I was behind nor that I was late in relation to the surround. I was in the same space inhabited by others yet not quite simultaneously present together with them and with everything else in the surround. In other words, I was not fully "there," or perhaps I should say, "here." And I was not fully myself since this depended on my relationships with the world that immediately were integral to my self-embodiment.

What may have happened here? Perhaps an extremely concentrated in-turning that excluded all other external stimuli and that created depth for this repetitive in-curving. This repetition shaped a local time within myself that differed from external linear time; and this, even though I wanted to emerge from within myself and synchronize with time external to myself. I was caught within a personal, local time of my own making and could not escape. This local time apparently emerged from the concentrated shifting between the two-dimensional and the three-dimensional through repetitive durations of approximately one second that obsessively reversed themselves. In manipulating my vision with the Magic Eye illustrations I was playing with the chiasm, the (partial) crossover of the optic nerve. In mammals the optic chiasm enables stimuli to reach each eye simultaneously. This simultaneity enables stereoscopic, three-dimensional vision. Perhaps I was turning this on and off until this repetition of one-second durations somehow became autonomous and I became disjointed with external time. By the way, this went on for about three weeks. I then went to my friend, Su Schachter who practices a technique called "reflex balance." Su re-balanced me and suddenly I was back in sync with the movement of time outside of myself. I never fiddled again with Magic Eye though at this moment the book is in front of me (and is speedily going back into its cupboard).

For all the complexities involved, the prime difference between the inorganic and the organic is that the organic must reproduce in order to continue to exist. The organic is not only intra-entropic through time but in some way all organisms are aware of this. Entropy excites organic life to seek its own renewal. And, reproduction would not occur without one general movement—I will call this again a kind of in-turning, the organism or organisms recursively turning within, into itself or themselves and to others of its kind, the organism into its own-ness. In order to reproduce an organism relates to itself. This often is referred to as the organism referencing itself. That is, the organism is reflexive. Reflexivity too has duration. One can say that this in-turning is the curving of time—the organism referencing its own local time. Reflexivity curves time. If I phrase this as the organism going back into itself, relating to its own-ness, then I am implying that the organism seeks through reproduction to return itself to an earlier moment of reduced entropy, even as the organism moves forward with the movement of physical, linear time.³⁵ Organic life accomplishes the *repetition* of itself with whatever alterations that accrue between one reproductive round and the next. In the simplest sense an organism is constituted so as to reconstitute itself and adapt itself internally and externally.

Yet in-turning requires duration and, in doing so, organic life curves away from the movement of physical, linear time, indeed from its own ongoing, inevitable, forward movement through time. A conundrum results. On the one hand, organic time curves into itself to accomplish the negentropy of reproduction and renewal; while on the other, entropic, linear movement through time never ceases.³⁶ Thus, under conditions that are far-from-equilibrium, the time of the organism both separates from yet remains in physical time; and in-turning organic time lags behind the movement of the organism through physical time. Moreover, this is no less so for efforts by human beings to search for negentropy to renew and revitalize their social orderings through ritual and numerous other sociocultural formings. As I will argue, given the durations required, the regenerative time of negentropy sought by human beings in concert through participation in cultural and social formings never catches up with itself. The durational movement of negentropy lags behind the entropic movement of physical time through which the efforts of renewal occur. This endemic lag signifies, for example, why the full (social) regeneration of a sociocultural ordering through, say, ritual, is virtually impossible.³⁷ In simpler terms, why ritual never can be fully effective. Yet more than this, since in my terms all sustained interaction generates degrees of emergent folding (see Part One), the time-lag is always present. One can say that persons are (almost?) always out-of-sync with themselves as well as with others.

Max Gluckman's Idea of Structural Duration

In anthropology ideas are few concerning the significance of duration in social life that potentially could open into the perspective I am thinking here. One such instance is that of Max Gluckman's thoughts on what he called "structural duration."

In 1966, Gluckman, the founder of the Manchester School of social anthropology (Evens and Handelman 2006) was invited to give a plenary address to the American Anthropological Association. Then fifty-five years of age, this was a highlight of his illustrious career. Gluckman and the Manchester School anthropologists had pioneered ideas of the analysis of social situations and the extended case method, both of which contributed substantially to the understanding of social ordering as ongoing, processual movement. A second plenary lecture was delivered by the social anthropologist, Fredrik Barth, then thirty-eight years of age, and the founder of the Department of Social Anthropology at the University of Bergen. For over a decade Barth had dazzled anthropology with his sophisticated joining together and modeling of social organization, transactionalism, and individual agency. Barth lectured on the study of social change as the outgrowth of the cumulative, strategic choices persons made vis a vis one another. Gluckman too lectured on the study of social change, relating this to what he called “the utility of the equilibrium model” in the study of institutions undergoing change. Gluckman’s lecture received polite applause.

Barth’s lecture was treated to a standing ovation. “Transaction” and “individual agency” turned on the middle-class audience; while “equilibrium” and “institution” turned them off. The audience’s reaction demonstrated that Barth was at the cutting edge of anthropology, addressing agency in decision-making and everyday life; while Gluckman was a *passé* structural-functionalist, a brontosaurus of an intellectual who insisted on holding onto outmoded theoretical ideas of systemic equilibrium. Gluckman returned to Manchester in deep gloom and, as far as I know, never referred again in print to the idea of structural duration.³⁸

Gluckman’s use of “equilibrium model” emphasized the modeling of reality and *not* reality as such, as a way of gauging the disruption of social order through conflict and its return to some sort of ordering. This was a strongly processual approach that in his perspective required the modeling of process since movement was continual. Yet beyond Gluckman’s defense of the equilibrium model as a heuristic device with which to compare and contrast change through time there is a fascinating idea embedded in his lecture that he called the “structural duration” of institutions. An idea quite ignored and forgotten, tangled up with the equilibrium model and caught in the web of misidentification of Gluckman with structural-functionalism. Google Gluckman and “structural duration” and you will come up with a bare handful of references, most of them derogating his “static” anthropology, which could hardly be further from his actual labors (for a striking exception, see Crawford 2007).

What is the idea of “structural duration”? I prefer to drop the language of “institution” and continue to use that of form and phenomenon, or of assemblages that seem to hold together during time with varying degrees of self-integrity. Gluckman (1968: 220) wrote that, “The problem of time is critical for all studies of social and cultural systems.” He (not so unlike Bergson) was saying that no phenomenon exists outside of time. Furthermore, that every phenomenon existing in the human world (and, I add, in the organic, more generally) “has its own time-scale built into

it” (ibid.). Moreover, that “we cannot understand [a phenomenon, an organization] unless we do so in that [very] scale.” The particular time-scale of a social form is its structural duration. The duration is the period through which the phenomenon lives fully, so that one can perceive this or, if its duration is lengthy, one can project the entirety of its existence forward through time. No form, no phenomenon or assemblage, whether tiny or huge, exists in such a simple manner that one can perceive its existence in the temporal flatness of the immediate present. Yet neither can we assign arbitrarily a period of time which we will declare as “sufficient time” to know the form through time.

In my terms one must discover through itself the “structural duration” during which a form may be said to exist fully. Then one can think with acumen on the in-turning of the form and how it is assembled as itself, as its own integrity that enables its phenomenal existence. How can one know, or project, the length and complexity of a structural duration, and whether this may be cyclical, oscillatory, periodic, or indeed open-ended? In the best of ethnographic worlds we do this by living and following what *seems* to be the phenomenal folding or assemblage of foldings, thereby learning what happens in what *seems* to be the nature of the organization. In fact one cannot know a structural duration without following what seems to be, is assumed to be, a folding of form, yet without knowing whether this is indeed the case. And without comprehending its structural duration one will not know in the fuller sense the nature of the phenomenon and how it changes (and as I have argued, changes during the duration of the very reproduction of itself). In discussing his idea of structural duration, Gluckman was not referring to historical time in the usual sense, but rather to time that is integral to a phenomenon, to that which I am calling a folding of form; the time within its folding that enables the form to be or to become fully its own; the time to go through the phases, alterations or changes that make the phenomenon as it is and/or how it will be. Structural duration indexes form through the temporalities of its own interior dynamics that are activated by the movement of time.³⁹ This enables us to comprehend how phenomena are constituted through their own temporalities—their own rhythms, tempos, disturbances, and chaotics.

