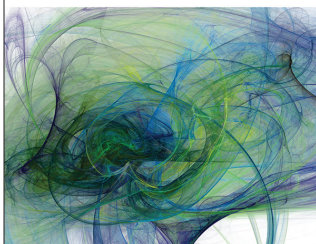


**CREATIVITY AND SCIENCE  
IN CONTEMPORARY ARGENTINE LITERATURE**

*Between Romanticism and Formalism*



Joanna Page

## CREATIVITY AND SCIENCE IN CONTEMPORARY ARGENTINE LITERATURE: BETWEEN ROMANTICISM AND FORMALISM

Joanna Page

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## 3 | Mathematics and Creativity

The mathematical dilemmas and discoveries narrated in Martínez's *Acerca de Roderer* (1992) and Cohen's *Un hombre amable* (1998) set the stage for a broader reflection on the persistence of certain elements of Romantic thought in postmodernism. In *Acerca de Roderer*, Martínez's repeated use of Romantic narrative topoi – the solitary creative genius, self-destruction with the aid of opiates, the Faustian pact – acquires a particular irony in a novel that mounts an impassioned defence of rationalism. Romantic perspectives on creativity are held in tension here with approaches that can be identified closely with Formalist ideas, and it is the latter that point most convincingly towards an alternative to what Martínez refers to as the “dead ends” of postmodern parody and cynicism.

The mathematical-philosophical questions explored in Cohen's *Un hombre amable* (1998) – chief among them, Platonism versus constructivism, or whether mathematical entities are created or discovered – provide a point of entry into debates within literary theory concerning the ethics of narrative reflexivity and irony. Cohen's novel reworks the legacies of Romantic irony and the Romantic understanding of chaos and order that remain evident in postmodern literature and theory. In so doing, it counters one of the most prevalent postmodern fictions: that self-awareness and reflexivity leads only to narcissistic detachment and not to the expression of an ethical commitment to the world beyond the text. Cohen draws on the more contemporary conception of the relationship between chaos and order suggested by theories of complexity and emergence, much less polarized than that proposed

in Romantic literature and theory. This newer understanding allows us to situate literary innovation as part of the broader, unceasing, creative flux of the universe at large. In turn, this conception leads to a more nuanced appreciation of the contradictions within Romantic thought, and the theorizations of Friedrich Schlegel in particular.

Both novels explore the possibility of non-binaristic modes of thought, but only in Cohen's does this become a principle of textual construction. Martínez's faith in the dialectical progress of Reason is mirrored in his Formalist understanding of literary evolution, in which opposing forms can give rise to new syntheses, and familiar or forgotten ideas can provide fresh insights if they are put to new uses. His sense of literary (and scientific) history as a discontinuous process that stems from negation, rupture, and refunctioning differs from Cohen's vision, in many ways more akin to that of Schlegel, who wrote of ancient poetry that "Everything interpenetrates everything else, and everywhere there is one and the same spirit, only expressed differently."<sup>1</sup> Cohen's epistemology is not built on a dialectical process but a commitment to nondualism, which positions the writer within the flux of the creative universe, not above it: it is therefore of little consequence whether our theories about it are accurate or not, and their much-vaunted demise may in fact permit us to construct a more honest, intimate, concrete, and yet still self-aware, approach to being in the world and to narrating it, two activities that often become synonymous in Cohen's work.

## **CREATIVE CONTRADICTIONS AND THE MATHEMATICS OF POSTMODERN THOUGHT / MARTÍNEZ**

Always doth he destroy who hath to be a creator.—Friedrich Nietzsche<sup>2</sup>

One must always assume from the start that an idea is not totally new. [...] But here, in this case, in this connection and under this light, it may indeed turn out that what has existed before

is new after all, new to life so to speak, original and unique.—  
Thomas Mann<sup>3</sup>

An erstwhile mathematician turned novelist, Guillermo Martínez is particularly well placed to appreciate the creative potential in appropriating mathematical and scientific ideas for literary use, if also to observe the distortion of such ideas as they cross disciplinary boundaries. Martínez has often criticized the misuse in postmodern thought of certain theories – most fashionably, those of uncertainty, incompleteness, and chaos – that are often cited in triumphant pronouncements concerning the demise of scientific rationalism as an epistemological project. As he claims, for example, “las extrapolaciones apresuradas y las analogías demasiado ligeras” (the hasty extrapolations and frivolous analogies) that mark the appropriation of Gödel’s incompleteness theorem by other disciplines “han llevado a conclusiones tremendistas, erróneas, a veces incluso risibles” (have led to conclusions that are alarmist, erroneous, or even laughable).<sup>4</sup> Our world may contain chaotic phenomena and natural catastrophes, but it is also governed, he reminds us, by immutable laws and regularity.<sup>5</sup>

A section of Martínez’s book *Gödel para todos* (2009) outlines ways in which he considers Gödel’s theories to have been used too loosely by thinkers such as Kristeva, Deleuze, and Lyotard. As I suggested in the Introduction, Martínez closely follows the line of critique established by Alan Sokal, Jean Bricmont, Jacques Bouveresse, and others of the use of mathematical and scientific ideas in French philosophy. Like them, Martínez objects to a version of the history of science that rapidly gained currency in the latter part of the twentieth century, according to which absolute empiricism reigned until the sudden irruption of certain theories (Gödel, Heisenberg, etc.) completely destroyed the premises of rational enquiry.<sup>6</sup> For Martínez, the idea that human reason is utterly incapable of accounting for reality – widely accepted and repeated as a commonplace among recent thinkers and writers – represents “un pase de manos demasiado rápido” (too quick a sleight-of-hand), leaping rashly from an affirmation of the limitations of reason to its total incompetence.<sup>7</sup> Seldom in Martínez’s *Crímenes imperceptibles* reminds us that mathematics as a discipline did not come to a full stop with the publication

of Gödel's theorem.<sup>8</sup> In a similar vein, Sokal and Bricmont point out that, far from confronting scientists with a dead end, chaos theory has opened up "a vast area for future research."<sup>9</sup>

If Martínez's *Crímenes imperceptibles* reveals our tragic propensity to misapply half-understood mathematical reasoning to the messiness of real life (see Chapter 2), *Acerca de Roderer* (1992) mounts an impassioned defence of rationalism and dialectical thought in the pursuit of creativity and new forms of knowledge. In many postmodernist caricatures, science is depicted either as hopelessly clinging to fixed laws that cannot explain the complexity of the universe or alternatively (or additionally) as nothing more than a set of myths and social constructions. Both perspectives may be considered hangovers from Romanticism, in its anti-Enlightenment approach to science and its development of irony as a self-conscious destruction of the illusions of fiction. Martínez's appropriation of Romantic narrative topoi in a novel about a discovery of paramount importance for mathematics and the philosophy of logic therefore acquires a particular irony of its own and works in specific ways to unsettle the dichotomy between Reason and Romanticism that still dominates much contemporary thought.

The contradictory combination of Romantic and Formalist ideas in *Acerca de Roderer* engages with and effectively reconfigures, I will argue, broader tensions between these inherited frameworks within postmodernism. That postmodern thought may be defined by the conflictive co-presence of these two currents is the provocative argument advanced by the Serbian mathematician Vladimir Tasić in his *Mathematics and the Roots of Postmodern Thought*, translated into Spanish in 2001 by Martínez himself.<sup>10</sup> I will explore Tasić's argument in some detail as the parallels he draws between the development of mathematics and postmodern thought suggest a more productive attempt to bring science and philosophy/literature into dialogue than the simplistic and often erroneous appropriation in postmodern texts of theories of uncertainty and chaos, whether as metafictional flourishes, as dubious analogies for social systems, or as evidence of the downfall of scientific rationalism.

## Rationalism and Romantic creativity

*Acerca de Roderer* relates the encounters – as boys and as men – between the narrator and an unusual school companion, Roderer. Roderer is Martínez’s most gifted and iconoclastic thinker, a self-taught genius who sets himself the task of overturning the law of excluded middle. This law, described in the novel as the most precarious in logic, rests on *reductio* reasoning<sup>11</sup> and refers to the premise that between being and non-being there cannot exist a third alternative. Roderer’s project is to dismantle the apparatus of thought that invented logic in the first place and to find a new system of thought that transcends this binary structure. His body wracked with pain and enfeebled with morphine, he claims to have discovered just such a system, but dies – conveniently for Martínez – mere hours before he can commit it to paper.

The novel frequently repairs to conventional Romantic representations of the creative genius, including the association of creativity with insanity or illness. Roderer, like the archetypal Romantic artist, is dishevelled, unpredictable, totally focussed on his creative work, addicted to opium, and oblivious to social mores. He is afflicted with a heavily Romantic conviction of finitude, battling against the passing of time and the increasing frailty of his body. His inspiration is supernatural and his rebellion against institutions is total. At school – for which Roderer has little time – his genius remains wholly untapped, but he becomes a figure of awe for his fellow classmate, the novel’s narrator. The boys’ mathematics teacher differentiates between two kinds of intelligence: the first is primarily “assimilative,” quick to analyze and synthesize different ideas, and associated with success in our world; the second, much rarer, rejects all previous assumptions and often brings madness or alienation, but may, through startling revelations, teach us to “mirar de nuevo” (see in a new way).<sup>12</sup> The narrator recognizes instantly that his own intelligence falls into the first category and that Roderer’s belongs firmly in the second.

The second approach is clearly associated in the novel with Romantic notions of creativity: it is the work of the inspired individual genius and involves the violent overthrow of the structures of previous knowledge. In the first approach, the individual plays a part in a more collective and cyclical

process of stagnation and revitalization, appropriating and reworking forms and structures from the past. This concept of how newness emerges is related in Martínez's work both to the dialectical tradition of scientific advance and to Formalist theories of literary evolution. If Roderer's creativity is more often imagined in terms of the second kind of innovation, Martínez imagines and executes his own revitalizing project very much in terms of the first. The complexity of *Acerca de Roderer* stems, however, from his refusal to treat Romantic and Formalist ideas of creativity as antagonistic but to seek instead to hold them in tension as a way of challenging old dichotomies and creating new syntheses of thought.

