Sideshadowing and Tempics

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Tempics and the Bias of the Artifact

Time is of the essence. All of us directly experience our lives as opening into an uncertain future. We possess no guarantee that each event in our lives will prove to be of significance or will fit a meaningful pattern. But successful narrative art, unlike life, does typically ensure such significance, which is one reason almost everyone senses the artificiality of even the most realistic story. However precise the author may be in recording the texture of daily life, the very fact of a work's structure renders its temporality radically different from that of real life.¹

In life, most people would regard it as futile to forecast one's future on the basis of what would make the most effective story. But in reading literature, this way of thinking about characters' lives is often justified. In novels there is a point when all loose threads must be tied together. But real time is an ongoing process without anything resembling literary closure.

Writers who have wanted to represent time as open have therefore sometimes struggled against this narrative demand for structure and closure. And yet for very good reasons, a work without these twin insurers of unity is likely not to be effective at all. It appears that literary structure is not neutral with respect to philosophies of time.

Lessing contended that art forms carry inherent predispositions,² and we may say that narratives, insofar as they rely on structure, are predisposed to convey a sense of fatalism, determinism, or otherwise closed time. It is relatively easy to make a narrative's temporality isomorphic with—the same shape as—closed time, but many writers have felt it almost impossible to create isomorphism with open time. That was the task set by those two extreme devotees of realism, Tolstoy and Dostoevsky—Tolstoy in order to represent the radical contingency of the world and Dostoevsky to represent human freedom. They developed remarkably interesting ways to resist the bias of the artifact—to overcome what I like to call Lessing's curse. Their most interesting method for doing so was a device I have named sideshadowing.

Let me project beyond my own examples and my earlier work to where I want to go in the future. It seems to me that the history of poetics, from Aristotle to the present, has, for all the variety of interpretive schools, almost always found meaning in narrative by reading out its *eventfulness*. A poetic reading shows us how the unfolding of incidents completes a pattern, how the work, when finished, is graspable as a synchronic structure that has simply required time to unfold. The work is spatialized, and so real eventfulness exists only for the characters.

For the reader, the work becomes graspable in all its artfulness after reading is over, when it is contemplated as a whole or reread. Indeed, for an experienced reader, even a first reading constitutes an anticipated rereading. Time becomes symmetrical, so that events may be explained not only by what precedes them but also by where they must lead to complete the structure in the best possible way. The future is given, as is the past, and the present moment of any event possesses no special meaning.

But in life, and for most novelistic characters, time is asymmetrical. While the past is fixed, the future is experienced as open and the present possesses real presentness, in which the weight of chance and choice may lead to many different outcomes. From this sense of presentness, we derive the capacity for regret and other emotions that depend on an uncertain future and a *momentous* present. Unlike most art, life is genuinely eventful and set in open time, with loose ends and without closure. And yet, some artworks have managed to overcome the bias of the artifact and convey a sense of open and asymmetrical time. Contemplating such works, critics, largely by default, have continued to read poetically and force a structure where one is lacking. The signs of ill-fit between work and interpretive method are apparent, but there is nothing else to be done because the choice has seemed to be either reading according to the norms of poetics or not finding meaning at all.

Of course, most works are written according to structural and poetic norms, which I do not in any sense mean to reject. But I do think that the application of such norms should be a *choice* among alternatives, which may or may not be appropriate in any given circumstance. It should not be made by default, or because of the sense that the only alternative to structure is chaos. What my last book begins to outline, and what a future one should develop, is just such an alternative, a subdivision of “prosaics” that for the moment I call “tempics” because it is so concerned with temporality.

I mean tempics to apply to works displaying open time, but I think the concept has much greater applicability because we often apply poetic models to the real world—to our peril, because poetic temporality is so different from open temporality. I believe that a great deal of the history of thought in many areas—ranging from biology and physics to econom-
ics, anthropology, and city planning, as well as literature and philosophy—manifests a continuing dialogue between various models that resemble poetics and those that strive to incorporate a real sense of process. The question, in each of these dialogues, is how to understand contingency and the apparent openness of the future. In literature and elsewhere, tempics, as a way of reading that takes time and contingency seriously, should help us to read experience without making a poem of it, and yet find meaning in it.

Foreshadowing, Sideshadowing, and the Middle Realm

I coined the term "sideshadowing" by analogy to foreshadowing, a concept we often use but, I think, have not examined with sufficient clarity. The term foreshadowing indicates backward causation. A spatial metaphor for a temporal phenomenon, it is a shadow cast in front of an object; the temporal analog is an event that indicates (is the "shadow" of) another event to come. An object in our path may cast a shadow backward, so that we reach the shadow before reaching the object casting it; and from experience, we may know to expect the object when we encounter the shadow. The shadow does not cause the object ahead, but is caused by it, even though we encounter the shadow first. A temporal foreshadow works the same way. When a storm foreshadows a catastrophe, the storm is there because the catastrophe follows; it is an effect of that future catastrophe visible in temporal advance much as the shadow of an object may be visible in spatial advance. Because the future is already there—is substantial enough to cause earlier events and to send signs backwards—foreshadowing ensures a temporality of inevitability.

Foreshadowing is possible because the work has structure and closure, which allow for events to be shaped by later, as well as earlier events, that is, by the pattern of the whole. It betrays the fact that in narrative, though not in life, time is symmetrical.

Foreshadowing therefore robs a present moment of its presentness. It lifts the veil on a future that has already been determined and inscribed. When foreshadowing is used, the sense of many possible futures, which in life we experience at every present moment, is revealed as an illusion.

Whereas foreshadowing works by revealing apparent alternatives to be mere illusions, sideshadowing conveys the sense that actual events might just as well not have happened. In an open universe, the illusion is inevitability itself. Alternatives always abound, and, more often than not, what exists need not have existed. Something else was possible, and sideshadowing is used to create a sense of that "something else." Instead of casting a shadow from the future, it casts a shadow "from the side,"
that is, from the other possibilities. Along with an event, we see its alternatives; with each present, another possible present. Sideshadows conjure the ghostly presence of might-have-beens or might-bes. In this way, the hypothetical shows through the actual and so achieves its own shadowy kind of existence in the text.

In sideshadowing, two or more alternative presents, the actual and the possible, are made simultaneously visible. This is not a simultaneity in time but of times; we do not see contradictory actualities, but one possibility that was actualized and another that could have been but was not. Time itself acquires a double and, often, many doubles. A haze of possibilities surrounds each actuality.