There is no shortage of examples of structural duration in the anthropological literature. A few of small scale come to mind. In her study of family, community, and industry in an American town, June Nash (1989: 265) concluded that the researcher needs to account for four generations of family in order “to see the biological processes of mating, reproduction, maturity, and death worked out in a complete cycle.” In his, *Fluid Signs: Being a Person the Tamil Way*, Valentine Daniels (1984) discovered unexpectedly that in participating in his third pilgrimage to the same shrine of a particular deity he actually was completing a full cycle of pilgrimage, and that this cycle is the critical mass of devotion of the devotee of this deity. Had he not gone on his third pilgrimage he may well not have acquired this knowledge. In her *Inuit Morality Play*, Jean Briggs (1998) watched numerous episodes of adults trying to play with three year-old Chubby Matta in ways that Jean came to think of as failed

game-playing, only to discover that this Inuit play actually ended just when we would expect it to begin; so Jean was thinking entirely in the wrong direction through a mistaken duration.

Gluckman (1968: 223) understood “all social life as a *process* in time” [my emphasis], yet less as a *dynamic* that operated through time in a double sense—as moving only with time and as being moved by time moving. He argued for abstracting the structuring of the duration of an institution so that duration became the period through which the institution would show itself more fully; that perhaps in a sense, would tend to reproduce itself (including whatever alterations had accrued during this period). Yet in this he did not consider time as a force of movement in itself, one that is folded into a “structural duration” in certain ways and not in others; and so that helps organize the very movement of the duration from within itself. Gluckman’s idea of duration acquires greater value when its “structuring” is understood as the forming of form that never loses its potential for emergence even as it is predisposed to in-turn and to fold in particular ways. Rather than duration becoming more of a skeleton of time (as it does in Gluckman’s schema) time instead opens into that which I have called “prospective history” (Handelman 2005b). Prospective history begins with presentness always moving through future. Prospective history is a history of becoming, of the potential of duration to open into emergence. Even as time-moving is shaped by the durational forming of form so, too, moving-time enables social life to actualize its formings and foldings.

Reflexivity, Negentropy, and the Recursive In-Turning of Organic Time

For human beings, reflexivity is key in attempting to accomplish negentropy. However this kind of reflexivity is more basic and much broader in scope than that initiated by the “reflexive turn” in anthropology during the 1980s (see Handelman 1994, for a critique of *that* reflexive turn). Like phenomenology in general, the reflexive turn in anthropology focused on individual experience and referred to the relating of self to other as they mutually influence one another’s perceptions and actions. So, this sort of reflexivity is the act of referencing oneself to oneself through the mediation of an external perspective on oneself, a perspective whose location may be through other persons or through other sources of stimuli. This version of reflexivity often is applied to the anthropologist as fieldworker in relation to a native other through a variety of media, producing, enhancing, and doubting perception, thought, feeling, and knowledge-making (Handelman 2016).

Here I depend from a different perspective on reflexivity. Evens, Handelman, and Roberts (2016: 1–20) argue that reflexivity-as-action is critical to the very becoming and being of the human condition.⁴⁰ To this I add that reflexivity is a movement that turns back on itself, a movement that is durational but not linear. Yet even as a time-trajectory curves into itself, re-entering itself with the experience and knowledge accumulated as it moves forward indeterminately, it re-enters later than when it

began its curving. Put otherwise, curving time re-enters its own physical, time past. The self-intersection of reflexivity in its manifold planes is critical to consciousness in human beings. The self-awareness of consciousness does not exist without the reflexive curve. The self-awareness of consciousness depends on curving, in-turning duration.⁴¹

I suggested earlier that organic life is temporally out-of-sync with itself. Thus there is almost no way for life in general and human beings in particular to accomplish the full negation of the effects of entropy, either personally or in terms of the social. Nonetheless, the striving for this goal continues, today especially through the biology of gene editing, cloning, and the transplantation of organs. An historical example of such striving is that of (the rare instances of) self-mummification (*sokushimbutsu*) in Japan and elsewhere in Buddhist Asia. Pure Buddhist practice would concentrate on the perfection of the self as a way to Nirvana. Yet according to one Japanese Buddhist sect, a believer, through the practice of especially severe austerities, could perfect the self and become a Buddha in his own body (Hori 1962: 234). These austerities would produce a being of emptiness unaffected by the passage of time, escaping the entropic deterioration of selfness and biological death and attaining a kind of negentropy of the living soul.

In the process of self-mummification dietary restrictions were prominent: abstinence from meat, the cereals, salt, and cooked foods. The ascetic did tree-eating (*mokujiki*), substituting only on parts of the tree. The ascetic dedicated to becoming a self-mummified Buddha in his own body would take a vow to perform the tree-eating austerities for periods of one thousand days, two thousand days and even lengthier periods. Blacker (1975: 88) comments that: "During the first part of the discipline their diet consisted of nuts, bark, fruit, berries, grass, and sometimes soy in fair abundance. The quantity of these things was then reduced, until by the end of their allotted period they had undergone a total fast of many days. Ideally . . . the man should die from starvation, upright in the lotus posture . . . His body should have been reduced to skin and bone, all flesh and visceral contents having long disappeared." The body then was placed in a wooden coffin inside a stone sarcophagus, buried for three years, and then exhumed. By then the body should have mummified. Blacker adds that (1975: 89), "It was alleged . . . that such people did not suffer death. What appeared to be death is in fact the state of suspended animation known as *nyujo*, in which condition the soul may await the coming, millions of years hence, of the future Buddha Maitreya." In recognition of the tremendous powers acquired through the terrible suffering of self-mummification, each mummified Buddha was dressed in the robes of a Buddhist abbot and placed in the position usually kept for the Buddha image in a local temple. The self-mummified Buddha would then be supplicated and prayed to, as one would have done before the usual Buddha image.

Self-mummification is an instance of extreme in-turning, of folding and self-reflexivity that completely enclosed the individual deeply within himself in order to seek self-perfection that was perceived as suspended animation; that is, a condition

of time whose movement is extremely slow or non-existent. To accomplish this, time within the individual folded into himself, becoming entirely local, separated from temporal movement outside the fold. Through his austerities the seeker comes to separate his own organic, temporal movement from those of the physical and socio-cultural worlds beyond his self-folding. Within his self-folding the seeker becomes profoundly, actively, and continuously self-reflexive. He cannot be separated from this engrossing reflexivity. This self-folding is profoundly deep, with the practitioner discovering in this depth (in Deleuze's terms) how to alter the movement of time. In my terms the seeker creates a different time within the fold, and through this synchronizes his interior, organic time with this local time. The seeker within his self-folding moves time in two ways. Initially, through self-starvation he speeds up time to reach his early death in an emaciated condition. Then, once his body is mummified, the movement of organic time becomes minimal, extremely slow, perhaps eliminated, as his now selfless soul awaits Maitreya in the far distant future. If a kind of negentropy then is attained within the fold this enables the now minimalistic organic time to move through physical time without being (or hardly being) effected by the latter. Here, what is left of the selfless organic is not out-of-sync with itself as it moves through physical time. I emphasize that both Raymond McDaniel and the self-mummifiers (at their outset) are and were enfolded within their own local times, each out-of-sync with time outside their foldings. Without these changes in the movement of time, and, so, of the durations of time, neither would become what they are and were.

What are these folded durations that I am calling local times? How do they relate to the distinction that I drew between physical time and organic time? To the question of whether time is a force in itself or whether its movement can be relegated comfortably to the passive passage of the fourth dimension? And, so, whether anthropologists can continue to rely safely on different movements of time as the products of varying cultural interpretations of the same dimensionality that at least since Newton has provided the scientific foundation for theories of time. The existence of time apparently is not provable except through measuring its movement; yet this, in turn, locks time into dimensionality and avoids what the bio-mathematician, Plamen Simeonov (2015: 271), calls the true nature of time that is ineffable, eluding science and mathematics. And, as I noted earlier, no less eluding for anthropologists as they accept the dimensionality of time as basic to ontological premises regarding the constitution of the very movement of everything within itself and in relation to everything else. The ways in which time moves seem to be critical to questions of ontology.

Cultural orderings have different, though sometimes overlapping basic premises that permeate living through their worlds, their cosmologies. These are premises that are not deterministic, yet they enable certain formations of existence rather than others. The patternings of these premises are ontological for the peoples who live them and epistemological for their practice. To my knowledge there are no human ontologies whose premises are static, without the movement of time. Premises of time-as-movement likely are embedded in some way in all human ontologies. If there

are different human ontologies, then are there different human realities? Most likely there are. Moreover, different realities may not be predicated on a distinction between subjective perception and experience and objective knowledge. If there are thoroughly different realities then do these realities have their own qualities of time (see, for example, Rosaldo 1980)? We know that a myriad of groupings live time, feel time, think time, and organize time differently from one another, thereby inducing the variable experiencing of time among their members.