For all the likeness he bears to a Keats or a Byron, Roderer is not a Romantic poet but a self-taught mathematician and philosopher, and his work is carried out within the rigours and constraints of systematic, logical thought. If he is to succeed in overturning previous knowledge and replacing it with an entirely new system, he first needs to teach himself the language of mathematics and logic. His new understanding of the universe is achieved through the scrupulous exercise of reason, not against it, even if it requires him to reinvent the logic on which reason is founded. He expresses an adherence to the dialectical method and a belief in the potential of human reason, stating "toda nueva oposición es sólo en apariencia oposición: en realidad señala la próxima altura a conquistar y la razón la recoge en sí al pasar, se alimenta de ella" (every new opposition is only an apparent opposition: in reality it points to the next height to be conquered and reason absorbs that opposition within itself as it moves along, feeding off it).<sup>13</sup> Roderer's return to the past to mine it for new possibilities, desperately trying to recuperate "todos los estados intermedios del pensamiento, los razonamientos precarios, los nexos perdidos u olvidados" (all the intermediary states in thought, shaky points of reasoning, links that were lost or forgotten),<sup>14</sup> is carried out in accordance with dialectical methods of thought, but also recalls the Formalist idea that literary innovation often involves a step backwards to find paths truncated or left unexplored by previous generations, recollecting what Jurij Striedter calls "collateral lines."<sup>15</sup>

Thus the novel gives rein to Romantic notions of genius and creativity while extolling the virtues of methodical, dialectical thought and taking as

its subject an enterprise of vast potential import for rationalist epistemology: to refound on a more accurate set of axioms the logic that underpins much mathematics and philosophy. By giving such overtly Romantic expression to this rationalist project, Martínez effectively subverts the dichotomy between Romanticism and Reason that has persisted in different guises in postmodern thought. Postmodernism's penchant for "lo incompleto, lo azaroso, lo indeterminado, lo fragmentado, lo imposible de conocer" (the incomplete, the risky, the indeterminate, the fragmented, the impossible to know) has, as Martínez comments, Romantic roots; likewise its portrayal of Reason as "prosaica, árida, mezquina, de patitas cortas" (prosaic, arid, small-minded, short-lived).<sup>16</sup> Martínez refuses to respect such divisions in the presentation of his protagonist: the highly intellectual Roderer enters battle with the zeal and desperation of any Romantic hero, ready to sacrifice everything – even his soul – to advance mathematical knowledge.

More importantly, however, Martínez recuperates the antagonism between Romantic inexpressibility and Reason as a battle that takes place within mathematics itself. Challenges to the law of excluded middle have been mounted by a number of mathematicians and logicians, chief among them L.E.J. Brouwer, Arend Heyting, and others associated with intuitionist approaches in the early twentieth century, and later in that century, by the philosopher Michael Dummett in his work on realism and anti-realism. For Martínez, these challenges – although yet to be incorporated into "mainstream" mathematics – play an essential role in the dialectical tradition that constitutes the foundation of scientific rationalism. He insists that we should not confuse rationalism with binary logic: rationalism is a historical process in which many more subtle forms of logic have been developed than that which rests on the distinction between true and false, incorporating "valores intermedios, valores probables, valores difusos" (intermediary values, probable values, diffuse values) into contemporary mathematics.<sup>17</sup> In a similar vein, *Acerca de Roderer* articulates a commitment to the pursuit of knowledge through reason, but a reason that is elastic and provisional as well as rigorously dialectical.



## Creative contradiction in Nietzsche

The significant presence of Nietzsche within *Acerca de Roderer* also points to a synthesizing intent: Nietzsche's understanding of contradiction as the source of creativity speaks both to Romantic ideas and to the processes of dialectical thinking. Roderer's refusal to accept the law of excluded middle responds to Nietzsche's call to start precisely with this axiom in a much-needed overhaul of thought. Nietzsche exhorts us to question the presuppositions of the law of contradiction, a particularly important task if it is (as Aristotle claimed) the "most certain of all principles [...] upon which every demonstrative proof rests."<sup>18</sup> The axioms of our formal logic, Nietzsche suspects, are "not adequate to reality," as logic is a human construct, an attempt to comprehend the world by making it "formulatable and calculable."<sup>19</sup> Roderer joins Nietzsche in questioning the adequacy of the axioms on which logic and mathematics have been founded since Classical times; this does not necessarily suppose an eschewal of all axiomatic thinking but certainly fits with what Nietzsche calls the "Attempt at a Revaluation of All Values."<sup>20</sup>

Nietzsche's understanding of creativity is also directly referenced in *Acerca de Roderer* at several points. Martínez's narrator is stupefied by Roderer's decision to get rid of his extensive library of books and does not understand his elliptical explanation: "ya fui el camello en el desierto y el león; sólo me queda la transformación en niño" (I have already been the camel in the desert and the lion; now all that is left is the transformation into a child).<sup>21</sup> The phrase recalls Nietzsche's "three metamorphoses of the spirit," which describe "how the spirit became a camel, the camel a lion, and the lion at last a child."<sup>22</sup> In its context in *Thus Spake Zarathustra*, this transformation evokes not (or not simply) the end of history but the possibility of a new creativity. After the "reverent spirit" of the beast of burden and the rebellion of the lion fighting for freedom, "Innocence is the child, and forgetfulness, a new beginning" and a "holy Yea," which is needed for the "game of creating."<sup>23</sup> This expression of hope seems antithetical to Nietzsche's account of nihilism as a state of utter disillusion in which "all that happens is meaningless and in vain."<sup>24</sup> Identifying this as an ambivalence in Nietzsche's work, Alessandro Tomasi suggests that "Nietzsche seems to be offering two

versions of nihilism, for which he offers no conceptual discrimination: a type of nihilism favorable, or even necessary, to creativity, and one that prevents any creative effort.”<sup>25</sup> For Justin Clemens, this ambivalence is more accurately understood as a paradox inherent within nihilism, which is at once “the terminus of history *and* a transitional moment, [...] poised on the brink of the unprecedented” and offering “the desirable-necessary chance for a new beginning.”<sup>26</sup>

In Nietzsche, the critique of the law of excluded middle forms part of a broader exhortation to create afresh by tearing down existing structures, and in this respect his thought resonates clearly, not only with the Romantic conception of creativity from destruction, but also of contradiction as a source of that creativity. The contradictions in Nietzsche’s work, as Phyllis Berdt Kenevan attests, stem from a resistance to the need to simplify; they produce “not simply chaos but a fertile sort of disorder,” opening up “creative potentialities.”<sup>27</sup> However, that Nietzsche did not, or did not simply, advocate the overthrow of human reason is evident, not least in his admiring portrait of Goethe as a man who “strove against the separation of reason, sensuality, feeling, will.”<sup>28</sup> The quest of *Acerca de Roderer* to bring together Romantic notions of creativity and a commitment to dialectical reasoning is pursued with something of this spirit.

## Postmodern parody vs. montage

This synthesizing approach is very much evident in the novel’s engagement with literary tradition. The particularly close relationship it develops with Thomas Mann’s *Doctor Faustus* (1947),<sup>29</sup> itself a novel about artistic renovation, suggests that another form of renewal is stake: of literature, rather than philosophy or mathematics. Martínez’s recourse to intertextuality must be distinguished from the openly parodic or self-referential use of such techniques in some postmodern literature, which he targets with an astringent critique:

cinismo, frialdad, parodia, intertextualidad, literatura en segundo grado, autorreferencia, aburrimiento, ¿qué es lo que hay

de común en estos elementos? Un único terror por no dejarse sorprender, por no quedar nunca más al descubierto. Al que no cree, por lo menos, nadie lo tratará de ingenuo, al que nada afirma nada se le podrá refutar. Del mismo modo, la parodia no puede ser parodiada ni la intertextualidad vuelta a mezclar. Nuestro fin de siglo, con un reflejo de mano escaldada, busca refugio en los estados terminales del escepticismo. [...] Pero el escepticismo, como posición, es tan inatacable como estéril, y en el dominio de la literatura – está a la vista – conduce rápidamente a caminos cerrados.<sup>30</sup>

cynicism, coldness, parody, intertextuality, second-degree literature, self-reference, boredom: what do these elements have in common? One fear, of allowing oneself to be surprised, or left vulnerable. If you do not believe, you cannot be treated as naïve; if you do not assert anything then nothing you say can be refuted. In the same way, parody cannot be parodied; nor can intertextuality be mixed up again. Our *fin de siècle*, like the reflex of a burned hand, looks for refuge in the deadly realms of skepticism. [...] But skepticism, as a position, is as sterile as it is unassailable, and in the field of literature – as is evident – it leads quickly to dead ends.

*Acerca de Roderer* articulates this sense of the exhaustion of artistic forms that is widespread in postmodern thought but also gestures towards a possible way through the impasse. It is interesting, given Martínez's comments above, that this is largely achieved through techniques of intertextuality and reflexivity; as I will show, however, these are given a serious, historicizing function in the novel that distances them from the more cynical, defensive or whimsical modes of postmodern parody criticized above.

Martínez engages closely with the themes of artistic exhaustion and reinvention developed in Mann's *Doctor Faustus*. Roderer, like Mann's Adrian Leverkühn, is a Faustian figure who destroys himself as he gives himself wholly to his new creations. Even Nietzsche's importance in *Acerca*

*de Roderer* is prefigured in the earlier novel, as Mann drew heavily on Nietzsche's life to construct his text, including his experience at the Cologne bordello and the precise symptoms of the disease he contracts. If he does not mention Nietzsche by name, this is – as Mann acknowledges – “because the euphoric musician has been made so much Nietzsche's substitute that the original is no longer permitted a separate existence.”<sup>31</sup> Although the plots of both *Doctor Faustus* and *Acerca de Roderer* are of good Romantic pedigree, focussing on the deeds and misdeeds of the genius whose individual creative powers may transform art and knowledge, their authors can be seen to experiment with a rather different kind of creativity in the form of their novels. Newness in both cases involves the careful return to a range of sources and voices from the past, to place these in surprising and productive relationships with the present. Like Mann before him, Martínez appears to be interested in revitalizing a tradition of montage, rescuing it from a collapse into mere pastiche or cynical parody.