When sideshadowing is used, it seems that distinct temporalities are continually competing for each moment of actuality. Like a king challenged by a pretender with an equal claim to rule, the actual loses some temporal legitimacy. It can no longer be regarded as inevitable, as so firmly ensconced that it does not even make sense to consider alternatives. The actual is therefore understood as just another possibility that somehow came to pass. It was perhaps not entirely accidental but it came without guarantees and it was preceded by no annunciation of its coming. Sideshadowing invites us to inquire into the other possible presents that might have been and to imagine a quite different course of events. If only that chance incident had not happened, if only a different choice had been made, if only a favorable sequence of events had not been interrupted, or had been interrupted a moment later—what would have happened then? Sideshadowing constantly prompts questions of this sort.

In permitting us to catch a glimpse of unrealized but realizable possibilities, sideshadowing demonstrates that our tendency to trace straight lines of causality (usually leading to ourselves at the present moment) oversimplifies events, which always allow for many possible stories. When a sequence of events seems so coherent as to be necessary, we are usually deceived by our own presence at the sequence’s culmination. The mirage is not other possibilities but the necessity of the actual one. Sideshadowing therefore induces a kind of temporally based humility.

Sideshadowing restores the possibility of possibility. Its most fundamental lesson is: To understand a moment is to grasp not only what did happen but also what else might have happened. Hypothetical histories shadow actual ones. Some nonactual events enjoy their own kind of reality: the temporal world consists not just of actualities and impossibilities but also of a third, in-between category: real, though unactualized, possibilities. Sideshadowing invites us into this peculiar middle realm of possibility.
Time as a Field

In its inclusion of contrary-to-fact expressions and tenses, our language displays an appreciation of potentialities in excess of actualities—of the *surplus of temporalities*. Time ramifies, and the present we know is one of many possible presents.

Once we are conscious of the lessons of sideshadowing, we may also wish to apply them to the past. In general, past sideshadowing suggests that we may well be mistaken about past actualities, and that the sequence leading to us differs from the one we imagine. And even if we are right about which events did happen, we may be mistaken in tracing straight lines between them. If we had a more accurate picture of the past, the significance of present configurations might look quite different. The same facts may possess other vectors; the product of different pasts, they may be directed to a different set of futures. Sideshadowing and tempics together suggest that the present—and every earlier present—is anything but a perfectly structured whole. Rather, it manifests the vestigial, facts that are explicable only as the product of contingent lines of causality that do not cohere.

Sideshadowing relies on a concept of time as a field of possibilities. Each moment has a set of possible events (though by no means every conceivable event) that could take place in it. From this field a single event emerges—perhaps by chance, perhaps by choice, perhaps by some combination of both with the inertia of the past, and in any case contingently. The other possibilities usually appear invisible or distorted to later observers. Thus a field is mistakenly reduced to a point, and, over time, a succession of fields is reduced to a line. Sideshadowing restores the field and thereby recreates the fullness of time as it was. To understand a moment is to grasp its field of possibilities.

The Extraordinary Number of Facts,
If Only They Are Facts

His mother (and several other persons) are anxious to find the principal reason for his return. N.B. There is no principle reason, just an indistinct attraction.

Fyodor Dostoevsky,
*Notebooks for The Possessed*3

The chronicler of *The Possessed* typically tells us what might have happened or what could have happened. In addition, the "actions" he
does describe are frequently checked impulses, which might or might not indicate a possibility contemplated but not actualized. Such actualities are themselves aborted possibilities and they evoke the middle realm of things that could have happened. Remembered by the character who "performs" them, and perceived by witnesses, these possibilities acquire a substantiality of their own. Dostoevsky's novels are thick with events that might have happened.

At about the midpoint of The Possessed, several characters take a trip to the mad "prophet" Semyon Yakovlevich. Having completed a lengthy description of the journey, the chronicler unexpectedly announces that none of these events is important: "At this point, however, there took place, I am told, an extremely enigmatic incident, and I must own, it was chiefly on account of it that I have described this expedition so minutely." Here, as elsewhere, the chronicler has evidently given us "too many facts," including all sorts of apparently "irrelevant" details about the expedition. We recognize their presence as characteristic of Dostoevskian narration. Too many facts, presented with no clear explanation and an air of mystery, lead us to construct or intimate many possible stories. What is irrelevant to one account, after all, may be central to another, and the reader, like many characters in the novel, seeks to construct many stories from each one.

Stories also multiply if the facts may not be facts at all or if other "facts" lie behind the ostensible ones, with ever-receding layers of possibility and orders of suspicion. Although the chronicler has himself witnessed a great deal and has apparently spoken with almost everyone about almost everything, he seems, for all his research, to be unable to decide on a single version of events. Instead, he typically reports a range of rumors, doubts his own best sources, and obsessively offers alternative possibilities. "Some say," "others affirm," "it is absurd to suppose," "now everyone at the club believed with the utmost certainty," "it is maintained in all seriousness"—these and countless similar expressions give each of his accounts an aura of endless alternatives and an air of unresolvable enigmas. That is surely true of the "extremely enigmatic incident"—if incident it was—at Semyon Yakovlevich's.

It appears that as everyone was leaving, Stavrogin and Liza Nikolaevna, whose relations everyone regarded as mysterious, jostled against each other in the doorway. Or, at least, "I am told" they did.

I fancied they both stood still for an instant, and, looked, as it were, strangely at one another, but I may not have seen rightly in the crowd. It is asserted, on the contrary, and quite seriously, that Liza, glancing at Nikolai Vsevolodovich, quickly raised her hand to the level of his face, and would certainly have struck him if he had not drawn back in time. Perhaps she was displeased with the
expression of his face, or the way he smiled, particularly just after such an
episode with Mavriky Nikolaevich. I must admit I saw nothing myself, but all the
others declared they had, though they certainly could not all have seen it in such
a crush, though perhaps some may have. But I did not believe it at the time. I
remember, however, that Nikolai Vsevolodovich was rather pale all the way
home. (P 341)

Readers will identify this rhetoric as quintessentially Dostoevskian.
"Though ... though ... however"); "I fancied"; "perhaps"; "it is asserted
quite seriously": with qualification piled on qualification, tentative
judgments no sooner made than withdrawn and perhaps ambiguously
reasserted, the narrator claims not to be sure what he himself has seen.
Reports of others are probably even more unreliable, and apparently
contradictory, though not necessarily groundless. Frivolous people with
a taste for scandal seriously say things that differ from what the narrator
himself has seen, although, of course, he may have missed such a vague
event and does not trust his own eyes "in such a crush." He concludes by
saying that he did not believe in the reported event—does he accept it
now?—and then giving evidence that it might just be true anyway.
Moreover, the action that may have taken place was a slap not given, and
so one has in any case to distinguish between an unrealized possibility
and nothing at all.