If there is a multiplicity of cultural ontologies then perhaps time too is not a singular medium of passive passage that is always the same, though interpreted differently? Perhaps time is a multiplicity? Not a multiplicity of distinctions between objective, scientific time and subjective, native time, but as temporalities that work differently through the realities of cultural ontologies that themselves are no less real than is our unquestioned reliance on time as the fourth dimension. In my view, how ontological temporalities work differently to endow the reality of the movement of time may be one of the most difficult questions that an anthropology of time can take up; and, moreover, one to which there may well be no answers. Nonetheless this question should be asked and pondered.

Henry Rupert and the Dynamic Force of Time

I wish to address the above questions through fieldwork I did over fifty years ago with a Native American shaman in Nevada (see Chapter One). When I met the Washo shaman, Henry Moses Rupert, he was just about the same age as I am now. The ways in which Henry came to organize his healing practices may tell us something about how time and reality are irreducibly interwoven and perhaps suggest that the issue of the potential existence of ontological multiplicities of time is indubitably real.

The Washo people lived in the Great Basin, an arid plateau with relatively few natural foodstuffs. The traditional Washo cosmos was of a world continually in movement, in flux. This continuous movement was that of “power” (*wegeleyu*) which filled cosmos (perhaps one could say that this power *was* the very existence of cosmos) and had an intimate affinity to life-energy. Life-energy energized a vast array of beings. Cosmos was fluid within itself. The fluidity of the Washo cosmos was associated movingly with water, while power, life-energy, was intrinsically attracted to water and flowed along waterways (though also along trails) (Miller 1983). This was a living cosmos that can be characterized as organic, with all its elements and beings intimately interrelated and interactive. The ontology of such a cosmos has hardly an opening for an Archimedean perspective, one that is external to cosmos, a perspective that considers itself all-seeing and objective, since any move toward perceiving the exterior of cosmos disrupts its interior relatedness. Without an Archimedean point of observation this sort of cosmos is comprehended from within itself.

Over a period of years Henry had formulated for himself an ethic of living that he called the Law of Nature. This ethic was composed of three primary ways of re-

lating to the cosmos of which he was a part. These were: be honest; be discreet; do no harm (Handelman 1967, 1972). Henry's ethic of existence was a way of entering and fitting directly into the interacting forms of the organic cosmos. In Henry's Law of Nature all beings, all flora and fauna, require water in order to continue to exist. Water flows with life, life flows with water. Water is the duration of life. To which I add the following: *water is time*. If the duration of water is disrupted, then life falls ill. Duration is disrupted when life is dried out and life-energy fails before the conclusion of its natural life span, its natural range of time. This usually occurs when a person inadvertently fails to provide water to the life-force of another organic entity, whether human or not, one for which he or she is responsible. In response the dried-out entity seeks and takes the water it needs from the person responsible, desiccating this person who then falls ill. To put this a little differently, life falters when its own time, its water, is taken from it. Henry's healing solution often was to ensure that water (and, so, time) would return to both of the afflicted.

Henry worked with entropy. This is to say that *he healed with time*. The reduction of water in an organic being increased its entropy and reduced the duration of its internal time. Thus the interior time of an organic being, its local time, was disrupted and faltered. Without the ongoing progression of time the condition of the afflicted became increasingly indeterminate. Healing involved restoring the life-force of the person by replenishing her or his water, that is, his or her internal time. In order to heal these conditions Henry had to make the ill person self-reflexive about her or his responsibility for the condition of illness. Here self-reflexivity again was a turning into oneself, a returning to a time when the person actually was making the error of desiccating another being, thereby triggering the loss of life-energy and time. Self-reflexivity had the potential to become an act of renewal just as the reflexive in-turning of the organism through reproduction is an act of renewal.

To call this in-turning "memory" is to obfuscate the necessity in self-reflexivity of re-experiencing what one has done. Let me reemphasize that which I have argued: it is more productive to say that in an indeterminate world of multiplicities (organic) self-reflexivity curves back through time even as physical time moves forward. The two are never fully synced, and the time of the organic never catches up with the movement of physical time.⁴² Organic reproduction is the movement of time that is negentropic, in-turning, moving into dynamics that will re-energize and re-create the organism. Yet during this movement toward repetition the organism continues to move forward through time as a physical, linear progression. This suggests that there always is a time-gap, however tiny this may be, between the progression of physical time and the regeneration that is organic time. Yet I also am saying that the in-turning's reflexive regeneration of organic time is a hallmark of social ordering, an ordering that continually seeks to repeat and reproduce itself even as this movement makes this reproduction out-of-sync with its own movement through physical time, opening ordering to continuing potential ongoing impetuses for change.

I have suggested that in Henry Rupert's healing the replenishment of life-energy and the replenishment of time were one and the same. Yet, was time simply malleable, simply passive, thus to be manipulated by the healer? Or was time dynamic, *enabling* or even *making* something happen in the healing process? Let me note at this point that the first spirit helper whom Henry acquired was that of *water* itself. In Henry's healing he would pray for water for the well-being of the patient, asking that the aggrieved being, dried-out and disintegrating, agree to stop dehydrating the patient in return for receiving water from the patient. In other words, the time that is water acted to help replenish the time-duration of the patient's life. Here time is hardly a passive passage that healer and patient pass through. Time is life-giving, indeed time in itself is a force (as it may be in the reproducing and re-energizing of the organic).

Initially Henry Rupert did what was understood as traditional Washo healing. A healing ritual required the shaman to work for three consecutive nights from dusk until midnight, and a fourth night from dusk until dawn. The same ritual acts were repeated during each night. Night after night the ritual had a rhythmic pulsation of repetition with each lengthy repetition augmenting, magnifying, and deepening the ritual folding and its intentionality and intensity; and then into the dawn of the fourth day when the shaman would have a better idea of whether difference had been accomplished—whether or not the victim agreed to stop dehydrating the patient.

Later on Henry acquired a second spirit helper, a young Hindu whose skeleton stood in the local high school. Henry continued doing the traditional healing ritual; though during healing he now saw himself as a skeleton wearing a turban, moving quickly around the patient's body. His own being during the ritual had changed. Though Henry continued practicing the repetitive, pulsating velocity of four nights of healing, he had introduced into his practice the potential of *speedier* time. His own interior velocity became faster with the augmenting life-energy that the Hindu brought him.

Many years later, when Henry was seventy years old, he healed a Hawaiian curer who lived in California. In return the Hawaiian gifted Henry with some of his own power in the form of a Hawaiian spirit helper named George who lived in a volcano on one of the islands, but whose power was at its maximum in the vicinity of Henry's home. George brought Henry new healing techniques together with the maxims that, "everything comes quick and goes away quick" and "we help nature and nature does the rest." For ailments easier to cure Henry now dispensed with visions of diagnosis and prognosis, with chants, and with many other of the elements of the four-night healing rituals. The healing ritual now took between approximately ten minutes to four hours, and involved Henry praying to George and the placing of hands on the patient to remove pain from the body.

With the Hawaiian spirit helper the healing ritual changed radically. The rhythm of repetition and pulsation was omitted in many instances, while the speed and velocity of the ritual increased greatly, now perhaps matching the speed of Henry's interior

after he acquired the Hindu spirit helper. Washo cosmology and Henry's development of the energy of time-as-water were largely excised. Moreover in these instances the patient was depersonalized since there was no need to establish causation through errors of omission and commission on the part of the patient. Through the emphasis on speed and velocity, time came more fully to the forefront as the dynamic that enabled "Hawaiian" healing. Yet, too, it was the sense and feel of the organic that Henry sought to heal. Today I think of Henry's healing as experimenting, albeit not deliberately, with the potentialities of time within his ritual (although he did not mention them as such). Nonetheless he was drawn to the dynamic potentiality of the movement of time as he folded this within his ritual. Initially, in his healing practice, time was contextualized through the movement of water as life-energy. Time in his healing ritual was repetitive, pulsating and, at the end of the fourth night at dawn, often climactic. Eventually, through the Hawaiian healing of George, contextualization disappeared and non-pulsating time—closer perhaps to the pure movement of time—came to the fore.