Mann used the term “montage” to describe his technique in *Doctor Faustus*, which had its genesis in a “wild medley” of “notes from many fields – linguistic, geographic, politico-social, theological, medical, biological, historical and musical.”<sup>32</sup> He openly admitted to the flagrant and unattributed reproduction or glossing of whole sections of Adorno's as-yet-unpublished *The Philosophy of New Music* and expressed relief that Adorno, who collaborated closely with Mann, was “gracious” in his response to such plagiarism,<sup>33</sup> unlike Schoenberg, who unleashed a bitter campaign against him for appropriating his ideas without acknowledgment, most notably the invention of twelve-tone serialism. In its extensive citations and paraphrases of an eclectic range of texts, *Doctor Faustus* performs a literary version of the techniques of montage often associated with the music of Mahler, resignifying familiar or simple motifs and styles by inserting them into new contexts.<sup>34</sup> In a similar manner, *Acerca de Roderer* is Martínez's most sustained attempt to bring together a heterogeneous range of ideas and discussions, drawing from the fields of biology, mathematics, philosophy, theology, and literature and weaving together citations from multiple texts as an example of the kind of imaginative repositionings and recontextualizations that may result in newness.

Mann writes of his attempts to draw the musical innovations of Schoenberg and others into the form of his novel, acknowledging that “my book itself would have to become the thing it dealt with: namely a musical composition.”<sup>35</sup> Arguably, Mann’s novel is nothing of the kind, or at least it reflects very little of the mathematical rigour shaping the musical compositions he discusses: it does not participate in any consistent manner in the avant-garde search, exemplified in the music of Berg, Webern, and the later Schoenberg, for new formal constraints to give meaning to old ideas. We see here nothing of the precise mathematical forms of constructivism in music but often a loosely connected series of digressions. Mann himself attests to his struggle to impose a form on the manuscript, once it had been written, to give it greater coherence; he experimented with and then abandoned a plan to split the chapters into six sections in a bid for greater clarity of form.<sup>36</sup>

Likewise, the narrative of *Acerca de Roderer* is not constrained by prominent formal devices, but its use of motifs and montage is similarly extensive. While both Mann and Martínez express an interest in the generative potential of serial music or logical series, their own aesthetic relies less on strict sequences or formal patterning and much more on the combinatorial, montage practices associated with earlier music on the cusp of modernity, such as that of Mahler or the early Schoenberg. As one of Mann’s critics acknowledges, there is nothing essentially new about the introduction of leitmotifs and montage to the novel; what is remarkable in this case is the extent and the tenacity of their use.<sup>37</sup> Martínez, like Mann, is interested in exploring the revitalizing potential in the tradition of montage, bringing texts and events from the past into a dialectical relationship with the present, breathing new life into old configurations, and rescuing potential clichés through the imposition of new forms. As the musician protagonist states in *Doctor Faustus*: “One must always assume from the start that an idea is not totally new. When it comes to notes, what is ever absolutely new! But here, in this case, in this connection and under this light, it may indeed turn out that what has existed before is new after all, new to life so to speak, original and unique.”<sup>38</sup> This sense of giving new meaning to old clichés by embedding them within an innovative construction is what underpins both serialism and montage, even if one compositional technique is really the

inverse of the other: the first generates, through “chance” (the application of strict mathematical iterations), patterns that occasionally throw up forms belonging to older patterns, such as tonality, while the second consciously ransacks forms from the past, producing a sense of newness by placing old forms in new or unexpected contexts.

Martínez’s choice of intertext – *Doctor Faustus* is already, in James Schmidt’s words, “a phantasmagoria of correspondences, imitations, resemblances”<sup>39</sup> – lays bare a giddy vision of an endless textual *mise-en-abyme*. The effect, however, is not to empty out signification or to produce blank parody: it is to undertake a critical exploration of the present and the past in search of correspondences and differences, and to resituate older practices within new contexts in such a way that they acquire new meanings. Precisely how such textual citation differs from the kind of skeptical postmodern parody and recycling Martínez denigrates may be appreciated in the following example. In the article cited above, Martínez criticizes postmodern skepticism for its assumption that everything has already been said, which condemns artistic creativity to “dos vías muertas: la parodia y la repetición” (two dead ends: parody and repetition).<sup>40</sup> Almost exactly the same words are used in the text of *Acerca de Roderer*, but this time they are used to summarize the theme of Heinrich Holdein’s *La visitación*, a fictional novel by a fictional writer. Roderer claims that Holdein’s text confronts the central problem facing art in his time:

la gran apuesta de la novela es afrontar el problema crucial del arte en esta época: el agotamiento progresivo de las formas, la inspección mortal de la razón, el canon cada vez más extenso de lo que ya no puede hacerse, la transformación terminal del arte en crítica, o la derivación a las otras vías muertas: al parodia, la recapitulación.<sup>41</sup>

the novel’s great undertaking is to confront the crucial problem of art in this era: the progressive exhaustion of forms, the deadly examination of reason, the ever more extensive canon of what can no longer be done, the fatal transformation of art

into criticism or its rerouting towards other dead ends: parody, recapitulation.

It becomes clear that Holdein's novel, like Martínez's own, is a version of Mann's *Doctor Faustus*, which – and this will hardly be a surprise – also contains a critique of art's "unvital" refuge in parody as a response to a sense of staleness in artistic form.<sup>42</sup> These repetitions and mirrorings do not, however, serve to parody previous discourses. To perceive connections between the contemporary sense of art's exhaustion and that which characterized an earlier period – in Mann's novel, the shift from late Romanticism to early Modernism in music – is not to conflate them or to repeat an earlier gesture, but to uncover the cycles of exhaustion, parody, and renewal that structure the history of art and human knowledge: there is nothing unique about the postmodern moment that should necessarily lead us to assume that exhaustion will not be followed by renewal as it has at other junctures in history.

Although the sincerity of Martínez's citations from Mann's novel might lead us to consider that categorizing his approach as "parodic" would be a mistake, it would nevertheless sit comfortably within Linda Hutcheon's much broader definition of parody. For Hutcheon, parody may operate in modes that range "from scornful ridicule to reverential homage" and is perhaps best defined as "ironic trans-contextualization" or "imitation with critical ironic distance."<sup>43</sup> A critical distance is certainly marked by the appropriation of Romantic motifs in a story about the axiomatic grounding of mathematical logic: Martínez is deliberately playing on our (Romantic-inherited) sense that emotion and reason are opposed. Furthermore, within the novel's diegesis Roderer criticizes Holdein – in terms that could easily be applied to Mann – for lacking courage in the characterization of his protagonist. Holdein cannot stay true to his original casting of a cold, inhuman figure but instead inserts an unconvincing affair with a prostitute, as (Romantic) literary tradition dictated that any passion (love, hate, jealousy) could be taken to extremes except intellectual passion, identified with frigidity. At this thought, Roderer exclaims, with incredulity: "¡Como si la inteligencia no pudiera arder y exigir las hazañas más altas, la vida misma!" (as if intelligence were not able to burn and demand the greatest exploits,

life itself!).<sup>44</sup> Martínez does not commit Holdein's/Mann's "error" of this unwarranted deference to Romantic archetypes: his protagonist is enslaved only to the passions of the mind, oblivious to all carnal desires or human emotions. Martínez's appropriation of Mann's text is not parodic in the sense of holding a previous text or genre up for ridicule, and neither does it simply quote or pay homage: it demonstrates the intent to transform it through critical distance to form a new synthesis, in the way that Hutcheon describes.<sup>45</sup>

## Mathematics and postmodern thought

Postmodern discourse frequently pits an "old" science against a "new" one: reductionism and the adherence to fixed laws in the "old" science contrasts with postmodernism's (Romantic) penchant for the undecidable and the inexpressible, while the "new" science is often depicted in terms that render it, as Jacques Bouveresse argues, as "poco diferente de la filosofía y la literatura" (little different from philosophy and literature): if both are simply forms of discourse or narrative, there can be little distinction between them.<sup>46</sup> Martínez challenges the "bad old science, good new science" premise that informs much postmodernist literature by making it clear that the more diffuse mathematics favoured by poststructuralists has emerged *within* the scientific tradition of reason and dialectical thinking, not against or in spite of it. The interplay in Martínez's fiction between a commitment to rationality and logic on the one hand and a Romantic sense of the inexpressible on the other can be read as internal conflicts within mathematics itself. This makes all the difference: instead of Reason overthrown by chaos, the inexplicable simply stimulates the next step in a dialectical process.

If the over-simplistic opposition between Romanticism and Reason is unsettled in this way, the path is open to consider different ways that we might choose to understand the relationship between mathematics and postmodern thought. The suggestive hypothesis explored by Tasić in his *Mathematics and the Roots of Postmodern Thought* is that both mathematics and postmodernism have been shaped by a series of exchanges taking place between these disciplines throughout the twentieth century. In his aim to



recover historical connections between mathematics and continental philosophy that might “go deeper than today’s tedious incantations of chaos, fractals, and fuzziness,”<sup>47</sup> Tasić goes as far as to propose that some of post-modernism’s contradictions may be located in debates initially conducted within the field of mathematics. His contention is that postmodern theory may be viewed as “a curious ‘product’ of the irreconcilable differences between intuitionism and formalism” in mathematics.<sup>48</sup>

Tasić argues firstly that certain Romantic ideas, including the inexpressibility of a reality that resists capture in language, resurface in the preoccupations of early twentieth-century intuitionist mathematicians – the key referent here is Brouwer – and then filter through the work of other continental philosophers, such as Poincaré, to influence thinkers like Derrida and Deleuze. Against Russell and Frege, Poincaré insisted that mathematical understanding is not reducible to logical inference: “there is always an unidentifiable subjective contribution, a creative-intuitive act of some kind” involved in the process.<sup>49</sup> An emphasis on that which resists formalization, and on the subjectivity of interpretation, is of course all-pervasive in postmodernist thought. Tasić finds Deleuze and Guattari’s ideas fairly incomprehensible from a mathematical perspective. Nevertheless, he observes that their “strange” work *Anti-Oedipus*, positing the possibility of a liberated, non-binary form of thought that will not apply the law of excluded middle, resonates with the lineage of Romantic-intuitionist thought he is tracing: there are key similarities, for example, between “all those fluctuations and flows of desire” and the intuitionist continuum.<sup>50</sup>

Tasić then argues in a similar fashion for the continuity of certain formalist ideas in postmodern thought, which are sometimes – in the cases of Wittgenstein and Derrida – combined in rather complex ways with Romantic-intuitionist ones. Here he focusses on the work of Jean Cavallès, the philosopher of science who “can be viewed as bridging the great divide between Hilbert’s formalism and certain parts of postmodern theory.”<sup>51</sup> Cavallès, to expand a little on Tasić’s argument, attempts to shift the focus of the theory of science from conscious acts of creativity to a kind of “conceptual becoming which cannot be stopped” that transcends the consciousness of individual scientists and ultimately generates, and responds

to, “the necessity of a dialectic.”<sup>52</sup> Tasić suggests that these ideas could be seen to lay the groundwork for Foucault’s approach to knowledge and truth as discursive practices.<sup>53</sup> He cites Foucault’s premise that “it is not man who constitutes [the human sciences] and provides them with a specific domain; it is the general arrangement of the *episteme* that provides them with a site, summons them, and establishes them – thus enabling them to constitute man as their object.”<sup>54</sup> This de-anthropologizing perspective is in clear conflict with Romantic/intuitionist notions of *a priori* knowledge and Brouwer’s treatment of the “creating subject” of mathematical activity.

