

Narrative Theory and Cognition

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ABSTRACT

Text resulting from the lecture presented at the XIV EBICC, held at the Federal University of Paraná in September 2024. It analyzes narrative as a mode of meaning production that substantiates human thought. Four directions are explored: the cognitive sense of the stories we tell each other, the cognitive benefits of elementary narrative forms, the inherent limits of narrative meaning production, the conditions of continuity between the most elementary narrative cognition and narrative culture in general.

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I am a narrative theorist from a literary background, who was first interested in the very sophisticated forms of narrative found in the novel; but the theoretical questions that arise in that context extend much further, and I am now interested in the question of what story is, considered as a fundamental form of meaning. Narrative, in this light, is a mode of sense-making, the rudiments of which are fundamental to how we think. So I want to set a view for you, from the field of narrative theory, of what it might mean to speak of narrative cognition. I am going to present the topic under four headings: first I will broach the idea of a cognitive sense of story; then I shall address the cognitive benefit of basic story form; thirdly, I intend to discuss the inherent constraints of narrative sense-making; finally, I will sketch the principles of continuity between basic narrative cognition and narrative culture.

1 The cognitive sense of stories

Story is obviously a bigger category than the novel; a story need not be literary or fictional and need not be told in the medium of language. It might be a rant about an annoying encounter on the way to work this morning; or a biopic about Édith Piaf; or a private fantasy about winning gold in the triathlon. But a description of an Alpine

panorama is not a story; an argument in favour of economic interventionism is not a story. Nor is a shopping list, or a review of the symptoms of type 2 diabetes. What they lack is a formal relation to temporal experience – to change, or, more broadly, to events. A story, just by virtue of being a story, is about temporal experience: although all of life is inherently temporal, unless the temporality of experience is addressed, there is no story. This matters: it means that while a basic story form is extraordinarily pervasive, it has specific defining qualities – features that distinguish it from other kinds of meaning, and that give story itself distinct attributes, both positive and negative. It means that story, even in its most inclusive sense, is a meaningfully definite object of inquiry.

Story has a very broad scope, but it is a definite form that is not inherent in temporal phenomena themselves; rather, it is a way of making sense of such phenomena. It is the form in which we achieve a cognitive grasp upon what happens. My proposition is that the theoretical exploration of the principles of story form, as they can be abstracted from the many kinds of narrative we encounter today, can tell us a great deal about how we think, both individually and collectively. If, instead of asking how story fits within contemporary culture, we pose the question from the other end and ask where said story comes from, we can discern its foundations in a very basic kind of sense-making activity. Narrative cognition begins by grasping together features of the perceptual experience of life, recognizing patterns within the chaotic noise of perpetual change and seizing upon them as events. Because this sense-making activity is very basic, its scope is vast; but because it is a specific kind of sense-making, it is also delimited, in ways that have significant consequences. To understand the distinctive logic of story, we need to recognize how its qualities are already given in the first principles of story form, yet to be realized but latent in its inception as a mode of cognition. The consequences of our fundamental cognitive investment in narrative are both constraining and enabling, inextricably so, and it is this base level that defines the possibilities of the sense of story, for both good and ill.

The inaugural move of narrative cognition consists in the turn of mindset that takes us beyond making sense of immediate experience, in real time, to making sense of the temporality of experience. Cognitive mastery of a changing environment does not inherently require narrative cognition. Most of what is involved in coping with rapidly changing situations can be done as well, indeed much better, via neurological processes that are neither deliberately undertaken nor available as such to consciousness. All forms of life exhibit this kind of cognitive mastery, in diverse and often astonishing ways, and in many respects we are simply the inheritors of such evolved competencies. Moreover, consciousness of temporality is, in itself, not equivalent to narrative cognition. The transition from a succession of

experiences to the experience of succession can be said to mark the entry into temporal consciousness, but in order to isolate narrative cognition we need a further distinction, between awareness of temporality and attention to it. The temporality manifest to consciousness in the experience of succession only acquires narrative form in the reflexive turn of attention upon temporal succession itself, an attention that is necessarily selective and bounded by criteria of cognitive relevance.