Interestingly, this change resonates to no small degree with how Deleuze, borrowing from the Stoic philosophers, understood the shift from pulsed time (Chronos) to non-pulsed time (Aion). Deleuze argued first that pulsed time is territorialized time, time marking territory. Second, that "pulsed time marks the temporality of a form in development." And third, that pulsed time "marks, or measures, or scans the formation of a subject"; thus education and the German idea of *bildung*, of character-formation, occur through pulsed time. Yet if de-territorialization occurs then non-pulsed time appears. So, too, if time moves primarily through speed and slowness then non-pulsed time is present. Furthermore, through non-pulsed time there is no formation of a subject.⁴³

When Henry took on George's epistemology of intensity—the movement of speedier time—then time was de-territorialized, and non-pulsating time became the dynamic of movement. Furthermore, in this way of healing Henry gave little or no regard as to whom the patient-as-subject was. Henry was disinterested in the cause of pain, the errors made by the patient, and so forth. In Henry's world time was not a passive passage but an active force. The message seems to be clear: Change time, change the dynamic of time; thus, without changing time there is no change in the dynamic of time.

After Henry and I began talking about his shamanism he told me flatly, "What is real for me is not real for you." I was unsurprised yet nonetheless nonplussed. What was the significance of his statement? It did not single out one of our realities as objective and true and the other as subjective and, if not untrue, then misguided or deluded. Indeed he never did so. He seemed to be telling me that we lived in different worlds, and that different worlds existed and moved through themselves differently. He understood multiplicity much more comprehensively than did I. But then he practiced this as I did not. Well, so what? Couldn't I learn about his world and come to understand it without embracing it? Probably not. Not without living a world

through premises of existence and movement distinctly different from my own, even though sometimes these premises *seemed*, and I emphasize this, to overlap one another. We lived through different ontologies, different cosmologies. I lived time more as the fourth dimension, time more as a passive passage. This too is what I had studied in anthropology. He frequently lived time as Gebser's a-dimensional time, time as a force for dynamic movement. My thought through the present moment is that without ontologies of time there may well be no ontology at all, and no epistemological difference that makes a difference. And this should be a sobering thought.

A Cosmic Macro-Folding: Jewish Cultural Time

I said earlier that how temporal ontologies move differently to endow the realities of the movement of time may be one of the most difficult questions that an anthropology of time can take up. In closing I would like to take up aspects of one ontology of cultural time that effected and affected those who lived with and through it and that continues to do so. My discussion here is necessarily sketchy.⁴⁴ Though here construed loosely and schematically, this ontology is basic to moving time in the Jewish religio-cultural cosmos. This time-moving is rhythmic, a moving-ness that thereby folds in on itself.

Writing of the Jewish week, Zerubavel (1985: 115) comments that this unit of duration is characterized by a peak day, the Sabbath, that imparts a "beat" to the week. He continues, "The experience of beat is essentially a sensation of a throbbing pulsation." The Jewish week is a unit of cultural time pulsating in accordance with a certain beat, or impulsion. This a deceptively simple yet profound observation, for this rhythm of temporal pulsing is critical to the forming of numerous units or durations of time in Jewish culture. This pulsing may be described as an impulsing from lower to higher, from ordinary to extraordinary. The rhythm is climactic, yet more so, for this impulsing implies movement from the less valued to the highly valued. For reasons not dwelt on here, this selfsame impulsing also may be found within the dynamic moving from fragmenting to integrating, to unity and holism. Time moving with Jewish culture is, generally, speaking, that of directional emerging and that of collective becoming. In the distant past this climactic impulsing of time was divorced in part from rhythms of nature, and therefore from ideas of the eternal character of dynamics of "becoming." As Zerubavel (1985: 11) notes of the Jewish week, it had to be based on an "entirely artificial mathematical rhythm."

Within this macro-folding of time, time-moving was imbued with the moral valuation of the human condition (Kauffman 1972: 73). Moving time that is a cultural becoming is then in the first instance (and in the last) a moral problem. Time is necessarily the moral ordering of existence. Put more emphatically, the dynamic movement of impulsing and pulsating time enables the coming into existence of Jewish moral ordering, through different durations. Should one need reminding, in the biblical myth of cosmogenesis the creation of time, the separation of light from dark-

ness, day from night (Genesis 1: 3–5), is almost isomorphic with the onset of cosmic creation, while the entire creating movement is marked by consecutively numbered days, climaxing on the seventh, which God blessed and made holy. As the medieval philosopher Maimonides (1956: 171) commented, “Even time itself is among the things created.” Whereupon he added (albeit for purposes of his own argument) that the “true and essential condition” of time “is not to remain in the same state for two consecutive moments.” In other words, time is moving continuously, always.

That time has a special status in Jewish thought is not in question. Heschel (1951: 8) writes that, “Judaism is a religion of time. The main themes of faith lie in the realm of time.” The nineteenth-century Orthodox thinker Hirsch (1985: 41) stated that, “The catechism of the Jew consists of his calendar.” Once time is created, everything else (with the exception of the Creator) happens within and during continuous time. Heschel (1951: 100) argues that, “it is within time that we are able to sense the unity of all beings.” One can say that moving time holds everything together in the Jewish phenomenal world. During (rather than in) the Judaic cosmos time never falters, never loses its continuous coherence, integrity, unity, even as Jewish human beings are falling, threatened, fragmenting.⁴⁵ Impulsing and pulsing time lifts them toward the potentiality of reintegration. Time never loses its rhythmic, impulsing and pulsating movement from low to high. The existence of the cultural logic that is this impulsing-pulsating rhythm enables moving time to become the template, as it were, for the moral ordering of becoming, of progressing, one that enables the forming of strivings for utopian perfection and for the unifying of people and place. The eschatological visions of traditional Judaism (that are growing steadily in Jewish Israel during the past fifty years, since the 1967 war and the occupation of Palestine), of God intervening in time to end time, and so to begin an eternity of perfection, point precisely to the essential integrity of the dynamic of moving time.

The rhythmic pulsing of time enables the forming of form that is climactic. It does not index the content of this forming; for example, it does not refer to the ways in which a messianic thrust takes form, nor to how the present-day forming of religious-political-territorial messianism in Israel compares with previous thrusts of the messianic potential of Judaism. To understand such phenomena one need do analyses of the social, the political, the economic, and so forth. Yet, in this respect, one can say that in the above perspective time ends when it is no longer necessary—when its dynamic of Becoming is completed and the impregnable boundary between God and the Jewish human being is dissolved.⁴⁶

The rhythm of pulsation—from low to high, from morally inferior to morally superior—is evident through different durations of Jewish time, from the short to the lengthy. The Jewish cosmos folds moving time within its own depths, shaping a particular rhythmic relationship between different durational, calendrical units of time moving. As noted below, these durations differ in scale, yet these durations are self-similar to one another in the pulsing rhythm that organizes their moving times. Thus the relationship between these different durations of time-moving appears to

be *fractal-like*. Fractal form was conceptualized mathematically by Benoit Mandelbrot, yet has a multiplicity of parallels and resonances in the organizing of form in the natural world.⁴⁷ Fractal organization refers to recurring patterns of similarity and difference on different planes or levels of scale (see Kreinath 2019, 2012). That is, regardless of their scale of organization, certain patterns maintain the same proportions in their internal constitution.⁴⁸

The fractal is holographic. All the information of the three-dimensional hologram is contained and is present in any of its (arbitrarily selected) parts. Cut any piece arbitrarily from a visual hologram and this part contains the entire hologram. So, too, with fractal organization. As in the hologram, information in the fractal is distributed non-locally—the whole is in every part. A fractal contains all its information on any scale on which it is organizing or organized. Put otherwise, as in the hologram, “information is embedded . . . so densely and recursively that everything is connected simultaneously to everything else. Moreover, this information is actually embedded within embedments (that are embedded within other embedments, and so on)” (Handelman and Shulman 1997: 194; see Bohm 1981: 143–47). The fractal, like the hologram, is characterized by ongoing self-similarity (Grossing 1993: 80).

In this regard consider moving time within the following durations of Jewish time. Thus, the pulsing of the Jewish twenty-four hour “day”: in the phrasing of Genesis (I: 5), “And the evening and the morning were the first day.” The moving time of the Jewish day begins in darkness and emerges into light. Light rather than darkness implies the value of morality. In a simple yet ever-ongoing way this night-day, as Hirsch (1985: 42) calls it, is no less the recapitulation of cosmogonic and existential movement.