Postmodern theory then, according to Tasić, is most accurately understood as a “deeply divided edifice,” riven with contradictory modes of thought that may be traced back to competing philosophies of mathematics. It may be viewed

first, as a revival, or a re-invention in somewhat different terms, of a challenge that mathematicians who were influenced by romanticism once issued to logical reductionism; and second, as an extraordinary radical dismissal of romantic humanism, a dismissal whose roots can in part be traced to mathematics, and which in its postmodern edition becomes a rather extreme form of formalism.<sup>55</sup>

When Tasić alludes to formalism, he is of course referring to mathematical formalism, not the kind practised by Russian literary critics. However, the two approaches do share some defining characteristics, particularly in their desubjectivizing approaches. Cavaillès’s understanding of scientific advance as a “conceptual becoming that cannot be halted” relegates the individual scientist to a secondary place in a way that recalls the Formalist account of literary evolution, in which the individual creator (as Shklovsky insisted) is “simply the geometrical point of intersection of forces operative outside of him”<sup>56</sup> in the battle between genres and forms through which art continually renews itself.

Tasić’s argument is ambitious enough to provoke contention in many quarters. Indeed, his introduction to the book makes clear that his aim is

“to demonstrate that mathematics *could* have been a formative factor in the rise of postmodern theory,” and he suggests that “it is probably best to think of this book as a story – a speculative reconstruction of a story – and an invitation to a polemic.”<sup>57</sup> In broad terms, however, it seems at least plausible to see in postmodern notions of creativity the persistence of two paradoxical lineages of thought: on one hand, the Romantic rejection of the mechanistic Enlightenment understanding of human creativity and, on the other, a privileging of text and discourse over authorial intention or the creative act of an individual in accounts of artistic evolution or the advance of scientific knowledge, which can be associated with mathematical and literary formalisms (and in their reworking in structuralism and post-structuralism). And of course Tasić’s major contribution here – like that of Martínez – is to complicate any monolithic conception of logic and mathematics as antithetical to postmodernism, and to situate those areas of affinity postmodernism has recently discovered with the “new” science of uncertainty within a much longer series of exchanges between science, art, and philosophy. His arguments bring us to suspect that what appear to be battles between disciplines may more properly be understood as internal conflicts within them.

While Martínez would certainly echo Sokal and Bricmont’s insistence that “Science is not a ‘text’”<sup>58</sup> or merely a mine of tropes for the description of broader cultural phenomena, he is more willing than they are to perceive the creative potential for mathematical and scientific ideas in literature and philosophy. In *Acerca de Roderer*, such ideas form a vital part of Martínez’s metafictional critique of postmodern declarations of the end of art and philosophy (as well as science) and allow him to imagine a way through the impasse of postmodern parody. What postmodern theorists stand to learn from mathematics is that even the most fundamental axioms of logic can be questioned without destroying the whole bedrock of rational and scientific enquiry: there is space for anti-rationalistic modes of thought within the dialectical process of rationalism. Certain schools of mathematics, Martínez shows us, have shown as much interest in undermining binaristic logic as the most ardent postmodernist. To tear down the entire edifice of rationalist enterprise at the first sight of limitations in our logic or problems with our epistemologies is not only mathematically inaccurate but also leads in

Martínez's eyes to a loss of faith in aesthetic renovation as well as scientific progress. As he suggests,

El escepticismo, en tiempo de derrumbes, puede hacerse pasar fácilmente por inteligencia. Pero la verdadera pregunta de la inteligencia es cómo volver a crear.<sup>59</sup>

Skepticism, in times of destruction, can easily pass for intelligence. But the real question intelligence poses is how to create once again.

Martínez's own recyclings of past texts bears little resemblance to postmodern parody, often criticized as conservative in its intent to mock other artistic forms without offering any serious aesthetic alternatives. They adhere much more to the version of parody elevated by the Russian Formalists, for whom – as Hutcheon states – parody is also “capable of transformative power in creating new syntheses.”<sup>60</sup>

## **POST-ROMANTIC PRINCIPLES OF CREATIVITY IN A SELF-ORGANIZING UNIVERSE / COHEN**

Suppose these houses are composed of ourselves,  
So that they become an impalpable town, full of  
Impalpable bells, transparencies of sound,  
[...]  
Confused illuminations and sonorities,  
So much ourselves, we cannot tell apart  
The idea and the bearer-being of the idea.  
—Wallace Stevens<sup>61</sup>

From his revolving stool, Dainez lifts his hand and brings a world into being: where his palm meets the air, lines spring forth and meet others to form surfaces and volumes. As it passes in front of him, his hand sketches out the smoke released from the chimney of a plastic container factory, an ATM booth with pensioners inside, pondering over brochures, and vans resting under the canopy of the Kum Chee Wa supermarket. In its wake, the hand reveals a muddle of squat dwellings, some of them just basic frames covered in canvas, interspersed with little shops with broken windows.

This is the “zone” of Cohen’s *Un hombre amable* (1998), which hovers enigmatically between mental construct and material reality, seeming at times to depend on the imagination of a single man but at others to exist autonomously in its own right. When he is not attending to the zone, Dainez, its primary creator and the protagonist of Cohen’s novel, is employed to discover prime numbers to crack security codes for electronic messages. Although the internet is not mentioned directly in this parallel world, prime numbers appear to play the same role in guaranteeing the security of electronic messaging there as they have done in public key cryptography in our own world since the 1970s: the unpredictable distribution of primes makes it impractical to factorize huge numbers at current computing speeds.

The nature of Dainez’s work on prime numbers allows Cohen to frame the uncertain ontological status of the zone within the broader constructivist debate over whether mathematical entities are created or discovered, or, as Dainez puts it, the difficulty of deciding “si los entes matemáticos existen de veras y por su cuenta” (whether mathematical entities exist in reality and on their own account).<sup>62</sup> In turn, as I will show, these mathematical-philosophical questions provide the starting-point for an intervention into debates within literature concerning the relationship between the creating subject and the object of representation. This is also the concern that informs the novella’s exploration of the dynamics of complexity and self-organization as paradigms of literary composition. Denied a transcendent position of distanced observation, literature is confirmed as wholly immanent to the flows of energy and matter that shape and renew life in the biological and physical worlds. This approach allows Cohen to recover some of the more fecund perspectives of Romanticism that have been sidelined or abandoned in

postmodern thought, and to challenge other Romantic legacies that persist within it, among them the transcendent perspective of the Romantic ironist. In doing so, he counters a number of the most prevalent postmodern fictions: that self-awareness and reflexivity lead only to narcissistic detachment, that the end of ideology means the end of ethics, and that, by mediating between us and the world, language and literature hinder any genuine encounter with otherness.

### Creativity between the imaginary and the material: mathematical constructivism and non-dualist thought

Prime numbers are often considered to be the “building blocks” of mathematics, as all other numbers can be generated by multiplying primes together; for this reason, they have been described as the mathematical equivalent of the periodic table,<sup>63</sup> and their existence is regularly submitted as proof of the universality of mathematics. G. H. Hardy demonstrates his adherence to a Platonist view when he claims in *A Mathematician's Apology* that “317 is a prime not because we think so, or because our minds are shaped in one way or another, but *because it is so*, because mathematical reality is built that way.”<sup>64</sup> Prime numbers, understood to exist independently of subjective (and therefore potentially culture-influenced) observation, are commonly imagined to be one of the first means of communication with an alien species.<sup>65</sup> The famous case of the Indian mathematician Ramanujan is also frequently cited to support claims of the universality of mathematical objects. Isolated from the mathematical community in Europe and with no formal training, Ramanujan astounded Hardy and other mathematicians with his work on primes and his rediscoveries of some of Riemann's theories, albeit notated in an extremely unorthodox language.<sup>66</sup>

Both the unique qualities of prime numbers and the story of Ramanujan are woven into the narrative of *Un hombre amable* to express the Platonist view of the objective existence of mathematical objects. However, through his depiction of the zone, Cohen also presents the opposing – constructivist – position, which contests the claim that mathematical objects exist independently of our perceptions and that the task of the mathematician

is simply to discover them. At points, the zone seems to owe its existence to Dainez's consciousness: if he were to faint, he thinks, the zone would disperse and die, and indeed at one stage the zone is described as fading out to black as Dainez becomes distracted. But curiously, it is not – or not always – simply rooted in the perception of a single individual, as “El que la ve puede ponerle lo que se le antoje” (whoever sees it can put whatever they wish into it).<sup>67</sup> Dainez himself fluctuates between a belief that the zone is autonomous and separate from his own perception and a suspicion of that very belief. On one hand, “Dainez sabe que en cierto modo se ha establecido sola” (Dainez knows that, in a way, it built itself),<sup>68</sup> and he certainly does not have any supernatural ability to foresee or intervene in what takes place in the zone: he is described at one point as passing through it “en busca de lo imprevisto” (in search of the unforeseen).<sup>69</sup> Against the accusation that the zone is merely a product of his imagination, he insists that “El barrio existe por su cuenta” (the neighbourhood exists on its own account).<sup>70</sup> On the other hand, he recognizes that “es como la matemática: lo que tiene coherencia parece un mundo real” (it's like mathematics: what is coherent appears to be a real world).<sup>71</sup> Here he aligns himself with constructivist views voiced not just by mathematicians but also, for example, by the neuroscientist Jean-Pierre Changeux, for whom the fact that mathematical objects can take written form seems to suggest that they are independent of our brains: their true nature as cultural representations is belied as they acquire in this way a “special coherence [...] which gives them the *appearance* of autonomy.”<sup>72</sup> Echoing these views, Dainez says of mathematical theorems that “si uno cree que existen fuera del cerebro es porque se pueden escribir en un papel” (if one believes that they exist outside of one's head it is because they can be written down on paper),<sup>73</sup> and reflects that “Bastaba un poco de cohesión para que una persona convenciera a otra de la entidad de fantasma que había visto o imaginado” (a little cohesion was all that was needed for one person to convince another of the object of fantasy he had seen or imagined).<sup>74</sup>