Experience, here, can be characterized as the cognitive subject's engagement with a material or social environment, or indeed with the subject's own body in interoception. Experience occurs in time, of course, but the immediacy of the experiential encounter does not encompass its own temporal dimension. Only the current state of affairs is immediately available to experience, which is to say that experience in this primary sense is confined to the phenomenal now, the subject's engagement with present stimuli. What is past is no longer present, and what is to come is not present yet; although the now is constantly changing, it has no experiential temporality of its own. This lack of temporality is not an ideal abstraction, as if the now were an infinitesimal slice of time between the past and the future; it has measurable temporal scope. The limits of the now are set by physiological and neurological constraints, which vary in scope not only between species but also between kinds of experience. Our capacity for the resolution of temporal detail varies even between aspects of visual perception. For example, we do not need to make sense of the relation between adjacent frames of a projected celluloid film, because we cannot perceive them separately. A rate of twenty-four frames per second is too fast for a difference to be perceptible between the continuity of the filmed action and the sequential still images that record it. The flicker between light and dark as each frame passes, however, is clearly perceptible at that rate, so the design of early film projectors soon incorporated a shutter to interrupt the projection of each image, effectively displaying it twice. The frame rate remained the same, but the flicker rate was now twice as high, and fast enough to be almost unnoticed by audiences. Such variations in the temporal resolution associated with aspects of perception partly determine the effective duration of the phenomenal now; it is also constrained by the neurological demands of processing various kinds of stimuli in a quick succession, a limit known as the 'attentional blink'. The empirical limits on human temporal resolution are set not only by our perceptual faculties, but also by contextual features of the experience concerned – the nature of the situation and the kind of attention paid to it.

For experience *in* time to become experience *of* time – or more exactly, experience of the temporality of experience – a dislocation of cognitive perspective must take place. Narrative cognition begins when the experiencing subject's attention shifts from direct engagement with changing sensory

stimuli to an engagement with those stimuli as perceptually apprehended. In other words, narrative cognition seizes upon the latent semiotic capacity of perception, the respect in which percepts are signs. Semiotics conventionally distinguishes between the symbolic, iconic and indexical functions of signs, a classification established since the foundational work of C. S. Peirce in the late nineteenth century. Symbolic signs function within sign systems, which is to say languages (in a broad sense); iconic signs function by virtue of resemblance, and are therefore grounded in perception; indexical signs depend upon direct contiguity, and so are tied not just to perception, but to the empirical environment itself. The indexical function of signs is inherent in any form of cognition, but here we are concerned with the transition from an indexical function to an iconic function, which frees the sign from its immediate empirical grounding and realizes its potential as an object of attention and conceptual manipulation in its own right. With this transition, sensory experience becomes available as a *medium* of cognitive sense, in what is now a semiotic environment. The emergence of narrative cognition is a case of such a transition. Experience in time is primed for the perspectival shift involved because it is concerned with change, which involves difference. An experiencing subject, coping with a dynamic environment, needs to register what is most salient at any moment, and what is new is always potentially salient (a dark shape looms from the right; a figure appears in the distance; the room falls silent). Anything registered as new, though, is only new relative to a previous state of affairs, so the basis upon which the new secures attention, even in its immediacy, already tacitly assumes change and a temporal dimension. That tacit difference is not itself available to attention as a perceived quality of the immediate environment, in the perpetual now, but only as a quality of the subject's perception of that environment. Experience of time is a second-order *experience of the experience* of change, and entails a transition from immediacy to mediacy. Narrative cognition is marked by the turn of attention from the stimuli of a dynamic environment to the subject's phenomenal experience of that changing environment. Sensory perception, as a cognitive relation between subject and environment, becomes cognitive sense, as a domain of meaning internal to cognition itself. Importantly, narrative cognition is not the only way in which the innate semiotic qualities of perception can be taken up and realized in the domain of meaning, but it is a highly consequential instance of this reflexive process.

Narrative cognition, in its most basic form, is the inauguration of a dual temporality: cognition occurs in time, and when that temporality itself becomes the object of cognition, the cognition of time itself occurs in time. Dual temporality has long been considered a definitional feature of narrative, though usually with reference to a much more restricted sense of the scope of narrative, understood as the report of a sequence of events in an instance