Consider the pulsing of the Jewish week. It moves through six ordinary days to peak at the extraordinary seventh, that Heschel calls “the climax of living,” and that has its own superior character (Zerubavel 1985: 113). In the biblical text, at least, “the Sabbath commemorates the creation” (Kaufmann 1972: 117); and, so, one may surmise, again implicates that elementary momentum.

Consider the yearly pulsing of holidays like *Purim*, *Passover*, and *Hannukah*. *Purim* is preceded by a fast day that commemorates the period of trepidation and repentance when the lives of the Jews of Persia were under dire threat. On the eve of the holiday the story of their salvation is read. The following day is one of celebration and jubilation. *Passover* is preceded by a fast day that commemorates the time of trial when God slew the firstborn of the Egyptians, whilst those of the Israelites were spared. On the eve of the holiday the story of the exodus from Egypt is read. *Hannukah*, too, is a sequence of trial and triumph. The pulsing of all the holidays moves through the low of tribulation to the high of triumph. But the peak of these occasions, like that of the Sabbath, is always celebrated during their eves, in darkness. Again, in these instances darkness is eclipsed, turning into the heights of light and the moral, collective good of the Jewish people.

Consider rhythms pulsing through longer durations. Every Sabbath service includes a reading from the *Torah* (the *Pentateuch*) that concludes with a reading called

haftarah (literally, “Conclusion”), usually from the books of the Prophets. Exegeses tend to link the meanings of these sets of readings. Consider the rhythmic pulsing of these Sabbath readings in Ashkenazic tradition, for six Sabbaths that fall in sequence between the end of the Hebrew month of *Shevat* (February–March) and Passover (March–April) plus one additional haftarah reading on the last day of Passover.⁴⁹ Here this implicit rhythm is discussed in brief (texts and commentaries are available easily in Hertz 1938). The first of these Sabbaths is called *Shekalim*. The Torah reading tells of the obligation of every Israelite to contribute a half-shekel toward the upkeep of the Temple. This has been interpreted as an annual renewal of collective membership (Hirsch 1985: 323; Vainstein 1953: 139). The associated haftarah tells of revolt against foreign idolaters, of the enemy within, and of their destruction (Hertz 1938: 954). The second, called *Zakhor* (“remember”), precedes the holiday of *Purim*. The Torah reading recalls the unprovoked and vicious attack of Amalek on the Israelites, following the exodus from Egypt. The haftarah tells of Saul’s extermination of the Amalekites. Both readings relate to the destruction of the enemy without. Haman, the arch-enemy of the Jews of Persia who is destroyed at *Purim*, commonly is assimilated as a descendant of Amalek.

The third of these Sabbaths is called *Para* (“heifer”). Its readings are on themes of purification, bodily and moral, and of renewal of the nation from within, as preparation for the fruition of the desolate land (Hertz 1938: 961). The fourth is *Hahodesh* (“the month”). Its Torah reading describes preparations for Passover, the holiday of the exodus. The haftarah is part of a prophecy of the New Jerusalem, to arise when exile is ended. The fifth, *Shabbat Hagadol* (The Great Sabbath), is the Sabbath prior to Passover. The haftarah concludes with a vision of the coming of the Prophet Elijah, in religious tradition the herald of redemption who would appear at Passover-time (Hertz 1938: 967). The sixth of these Sabbaths occurs during Passover itself. Its haftarah is Ezekiel’s great vision of the dry bones returning to life, of resurrection and redemption: “I will open your graves, and cause you to come up out of your graves, and bring you into the land of Israel” (Ezekiel 37: 12). The seventh reading is not on the following Sabbath but on the last day of Passover, and continues the upward impulsing of time moving. This haftarah from Isaiah (Isaiah 11) contains the vision of a perfected cosmos, one in which wolf and lamb, leopard and kid, and so forth, will dwell together in harmony—a vision of peaceful, cosmic holism. This last haftarah is also read during the special prayer service of Israeli Independence Day (Vainstein 1953: 159), and I will return to this detail.

Time-moving carries the sequence of these Sabbath texts plus one toward crescendo, one that includes the peaks of Purim and Passover. This sequence of impulsing begins with the corruption within, the expulsion of interior corruption, and the renewal of collective identity. The impulsing continues through the collective response to evil from without, and then through themes of purification and cleansing from within. Time-moving then raises visions of the end of fragmentation and exile, into the onset of reunification and perfection, climaxing during Passover, that itself

is forming the primordial coalescence of the Israelites into a rudimentary collectivity emerging through their collective deliverance from oppression.

Consider the duration of fifty days (seven weeks of seven days plus one; in other words, the whole completion of this duration) called “Counting the Omer” (*Sefirat Ha’omer*). This begins on Passover and moves until the holiday of *Shavu’ot* (Weeks), identified with first fruits and often with the giving of the Torah by God to Moses on Mount Sinai. During this period, time moves from Passover, the struggling for collective freedom, to *Shavu’ot*, the contractual surrendering to God and God’s laws by the Israelite collectivity. Again through this duration time is moving toward climactic impulsion. Consider the lengthiest of durations of Jewish time, the eschatological. Whether conceived of as progressive (moving slowly toward completion, toward end-time redemption) or as apocalyptic (God intervening abruptly in human life to end time) moving time is pulsating toward the climactic and utopic, toward the moral unifying and perfecting of the Jewish cosmos.

So, what happened when Israeli Jews were given a choice as to what manner of time-moving to adopt as their moving time? The founding of the State of Israel in 1948 is the case in point. Consider that the first Israeli government—orientated toward socialism, secularism, and nationalism—chose to adopt officially the Hebrew calendar with its significant holy days and holidays. In other words, Israel adopted the religious calendar with its fractal-like impulsing of time outlined above. Even though most of the populace organized their daily life in terms of the Gregorian calendar, the durations of cosmic Jewish time, with its rhythm of time folded within, surfaced continuously. The secular antidote to this (beginning even earlier, during the British Mandate) was to secularize the contents of holiday observances and celebrations, yet nonetheless to observe their occurrence on the dates of the religious calendar (Shavit and Sitton 2004). This was done as if it were the now secular contents themselves of time-moving that had the power to move persons rather than the pulsating rhythms of time folded into the religious calendar.

Consider that the State also invented three new days of state commemoration and celebration: Independence Day, Remembrance Day for the fallen soldiers, and Holocaust Remembrance Day. These three Days were scheduled soon after the end of Passover and were quickly arranged in the sequence of Holocaust Remembrance Day, Remembrance Day, and Independence Day. These Days move from the lowest depths of destruction that is the Holocaust, to the upward-moving fight for national independence and freedom commemorated by Remembrance Day for the fallen, to the heights of celebrating the founding and ongoing existence of the Jewish State, that is Independence Day. The sequencing of the three Days immediately picked up the impulsing, recursive, pulsating rhythm of cosmic Jewish time: moving from low to high, from darkness into light (see Handelman and Katz 1998).

Consider that in 1948 the State organized a competition to choose the design for the national emblem of Israel. A variety of designs were submitted, both secular and traditional in their shaping and thematics. The winning design was that of the

seven-branched lampstand, the *menorah*, sculpted in relief and frozen for posterity in 81 CE on the triumphal Arch of the Emperor Titus in Rome. The menorah was one of the ritual implements that had stood in the Temple in Jerusalem, destroyed by the Roman armies in 70 CE, and that was carted off to Rome. The choice was understood to recuperate the ancient loss of Jewish sovereignty, returning the ancient symbol of independence to the newly founded Jewish state (Handelman and Shamgar-Handelman 1990, 1993). Again that pulsating rhythm of time from low to high that dominates the Jewish cosmic folding.

Consider that the two great all-out wars that Israel has fought since the 1948 War were the war of 1967 and that of 1973. That of 1967 speedily came to be called the Six-Day War, even though it had lasted seven days, and that of 1973 was termed the Yom Kippur War since it began on the Jewish Day of Atonement (according to the religious calendar). The Six-Day War immediately bore connotations of God's creation of cosmos: he labored for six days to create cosmos and rested on the holy seventh. So, too, the Israeli Army fought three Arab states for six days and rested victoriously on the seventh, having also recaptured the Old City of Jerusalem and, most significantly, the Western Wall, that sole remnant of the ancient Temple destroyed by the armies of Titus; the remainder that quite quickly became the most holy relic of the State (and of much of its Jewish population), tying together that ancient time of fragmentation and the present-day of unifying victory (and all Jewish historical moments in-between). In messianic terms the ownership of the Wall brought the State and Judaism, its official state religion, to the very verge of the Temple Mount (the Muslim *Haram al-Sharif*, the Noble Sanctuary) where the Temple destroyed by Titus's armies had stood. That which is ensuing at that site since 1967 is a story in itself.