The contradictory presentation of the zone – does it originate in Dainez's thoughts or exist independently of them? can both statements be true? – becomes part of a broader exploration of the creative act in *Un hombre amable*. The novel erodes distinctions between creator and created through

techniques of *mise-en-abyme*, inversion, and the construction of tangled hierarchies. Dainez and the zone are engaged in a process of mutual creation and definition, not a unique act of bringing-into-being carried out by a single individual at an identifiable point in time, but an ongoing exchange with the result that “con cada aparición la zona se volvía más compacta y él más ágil, no nuevo pero al menos recreado” (at every appearance the zone became more compact and he became more agile, not new but recreated at least).<sup>75</sup> The inventor is created by his invention; both bring each other into being:

De una apariencia de calvo barrigudo con camisa a cuadros la zona había inventado al Dainez que él era ahora, y de un tul de gases envolviendo semiedificios él había inventado la zona. Se pertenecían: habían surgido al mismo tiempo, lo mismo que una pirámide y su ingeniero, que Pitágoras y su teorema [...].<sup>76</sup>

From the appearance of a paunchy bald man with a checked shirt, the zone had invented the Dainez he now was, and from a tulle of gases enveloping half-buildings, he had invented the zone. They belonged to each other: they had emerged at the same time, like a pyramid and its engineer, like Pythagoras and his theorem [...].

As Dainez makes the zone appear, day after day, he reflects that this act is not merely one of charity: he learns from it, and it has a diffusive effect on his identity that he welcomes: “ese Dainez que resurgía con las cosas iba perdiendo tirantez mientras ganaba transparencia de ánimo” (the Dainez who re-emerged along with the things began to lose his tautness and to gain a transparency of spirit).<sup>77</sup>

Further confusion between creator and created is brought about in the sections narrated by Dainez’s daughter, which produce a folding-together of narrative hierarchies: she relates the story of Dainez’s life but is at the same time a product of his imagination. Dainez’s created world is itself full of inventors and creators, from the kiosk owner who invents a new snack in the form of “borlangos” – fried balls of dough that somehow turn out soft



on the outside and crunchy on the inside – to Roxana, who is pregnant with the child of a man she has stitched together from body parts she discovers in icecream tubs and which almost add up to a full set. The sole characteristic shared by the motley inhabitants of the zone is a resourceful creativity that transforms their lives and those of others; like Dainez’s own construction of the zone, these creations and transformations often slide imperceptibly between the imaginary and the material. For his own part, Dainez considers that abstract mathematics and chicken livers really share the same plane of reality, as the exercise of one is transformed into money to pay for the other. Cohen thrusts us into a world of quantum realities in which, as he reminds us, “*Partículas u ondas (los, se supone, constituyentes últimos de la materia) son formas de abstracción, dice David Bohm*” (particles or waves [believed to be the most basic constituents of all material] are forms of abstraction, says David Bohm).<sup>78</sup> The radical undecidability governing any distinction between the imaginary/abstract and the material pervades the language and style of the narrative. When LaMente is described by Dainez as “*fundién-dose*” (merging) with the people of the zone or with its scraps of waste,<sup>79</sup> the ontological uncertainty reigning in the narrative is such that the reader is not sure whether to understand this literally or metaphorically.

Arguments for the indivisibility of mind and matter, subject and object, have of course a long history in both Western and Eastern thought: with reference to Cohen’s work, one could cite the influence – with ample justification – of both Spinozan immanence and Buddhist nondualism. In much postmodern literature, the most immediate references for such thinking are often to be found in a combination of Eastern philosophy and quantum theory, a fusion of mysticism and science that the physicist Erwin Schrödinger found entirely natural:

The world is given to me only once, not one existing and one perceived. Subject and object are only one. The barrier between them cannot be said to have broken down as a result of recent experience in the physical sciences, for this barrier does not exist.<sup>80</sup>

Cohen's writing draws to a significant extent on both of these traditions: his vision of the universe as a dynamic web of energy flows underlines the alliance between the holistic worldview and contemporary particle physics that has been noted by many theorists.<sup>81</sup> Cohen's introductory text on Buddhism, for example, echoes Schrödinger's insights in its claim that "Mi mente y el mundo están compuestos por los mismos elementos" (my mind and the world are composed of the same elements),<sup>82</sup> almost a direct citation from Schrödinger's argument in the third chapter of *Mind and Matter*.<sup>83</sup> In *Un hombre amable*, a similar formulation is expressed by Dainez, who defends himself against LaMente's accusation that he has simply invented the zone by stating that "ocurre que el mundo y mi cerebro están hechos de lo mismo. Por eso no están peleados" (it happens that the world and my head are made of the same thing. For that reason they don't fall out with each other).<sup>84</sup>

If Cohen's exploration of immanence and nondualism draws simultaneously on ancient Buddhist philosophy and twentieth-century science, it also situates itself in relation to another constellation of ideas, associated with Romantic theory and literary praxis. Tracing the dialogue established in *Un hombre amable* with Romantic thought on chaos and order in the natural realm and in artistic composition will throw into relief Cohen's use of mathematical and scientific ideas in order to restage or resolve certain literary debates. These include some of the epistemological and ethical quandaries that have troubled a self-conscious postmodern culture, such as the averred narcissism of postmodern irony and reflexivity, and the ethical minefield of representing the Other.

### "Form gulping after formlessness": art and chaos in Romantic thought

The poet Wallace Stevens has been identified by Cohen as one of the "six or seven" writers who have influenced him most,<sup>85</sup> and in 1987 he published a Spanish translation of *Adagia*, a collection of Stevens's aphorisms on the nature of poetry.<sup>86</sup> Stevens's poetry has been read as profoundly Romantic in its overriding concern with the relationship between inner, "subjective" experience and the outer, "objective" world. All-pervasive in Stevens's work

is the question of whether we can distinguish with any certainty the perceiving self from the world around it. In relation to “An Ordinary Evening in New Haven” (quoted in the epigraph above), David M. LaGuardia suggests that “The poet seeks a relationship between the mind’s eye and the reality it perceives but can locate no dividing line between them. Does the mind *know* what is there, or does it *make* what is there?”<sup>87</sup> As Frank Doggett reminds us, the mind in Stevens “is only nature looking at itself”<sup>88</sup> and can therefore take up no privileged position in relation to the matter it perceives. By extension, language – as Stevens asserts in the same poem – is not a medium for expression but part of the same material from which the whole world is made:

The poem is the cry of its occasion,  
Part of the res itself and not about it.<sup>89</sup>

The provisional universe of Cohen’s texts, in constant flux and exceeding all attempts to impose order upon it, bears considerable resemblance to Stevens’s world, in which “We live in a constellation / Of patches and of pitches,” surrounded by “Thinkers without final thoughts / In an always incipient cosmos.”<sup>90</sup> The Romantics’ rejection of the orderly Newtonian universe begged for a new kind of poetry that would express and participate in such constant transformation, one that “should forever be becoming,” as the Romantic poet and scholar Friedrich Schlegel described it.<sup>91</sup> Both Stevens and Cohen respond to the formal challenge of capturing life in flux, of expressing dynamic change and boundlessness in fixed words on a page: “form gulping after formlessness,” as Stevens would sum up the paradox in “The Auroras of Autumn.”<sup>92</sup> Dainez voices a similar quest in *Un hombre amable* when he writes: “Que haya para nosotros una forma. Una forma neutra, tolerante, una forma que contenga el caos sin disimularlo” (let there be for us a form. A neutral, tolerant form, a form that contains the chaos without disguising it).<sup>93</sup>

Both Cohen and Stevens repeatedly echo the observations of Schlegel, for whom Romantic irony served both to emphasize the chaotic nature of the universe, unrestrained by Newtonian laws, and (paradoxically) to insist on the power of the mind to impose forms and patterns on it: to construct

worlds in which to live, and to render finite and firm what is infinite and subject to continual transformation. As Schlegel maintains, “isn’t this entire, unending world constructed by the understanding out of incomprehensibility or chaos?”<sup>94</sup> The source of the Romantic ironist’s skepticism is an acute awareness of the provisional nature of such structurings of experience: “Irony is the clear consciousness of eternal agility, of an infinitely teeming chaos.”<sup>95</sup> One of the many ways Cohen seeks to dramatize the interplay between chaos and form in his fiction is through the use of unresolved contradictions, signalling the provisionality of all potential explanations and essentialist notions of identity. At every turn, his narrative places disjunction, antinomy, and unresolved paradox above coherence, integration, and reconciliation. In fictions crowded with gurus, disciples, and beliefs of all kinds, Cohen introduces an antithesis for every thesis and refuses to arbitrate between them.

A clear example of this technique in *Un hombre amable* may be seen in the invention of the character LaMente, who acts both as a kind of double for Dainez and as his most feared nemesis. His ontological status is left entirely undecidable. He is first introduced as a spiritual well-being mentor employed by the company Dainez works for, but his “reality” as a character is undermined by repeated suggestions that he may be some kind of spiritual force or mental projection. In her own narrative of events, Dainez’s daughter gives him a mythical standing as “un antagonico, un ángel opaco enviado por el mundo de las cosas pesadas para que Dainez frente a él se haga más fuerte” (an antagonist, a dark angel sent by the world of heavy things so that Dainez would become stronger through confronting him).<sup>96</sup> Dainez himself comes to question whether LaMente really exists and to wonder whether he might be an invention of his own. Playing the discipling role of “los antiguos maestros” (the ancient masters)<sup>97</sup> to a fault, LaMente might represent a Socratic figure, a rhetorical device invented in order to present contradictory positions and to dramatize the process of coming-to-knowledge. This device is thickly overlaid with irony, however, as the status of sage and voyant Dainez acquires in his daughter’s narration is placed firmly under erasure: his aloofness and meditative silence may not be the result of enlightenment but of brain damage following a head injury.