Something may or may not have happened, and if it did, it may have
been one thing or another. Liza and Stavrogin may have simply stared
strangely at each other or, "on the contrary," she may have intended to
slap him. If that was her purpose, it may have had various motivations,
including, presumably, others not mentioned here at all.

What we are given here is not one but many possible stories. The real
point is that whatever did happen, any of these incidents could have
happened. What is important is the field of possibilities, not the one
actualized. By depriving any version of undeniable actuality, Dostoevsky
reveals the field itself. The sideshadows crowd out the actual event.
Indeed, nothing may have happened, in which case the sideshadows are
all there are.

Rumor as Hero

With facts uncertain, rumors predominate. No matter what happens,
rumors circulate countless versions. Indeed, rumors serve as one of the
prime movers of action in most of Dostoevsky’s novels. Apparently, Pyotr
Stepanovich seeks to maximize the power of his revolutionary organiza-
tion by conveying exaggerated impressions of its size and power; or is he,
on the contrary, seeking to hide the extent of its power by discrediting accurate versions as mere rumor? It is hard to know, and though we, like the townspeople, may suspect one thing or another, the matter is not resolved, which is just the effect at which Pyotr Stepanovich aims.

And so everywhere Pyotr Stepanovich goes he drops hints or refutes what no one has imagined. Using a method that eerily echoes the chronicler who describes him, Pyotr Stepanovich relies on providing too many facts: he patters on, digresses, and recounts "irrelevancies," which, taken together, intimate more stories than he actually tells. In Bakhtin's terms, we might say that Pyotr Stepanovich unwittingly draws the chronicler into his speech zone. He is in this way a sort of co-chronicler, which raises the suspicion that the novel itself may be a kind of decoy. Intrigued by intrigue itself, the townspeople find themselves sorting through countless versions and feeling clever when they arrive at an appealing one, which, however, is soon dislodged; the readers of the novel, though they may smile at the townspeople's simplicity, do the same thing. Nothing is ever as it seems, and the novel ends with many mysteries unresolved (Who killed Fedka? Was Pyotr Stepanovich a double agent? Was Stepan Trofimovich really his father?). The plurality of possibilities is unreduced to singularity. The Possessed offers a haze of stories about a haze of stories.

It might almost be said that rumor is the main character of The Possessed. Indeed, as the book progresses, it becomes apparent that rumors seem to spread on their own, even in situations where there was no one to spread them. They do so because they reflect and evoke the field of possibilities surrounding all actions and all nonactions. Clouds of story hover over the narrative landscape. We are used to thinking of stories as moving from event A to event B to event C, but The Possessed proceeds differently, from one indistinct field of possible events to another, no less definite. It moves not from point to point but from smudge to smudge.

Pseudo-Foreshadowing and Backshadowing

To create sideshadowing, Dostoevsky also uses a device that at first glance seems to preclude it. At times he appears to employ a form of foreshadowing, which, one might suppose, allows the future to dictate possibilities to the present and therefore to close down time. On closer inspection, however, these passages exhibit what might be called pseudo-foreshadowing: though using the tropes of foreshadowing, they produce the opposite effect.
Readers of Dostoevsky are aware that his narrators often allude to a future catastrophe, which is, indeed, what has motivated them to tell the story in the first place. *The Possessed* begins, “In undertaking to describe the recent and strange incidents in our town, till lately wrapped in uneventful obscurity, I find myself forced in absence of literary skill to begin my story rather far back, that is to say, with certain biographical details concerning that talented and highly esteemed gentleman, Stepan Trofimovich Verkhovensky” (P 3). We have here an allusion to the future, which will contain “strange incidents,” but no statement as to what those incidents will be. Something is promised, but we do not know what.

Throughout the novel, the chronicler often begins a sequence of events by saying that they contributed to a later catastrophe, but just what the nature of that catastrophe was—and how it affected the major characters—is left obscure. Although this sort of rhetoric could easily have its place in a novel based on foreshadowing, here it serves a different function.

The first thing to note about pseudo-foreshadowing is that it closes off virtually no options. To be sure, it tells us that there will be some sort of disaster—although a strange event is not necessarily disastrous—but that much is always a given in any Dostoevsky novel. This sort of vague warning has a double effect. First, it alerts the reader to the importance of forthcoming details that have the potential for catastrophe. Second, it promises that something otherwise unforeseen and sensational will take place. We focus keenly on possible futures. The result is a sense that anything may happen—which is just what Dostoevskian sideshadowing creates. Whereas foreshadowing severely limits options, pseudo-foreshadowing does the reverse. Instead of anticipating some specific outcome or course of events, readers come to expect the radically unexpected.

Dostoevsky’s notebooks make clear that he used this device quite consciously even when he had not settled precisely on what would follow and when foreshadowing therefore could not have been his aim. Long before he had settled on a specific plot, for instance, he included the following plan for the opening passage just cited: “N.B. . . . Our recent fires and other strange developments in our, i.e., S—a province notwithstanding, I shall begin my narrative with T. N. Granovsky [the model for Stepan Trofimovich]. . . . Timofei Nikolaevich [Granovsky] did not understand nihilism and used to argue about it with Shatov. Yet these are digressions, of which many are needed; also, introduce as many particular events as required . . . then all of a sudden bring in a truly promising plot. Finish it with some major event and a lot of noise” (NP 177). “Some
major event,” “a truly promising plot”: apparently, virtually any major event or dramatic plot would accord with the initial vague prediction. And virtually no possibilities for sensational events are precluded.

At the beginning of The Idiot, a truly remarkable example of pseudo-foreshadowing occurs: “In one of the third-class carriages, two passengers had, from early dawn, been sitting facing one another by the window. Both were young men, not very well dressed and traveling with little luggage; both were of rather striking appearance, and both showed a desire to enter into conversation. If they had both known what was remarkable in one another at that moment, they would have been surprised at the chance which had so strangely brought them opposite one another in a third-class carriage of the Warsaw train.” Everything about this meeting of Myshkin and Rogozhin suggests their future involvement in sensational events. The sequence of “both” clauses intimates a vague parallel between their life stories; and the comment that “if they had . . . known what was remarkable” in each other they “would have been surprised” at the strange chance bringing them together, seems to intimate the hand of destiny or, at least, a mysterious causal chain. For critics who know the whole novel and who are rereading this passage, the friends’ fatal rivalry over Nastasya Fillipovna seems already contained here. Both Rogozhin’s attempt on Myshkin’s life and the novel’s tragic end seem present at the beginning, like a future dictating subsequent events.