During the 1973 War, Israel sustained severe losses of life and armament in desperate battles before regaining the upper hand against the Egyptian and Syrian armies. Not a few responses in Israel attributed Israel's trials in this war to the overweening pride of its leaders since the Six-Day War, and of their neglect of the ongoing training of the armed forces and the upkeep of their equipment. In other words, Israel had to struggle mightily to overcome its own weaknesses and the strengths of its enemies in order to move from the darkness of near defeat into the light of victory and salvation. These wars (and other actions) easily assimilate into the Jewish rhythmic pulsating of time.

Consider that two months after the Six-Day War a new social movement arose, called the Greater Land of Israel. Its founding signatories, primarily secular and primarily from the center-left of the political spectrum, were among the most senior and respected Jewish intelligentsia in the country. They included the revered poet and guru, Natan Alterman, and the author, S. Y. Agnon, who had been awarded the Nobel Prize for literature. It is worth quoting here from the document (in Hebrew) that they signed: "The Land of Israel is now in the hands of the Jewish people. Just as we are not permitted to relinquish the State of Israel, so we are commanded to maintain what we have received from its hands: the Land of Israel. We are hereby

loyally committed to the *wholeness of our land*, with respect both to the people's past and to its future, and *no government in Israel is entitled to relinquish this wholeness*" [my emphases].⁵⁰

I am not saying that the simple temporal, fractal-like pulsating rhythm I am describing is causal. Not at all. Or, more accurately, I don't know. I am not relating to the "contents" of cultural classifications and social actions, nor to their contextual meanings, nor to their consequences grounded in the social, the geopolitical, and so forth. Nor am I saying that there is some distinction here between "ritual time" and mundane time, as Bloch (1974) argued long ago in criticizing Geertz's conception of Balinese time as cyclical. Please forgive my repetition. I must emphasize this: I am saying that within the macro-folding that is Jewish creation and its existing that is ongoing, time-moving often is organized through a pulsating rhythm that moves from low to high, from darkness to light; that this is integral to Jewish cosmology; that this is a common-sensical understanding within Jewish culture; that this organizes numerous occurrences of social existence; and that this naturalness is used both without and with intention.

Time here is dynamic because at the very least it enables movement, because it was shaped to move as it does, and because it has fractal-like qualities of self-similarity of scale on a host of planes and levels, micro and macro. Zionism carried this macro-folding of Jewish time to Palestine, first within the state-in-the-making during the British Mandate and then within the Jewish state, despite claims of secularization, socialism, liberalism, modernization, and, too, of course, of the creation of the post-Holocaust new Jewish person, heroic, strong, and unbending. The rhythmic impulsing and pulsating of Jewish time with its fractal-like self-similarity moves powerfully within and through the messianic wave that has been building in Israel at least since the 1967 War, a wave whose future heights and duration no one can predict, nor can one know what will be left after it breaks. The State of Israel is caught (perhaps trapped) within Jewish cosmic time. Can it break free of this?

Notes

1. However "unfolding" was used there more in a micro-historical sense, of occurrences following one another.
2. For a powerful critique of methodological individualism, see Evens (1977).
3. In what I call events of modeling (Handelman 1990) or rituals of transformation we can say something like, the ritual creates the persons who will produce the ritual as that ritual that created them during n number of generations.
4. A path-breaking yet quite ignored exception was John M. (Jack) Roberts's (1951) monograph on cultural variation in three closely-related Navaho households. Roberts (1951: 3) argued that anthropologists had neglected the study of small groups "as discrete cultural entities lying between the individual and the larger groups . . ." While small groups were not neglected, they nonetheless "have been treated as parts of larger entities and their cultures as segments or divisions of larger group-ordered cultures" (1951: 4). Roberts's radical hypothesis was that "every small group, like groups of other sizes, defines an independent and unique culture" (1951:

- 3). Thus, small groups “sometimes constitute entities which cannot be fully encompassed by some larger group-ordered culture . . .” (1951: 5). Moreover, in a later essay Roberts (1964) recognized the small-group culture as a medium of information-processing, one with greater capacity to do this than the small-group as such. Tom McFeat (1974) took up and developed Roberts’s ideas in an intriguing and creative book that in turn anthropologists ignored. See also Handelman (1989).
5. The neologism of a-linear gives to movement a very different potentiality than does the nonlinear. Nonlinearity has linearity as its ground. The nonlinear is not-linear yet includes the referent of the linear. The nonlinear departs from the linear. However the Greek prefix /a-/ liberates movement from linearity. A-linearity locates movement (and time) away from and unconnected to linearity and nonlinearity, without any referent to the linear and without any commitment to an either-or arrangement of linearity *or* nonlinearity. See Gebser (1984: 2) for the significance of using the Greek prefix /a-/.
 6. This also opens to the logic of abduction of C. S. Peirce through which surprise generates questioning and analysis, rather than the prediction of induction or the reductionism of deduction. The logic of abduction in fact is critical in anthropological fieldwork though hardly recognized by anthropologists even as they use it in common-sensical ways.
 7. The sociologist, Keith Sawyer (2005: 104) argues that ideas of emergence were widespread in French nineteenth-century intellectual life. Durkheim made “emergence” central to his theorizing on the “social emergence” of social facts and collective representations from the interaction of individuals, and that: “social structure then becomes autonomous and external to individuals and exerts causal power over those individuals.” In other words, society emerges from individuals in concert but then becomes *sui generis*. Sawyer suggests that Durkheim’s place as a primary theoretician of social emergence was obscured by the emphasis he placed on the reproduction of society rather than on further social change. Though one should note that Durkheim’s concern with social reproduction was likely related to his pondering on how the France of that period could be held together through the creation of social solidarity.
 Interestingly, the idea of the autopoietic moment is joined to the *sui generis* when linearity (suddenly?) begins to curl into itself, toward folding and the beginning of self-organizing. It is then, during emergence, that the interaction of individuals is becoming the intra-action of folding.
 8. Compare what I have said on my early thinking on the encounter in the preceding pages with the following passage (Di Paolo 2009: 58), separated by some three decades from the latter: “Even though normal social encounters, for instance conversations, may only last a few minutes, our point is that during that period they may organize themselves [as follows] . . . the agents sustain the encounter, and the encounter itself influences the agents and invests them with the role of interactors. The interaction process emerges as an entity when social encounters acquire this operationally closed precarious organization. It constitutes a level of analysis not reducible to individual behaviors.” The tenor of resemblance to that which I argued a generation before is remarkable.
 9. This is one reason why in anthropology the journal article has become more prevalent in citation recording and evaluation. Much less can be accomplished through the article when compared with the monograph. The latter tries much harder to embody the complexity and richness of time, space, and person (see Handelman 2009). The length and character of the journal article in practice almost automatically invokes and legitimates the premise of “all other things being equal.”
 10. The historian of science Michel Serres (2015) argues for example, that “solidity” is slow speed.
 11. The philosopher, Cornelius Castoriades, influenced by Francisco Varela’s use of autopoiesis in cell biology, re-introduced and radicalized Aristotle’s concept of *physis* (or *phusis*) as purposively “pushing-toward-giving-itself-a-form.” See Adams (2008: 390; 2014).
 12. For critiques of and support for the usefulness of autopoiesis in law see, for example, Zolo 1992; Bankowski 1994; Paterson 1995.