Among the many and conflicting theses advanced by both Dainez and LaMente throughout the novel, one in particular does seem to attain the irrefutable quality of a metanarrative: “‘Vivir,’ dijo LaMente, ‘es mantenerse entre contradicciones que ningún análisis puede conciliar’” (“To live,” said LaMente, “is to maintain a position between contradictions that no analysis can reconcile”).<sup>98</sup> This recognition again accords with the place given to antithesis in Romantic irony as theorized by Schlegel, for whom “Everything that is worth something ought to be simultaneously itself and its contrary.”<sup>99</sup> Opposites should be held in tension, not resolved into a final synthesis, with creativity to be found in “the continual self-creating interchange of two conflicting thoughts.”<sup>100</sup>

## The ethics of irony and reflexivity

But is incomprehensibility really something so unmitigatedly contemptible and evil? Methinks the salvation of families and nations rests upon it.—Friedrich Schlegel<sup>101</sup>

As Anthony Whiting points out, the inability of the mind to understand a chaotic universe did not become “a cause for despair” for the Romantic ironist, who “celebrates the universe of becoming and change and warns against a universe that is completely available to rational comprehension.”<sup>102</sup> It is this celebration that infuses the work of Cohen, much fuller and more joyous than the exaggerated and cynical pageants marking the end of epistemology to be found in much postmodernist literature and theory. In this spirit, Cohen recuperates mathematical uncertainty as crucial to the survival of the zone in *Un hombre amable*. Dainez thinks that he may have access to a number, or a key, that would in some way “complete” the zone, just as a solution was imagined to the square root of minus one and thus imaginary numbers came into being to complete the set of all possible numbers. He fears that the longer he continues his dialogue with LaMente, the nearer he will come to finding such a figure, which will hold some kind of explanatory

power over the zone. If he doesn't remain silent, he will give LaMente that key, and

Con eso LaMente haría un aforismo inolvidable. Empaquetaría el barrio en una frase. Otros llenarían el aforismo de significados. Le clavarían explicaciones. Lo encaminarían a muchos fines. La frase se convertiría en una herramienta, hasta que el uso la estropeará; o bien se convertiría en una joya muy cara.

Mejor no encontrar ninguna cifra.<sup>103</sup>

With that, LaMente would invent an unforgettable aphorism. He would package up the neighbourhood in a phrase. Others would load the aphorism with meanings. They would nail explanations to it. They would channel it towards many goals. The phrase would become a tool, until it either wore out through use or turned into a very expensive jewel.

Better not to find a number at all.

The zone is vulnerable to LaMente's manipulation, who seeks to inject into it "la dureza del mundo, su resistencia, su falta de flexibilidad" (the hardness of the world, its resistance, its lack of flexibility).<sup>104</sup> In contrast, Dainez is attracted by the uncertainty of the methods of finding primes, which can sometimes be found, on testing, not to be primes after all, and whose distribution remains one of the most significant unsolved mysteries in mathematics. This embrace of uncertainty becomes, as we begin to understand, as much an ethical stance as an epistemological one. A notion of freedom, and the lives of the zone's residents, appear to depend on it.

It was the question of the ethics of Romantic irony that fuelled the vigorous critiques delivered by both Hegel and Kierkegaard of Schlegel's theorizations of Romantic literature. If irony, for Schlegel, is "the mood that surveys everything and rises infinitely above all limitations,"<sup>105</sup> this surely results in a position of detachment rather than engagement with the world left down below. For Hegel, rejecting the narcissism of the Fichtean ego that underpinned Schlegel's thesis, the "disengaged" ironist takes up the position

of a “divine creative genius” and “looks down from his high rank on all other men,” closing himself off from genuine interaction with others.<sup>106</sup> In ironic modes of writing, Romantic inexpressibility did not signal artistic failure but was more commonly reincorporated as a theme of the work itself, a device with which any reader of Keats or Wordsworth will be familiar. As Lilian R. Furst suggests, the Romantic ironist “aims to demonstrate the artist’s elevation over his work, his transcendence even of his own creation.”<sup>107</sup>

Such critiques of the solipsistic attitude of the ironist fail to take account of Schlegel’s refusal to guarantee the self any kind of independent existence from the external world. Notwithstanding, questions over the ability of the narcissistic, transcendent ironist to engage fully with the world around him have been rearticulated many times in subsequent revisiting of this debate. The condemnation of the ironic mode on ethical grounds resurfaces more recently in the criticisms of postmodern reflexivity voiced by Bruno Latour and others.<sup>108</sup> Latour outlines the way in which reflexive texts, in deconstructing the very process of representation, succeed in establishing their own mode as more “truthful,” reserving a special claim to truth and honesty for the writer who is able to see through the deceptions of his own fictions. For Latour, this technique has both epistemological and ethical consequences, as “reflexivists spend an enormous amount of energy on the side of the knowing, and almost none on the side of the known. They think that any attempt to get at the things themselves is proof of naive empiricism.”<sup>109</sup> Cohen’s particular mode of irony and reflexivity challenges the terms of this debate. As we will see, it does so in ways that demonstrate, among other conceptual frameworks, a significant debt both to Schlegelian non-duality and to a more contemporary understanding of chaos and form deriving from theories of emergence.

Cohen’s teeming worlds cannot be tamed by our attempts to impose order upon them; however, our invented structures are not for that reason simply dismissed as fictional, and therefore invalid, misleading, and worthless. Like Schlegel, Cohen’s characters adopt a contradictory position in relation to such structures, both skeptical and committed: aware of their provisionality and their insufficiency, but equally of their necessity. As Schlegel warns, “It’s equally fatal for the mind to have a system and to have none. It

will simply have to decide to combine the two.”<sup>110</sup> In his “Adagia,” Stevens voices a similar insight: “The final belief is to believe in a fiction, which you know to be a fiction, there being nothing else. The exquisite truth is to know that it is a fiction and that you believe in it willingly.”<sup>111</sup> This double-think is precisely what characterizes Dainez’s relationship with the zone and with the various ideologies expressed by himself and by others in the novel. As I will show, it also forms the basis of Cohen’s understanding of the nature of human creativity, and particularly as a form of knowledge that transcends any true/false dichotomy.

The question that dogs Martínez’s writing – to what extent our mathematics and logic are sufficient as tools to account for reality – is wholly displaced in Cohen’s work, which does not permit any straightforward opposition between form and chaos, or truth and illusion. In Martínez’s *Crímenes imperceptibles* (see Chapter 2), the layers of deception are eventually peeled back to reveal the facts: if there is a murdered body, there must be a murderer, and the question only then remains of whether our skills of deduction lead us to the right person or not. Although Martínez emphasizes the gap between truth and proof, and the extent to which aesthetic values affect our logical judgment, he leaves intact the truth-value of the events that spark off the narration. In Cohen, by contrast, misunderstandings or deceptions do not play a role of any importance: ultimately there is little interest on the part of Dainez or any other character/narrator in the truth-value of the zone and what is described as taking place there. Is Roxana really pregnant with the child of a man she has probably imagined? We don’t discover. There are no external observers in *Un hombre amable* who might be able to construct a unified or analytical representation of the zone. LaMente recognizes this very well when he protests to Dainez, “quiere que la conciencia se funda con las señales incomprensibles que le manda la vida. Usted pretende romper los límites del pensamiento” (you want your consciousness to merge with the incomprehensible signs that life sends you. You are trying to break down the boundaries of thought).<sup>112</sup>

If irony is often used as a tool to shatter poetic illusion, we find a very different dynamic at work in *Un hombre amable*. There are no illusions here to be dismantled: instead, Cohen’s emphasis is always on the creative power



of the imagination to engender something that permits new encounters and participates in different ways in the endless creativity of the universe. There is no act of analysis that is not also an act of creation: the processes by which we add bias or transform what we see into something else is evidence of an essentially human creativity. This does not become a cause for lament or cynicism, as we see in the following passage, but simply places an additional requirement on us to adopt that creative responsibility in an ethical manner:

Mientras miraba la vida de la zona, [... Dainez] se preguntó si no era cierto que algunas formas de mirar, por ejemplo la de él, achataban la realidad y con la realidad a las personas; si no las privaban del grosor donde los gestos, tan volubles, nunca dejaban de complicar las palabras, de obligarlas a multiplicarse.

Era una pena. ¿Sería posible mirar algo sin añadirle ningún prejuicio?

Pero añadir, inventar, era una necesidad humana tan natural que al principio debía haber sido inhumana: la necesidad de hacer algo con lo que presentaba la vida, casucha sin humo o humo sin chimenea, de preguntarse irremediamente adónde iría ese barquito visto en el horizonte. Como a eso no había escapatoria, más valía rendirse y usar, usar con esmero y confianza los detalles que ofrecía la vida. A él la vida lo había puesto en ese barrio.<sup>113</sup>

As he watched life in the zone, [... Dainez] wondered if it were true that certain forms of looking, his own, for example, flattened out reality and people along with it; if it deprived them of that thickness in which gestures, changeable as they are, never failed to complicate words, to oblige them to multiply.

It was a pity. Was it possible to look at something without adding any kind of prejudice to it?

But adding, inventing, was such a basic human need that at the beginning it must have been inhuman: the need to do something with what life gave, a hovel without smoke or smoke

without a chimney, to ask oneself the inevitable question of where the boat glimpsed on the horizon was heading. As there was no escape from that, it was better to surrender and to use, with care and confidence, the details life offered. Life had put him in that neighbourhood.

Our propensity always to “add” something to a pre-existing reality might be a cause for epistemological skepticism. In Cohen, however, it also opens the way to a different form of knowledge. As he explains,

adhiero a algunas ideas de Wallace Stevens, en el sentido de que la única manera de renovar y refrescar el mundo es mediante la imaginación, que es lo que agrega algo a lo que ya estaba. Ese acto no sólo es un acto de creación sino de conocimiento.<sup>114</sup>

I adhere to some of Wallace Stevens’s ideas, in the sense that the only way to renew and refresh the world is through the imagination, which is that which adds something to what was there before. That act is not only an act of creation but also one of coming-to-knowledge.