On the other hand, this prediction is so vague that it does not specify what or how important the connection between the two may turn out to be. Whatever happened subsequently might look in retrospect as if it had been intimated here. In principle, this passage could be an instance either of foreshadowing or of pseudo-foreshadowing, which is often the case. First readers experience a vague prediction that makes them attentive to potentials, rereaders see future actualities already present. Critics are virtually always rereaders, and so the very nature of their activity predisposes them unawares to choose the interpretation of foreshadowing. But if we separate ourselves from this professional predisposition, which alternative is really more persuasive?

Despite a reluctance to rely on external evidence as a way of solving problems of this sort, I would note that if we have in mind Dostoevsky’s intention when he wrote and published this passage, the answer is clear. The notebooks to The Idiot reveal conclusively that even after Dostoevsky had published the first of the novel’s four parts, he had essentially no idea of how to continue. To mention just a few important questions of plot, he did not know whether Nastasya Fillipovna would marry Rogozhin or Myshkin; whether she would kill herself, be killed, or die naturally; or
whether Rogozhin would be damned or saved. In one draft, Rogozhin was to take up with Aglaia, and in another Myshkin with Adelaida! In terms of the story, it would be hard to imagine much greater openness. And equally important, no matter which of these options Dostoevsky had chosen, critics could have found signs of “foreshadowing”; because the devices of sideshadowing, with their plethora of possible paths, allow for almost any continuation. If one simply looks for preparations for what did happen, and ignores preparations for what could have but did not happen, one will necessarily detect foreshadowing; the result is spuriously guaranteed.

After finishing Part I, Dostoevsky was about as uncertain of future events as his readers. In fact, even toward the end of his notes for Part III (written between August and October 1868), Dostoevsky was still considering whether to marry Myshkin to Aglaia! The magnificent ending to the novel—surely one of the most memorable in world literature—did not appear in his notebooks until October 4. We sense the thrill of discovery when it occurs to him: “2nd half of the 4th Part. N. F. is engaged to the Prince. . . . Goes to Rogozhin in despair. (He murders.) Summons the Prince. Rogozhin and the Prince beside the corpse. Finale. Not bad.” And strangely enough, even after this October 4 note, Dostoevsky still played around with other endings. Writing without a fixed plan, constantly playing with countless possible and shifting plots, and inventing characters for whom he had not prepared in earlier sections, Dostoevsky wrote so that many continuations could grow out of each scene and so that we would be alert to possibilities. His initial scene does not close down time, as foreshadowing does, but alerts the reader to its openness while allowing the author to go in many directions.

I have heard critics say in response: but however he came by the ending, the beginning does foreshadow it—look how perfectly the end can be found in the beginning! I think that these readers are committing what Tolstoy called the fallacy of retrospection and what Michael Bernstein and I have called backshadowing. After the fact, one sees the patterns that happened to have emerged and ascribes it to advance planning. In Tolstoy’s example, a group of men are hauling a log and they each want to haul it in a different way. They all get up and pull as they wish and it turns out by chance to go in the way one of them wished. We are likely to conclude they were following his plan. Had the men gone in some other way, we would have said they followed someone else’s plan; and since every way is reasonably close to what someone wanted, we have set up our interpretive apparatus so that the assumption of advance planning is almost compelled to be confirmed. Backshadowing—the ascription of foreshadowing after the fact—is an
extremely common habit, which filters out the contingency of the world and blocks us from seeing that past moments were earlier presents, with all the openness that our own present so palpably displays.

If nothing significant had grown out of Rogozhin's and Myshkin's first meeting, what significance would rereaders attribute to this scene? Instances in which foreshadowing could have been present but is not are usually not noticed. But we can look for them, look for loose ends, instances where the signs of foreshadowing are present as strongly as in the first scene but lead nowhere. That is one good test of whether the evidence for foreshadowing where we do find it is real or manufactured by retrospection.

As it happens, Part I of The Idiot contains much stronger signs of a future conflict between Myshkin and Ganya—constant misunderstandings, insults, vague threats, and a blow—all of which seem to lay the groundwork for them to be significant enemies. When Ganya three times ominously (and eponymously) calls Myshkin "an idiot," the full weight of the title seems to promise a dramatic clash. And he tells Myshkin that he is sure (and we believe him) that they will eventually be either great friends or great enemies. But in fact Ganya turns into a minor, though frequently present, character, and nothing significant or "fatal" takes place between him and Myshkin. In Part I, Dostoevsky evidently planted the potentials for many future tragedies, more than he could possibly develop, and without limiting himself to specific ones. In the notebooks written after the publication of Part I, he reminds himself to do something more with Ganya but never does. If the vague promises about Rogozhin turn out to be justified, those about Ganya (and some other characters) do not. Reflecting on both of Myshkin's early conflicts, we may suspect that neither outcome was inevitable.

If we reflect on Dostoevsky's creative process, an intriguing possibility presents itself. Sideshadowing initially resulted from Dostoevsky's habit of creating in process, without a firm advance plan. But it worked so brilliantly to suggest the philosophical tenets he valued—freedom and open time—that he made a conscious practice of it as well. Dostoevsky learned to capture the palpable uncertainty of the creative process and to transfer that excitement to the text itself. By so doing, he found a new way to convey freedom. He also created a sort of work that poetics, with its spatialization of time and its elimination of real processuality, cannot accommodate. In creating a work whose temporality is more lifelike than artlike, Dostoevsky demonstrated the limitations of poetics and all synchronic interpretive models.
Roulette

Dostoevsky wrote *The Idiot* forward, not backward. He did not execute a structure planned in advance. And because he published the novel serially, not knowing—really not knowing—what was going to happen next, there was no possibility of correcting the text to make earlier events look forward to later ones. As this compulsive gambler states in one of his letters, “I took a chance, as at roulette: ‘Maybe it will develop as I write it!’”

Everybody who reads Dostoevsky experiences the amazing thrill of suspense, of decisions that could go either way, taken on the moment, where the future is genuinely open. We sense that the author was as anxious as the characters and the readers about what would happen next, and so we in fact have something more than literary suspense: we have genuine uncertainty. And it is therefore curious that the methods of criticism, when they interpret these scenes, find meaning by importing inevitability and foreshadowing, and thereby read out just what makes them thrilling, what makes them quintessentially Dostoevskian. For any writer, I think, that should be a sign that something has gone badly wrong.

Consider the everyday circumstance in which a frustrated storyteller says: “you had to have been there.” We are often driven to say this when an event took place that was impressive because, surprisingly, things worked out as if they had been planned, as in a story. That surprise is the very aspect of the experience one wants to convey. But once one tells it as a story the listener knows that something story-like is to be narrated, and so the very act of telling makes it almost impossible for the surprise to be conveyed. Reading *The Idiot* as a structure does just that to its thrilling scenes.