13. Fully supported by the Inuit households that the late Jean Briggs studied in the 1960s and 1970s. See Briggs (1970, 1998).
14. That might be worth thinking about, for example, in relation to Mircea Eliade's (1964) myth of the eternal return.
15. This thought builds on the philosopher Helmuth Plessner's conception of "mediated immediateness," in which the immediacy of human experience becomes mediated perception in order to shape the world (Lerch 2014: 208). Also cited in Soeffner (1997).
16. So neither Peter Blau (1964), the most prominent proponent of exchange theory at the time, nor Fredrik Barth (1981: 14–76), the innovator of transaction theory, related to the profound formative confluence of the conjunction of curving, volume, depth, and time. This kind of thinking was foreign to them, as it continues to be in anthropology and sociology. I am not discussing Gestalt Theory here though it is relevant to the stability of visual forms and, according to Gandelman (1982), to Husserl's phenomenology. However Gestalt Theory seems to say little about the problematic of time in social forms.
17. Here is one example of responses at the time to these ideas. In 2004 I lectured on ritual in its own right at the Institute for Indian Studies at the University of Heidelberg. When I began to discuss the step of taking a "ritual" out of context in order to study the phenomenality of its interior form the senior anthropologist at the Institute half stood up and loudly called out to me, "You can't do that!" My response was, "I'm doing it."
18. Present-day state and other official orderings largely downgrade "ritual" to mirroring and representing social orders. Yet oft forgotten in relation to "ritual" is that these orderings use the most powerful organ of making controlled change ever invented by human beings—bureaucratic logic and the ongoing, routine, making and changing of taxonomic bureaucratic classification (Handelman 1998: xxiv–xliii; this volume, Chapter Four). So it is not surprising that official "rituals" are often as lacking in interior dynamics as they are. In thinking like this I can be accused (once more) of implicit functionalism through lengthy durations. Yet to me this way of thinking is more akin to that of Michel Serres's use of the logic of "crumpled time," of times that—chronologically, linearly—are distant from one another yet that bring together, even join together, a logic in each that is akin to the other (See Serres's thinking on turbulence in Lucretius and in modern physics). In its crumpling, time is nonlinear or, more accurately, a-linear, such that there is no linear baseline to time, as the nonlinear (the "not-linear") implies. Then, why necessarily separate points of time chronologically distant from one another when the logic of what happens during each of these points in time is akin to that of the other? To what extent is such separation a product of an ontology that demands linearity in thinking, planning, and intellectualizing in order to conceal recursivity?
19. For example, look at the dynamism of curving and folding in paintings (Elasticity [1922], The Dynamism of a Football Player [1913], and The Dynamism of a Cyclist) by the Italian futurist, Umberto Boccioni.
20. Among those who have responded to the idea that it is worthwhile studying ritual in its own right are Clark-Deces (2007: 11–12), Espirito Santo (2016), and Shapiro (2015).
21. The mathematician, George Spencer Brown (1969), called this self-intersection, re-entry. His calculus shows how logical form emerges from the making of distinctions—how space comes into existence from nothing (Robertson 1999). In doing so he discovered that, contrary to his original intention to have space emerge only from space, his calculus could not continue indefinitely to develop space synchronically. In a sense the calculus demanded that form exit itself and re-enter itself in order to enable the calculus to make its creation of form just that—whole. Form, in order to become form, had to become self-referential. This is what the re-entry of form did in re-entering itself and thereby necessarily referring to itself. Yet, what is especially interesting here is that to have form make itself self-referential Spencer Brown had to introduce what he called "time" in order to deal with re-entry—of going outside in order to return inside. This operation could not be performed without *duration*, that is, time. As Schiltz (2007: 27) put this: "The reader must realize that time has thus been created as a consequence of a type of

space, namely space in which form can relate to itself [through self-intersection], and, as such, change . . .” But here in my terms something no less intriguing occurred. By making time critical to the creation of form Spencer Brown had to take into account just what it is that time does. Time moves. As form durationally re-enters itself time continues to move forward, and therefore form, creating itself through its re-entering, can never catch up with itself, and is always out of sync with itself (see Schiltz 2007: 22). *Form therefore can never be whole*; holism is always just out of reach. Furthermore, again in my terms, if the re-entry of form into itself is understood as the repetition of form in a Deleuzian sense then repetition necessarily generates difference. Form therefore is ontogenetic (i.e., morphogenetic) rather than ontological (see Schiltz and Verschaegen 2002). For a similar argument on why holistic theories in physics—theories of everything (theory of relativity, quantum mechanics, string theory)—ultimately fail, see Rosen 2008.

22. The ethnographer was Donald Roy, an industrial sociologist whose orientation derived from the Chicago School of Sociology (see Roy 1959–60). In *Models and Mirrors* (Handelman 1998: 104–12) I offered an earlier interpretation, one related to dialectics, though I am more satisfied with my present-day understanding.
23. One might argue that the idea of framing is no less effective than that of folding and that framing has been an accepted term for many years. Yet note that “frame” is a linear idea that promotes the spatial and its interior shallowness, while “fold” accentuates depth, the temporal, and interior complexity.
24. This is similar to phenomena that Max Gluckman (1963) called “rituals of rebellion,” in which recurrent, ritualized opposition to the social order is contained by that order, thereby demonstrated the strength and resilience of that order that then encourages further “rituals” of opposition to the social order. Myron Aronoff (2015) used Gluckman’s idea to analyze the operations of the Central Committee of the Mapai (Labor) party in Israel during the 1970s.
25. Marilyn Strathern (1988) took the “dividual” to Melanesia, arguing that Melanesian persons are themselves composites of the substances and qualities of other persons so that in a sense each person contains a multiplicity of persons and is able to shift through aspects of these others as parts of oneself. The Melanesian person, she argues, is partible. In this regard, see the distinction drawn by Busby (1997) between partible and permeable personhood.
26. So, too, with regard to certain aspects of gender in South India. In Western perception categories of gender are monothetic, and as a new gender is “officially” recognized it is added to the string of others, each an encapsulated difference, hence the string of LGBTQ that is actually L+G+B+T+Q. South Indian gender may be more similar to a continuum or, more accurately, to the skins of an onion that overlap with one another more and more in deeper and deeper depth (see Handelman 2014: 109–10).
27. I must emphasize that the idea of folding is not the recourse to a more abstract metalevel understanding of the forming of form. Folding is *not* encompassment. Encompassment refers to a holding together from their exteriors of all the elements that hold together. The logics of this kind of assemblage are those of some kinds of forcefulness that tries to prevent the elements of the assemblage from falling apart or escaping. Encompassment is a top-down idea that dictates the organization of motion and movement. Folding is closer to a bottom-up idea, describing the emergence and self-organization of assemblages *through* their own motion and movement. Folding resonates in some ways with a qualitative use of the construct of the Klein Bottle with its self-intersecting involution that, according to Steven Rose in one of his works, is time as the fourth dimension; in other words, is the duration that necessarily enables movement through, within, and outside the Bottle. Of course the distinction between encompassment and folding may well be fuzzy, perhaps with shifts back-and-forth, in and out. This does not obviate the significance of the distinction; indeed folding and encompassment may grow out of one another, and then the conditions for the formation of each become critical.

What I deny is the simplistic ease with which we reach for higher-order metalevel concepts and arguments in order to enable order that then, again too easily, becomes the baseline for