of storytelling, or narration – as for example when Edward Gibbon, in the eighteenth century, narrates the decline and fall of the Roman Empire; or when Charlotte Brontë's character Lucy Snowe, in *Villette*, narrates in retrospect the events of her own early womanhood. The two temporalities of narrative are generally understood as the time of the telling and the time of the told; that is, the time in which the narration of the story unfolds and the time in which the narrated events occur. Narratological discussion often emphasizes the ways in which it is possible to manipulate the relation between these two times – as when (to offer a film example) the training montage in *Rocky* (in any of the *Rocky* films) narrates in an abbreviated form the whole repetitive process of our hero's preparation for the big fight. In developed cultural forms of narrative, the relation between the times of the telling and the told can be exploited with considerable sophistication; at the foundational level we are considering here, though, dual temporality defines the bare possibility of narrative cognition. It inaugurates a division between the immediacy of experience, in time, and a reflexive attention to the temporality of that experience. Experience necessarily has temporal extension, and that implicit temporality is manifested in the experiencing subject's negotiation of change in a dynamic environment. 'Experience', in this sense, is common to every agent of cognition, which is to say every organism engaged with an environment. The temporality of this immediate experiential perspective is *only* implicit, however; it is not cognitively realized *as* temporal experience (as 'the time of the told') except in the reflexive turn of the subject's attention upon that unfolding experiential perspective itself. This turn of attention establishes a second perspective (i.e. 'the time of the telling') at one removed from experiential immediacy. The temporality of experience is articulated from this second perspective, which also necessarily has a temporal extension of its own. Just as with immediate experience, however, its own temporality is only implicit; as with that immediate perspective, such implicit temporality is available to attention, and may achieve cognitive realization as the focus of a further reflexive turn – from a third perspective, with its own implicit temporality. The foundational move of narrative cognition has an intrinsic recursive potential; once narrative cognition is under way, it has the capacity to become a runaway engine of sense-making, limited only by the practical economy of the subject's finite cognitive resources and situated cognitive needs.

The dual temporality of narrative form is what distinguishes narrative cognition from cognition in general: narrative cognition makes sense, in time, of time. This dual temporality also clarifies the difference between story and experience: no experience includes its own temporality, because that can only become the focus of attention as the result of a reflexive turn – a turn that constitutes a displacement of perspective, an abstraction from the

immediacy of the experience itself. This reflexive turn makes the temporality of experience available as an object of cognition, and story as the form in which that temporality is grasped. The dual temporality of story form also encapsulates the essential, reciprocal relation at the heart of the narrative, which is the relation between reflexiveness and the implicit. The interaction between these two features of narrative cognition is a feedback loop, but it is far from any austere or ideal conception of such a form. Both the reflexiveness of narrative form and its relation to the implicit have multiple ramifications from the outset, and these only proliferate as the inquiry unfolds.

2 The cognitive benefit of basic story form

The implications and possibilities of story form have emerged progressively within multiple overlapping spheres of cognitive, social and cultural activity; they are only latent in the very primitive form that defines the origin of narrative cognition. At some early point in the history of our species, narrative became established as a crucial mode of human sense-making, a significant cognitive adaptation that must have conferred an advantage in evolutionary terms. Story concerns our cognitive engagement with change, but to notice and pay direct attention to change does not in itself afford any cognitive grasp upon it, and on the face of it the experience of attending to temporal experience is no more readily intelligible than temporal experience itself. Narrative cognition introduces a new possibility, however, which is the ability to apprehend temporal wholes: to recognize patterns in the way things change, and so to conceive recurrent kinds of temporal unit, grasped in the form of events. The discrete unity of an event is a cognitive construct, a manifestation of the selective attention intrinsic to the situated and relevance-bound nature of cognitive acts. While the ability to construe events may bring with it significant cognitive gains, whatever purchase it affords upon temporal experience can only be provisional, because there is an inherent tension between the conceptual unity of a pattern and the fluidity of change. The reflexive turn of narrative, by abstracting from experiential immediacy, brings us a significant cognitive gain because it allows for a different relation to the phenomena concerned – a conceptual and manipulable sense-making relation. The difference provides for the cognitive value of the pattern, by establishing a conceptual stance towards the changing environment. For instance, the burly man brandishing a club and striding towards me may be hailing or threatening, it is too soon to know. I could wait and see, reacting in real time to the emerging situation; or I could interpret some plausible signs of hostile intent in his approach as the early stages of a familiar trajectory of escalating violence. Such recognition gives me the opportunity to leave the scene with relative composure, rather than in panicked flight. The adequacy,

or aptness, of our cognitive modelling of our environment is measured against pragmatic criteria, then; the sense-making effort is accountable to the needs of the cognitive subject's situated engagement, rather than to the environment's objective nature. Cognition is relational, and the measure of cognitive success in any context is the extent to which the sense-making effort enables a satisfactory negotiation between some measure of the subject's interests and the reality of the situation. Cognitive benefit here does not simply equate with being right, nor with achieving goals: it's possible that the man was exuberantly friendly – I'll never know. In any case, the cognitive gain to me is the realization that it is just not worth taking this shortcut across the golf course. In general, such sense-making efforts are informed by evaluative feedback loops that operate at different scales, from the very local (enabling the individual to make a viable choice about what to do next), all the way to the species-level test of the efficacy of cognitive traits in the long game of adaptive evolution.