The very best critic of this novel, in any language, Robin Feuer Miller, first shows that, in terms of the creative process, foreshadowing could not be present and then finds it in the finished work nevertheless. I imagine her instincts here are similar to those of most good critics who have been trained to read the text as a spatializable structure. The difference between Miller and all other critics is that she is aware of the problems of this method when applied to a work created processually, and she addresses them.

She wants to assert that Myshkin’s stories of execution “foreshadow” Ippolit’s confession in Part III, even though, as she has pointed out, the very idea of Ippolit had not occurred to Dostoevsky when he wrote Part I. It is worth listening to how Miller handles this problem, because I do not believe that poetics can produce any explanation that is in essence more sophisticated than this one (though it can produce ones with a
different vocabulary). Miller writes: "Of course we know from the notebooks that Dostoevsky had not even planned the existence of Ippolit at the time he wrote Part I of the novel. But that does not mean that we cannot talk about unities of construction in this novel. As readers, after having read a work, we inevitably gauge its impact upon us as a whole. Prophecies and fulfillments exist within a work; one cannot deny them simply because the writer at the beginning of his undertaking did not himself know the exact shape that his work would assume." Prophecies and fulfillments: but what about all those promises that are not fulfilled, such as the overdetermined signs that there will be a conflict between Myshkin and Ganya? There are countless such loose ends in The Idiot, apparent prophecies that do not come true. Notice also the priority given in Miller's formulation to rereading as opposed to reading. The essence of this argument is (1) no matter how the work was written, it is a structure, because (2) that's all it can be, we "inevitably" read it that way. But is it inevitable? Or is this a critic's inevitability, produced by the habits of poetics?

In life, we often assess past events that led to future events without assuming that the past events were somehow put there to contribute to the unities of construction and without assuming that there is a unity of construction. We know that many events do not fit a pattern, and we read the ones that do seem patternlike differently precisely because they did not have to be and because so many are not. The fact that someone's prediction on one occasion actually came true does not turn it into a prophecy, does not confer inevitability on it, because we know most predictions do not come true. That is why we are so impressed when one does in life, as we are not in literature. Nobody is surprised that Tiresias turns out to be right. But everyone remarks when an analyst accurately forecasts the market.

Let me clarify: It is one thing to say that an earlier event foreshadows a later one and quite another to say that the later one echoes or draws upon the earlier one. The first formulation demands a structure, a plan of the whole; the second does not. In life, where we have no plan of the whole, later events draw on and resemble earlier ones. Nevertheless, unless one believes in omens, there is no foreshadowing in life. We typically imitate others or repeat ourselves, but such behavior does not imply foreshadowing.

The second formulation—one event echoes another, but is not foreshadowed by it—relies only on forward, not backward, causation. Time is asymmetrical, and so this formulation differs from foreshadowing. Undoubtedly, there is a strong thematic connection between Myshkin's execution anecdotes and Ippolit's confession, but in which direction is the causality flowing? Poetics presumes an answer, but that
presumption begs the question. Two alternatives are possible, and we cannot decide the question by fiat.

Poetics detects structure by taking the narrative as a synchronic whole, with patterns visible; causality goes both ways. As it happens, *The Idiot* contains numerous explicit passages—among the novel's most famous—about the difference between product and process, and its characters (especially Ippolit himself) insist that life be understood as process: "Oh, you may be sure that Columbus was happy not when he had discovered America, but when he was discovering it... It's life that matters, nothing but life—the process of discovering, the everlasting and perpetual process, not the discovery itself, at all" (*I* 375). Why could that not be true of *The Idiot* itself? Dostoevsky wrote a book that was not only about process but was also itself processual—written processually and designed to be read that way.

No Pie

In *Great Expectations*, Pip gives a pie to a convict, and the reader assumes that this apparently inconsequential event will in fact be consequential. It will mean something, or it would not be there. The fact that novels have structure justifies this assumption. Events are shaped not only by incidents within the fictional world, which the heroes in principle could know, but also by the need for a symmetrical story and an effective aesthetic artifact, considerations they could not know. As Bakhtin would say, they testify to the author's "essential surplus" over his characters. This *double causation* of events distinguishes the temporality of even the most realistic novel from that of life. We do not expect our daily donations to be Dickensian pies. In novels, when bread is cast upon the waters, it comes back manifold, but in life it often just drifts away.

In so many of Dickens's great novels, we marvel at the author's pie-baking skill. Characters and incidents mentioned apparently at random—motivated only by previous events and the currently unfolding action—turn out to be tied together in all sorts of complex ways. In *Bleak House*, the lost love of Boythorn's life turns out to be the woman who first raised Esther and who was Lady Dedlock's sister. And so on. Dickens's plots stand as masterpieces because their design is so artful—and so palpable. They are utterly unlike life. But *The Idiot* does not resemble *Bleak House* in this respect. Dickens rarely tells us that some apparently minor incident is a pie, although we usually know. Dostoevsky does seem to tell us unmistakably—and then: no pie.

We live our lives reading experiences without prophecies, foreshadowing, or the assumption that we must "gauge [each incident's] impact
upon us as a whole.” What whole? And if we don’t read life that way, why is it inevitable that we must read every art work that way?

A Creative Process Is Always Assumed

We usually read art as Miller wants us to read The Idiot because typically artworks are designed, and we assume that the author has written the work with a whole in mind, written it and rewritten, as we cannot plan and rewrite our lives as we live them. That is why the assumptions of poetics are so often justified in understanding art. They assume a certain creative process, and that assumption is usually rewarded.

When readers detect “pies” or “foreshadowing”; when they look for signs of an approaching closure; and when they see how two causally unrelated plot lines reflect upon each other even though no character in either one could have planned the parallels; at such times, they are necessarily assuming some such creative process. To be sure, they assume a creative process that has erased its tracks in producing a perfectly designed artifact, a process in which whatever false starts or loose ends there may have been have been eliminated—but that, too, is a specific kind of creating, different from others. That is, even though critics from numerous schools of poetics reject as a fallacy consideration of the creative process, this very rejection depends on a certain notion of the creative process, one in which planning leads to perfection and justifies our confidence in design.

Despite the way the question is often put, we do not choose whether to consider the creative process but which account of it to choose. If that is so, if all schools of poetics implicitly rely on a notion of the creative process, then when the one assumed by poetics is ostentatiously untrue, we must consider an alternative. But we have none that offers a principled way of reading a text along with the process of its creation, a text that is truly processual. For such works—a group that includes The Idiot, War and Peace, Tristram Shandy, Eugene Onegin, and doubtless many others—we need a tempics.