This kind of knowledge bears no resemblance to the detached, objective exercise of rational analysis that cannot avoid being simultaneously an exercise of power. LaMente – like the voice of a troubled conscience – accuses Dainez of engaging in abstract activities that are divorced from reality or that simply construct a world around him for his own purposes, twisting reality to suit his own whim, like a tyrant.<sup>115</sup> His mind is full of words and numbers, but these cannot hope to speak to, or intervene compassionately in, a reality that LaMente describes as “ugly” and “irreparable.”<sup>116</sup> But LaMente’s accusations do not ring true: Dainez’s commitment to the zone is clear, as he descends repeatedly from his lofty seat above it to mingle with its inhabitants, to defend them (if ineffectually), to enjoy companionship with them, or to suffer rejection or violence at their hands.

If Martínez's creative genius (Roderer) is an archetypal Romantic solipsist – an isolated ego, dismissive of others and incapable of genuine interaction with them – Cohen's is intimately and compassionately involved with those around him, although modestly, humbly, and with neither the desire nor the ability to become their hero or saviour. He is not in a position to judge or impose order or explanations on the world, not because the discipline of mathematics (and poetry, LaMente adds) occupies a pure, abstract realm separated from reality, but precisely because mathematics, poetry, consciousness and the physical world are all made from the same stuff. Dainez realizes that the zone "sólo se entenderá aceptando ser, no un lugar por donde pasan las cosas, sino cosa que sin darse cuenta ocurre en un lugar. Aceptando ser cualquier cosa. Un cualquiera" (can only be understood if we accept to be, not a place through which things pass, but a thing that, without knowing it, happens in a place. If we accept to be whatever. A nobody):<sup>117</sup> in other words, understanding comes by grasping our coextension and consubstantiality with the world and eschewing any privileged position or vantage point in respect of it.

Indeed, it is the ironist's skepticism of the validity of the structures we impose on the world that leads, not necessarily to radical, paralyzing epistemological doubt nor to a cynically detached whimsicality, but to a much more engaged and ethical approach. This view, in fact, was expressed by Schlegel and is summarized very effectively here by Whiting:

To see the universe only through the patterns the self imposes on it is to turn the universe into a mirror image of the self. Skeptical reduction shatters this mirror and leaves the self confronting a universe that no longer reflects its image. The displacement of the world as self-image does not for Schlegel result in feelings of isolation or alienation. Freed from its narrow focus on itself, the self can turn to the universe at large. "We must rise above our own love," Schlegel writes, "and be able to destroy in our thoughts what we adore; if we cannot do this, we lack [...] the feeling for the universe."<sup>118</sup>

In the same way that Piglia's reflexivity becomes, not an inward-focussed exercise but a way of connecting with the world beyond the text (see Chapter 4), Cohen's irony also defends itself against charges of narcissism and detachment and paves the way instead for a more intimate relationship with the world, based on an understanding of the consubstantiality of creator and created.

The only value to which Dainez is able to give himself wholly is that of "amabilidad" (kindness). In an interview, Cohen identifies this word with the Sanskrit word "maitri," which has been variously translated as "loving kindness" and "unconditional friendship"; speaking specifically of Dainez's embrace of "amabilidad," Cohen adds further definitions: "la convivencia cívica" (civilized coexistence) and "una disposición de apertura" (an attitude of openness).<sup>119</sup> Dainez adopts kindness as the ultimate – or only possible – value by which he might live in a post-ideological world:

Mientras sigue camino Dainez comprende, y el paso se le aviva, que la amabilidad es un alto valor práctico. No es un ideal, por supuesto, y por eso le gusta. Le gusta mucho, la amabilidad. Y aunque tal vez tampoco sea un valor, seguro que es una virtud. Dainez no ve bien la diferencia entre valores y virtudes. [...]

Ni vencedor ni muertito. Un abandono. Una apertura.<sup>120</sup>

As he sets off again, Dainez understands, and his step lightens, that kindness is a highly practical value. It is not an ideal, of course, and for that reason he likes it. He likes it very much, kindness. And although perhaps it isn't a value either, it is definitely a virtue. Dainez does not see much difference between values and virtues. [...]

Neither victor nor dead guy. A withdrawal. An opening.

Interestingly, Cohen also associates "amabilidad"/"maitri" with concrete, physical proximity and a form of intimacy: "una disposición ante las cosas inmediatas, para vencer las mediaciones" (an inclination towards immediate things, so as to overcome mediations).<sup>121</sup> As we will see, *Un hombre*

*amable* extends this theme to a formal experiment, as Cohen seeks to balance the vertigo of recursion, and a continual sliding between the material and non-material, with a commitment to the concrete and the immediate. In this he echoes to some extent Stevens's pragmatism, which leads him to cast out theory in favour of the physical facts and reject previous hypotheses to demand "new ones originating from renewed physical contact."<sup>122</sup> In the sum of the parts, there are only the parts," writes Stevens; "The world must be measured by eye."<sup>123</sup> It is the pragmatist rather than the rationalist, in William James's terms, who rejects the "skinny outline" of abstraction, "so much purer, clearer, nobler," in favour of the "rich thicket of reality."<sup>124</sup>

The overcoming of ironic distance and the cultivation of intimacy become central to Cohen's aesthetic. If Romantic irony performs a continual rise through higher and higher levels of reflection (Schlegel observes that the poet "can raise that reflection again and again to a higher power, can multiply it in an endless succession of mirrors"<sup>125</sup>), then Cohen delights in bringing his ironists back down to earth with a bump. One episode in *Un hombre amable* exemplifies particularly well this short-circuiting of the distance created through ironic modes of narration. His attention drawn to a single chamomile flower growing between stone slabs, Dainez stretches out a hand to pick a petal but is distracted by a vision of himself stretching out a hand towards the flower and then by a vision of himself watching himself stretching out his hand. This regression repeats itself many times until "al cabo, sin esfuerzo, la conciencia rompe la serie" (in the end, effortlessly, his consciousness breaks the series) and all the images press into one to form "un solo Dainez impalpable, o unido ya a la florcita" (a single, intangible Dainez, or one already fused with the little flower).<sup>126</sup> For a moment it appears to him that he and the flower are one and the same, or interchangeable, before he gathers in the whole string of reflexive images he has just seen and returns, suddenly, to the space he was occupying when he first noticed the flower growing between stone slabs.

This is not the simple, unidirectional recursion of "the dreamer dreamed," as in Borges's "Las ruinas circulares." Borges's story is misnamed insofar as the Chinese-box structure never comes full circle, but continues to reach dizzyingly upwards, as the wizard who has imagined his son into being

realizes himself to be dreamt up by another, who may in turn be the creation of another, *ad infinitum*. Cohen's *mise-en-abyme* might continue spiralling ever-upwards in the same way, but instead the trajectory is reversed and inverted. The ironic distance created through layer upon layer of self-framing is obliterated as the consciousness of the observing subject fuses with the object in the original act of observation (the flower) and then re-merges with the consciousness of the self under observation (Dainez looking at the flower). Dainez returns to his self much as he left it, but perhaps a little more "inseguro" (uncertain) than before.<sup>127</sup>

This vision of immanence acts as a check to any narcissistic version of reflexivity. One is reminded of Borges's citation in "El Zahir" of Tennyson's invocation of the flower:

si pudiéramos comprender una sola flor, sabríamos quiénes  
somos y qué es el mundo. Tal vez quiso decir que no hay hecho,  
por humilde que sea, que no implique la historia universal y su  
infinita concatenación de efectos y causas.<sup>128</sup>

if we could only understand a single flower, we would know who  
we are and what the world is. Perhaps he meant that there is no  
event, however small, that does not involve the history of the  
universe and its infinite concatenation of causes and effects.

In a materialist formulation that echoes down the line from Deleuze to Spinoza and beyond, passing here through Borges, Cohen insists that "hay una sola sustancia" (there is just one substance), and that "En el momento que se piensa que la mente y el mundo están hechos de materias distintas, uno no puede ver nada sin ver a la vez su propia conciencia. Entonces pierde su cuerpo y, con él, todo lo que está viendo" (as soon as one starts to think that the mind and the world are made from different materials, one can see nothing without seeing one's own consciousness at the same time. The body is therefore lost, and with it, everything one sees).<sup>129</sup> Cohen's narrator-creator is not poised above the world but one with it. His position is exemplary of the relationship between creator and created world described by Deleuze:

The author creates a world, but there is no world which awaits us to be created. Neither identification nor distance, neither proximity nor remoteness, for, in all these cases, one is led to speak for, in the place of... One must, on the contrary, speak *with*, write *with*.<sup>130</sup>

In a similar way, as I will show, the role of Cohen's narrator is not to impose order on a chaotic mass but to participate in the continual intermutation of order and chaos that characterizes the natural world as well as our artistic depictions of it. Here Cohen draws on the more contemporary relationship between chaos and order suggested by theories of complexity and emergence, in which the two – unlike in Romantic literature and theory – are not necessarily opposed or mutually exclusive, providing a way of understanding literary innovation as participating in the endless creative fluxes of the universe at large.