The feedback loop between organism and environment, as such, is intrinsic to cognition in general, not unique to narrative cognition. The enactive basis for cognition in general is nonetheless an especially crucial premise for an understanding of narrative cognition's specific qualities, given that narrative is inaugurated by a reflexive turn that appears to abstract it from any such enactive relation. A conceptual abstraction from the particulars of the immediate occasion is certainly essential to the reflexive turn, and to the consequent shift of attentional focus that constitutes narrative cognition. Only such a move makes change available to the cognizing subject as temporal form, and that is what establishes the semiotic domain within which it is possible to conceive the temporal patterns and units, the kinds of processes and events, that make narrative sense of a particular experience. But narrative cognition is not an exercise in classification. It remains, in its own terms, an articulation of particulars, and oriented towards a particular occasion. Narrative makes sense of what happens just to the extent that it assimilates the particular case to general types, to recognizable temporal patterns, but it gives form to the specific occurrence – it articulates this event, not the kind of event of which this one is an instance. The irreducibly particular quality of narrative cognition is important because it governs both the strengths and weaknesses of narrative form across the whole range of its social and cultural manifestations. Narrative's intrinsic orientation towards the particular case, the specific and the individuated, is fundamental to its emotional, aesthetic, and indeed ideological power; but its vices, already lurking within those strengths, are fed by the same particularity: bias, short-sightedness, prejudicial haste, mere contingency, lack of circumspection, specious authority.

Narrative cognition may be defined by a conceptual remove from the immediacy of experience, but it is equally defined by its sustained orientation

towards that experience. Narrative's inaugural cognitive move is a step away and a look back. The focus upon particulars in narrative counterbalances the very abstraction that makes it possible, and in this way, you might say, narrative keeps it real. It only ever requires one degree of abstraction to produce its object of attention, and that attention doesn't fall upon the conceptual abstraction but the produced object – the event, the action, the behaviour. This is the basic loop involved in the process of narrative representation. If that were all there was to narrative cognition, it would remain a rather perfunctory and instrumental sense-making resource – cognitively useful, no doubt, but exhaustive in the use. It is not all there is, though, because making sense of time is itself a temporal process that invites further sense-making; narrative cognition is primed for reflexiveness. Yet however far the recursive cycles of this reflexiveness may carry us from the basic urgencies of cognition, it remains true that narrative is always oriented towards the particular, whatever that may be in context. Even if the attentional focus of narrative sense-making is upon abstract ideas, the mode of narrative treats them as the particulars of the processes concerned. For example, in 'the government abandoned environmental regulation in pursuit of economic growth,' the narrative entirely concerns relations among abstract, general concepts, but it articulates a particular change in these relations. Narrative cognition's formal focus upon the particular is a defining trait with importance across the whole range of narrative's manifestations; it is also a trait bound up with the contingent emergence of such a mode of cognition in the first place – that is to say, bound up with paying its way as an investment of cognitive resource.

Any form of cognition, for any organism, has its value in context, as the means of the situated, embodied negotiation between the organism and its environment. For a narrative mode of cognition to have become established at all, it must have earned its keep in just such pragmatic terms. Any such basic disposition must function within a cognitive economy; it must prove effective enough to justify the demand it makes upon finite resources. On the face of it, the costs associated with narrative cognition look worryingly high. There are very significant demands upon our neurological capacity involved in the reflexive turn of narrative, and the cognitive return on that investment seems very uncertain, given that it involves a displacement of attention away from the immediacy of the encounter with an empirical environment in favour of a mediated engagement with the temporal form of that encounter. Is this extraordinary move likely to be advantageous in some respect ultimately accountable to the iron laws of natural selection? Evidently it is. A cognitive disposition becomes an established species trait if it proves adaptive in the prevailing environmental circumstances. Conversely, a trait that is maladaptive cannot persist long: it must go, or the species must go. There is indeed plausible adaptive advantage to be gained from the conceptual

sense-making relation that a cognitive investment in narrative brings to the temporal dimension of experience. What is new with narrative is the capacity for recognition, firstly, that there were reasons why things went the way they did; and secondly, that things might have gone another way. These two recognitions are in productive tension with each other, encapsulating respectively the ideas of narrative necessity and narrative contingency, and so helping govern expectations and identify opportunities for action.