Across the Disciplines

As you may have guessed, tempics involves broad philosophical issues. Poetics and a philosophical stance I will call Leibnizian seem to me to be intimately connected, and both raise troubling problems when applied indiscriminately.
I have stated that literary criticism and theory, for all their manifold changes in recent years, still cling to an essentially Aristotelian model in which the literary work is viewed as a synchronic structure. A novel may unfold in time, but (we assume) it exists and is best analyzed as a perfectly organized whole we can take in at a glance. Its narrativity exists within the world depicted, and it is only from the perspective of its characters that time flows forward. For the critic, anything contingent, which leads to nothing or does not fulfill a pattern, indicates a flaw. Perfection apparently marks the true artwork and the job of the critic, trained in whatever school, is to show how the contingent, the unfulfilled, and the asymmetrical are all merely apparent. Structure banishes temporality, if by temporality we mean eventness.

If anything, this poetics has grown stronger in recent years. Concepts of wholeness have changed, as have methods for detecting it and ascriptions of the agency producing it. The variegated movements known as cultural studies and the poetics of culture by and large extend this poetic model of the text to nonliterary culture, which is read “as a text.” In this way, the literary-textual model of “reading culture” assumes a hidden unity in the world comparable to that of the literary text. The world is a metaphysical poem; or else why would people trained in literary studies be able to offer revealing interpretations unavailable to others? Despite Freud’s own reluctance to see culture in this way, his ideas are easily adapted to the poetics of culture. One has only to assume that what he says of the internal world is also true of the external one. To be sure, cultural poetics often invokes the importance of “history”; but this history is typically purged of eventness. It becomes a synchronic system sliced sideways. Jakobson and Tynyanov’s famous observation that the history of a system is in turn a system seems to cast its shadow on subsequent theories.¹⁰ They typically envisage temporal processes non-processually, as a mere unfolding, a systematic revelation of a system, rather than as a genuine, unpredictable, and eventful becoming. Time remains a mere parameter, not an operator.

In the case of Russian Formalism, one is tempted to discern in this approach to temporality the influence of the physical sciences, in which the concept of “law” so long implied a universe where time merely unfolds and where nothing truly eventful can happen: for laws dictate all that follows while revealing perfect order under apparent contingency. As Leibniz insisted, there must be in the universe (as in the poem), a “sufficient reason” for everything. In Leibniz’s famous correspondence with Clarke, he insists that any model of the solar system—like Newton’s—which demands that God occasionally intervene simply makes God an inferior watchmaker. No, says Leibniz, everything must fit, perfectly. Newton and Clarke strongly objected to this view, but what we eventually
got—with Laplace and after—is a Leibnizian perfecting of Newton’s models.\textsuperscript{11} I think poetics, almost all of it, is Leibnizian. It aspires to find a sufficient reason for everything, shows the work, like the world of Leibniz’s God, to be inevitably what it is, without a shred of accident or option.

Leibniz’s model also displays a number of other features that recur in theories that have influenced several disciplines. First, the world is presumed to be in a state of equilibrium. That is one reason Leibniz objects so strongly to Newton’s idea that, without divine intervention, the solar system would not remain stable. It must be, by itself, in a state of perpetual equilibrium; anything else would mean invoking unnecessary miracles. A number of other disciplines—notably economics and social sciences that borrow from it—have often favored equilibrium models, which in turn lead to a static analysis or to various conceptions of history conceived as a “dynamic equilibrium”—concepts that may be regarded as rough equivalents of the Jakobson-Tynyanov idea. Genuine contingency is ruled out.

Second, the state of the world is optimal. For Leibniz, optimality derives from the fact that God would choose only the best of all possible alternatives. He goes so far as to state that there cannot be identical particles—atoms—or else God would have no basis to prefer placing a given atom in one place rather than another. It follows for him that given any set of alternatives, one and only one—the best—will take place. In other disciplines, optimality may be the product of some version of the invisible hand, so long as exchanges take place under perfect competition and other ideal conditions. Especially when optimality and equilibrium thinking are combined, we wind up with a world in which history becomes irrelevant. For the optimal equilibrium point acts as an attractor, and wherever one starts, one will wind up there—much as (to use a common analogy) a marble dropped into a bowl will, whatever path it takes, reach the bottom. The path taken is uninteresting. In recent years, those economists and other social scientists who have objected to this kind of thinking have formulated the notion of “path dependency,” according to which the point reached does depend on the path taken, which may in turn depend on contingent events at earlier stages. To use the standard example, that is how we wound up with the suboptimal QWERTY keyboard, as opposed to several more efficient alternatives.\textsuperscript{12}

Third, what is meaningful is wholly present at a given moment. For Leibniz, and for the tradition known as natural theology, God’s plan is everywhere before us. He revealed himself in two books, Scripture and nature, which can be read for signs of perfect wisdom. This is precisely the notion that Darwin most wished to dispute. In anthropology, the
sufficiency of the present appears in strong versions of functionalism. Malinowski argued explicitly that culture contains no "survivals" (vestigials) because nothing can survive into the present that does not serve a sufficient function in the present.13

These assumptions—sufficient reason, equilibrium, optimality or perfection, and synchronicity—are all shared by poetics. Otherwise it would be hard to explain the "hermeneutic imperative"—the almost automatic impulse of literary critics from diverse schools, when confronted with an apparent flaw in a masterpiece, to show why it is not a flaw if the work is interpreted correctly. Apparent refutations are future dissertations. For every apparent shortcoming there exists a sufficient reason, which the critic will discern and thereby show that the work is in an optimal state analyzable as whole graspable at a moment.

Leibniz also insists that philosophy works by deriving what must be the case axiomatically, from first principles. No vacuums can exist, he insists to Clarke, because only a plenum is consistent with the axioms of divine perfection. In the social sciences, physics envy has also led to the prestige of models derivable mathematically. What is crucial about these kinds of thinking is that the contingent is necessarily excluded. There is neither contingency nor temporality in Euclid. By and large, poetics has not been afflicted with physics envy, but at various periods, especially the present, theorists have been drawn to reasoning down from first principles about language or culture, while regarding a concern with contingent facts as somehow untheoretical and naive.

In short, poetics can be taken, in a broader sense, to reflect a style of thinking that goes far beyond literature. This style of thinking tends to work best when the phenomena to be explained really are perfectly (or nearly perfectly) structured, and where each fact can be explained by others simultaneously present. Great lyric poems do approach this ideal, which is why, for most literary masterpieces, poetics works tolerably well. But not for all. And in the cultural world outside of literature, perfection is exceedingly rare. Thus literary poetics has suffered fewer challenges than its analogues elsewhere. Nevertheless, we can learn a great deal about our assumptions and about alternatives if we look at those analogues from other disciplines. Then we would more readily appreciate the need for a tempics even within literary studies.