- thinking on stability *and* change. I am in full agreement with the philosopher of science, Isabelle Stengers (2008: 107), when she argues about the problematic way “in which we accept the domination of abstractions; that is, the way in which we consent to forget or neglect what we are aware of when it cannot be formulated in a clear, self-contained way.” The macro does not necessarily encompass and organize the micro. Phenomenal forms on their ways to folding self-intersection (to whatever degrees) have their own lives that thread through the lives of their participants. In order to perceive this we must avoid the condition of explanation in which, as the historian Siegfried Kracauer (1969: 126) commented, events (and social phenomena) arrive at macro altitudes in a “damaged state.” Kracauer (1969: 130) accurately and wisely summarizes the problem of metalevel explanation in noting that, “The belief that the widening of the range of *intelligibility* involves an increase of *significance* is one of the basic tenets of Western thought. Throughout the history of philosophy it has been held that the highest principle, the highest abstractions, not only define all the principles they formally encompass but also contain the essences of all that exists in the lower depths. They are imagined as the ‘highest things’ in terms of both generality and substance” [italics in original]. As I (Handelman 2006b: 112) commented elsewhere, “The history of field-research anthropology in the twentieth and now the twenty-first century may be understood as an unresolved struggle with this premise [of Kracauer’s].”
28. Another example of an autopoietic moment is what in Jewish Israel is called “crystallization” (*gibush*), the sudden formation of group-ness, of folded-ness, within a collection of loosely connected or disparate individuals (see Handelman 2007b: 132–34). See also the invention of an (unspoken) game, the Donkey Game, in one of the workshops I studied (Handelman 1990: 86–101).
 29. Physics had long discounted time as a dynamic in the workings of the cosmos. As Stengers (1977: 40.1) states: “to affirm that time is nothing else than the geometrical parameter [i.e., a fourth dimension] that allows calculation from the exterior, and as such, negates the becoming of all natural beings, has been almost a constant of the tradition of physics for the last three centuries In our time it is Einstein who embodies with the greatest force the ambition of eliminating time,” that was powerfully in evidence in his 1922 debate with Bergson during which Einstein dismissed the “[subjective] time of philosophers” as “incompetent” (ibid.). Yet according to Canales (2015: 346) later in life Einstein “admitted that he did not think that the division between the subjective and objective could be established once and for all, or even that between physics and metaphysics.”
 Interestingly, the historian, Kofi Campbell, in a blog post in 2008, wrote, “I was rereading some of the writings of Albert Einstein, and one sentence in particular struck me again: ‘The only reason for time is so everything doesn’t happen at once.’” This phrasing, here attributed to Einstein, is simply a paraphrase of Bergson’s, “Time is what hinders everything from being given at once” (Bergson 1992: 93). Regrettably, Campbell does not give a reference for his reading, and apparently the other historian contributing to the blog did not ask him for one. I emailed Campbell at the University of Waterloo (4 April 2018) asking if perhaps he still had the reference even though a decade had passed but received no reply. Campbell’s post was cited in Eileen Joy, “Signaling to Each Other From Inscrutable Depths: A Response to Gabrielle Spiegel’s ‘Getting Medieval’: History and the Torture Memos” (<http://www.inthemedievalmiddle.com/2009/03/signaling-to-each-other-from.html>; accessed 5 February 2017).
 30. Thus Grosz (1999a: 4): “each [of these thinkers] in his own way affirms time as an open-ended and fundamentally active force—a materializing if not material—force whose movements and operations have an inherent element of surprise, unpredictability, or newness . . . and chance . . . is of the essence of a time that is not regulated by causality and determination but unfolds with its own rhythms and logic, its own enigmas and impetus.” See also Grosz (1999b: 28).
 31. Later on, Einstein was convinced the universe had four dimensions, and still later on he wondered about this. See note 29.
 32. See note 4 in Simeonov 2015 for the translation.

33. Michel Serres's (1998: 81–122) exposition of “the birth of time” gives to time something of the qualities of the a-linear. Serres suggests that, in relation to space, time can shift to become less spatial (and closer to pure time in its own right) or more spatial, enabling a multiplicity of relationships between forms and time.
34. Bateson (1972) argued this through his theory of schismogenesis. See the modifications of Simonse (n.d.) and Thomassen (2010).
35. By using the neologism, own-ness, I do not have to assume the existence of self in relation to reflexivity. I assume instead that an organism of any variety has its own “own-ness,” whatever this is that holds the organism together as a unit or units, without assuming that it necessarily has a self.
36. Organic matter, even at the molecular level (see Schweber 2016: 130–31; Torday 2018: 5) may be said to possess memory and hence to process information. This suggests that in-turning is no less the organic referencing itself through information-processing. In evolutionary terms, according to the cell biologist, J. S. Torday, such memory is genetic and, importantly, epigenetic, the cellular organism learning through time from its changing environments and passing this information from generation to generation. See also the discussions on the Neuroskeptic Blog (“Slug Life: About that Injectable Memory Study,” <<http://blogs.discovermagazine.com/neuroskeptic/2018/05/18/epic-snail-about-that-injectable-memory-study/#more-9517>> accessed 4 June 2018) regarding experiments to transfer a component of memory from one sea slug to another. As Landecker and Panofsky (2013: 339) say, “With epigenetics, the formerly immutable genome is acquiring a life span.” In my terms, life span is durational and the organism is a time-form contending with reproduction and change through the organism's in-turning, into itself. For a wise, cautionary note on epigenetics, society, and culture, see Lock (2015).
37. Once the movement of time is factored in, even the potentialities of Deleuzian virtuality (see Handelman 2013) cannot enable organic time to catch up with physical time.
38. I saw this first-hand and up close. At the time I was in Manchester and Gluckman was my PhD supervisor.
39. As Crawford (2007: 11) points out, “Gluckman's material example of structural duration was a chair, in which the molecules are always moving but the structure . . . remains the same. This is perhaps more telling than Gluckman realized. The significant distinction is not between ‘the’ structure of the chair and the constant movement of the many particles within it, but the multiple structures involved in a chair and their corresponding multiple timeframes . . . Max Gluckman's chair contains a radical plurality of temporalities . . . The chair-in-itself is a sort of membrane, or what some have termed a ‘moment,’ where (when!?) a set of temporal processes of very different periodicities come together.”
40. Thus the process philosopher, G. H. Mead, used a version of this kind of reflexivity to discuss the emergence and functioning of selfhood through taking the role of the other.
41. Without speaking of selfhood, self-identity may be embedded in a variety of organic forms. Some, like the body and flesh more generally, are clearly sentient in their own, active ways that are undoubtedly sensually cognitive. For example, the reactions of immune responses to the presence of foreign bodies that are felt as threatening to the organism, and the mistakes of immune responses in recognizing the surface disguises that some of these foreign bodies may take on, all depend on recognizing difference from the common identity that characterizes cellular membership in the organism (cf. Tauber 1997, Wilce 2003, Napier 2003).
42. Perhaps time, in opening to the potentiality of multiplicity, moves toward what Michel Serres called “crumpled time,” a heterogeneous, polymorphic sense of time through which moments separated chronologically in linear time come into contact with one another because both use the same logic of thought and affect. Therefore these moments or events should not be thought of as separated by the duration between present and past, however distant. (For that matter, these moments could be thought of as existing on parallel time-lines in an indeterminate universe). Serres's most well-known example is the resonance (one can say the time-resonance) between the thinking on turbulence of the Roman, Epicurean poet, Lucretius (in his *De Rerum Natura*) and the twentieth-century thinking of physicists).

43. See Gilles Deleuze speaking with Richard Pinhas, "On Music," 03/05/1977, translated by Timothy S. Murphy, in *Les Cours de Gilles Deleuze* <www.webdeleuze.com>.
44. Much of this discussion is taken from Handelman and Katz (1998), though my understanding of this ontology today is radically different in certain respects from that previous version.
45. By contrast, space is alienated (by expulsion), and fragmented (by destruction); while desired space is often at best the promise of time: *elsewhen*, and attainable only through the coherent continuity and integrity of time.
46. Elsewhere (Handelman and Lindquist 2011) I have argued that the Jewish God holds together the cosmos of His creation from its outside rather than from its inside. The existence of God does not depend upon the survival of His cosmos (unlike, for example the South Indian cosmos of the deity, Shiva, whose very survival depends upon his cosmos holding itself together from its inside [Handelman and Shulman 2004]). One can say that the existence of His cosmos depends upon the capacity of Jews to perfect themselves morally in accordance with God's instructions through actions whose primary rhythm and pulsation is that of time moving from low to high; and that every striving for such moral perfection throughout Jewish history has failed, yet the rhythm of striving for moral perfection begins all over again. At times I think that the Jewish God placed his standards at such a height that Jews could only fail in their strivings to reach them, thereby ensuring that the rhythm and pulsation would begin over again.
47. Mandelbrot's geometry of the fractal refers to structures that in terms of classical mathematics of Euclid and Newton were perceived as pathological: "By definition, fractal objects have fractal dimension. According to Mandelbrot, they are *broken, irregular, fragmented, grainy, ramified, strange, tangled, wrinkled*. These wrinkled structures may extend over space, over time, or over both: fractal space-time patterns" (Abraham 1993: 53). Time, as discussed in this chapter, is neither objective nor subjective. Nor is time a structure that extends over time. Rather, time is moving and folding within form, enabling or aiding form to move through time within itself and through time exterior to itself. Thus I am saying that the organizing of Jewish cosmic time, its self-similar pulsation on different scales, is fractal-like in this respect.
48. The idea of the fractal was introduced into anthropology by Roy Wagner in the first instance to discuss Marilyn Strathern's "concept of the person who is neither singular nor plural" (Wagner 1991: 162), though Wagner demonstrates the relevance of its organization to a number of New Guinea cultural orderings.
49. The first four Sabbaths of this sequence are explicitly accorded a special status in traditional Judaism. Their temporal rhythm is accentuated if one adds to this sequencing the readings from Prophets of the two subsequent Sabbaths.
50. Meron Rapaport, "One Day, Two Declarations," *Haaretz* (English edition), 7 June 2007.

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