Narrative cognition is not the whole of our life experiences, nor are we entirely in its thrall – we have other ways of thinking that can throw it into relief and afford a critical perspective upon our sense of story. This is important because story does have a powerful hold on our way of thinking, being such a fundamental and widely applicable sense-making resource; and it is such a fundamental resource because it evidently does achieve an efficient balance between effectiveness and cognitive cost. Given the high initial outlay involved in a reflexive turn of attention upon experience itself, narrative cognition only achieves such efficiency by realizing the advantages of that move as simply as possible. By the standards of reflective thought it is a quick and dirty sense-making strategy, and there are important compromises attendant upon its success. Narrative cognition met the selection standards for an adaptive trait in the evolutionary context of the species thanks to basic attributes that persist, in significant ways, throughout the whole range of the social and cultural manifestations of story with which we are familiar today. From very early in human history, the uses of story began to proliferate, extending its scope well beyond the terms within which it met the basic threshold of adaptive benefits, and today that criterion seems remote in comparison to more present urgencies: in manifold ways, narrative is caught up in negotiations of meaning and value in every sphere of modern life. Matters of politics, social values, education, emotional and psychological well-being are not necessarily best served by the same cognitive resources that won out in an evolutionary context, yet (with some important qualifications) that is the core of what we have and use, ubiquitously, in narrative.

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3 The constraints of narrative sense-making

The sense afforded by story as a mode of cognition is, in the first instance, oriented towards effective negotiation with the immediate environment and is therefore closely aligned with the priorities dictated by that embedded situation. One of the most fundamental and consequential features of basic narrative form is that its connective logic is sequential: it is characterized by a highly selective attentional focus upon a singular action, a single line of development stripped out from all the ambient manifestations of change available to cognition in any given context. This highly reductive

principle is a great strength of narrative cognition: its close adhesion to the present specific concerns of the cognitive subject gives it optimal relevance, maximizing the cognitive benefit for the processing effort involved. At the same time, however, such selective attention involves ignoring a great deal, and it sets up an artificial boundary between features of the changing situation that are integral to the narrative sequence and features that are not. Every act of narrative sense-making traces a selective temporal pattern, and only some relations between phenomena, as well as certain kinds of relations, will fit such patterns. The sequential development that narrative privileges is a formal feature of the pattern, not an intrinsic feature of the temporal process of which it makes sense. Any pattern is a relational construct, both objective and perspectival. To be an actual pattern at all, it must be a feature of the cognitive environment; but it only achieves the status of a pattern by being cognitively realized as one, picked out and abstracted from the totality of that environment. Pattern recognition is a basic disposition across all modes of cognition, and the recognition of temporal patterns is one axis of this foregrounding of regularities. The original test of story as a sense-making strategy was not, of course, that it produced an ultimately true representation of the encountered temporal process; it was that it proved on balance sufficiently effective to be reinforced by natural selection; it was an apt sense-making strategy with respect to specific cognitive concerns, and so only accountable within those restricted horizons. A narrative mode of sense-making established its place in human cognition because it worked as a pragmatic approach to negotiating the kinds of environment that crucially mattered at key points in the emergence of the species, enabling the individuals concerned to thrive in a way that was favourable to the perpetuation of their genetic signature. Yet such a test is not a good indicator of fitness for purpose in all the circumstances that now fall within its scope, which is to say, all our conscious efforts to make sense of temporal experience in the modern world.

There are further implications for narrative of that basic criterion of relevance to the concerns of the cognitive subject. With respect to cognitive relevance, story offers the potential for two complementary kinds of benefit – one oriented towards the demands of the immediate situation, the other towards an enhancement in the subject's cognitive competence to cope with situations of this kind. That is, story achieves cognitive value by establishing a reciprocity between particular cases and general paradigms, not as two distinct ways of thinking but as bound up with each other. Story addresses the particular and puts great weight upon it, so that the general in narrative is only manifest through the particular, and this cognitive bias towards circumstantial particularity is both a strength and, in a modern context, one of narrative's major shortcomings. It is a constraint dictated by the pressures of cognitive economy, however; given the expense of cognitive resources needed to engage