Giraffe Tails and Mole Eyes

In the work of poetics—the term now taken broadly—the present moment has no special meaning. "Now" becomes, as Einstein once remarked, a psychological illusion. Moreover, in such a world, there are
no true agents. A comprehensive pattern governs all, and sideshadows are as much a mirage as presentness. The idea of the "death of the author," in which the writer becomes the mere locus of converging forces, is a fairly clear expression of such a view.

Even the physical sciences no longer necessarily conceive of reality in this way, and evolutionary biology never has. As Ernst Mayr has observed, "the concept of law is far less helpful in evolutionary biology (and for that matter in any science dealing with time-dominated processes such as cosmology, meteorology, paleontology, paleoclimatology, or oceanography) than the concept of historical narratives."14 By "time-dominated processes," Mayr means more than processes that take time, as all do. He evidently means eventful processes without a predetermined outcome. Evolution is not a matter of general laws specifying unique results, predictable in advance. Rather, general, loose regulating principles operate in the background and contingency governs in the foreground. As Stephen Jay Gould likes to say, run the tape over again, and the result may well be different. The process of biological evolution is genuinely processual.15

It would take us far beyond the boundaries of this paper, but I think a superb guide to how to think of genuine, eventful, open processes as meaningful is provided by Darwin, who, incidentally, had no use for physics-derived models of causality when applied to biology. The basic trope of The Origin of Species is to describe a scene, or set of facts, which we are tempted to grasp synchronically and get us to see it as discrete interacting processes, processes, moreover, which are not completed and in which the loose ends have not been tied up. Although in high school renditions of Darwinism, we are told that every feature of an organism must have a function put there by natural selection, Darwin encourages us to think of all organisms in terms of imperfection. He insists, repeatedly, that organisms are not perfectly designed, and do not make the most of their ecological niches.16 That is why when animals or plants from Europe or America are imported into New Zealand or small archipelagos, they almost always wipe out their native competitors, who clearly were not optimally designed.

I wish I could go into detail here, but let me provide just a few examples. Darwin describes a species of mole that lives its entire life underground. It has no need for eyes, but nevertheless it has them. And yet, even if this mole were to see the light of day, the eyes would do no good because they are covered with a thick membrane. No current function can explain these eyes; they do not pay their way, and therefore represent imperfection. They must be explained historically, as the inheritance of an earlier stage when the mole had a use for eyes. The
same reasoning applies to a species of inland geese that nevertheless have webbed feet.

Why do giraffes have tails? Darwin insists that no functional explanation he can think of would work, because the minimal purpose the tail serves—as a fly swatter—would be insufficient for natural selection to develop it. It does not pay its way. Of course, one could insist that there must be such a function, but that, for Darwin, would be allowing theory to think away history, and history is what Darwin is all about. In brief, his explanation is that giraffes inherited tails from remote ancestors for whom they surely did serve a function—for fishes they are needed for swimming. Some animals found new uses for tails in changed conditions—they may aid in balance, or flying, or defense—but others gave them no or only a minimal function. If one is thinking synchronically, or in terms of perfect design, one will miss what is going on.

Darwin sees organisms as agglomerations from different periods, which cohere in their own way, but not entirely; they show signs of different times. Functions change and disappear. Structures evolved to serve one function come to serve another, and then none at all. The present organism shows this history in what it now is. It must be understood temporally, in something like the way we understand an old building that has passed through many owners in different social contexts. We must imagine each earlier moment in much the same way, with a present exerting its own pressure for enough functionality to survive in a given environment, but with various pasts hanging on. Nor is the present state of an organism ever some sort of culmination. The organism is in process, not to a preset goal, but in interaction with contingency allowing for many paths. Darwin wants us to see the vestigial and the potential. He could not be farther from Leibniz or poetics, and I think a judicious reading of Darwin, an exploration of how he thinks, would help us overcome our synchronic, functionalist prejudices and help us develop the tempics we need.

Poetics as a Limiting Case

Especially when he has been appropriated by the social sciences, Darwin is often read, falsely I believe, as a perfectionist. Of the two key ideas in the *Origin*—the historicity of species and natural selection—the second is read without the first, and interpreted as a mechanism that insures optimality. In that case, any feature of an organism or analogous entity is assumed to serve a commensurate function—to have a sufficient reason for being there—or natural selection should have eliminated it.
Perfectionist Darwinism thereby becomes an argument for a purely synchronic and functional approach. But this is to miss Darwin's central point, that it is *imperfection*—those mole eyes—that proves historicity. A divine being, creating species at a moment, would have no need for vestigial organs. Like poetics, Leibniz, structuralism, and strong functionalism, perfectionist Darwinism belongs to the same tradition of thought as natural theology and creationism.

Whenever someone proposes that a biological or cultural entity is a perfect system, we may ask who the designer was. To the poeticians of culture, those who assume that a culture is analogous to a well-wrought poem, we may query: who made culture that way? Who was the artist that made all of culture cohere, so that causally unrelated events reflect on each other the way causally unrelated plot lines in a novel do? Who occupied that position "outside" the world and beyond time? The strong view of the poetics of culture is creationism transplanted. Typically, the poeticians of culture provide no mechanism that explains how else perfection has been attained or why it can be presumed. Economists who deal with optimality at least invoke a version of natural selection and the invisible hand; indeed, we may locate the appeal of all "invisible hand models" in their ability to do what Leibniz's God does without invoking a deity.

Perhaps the world sometimes really works this way, but one often wonders whether such descriptions reflect the predispositions of model builders. The more contingency, the less predictability, and the less power an axiomatically derived theory possesses. Thus the instinct of theoreticians is usually to explain away contingency and, with it, eventful temporality. Once we are aware of this instinct, we may want to resist yielding to it. It would be worthwhile, in each case, to ask whether present structure really is sufficient or whether we need some combination of structure and history—history that is irreducible to structure because it contains genuine contingency.

A character in Chekhov wishes that the life we live were merely a rough draft and that we could then live it over, the right way. Most of life does not resemble literature because we live our rough drafts. Almost nothing is perfectly organized or works with maximum efficiency. Prosaics holds that mess—imperfection, flaws, inefficiency, entropy—is fundamental. Speaking most generally, poetics (and its various analogues) may be seen as applicable in certain special cases, which represent the majority of artistic masterpieces but are distinctly rare elsewhere in social life. It is applicable wherever artifacts or institutions are perfectly designed. Perfection makes history irrelevant because one can always explain any part of the institution or artifact in terms of the rest, with no reference to its history. But wherever there is imperfection,
wherever we have evidence of both design and of mere vestiges, poetics will be insufficient.

One may summarize in terms of the following notation: \( M = f(s + h) \), where 1 is perfection and \( s + h = 1 \). So if the work is structurally perfect, \( M = f(s) \). In plain language, meaning is a function of structure and history. But if structure is perfect, history factors out. We consider history when there are signs of what, from the perspective of structure, is imperfection.

The practitioners of poetics, focusing on the limiting case of perfect artifacts, take that case for the whole. Faced with works that from a structural point of view are imperfect, they either invent spurious structures or declare the work meaningless to the extent that it is flawed. But if we do not take the limiting case for the whole, we may consider another interpretive option, one that can explore the meaningfulness of process as well as structure. That option—tempics—I hope to explain in more detail.

**Novel as Thought Experiment**

Let me return briefly to *The Idiot*. Criticism of this novel has been particularly divided on its meaning. Basically, one school, consisting almost entirely of non-Slavists, has identified the work’s theme as what Murray Krieger called “the curse of saintliness.” According to these critics, Dostoevsky showed that a truly Christian figure would bring not happiness and salvation but catastrophe. They point to the continual harm Myshkin causes by his very goodness, which provokes in reply responses following profound, and profoundly Dostoevskian, dynamics. No greater psychologist than Dostoevsky ever lived, and when we see the true Christian in such a psychologically compelling world, we are convinced that the wages of saintliness is death. In my opinion, the experience of reading *The Idiot* largely confirms this interpretation.

Slavists have, almost to a man and a woman, utterly rejected this view. They have shown, to my mind conclusively, that there is no way that Dostoevsky could have intended this result. Before, during, and after writing, in the text and the notebooks, it is absolutely clear that the work was not, and was not intended at any point to be, such a refutation of Christianity.

These views contradict each other only because they share a hidden assumption: that the work at some point can be taken as an atemporal whole signifying something at that moment. But what if one sees the work, as I have been suggesting we should, as eventful? As a process without a predetermined (or postdetermined) outcome?
This is what I think happened, and what readers (rereaders less so) sense: *The Idiot* is a thought experiment in process, which, like any real experiment, had no predetermined outcome. Dostoevsky wanted to create a true Christian, who would be portrayed with full psychological realism, and to see what would happen as a result of his presence in a realistically described world. The experiment had constraints: he could not just manipulate the events to get a given set of results, because the outcome would then not be believable psychologically. As the narrator and Myshkin themselves comment in a few places, realism is itself a very severe test of plausibility—perhaps more severe than reality itself, since we will accept strange events in reality but might not in a novel; for reality does not have to be plausible, it just is.

And so Dostoevsky began writing this novel to test what would happen, without knowing or predetermining the outcome. The realistic imagining of what characters might choose or do in given situations would determine the result, and the author would just keep setting up situations where those situations would drive the action. As it turned out, the result was that saintliness proved a curse.

Question: what was Dostoevsky’s intention? Answer: to conduct such an experiment. Of course, Dostoevsky hoped the outcome would show that Christianity would lead to good results, but, as with any genuine experiment, the other outcome was always possible and in this case was what he got. In this sense, we may say that there turns out to be a curse of saintliness and yet that the work was not intended to be a refutation of Christianity. It was intended to be an experiment.

But one can see the work this way, and recognize both sides of the argument as partially correct, only if one can stop seeing the work as "an organized whole" and come to see it instead as an event, an open process that happened on this occasion, to produce a given result. I say on this occasion, because Dostoevsky for understandable reasons decided to run the experiment over again, with somewhat different parameters—a different sense of the true Christian—and so wrote *The Brothers Karamazov*.

One mystery that has haunted Idiot criticism is that the work turns out to be so powerful even though it is clearly flawed in structure. As Joseph Frank keenly observes, it is easy to point out the flaws, but “more difficult to explain why it triumphs so effortlessly over all the inconsistencies and awkwardness of its structure and motivation” (*D* 340). This is just the right question to ask. Frank’s answer is that we sense an incredible authenticity in the work, and feel that is an amazingly “courageous creation,” as Dostoevsky subjected his own fondest beliefs, as he had previously subjected the beliefs of his enemies, to his harshest tests. I think all these reasons are true, but I would add another: Structural flaws are only flaws if one reads in terms of structure. But they
acquire a wholly different significance if one reads a work as an event, reads it in terms of prosaics and tempics. Then they may become, like the tail of a giraffe, the signs of eventness, requiring a way of reading that will make prosaic sense of them.

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Notes

1 The present paper combines ideas from my recent book Narrative and Freedom: The Shadows of Time (New Haven, 1994) and my work in process, on tempics and processuality across the disciplines.
7 See Michael André Bernstein, Foregone Conclusions: Against Apocalyptic History (Berkeley, 1994). See also ch. 6 of my Narrative and Freedom, pp. 254--64.
8 From Dostoevsky’s letters, as cited in Joseph Frank, Dostoevsky: The Miraculous Years, 1865--1871 (Princeton, 1995), p. 271; hereafter cited in text as D.
10 “The history of a system is in turn a system. . . . The opposition between synchrony and diachrony was an opposition between the concept of system and the concept of evolution; thus it loses its importance in principle as soon as we recognize that every system necessarily exists as an evolution, whereas, on the other hand, evolution is inescapably of a systemic nature.” Why inescapably? Why could not the asystematic or contingent play a role in evolution? This formulation does away with historicity by extending the notion of the synchronic system to the historical process; it accommodates “diachrony” by reading the truly historical out of history. See Jurij Tynyanov and Roman Jakobson, “Problems in the Study of Literature and Language,” in Readings in Russian Poetics: Formalist and Structuralist Views, ed. Ladislav Matejka and Krystyna Pomorska (Cambridge, Mass., 1971), pp. 79--80.
13 Bronislaw Malinowski, A Scientific Theory of Culture and Other Essays (Chapel Hill, N.C., 1944), pp. 28--30.
16 Ernst Mayr observes: “Up to the present day many authors fail to understand the populational nature of natural selection. It is a statistical concept. Having a superior genotype does not guarantee survival and abundant reproduction; it only provides a higher probability. There are, however, so many accidents, catastrophes, and other stochastic perturbations that reproductive success is not automatic. Natural selection is not deterministic, and therefore not absolutely predictive. . . . Darwin advances a number of arguments showing that the interpretation of the essentialists and natural theologians is not valid. There is room for improvement in all species” (Mayr, The Growth of Biological Thought, p. 490).