in narrative cognition at all, it only has a prospect of proving viable if it shows a quick return. Story is highly selective in its attentional focus for the same reason: it doesn't look for constellations of interacting elements, but for the thin thread of a sequential chain, one thing leading to another. The cognitive economy with which we are concerned is specifically a human one, of course, in which the needs of a social animal are at a premium. Story privileges human behaviour over other kinds of events, and indeed strongly projects a model of human agency and action not only onto the behaviour of other species (the bees work together to serve the common interest of the hive), but even onto inanimate processes (the wind roughly shakes the trees). Such latent anthropomorphism is just one aspect of the systematic anthropocentrism of story, which is an inevitable side-effect of its cognitive value. Human narrative cognition serves, in the first instance, core human cognitive needs, which substantially determine the kind of sense it affords. The interests of a story are normatively human in scale; its temporal and situational frames are bounded by the horizons of embodied experience. These horizons are fixed by the scope and resolution of human perceptual faculties – by what we are able to discern, on the one hand; and on the other, by the narrow criterion of adaptive advantage, in evolutionary terms, as the ultimate measure of cognitive benefit. Indeed, these two limits are themselves reciprocally caught up with each other, as part of the iterative attunement to environment from which the human species, or any species, circumstantially emerges. They are also limits that constrain the ability of story to accommodate, for example, the very fast or very slow, the very large or very small, except as analogous to human scale events. The horizons of narrative cognition are also attentional, not just because there are limits to our cognitive capacity to pursue all the possible inferences from even the most basic narrative premises, but also because, as situated cognitive acts, efforts of narrative sense-making are strongly impelled towards addressing the topic in hand and can accommodate centrifugal connections only to the extent they can readily turn back to bear upon that topic. The essence of topic, in this context, is almost literally in hand – a matter of the embodied situation, concrete and particular. An intentional orientation towards the subject's empirical environment is ingrained in story's adherence to particulars, but also in the way narrative cognition endlessly conflates aspects of story form with qualities of the represented events themselves. The most obvious of confluences takes the form of unguarded assumptions about causes and effects, but in fact the same habituation to a story underlies our common-sense assumptions about such causalities. As a semiotic form, story is also constrained by the affordances of its media - which is to say, in the first instance, the human senses (primarily sight and hearing) treated as iconic media of mental representation. While language releases story from some of those limitations (encumbering it with others at the same time), the mode

of narrative still bears the legacy of its iconic origins, which become more serious constraints the further our usage of story strays from the domain of embodied experience. The urgency of the cognitive demand that sense-making pays off, that it secures an end, is manifested at every level of story form in its orientation towards resolution. From the definite form of an event to the ending that marks a narrative whole, story is oriented towards forms of closure that impose a usable finitude upon the endless flux of time. The orientation towards projected closure that pervades a story at every moment and sustains the expectation of relevance, of point, is closely aligned with its basic cognitive value as an instrument of planning and the pursuit of goals. This orientation towards the end is another feature of story form that is pervasively attributed to temporal phenomena themselves, in the guise of convictions about teleology, or final causes which determine what precedes them.

The formal qualities of story address cognitive relevance criteria inherent in the negotiation between organisms and their environment, and in doing so they establish narrative's essential perspectivalism. Perspective is a protean concept with currency in specific senses in every domain of the discussion of story, at every level of its elaboration: from the rudimentary process of narrative sense-making to the literary tour de force. Perspective qualifies the relation between subject and object and encompasses everything from spatial orientation to epistemological, functional, aesthetic, ethical, and ideological orientations. Perspective, in short, is the condition of possibility for values of any kind. The multiple transformations of perspective that apply to narrative hint at the extent of narrative's role in the formation and elaboration of values. Cognition of any kind involves a perspectival relation, which tacitly constitutes a minimal value: what matters here and now, as the bare criterion of relevance inherent in every cognitive act. Narrative cognition exhibits a fundamental displacement that can be said to enact perspectivalism temporally: it is a cognitive orientation towards some action, and is itself action, in that narrative sense-making is an activity in which we engage, not just in its basic cognitive form, but with respect to all kinds of narrative. We may speak of narratives as artefacts, as products – a horror film, a detective story – but they need to be worked through, in a process that does not only take time, but has a sequential orientation doubling the sequential temporality of the subject matter. The sequential presentation of a description or an argument, say, does not parallel a concern with the representation of sequential relations: descriptions are concerned with aspectual relations, and arguments are concerned with logical relations. In this respect narrative sense-making is uniquely constituted to foreground its own form; its own sequential ordering necessarily doubles the sequential ordering it gives to events. Story therefore always both enacts a perspective and invites reflexive

recognition of its own perspectival contingency. The reflexive turn integral to narrative makes the subject's application of tacit values available to attention; and while this potential does offer a corrective for the blinkered nature of perspective, it does so not by re-establishing direct contact with the empirical situation, but through the triangulation of perspectives. Because narrative's multiplication of perspectives is incessantly recursive, it is a powerful engine for the proliferation and convolution of values.

All the distinctive features of narrative form I have touched upon bear strongly upon the ways in which this elaboration of values proceeds, so that the perspectival qualities of narrative as a mode of cognition are thoroughly enmeshed with all systems of values, built in from the ground up. Narrative cognition is not simply a window onto the world, but a motivated and circumscribed way of making sense. At the same time, because it has such an intrinsic, foundational role in the articulation of value systems, it is an often-unexamined premise lurking behind the very notion of making sense. This state of affairs gives rise to the double bind or dual aspect of narrative sense-making: narrative is intelligibly a restrictive and tendentious way of making sense of what happens, yet narrative intelligibility is in most contexts a non-negotiable measure of what counts as sense. We rely so fundamentally upon narrative that it is not just a tool for understanding, but a condition for it, so that if we can't tell the story of what happened then in an important sense we have not understood, we have not achieved the cognitive grasp upon it that narrative affords, for which no other kind of explanation can entirely compensate.

4 From narrative cognition to narrative culture

The dual temporality that defines narrative form arises with the inaugural turn of attention from experience in time to the temporality of experience, which also creates the recursive possibility that the same cognitive move can be applied to the act of sense-making involved. The reflexive turn itself creates the semiotic environment within which this second-order cognitive activity takes place. The medium of basic narrative cognition is perceptual; it is the embodied sensory register of empirical experience, but abstracted one step from the immediacy of that experience. Perceptions, in the first instance, are indexical signs through which the cognitive subject registers environmental conditions; there is a direct contiguity between the environment and the subject's perception of it. Narrative cognition, as a specific way of stepping back from experience in time, goes a step further, by treating the indexical signs of perception as iconic signs. That is, sensory experience is no longer merely the channel of engagement between cognitive subject and environment, but a medium that is itself available to attention.

Iconic signs function both as representations of an external environment and as objects of cognitive engagement that constitute a semiotic environment, internal to cognitive processing. Cognitive engagement with this semiotic environment is conceptual, in that it is sense-making within the domain of signs. So, you return home in a disturbed state of mind, having just been ignored on the street by someone you know. Was this a snub? If so, you will spend the rest of the evening agonizing about the possible reasons for it. But first, what actually happened? You passed each other in the crowd, though your eyes did not meet, and he walked on without pause or acknowledgement. That was the event as apprehended, a cluster of visual, proprioceptive and interoceptive perceptions grasped together into a significant temporal whole. Now you review the event, scrutinizing your own construction of it. Could he have not noticed you? His eyes were down – in contemplative abstraction, perhaps, or studiously avoiding yours. Did his behaviour seem self-conscious? Then again, how early did you notice him – if you missed his glance at you, how would he interpret your own abstraction? Could you have inadvertently snubbed him? You replay your first formulation of the event in your mind's eye, querying its assumptions, omissions and implications. The focus of your attention is now your idea of the event.

The move from basic narrative cognition to narrative conceptualization transforms the scope and flexibility of our grasp upon temporal process, and provides for the detached pursuit of narrative sense-making, sequestered to some degree from the reactive demands of the moment. It also indubitably makes this activity available as a possible focus of narrative cognition. The dual aspect of narrative conceptualization, towards the empirical environment and towards the cognitive subject's own semiotic environment, has far-reaching consequences in itself. The semiotic environment, as part of the subject's total cognitive environment, is a domain of narrative sense-making that achieves relevance with respect to the empirical environment, either as a present focus of attention or (as with the example just given) in retrospect. But it also provides for a level of narrative sense-making that secures cognitive relevance within the semiotic environment itself, disengaged from direct address to the empirical context. Narrative cognition at this level is freed to explore possibilities implicit in the semiotic environment, the immediate benefit of which will be primarily to extend the subject's cognitive proficiency in that environment. So, a new range of narrative activities becomes available, beginning with elaboration and extrapolation from the situated occasion and extending into more conjectural ways of modelling it, invoking hypothetical or counterfactual possibilities, leading into the uncharted territory of imagination. All these potential ramifications of story are also implicated in the other line of development emerging out of basic narrative cognition, which is the prospect of narrative communication.

Communication in general, of course, is a much more extensive topic, both in the sense that there are forms of communication that are more primitive than narrative cognition, that are indeed pre-conditions for the possibility of narrative cognition; and in the sense that communication within the semiotic order exploited by narrative sense-making also takes other, non-narrative forms. Nonetheless, the communicative value of narrative form is a significant part of the development of human communication, and it is as a mode of communication that narrative has attained its pervasive presence in society today.

If narrative conceptualization begins with a turn of attention from the empirical environment to the semiotic environment, narrative communication begins with a turn from the environment, as the occasion of sense-making, towards other cognitive subjects, other sense-making agents. It is enabled by joint attention, a cooperative form of cognition that has its foundations in shared behavioural engagement with the same environment. Joint attention is constituted by a mutually recognized interest in some environmental phenomenon, implying a shared assumption that there is cognitive benefit to be gained from engaging with it. The concept of joint attention is perhaps most prominent in developmental psychology, where it typically involves parent and child, for instance when stacking wooden blocks or reading a picture book. Here, the cooperative relation is asymmetrical, and the cognitive maturity of the adult figure underwrites the expectation of a benefit – which is of course likely to come in the guise of fun or pleasure, but such affective benefits are ultimately continuous with cognitive benefits. Joint attention is not confined to developmental contexts, though, but is a general social behaviour; the mutual cognitive environment it establishes, and the expectation of cooperative cognitive benefit, are the conditions of possibility for communication. Communication is a manifested intervention in a mutual cognitive environment. This is ostensive behaviour, or (in its basic forms) performative behaviour; we can distinguish it from display behaviour, a broader category of communication common to many species, to the extent that it assumes an equivalence between the communicator's own sense-making process and that of the recipient, a reciprocal assumption that provides for both the communicative intent and its intelligibility in terms of communicative relevance. The situation of joint attention prompts a turn from behaviour addressing the environment to behaviour addressing the cognitive attention of others; and because narrative cognition has a specific concern with behaviour, it is integral to this transformation. The innate reflexive potential of story makes readily available the prospect that the ostensive behaviour is not merely narratively intelligible as behaviour, but as ostensibly narrative. Once a situated basis for ostensibly narrative behaviour is established, furthermore, the opportunity arises for the combination of this communicative turn with

the conceptual turn just discussed: the mutual empirical environment can be supplanted by a mutual semiotic environment. The basis for communication is no longer a shared relation to the situation, but a shared relation to a repertoire of sense-making resources; communication is liberated from engagement with the immediate context, and so the communicative point can be retrospective, prospective, wishful, deceptive and creative. If the available means of expression remain iconic and performative, such communicative possibilities are still tightly circumscribed and closely tied to the occasion, but an explosion of possibilities follows with the advent of language. The importance of language to narrative has to do, firstly, with the vast extension of the scope that a symbolic medium affords to narrative sense-making, and in that sense it has to do with the consolidation of narrative's cognitive and cultural power. Secondly, though, the importance of language for narrative cognition derives from the structural complexity it brings to semiotic activity, and the ways in which that complexity has facilitated a progressive refinement and sophistication of the capabilities of narrative form.

Finally, another turn becomes available as storytelling practices become established within a social group, which is the beginning of a dialogue between the articulation of any particular story and the established forms of a narrative culture. Storytelling practices establish conventions, genres and traditions, and – to the extent that a society's stories are told and preserved in material media – the legacy of storytelling is preserved in canons of specific, culturally significant narratives. Technologies of storytelling are crucial to the persistence of narrative cultures, and also give rise to further ramifications of story according to the potential latent in their media as distinct combinations of formal resources. Narrative cultures accommodate historical change in narrative form itself, change that is always caught up within the ebb and flow of larger social and ideological interests, and which also exhibits the continual tension between the conservative and transformative forces intrinsic to narrative form itself. Any given story draws upon and contributes to the currency of multiple systems of narrative meaning within the social formation concerned, which may be anything from a family to an entire civilization: narrative cultures can be specific to a tribe, ethnic group, religion, occupation, academic discipline, subculture, or nation, any of which may overlap with each other. Within any social frame there will also be multiple aspects of narrative culture informing the functions of narrative for the group: informing how it understands its past, how it articulates collective fears and desires, how it confronts current events, how it finds pleasure in stories. It is at this cultural level that stories participate centrally in the articulation, perpetuation and contestation of values; and it is there, of course, that my own interest in narrative cognition reconnects with the literary forms that first drew me to the field of narrative theory.