## Complexity and emergence: models of narrative construction

There is nothing exclusively human about it: culture emerges from the complex interactions of media, organisms, weather patterns, ecosystems, thought patterns, cities, discourses, fashions, populations, brains, markets, dance nights and bacterial exchanges. There are eco-systems under your fingernails. You live in cultures, and cultures live in you.—Sadie Plant<sup>131</sup>

Two illustrations in *Un hombre amable* demonstrate the dynamics of self-organization at the heart of theories of complexity and emergence and, in doing so, also suggest a method of literary composition. The first analyzes the nature of human activity on the dance floor in the zone, as observed by the fascinated Dainez. Cohen de-individualizes the dance-floor frenzy in a string of plural or uncountable nouns: “Manos enguantadas frotran caderas de lycra. Jactancia de las pelvis, braguetazos. Festival de cerveza y saliva,

apretones y cachetadas, arrumacos, espasmos, orlón, algodón” (gloved hands rub lycra hips. Pelvic bragging, smacking groins. Festival of beer and saliva, crushes and slaps, pettings, spasms, acrylic, cotton).<sup>132</sup> Dainez’s initial focus on the multiple faces, mouths, clothes, and muscles of the dancers gives way to an appreciation that the mobile mass is something more than a group of individuals: it is “un organismo hecho no de unidades pegadas sino de conjuntos, y que tiene tantas conexiones como membranas divisorias” (an organism, not made up of units stuck together but of groups, and which has as many connections as it does dividing membranes).<sup>133</sup> These groups continually shift, folding together and reabsorbing other groups, generating “asimetrías nuevas y jugosas” (new and juicy asymmetries), and the picture is further complicated by individuals drifting through the mass and resisting any categorization, “como áreas confusas de un cerebro que nunca generará una identidad” (like confused areas of a brain that will never generate an identity).<sup>134</sup>

Dainez then understands that

La pista entera con sus cuerpos es ese cerebro, compacto pero gelatinoso, uno de la unción y múltiple de contracciones, vibrante pero no muy estructurado, quizá ebrio. El amasijo de cuerpos es el cerebro de Dainez, y Dainez está dentro, como la neurona capital en el centro de todas las relaciones, esperando una descarga para que nazca la conciencia. Pero no. La masa encefálica sólo se mueve.<sup>135</sup>

The whole dance floor with its bodies is that brain, compact but gelatinous, one in its anointing and multiple in its contractions, vibrant but not very structured, maybe drunk. The jumble of bodies is Dainez’s brain, and Dainez is inside, like the cardinal neuron at the centre of all the connections, waiting for a discharge to spark consciousness into being. But no. The mass of brain matter only moves.



This vision accords closely with some of the observations of emergence theory. Emergence – to borrow Jeffrey Goldstein’s definition – describes “the arising of novel and coherent structures, patterns, and properties during the process of self-organization in complex systems.” As in the commonly cited examples of swarming bees and flocks of birds, emergent phenomena are “conceptualized as occurring on the macro level, in contrast to the micro-level components and processes out of which they arise.”<sup>136</sup> The patterns arising from the chaotic mass of dancing individuals leads Dainez to consider the possibility that there is some central organizing function, like a brain, only to realize that these patterns merely emerge from the blind functioning of elements at the micro-level and are not imposed consciously from above.

As he moves backwards, Dainez loses sight of individuals altogether and thinks “Tal vez lo que llena la pista sea un gran número primo” (perhaps what was filling the dance floor was a huge prime number):<sup>137</sup> in other words, an entity that is elusive, indivisible, and irreducible. If the poetry of Wallace Stevens testified to a world without certainties, in which totalizing visions have splintered into “parts, and all these things together, / Parts, and more things, parts,”<sup>138</sup> adhering to the pragmatic view (cited above) that “In the sum of the parts, there are only the parts,”<sup>139</sup> Cohen’s texts demonstrate a rather different understanding, in accordance with theories of emergence and complexity, that the whole is greater than the sum of its parts: that a system has properties that cannot be explained simply with reference to its constituent elements, and that the co-functioning of the parts gives rise to higher forms of order. In an essay, Cohen applies this understanding to the interplay in narrative between the whole and the elements that comprise that whole:

una narración no está hecha de elementos que se ensamblan, no es un artefacto armado con piezas de meccano, no puede desarticularse. La entidad narración es anécdota, paisaje, personajes, “peripezia moral,” pero no una suma económica de estos componentes; y aunque lo fuera, el total es de una índole nueva, así como una palabra es algo más que una suma de letras.<sup>140</sup>

a narration is not made up of elements that are assembled; it is not an artefact pieced together with bits of meccano; it cannot be dismantled. The narrative entity is the anecdote, the setting, the characters, the “moral vicissitudes,” but it is not simple sum of those components; and even if it were, the total has a different nature, in the same way that a word is more than the sum of its letters.

In this respect, Cohen articulates a familiar Romantic preference for organic rather than mechanistic accounts of artistic creativity. However, his understanding of chaos and complexity allows him to take explicit distance from the Romantic apprehension of chaos (and that of many of the post-modern theorists and critics denigrated by Sokal and others<sup>141</sup>) as entirely antithetical to order. As he states, his version of chaos is not the one that, for Novalis, must “shimmer through the veil of order” in a work of art, but a chaos that continually generates ephemeral forms and orders itself.<sup>142</sup> By deconstructing the dichotomy between order and chaos in this way, Cohen effectively reworks the Romantic theme of “the world as a work of art.” For Schlegel, “All the sacred plays of art are only a remote imitation of the infinite play of the universe, the work of art which eternally creates itself anew,” and therefore the artist can produce only a simulation of the creativity and randomness of nature, constructing an “artfully ordered confusion” that allows us to glimpse the “original chaos of human nature.”<sup>143</sup> This opposition between an artificially generated chaos and a real one inevitably casts the artist in the role of imposing a form, even one cleverly disguised as chaotic, on the world. This is a division that Cohen cannot admit: firstly – as we have seen – because it relies on an essential distinction between creator and creation, and, secondly, because it is too crude in its polarizing of order and chaos and its association of chaos with nature and order with art.

A second picture of emergence Cohen gives us in *Un hombre amable* further erodes any distinction between the artificial and natural processes by which complexity is generated. The zone “sings,” each voice sending up to Dainez’s ziggurat a different musical phrase. Cat miaows, phrases from a televised drama, a scolding voice, laughter from the dance floor, the bellow

of Justín's harmonica and the chirping of a cricket: all combine and overlap until a pause signals the end of a series, only to begin again:

Rayan el aire los crótalos del grillo. *que ese maldito bastardo ha dilapidado la herencia de Candy.* Aterrizan cajas en un camión. Rumor de cordajes en las matas. Uuuooooou y briiich en los dominios de Justín. *me lo tenés que decir, con todo lo que pasó entre nosotros.* Gurubel. Gato. Grillo.

Gurubel, Ruooooouuu. *me lo digas por favor favor quiero que.* Chapoteo. Briiich. Maullido. Plástico, vidrio y chapa. Gurubel. Aplausos, risotada general en el bailongo. Jarcias. Publicidad en la tele: *¿cuando va a darse ese gusto?* Grillo. Gato. Chillido de murciélago.<sup>144</sup>

The cricket's castanets scratch the air. *that mean bastard has squandered Candy's inheritance.* Boxes land on the floor of a truck. The sound of rigging in the bushes. Uuuooooou and briiich from Justín's dominions. *you've got to tell me, with everything that's happened between us.* Gurubel.<sup>145</sup> Cat. Cricket.

Gurubel, Ruooooouuu. *tell me please please I want to.* Splashing. Briiich. Miaow. Plastic, glass and corrugated iron. Gurubel. Applause, general laughter from the dance hall. Rigging. TV advert: *when are you going to give yourself the pleasure?* Cricket. Cat. Bat screech.

Dainez realizes that he is at the centre of “una música aleatoria cuyo discreto director es un viento arremolinado” (a piece of aleatory music whose self-effacing director is a swirling gust of wind).<sup>146</sup> The action of the wind, picking out different sounds in the zone, creates a system that demonstrates emergent properties – hurricanes are a common example given to illustrate emergence – in which the wind orchestrates the different sounds, gathering them up together, organizing them into segments and marking pauses before the start of the next series. The action of the wind, which does not consciously choose the order of the “instruments” it plays as it has no will

of its own, creates new and ever-changing patterns and forms from the different motifs playing out in the zone, such that one series is never identical to another: “Los segmentos cambian de orden, se permutan, se traspolan, se desplazan, nunca se confunden” (the segments swop round, change places, switch to opposite ends, move around, they never fuse together).<sup>147</sup> Although the direction of the wind seems random, we are told that it creates a higher level of organization that brings the different musical elements together without negating their individual autonomy: “en el rocío que moja los objetos del zigurat, y moja a Dainez, el conjunto reverbera con la parsimoniosa autoridad de una mantra” (in the dew that wets the objects of the ziggurat, and wets Dainez, the ensemble reverberates with the unhurried authority of a mantra).<sup>148</sup>

Thus from simple individual motifs, series are formed, and these combine and overlap with each iteration to create such formal complexity that the piece of music as a whole is initially experienced as random and chaotic; however, new forms of order emerge from the seeming disorder. The composition technique brings to mind Messiaen’s experiment in *Quartet for the End of Time*, in which two prime-number sequences of 17 and 29 notes are played simultaneously. As they will not coincide again until they have been played  $17 \times 29$  times each, this form creates a wealth of new combinations of sounds from just two original motifs. From the simple to the complex, the complex to the simple: human invention is merely an extension of the creativity of the universe, as studied in theories of complexity and emergence. In Dainez’s words, “Real e imaginario. Vieja cupla. Qué tedio. Qué tandem embustero. Un buen invento era tan milagroso como la existencia” (real and imaginary. Old coupling. What tedium. What a phony duo. A good invention was as miraculous as existence).<sup>149</sup>

Only a simplistic, Romantic conception of chaos as the preserve of nature, resistant to (human) order would make it possible to insist, as Frederick Garber does, that the ironist offers only “a skillful mimicry of that anarchy which is always out there,” in such a way that “the threat of disintegration” is turned into “the matter of high art,” ensuring the triumph of the ironist over the chaos he purports to allow into his work.<sup>150</sup> To accuse Cohen of merely fabricating an illusion of chaos intruding into a narrative that is always in

reality under his control would be to reassert precisely those dichotomies between creator and created world, order and chaos that are challenged in his writing. Both art and the world (as art is part of the world and not divisible from it) operate as complex systems that manifest elements of both chaos and order in their functioning, just as the creator is not merely an observer of an external flux of chaos and order but part of that same flux. It is too naïve to assume that our consciousness sets us apart from the rest of the creative universe. We may impose patterns on the world around us but, like Dainez caught up in the crowds on the dance floor, we are also organized into higher systems that transcend us; we do not even transcend our own creations, which act upon us and shape our destinies as much as we program theirs. The impossibility of transcendence gives rise, neither to despair nor skepticism, but to a sense of our participation in an endlessly creative universe that is exhilarating, but brings with it a renewed, if less hierarchical, sense of ethical responsibility.

## An ethics of creativity for a post-ideological world

Cohen's explorations of emergence and complexity, when combined with an abiding interest in the ethics of narration, form an effective rebuttal of both Romantic and postmodern critiques of the narcissistic detachment of ironic and reflexive modes of literary narrative. In *Un hombre amable*, Dainez is intensely irritated by the general lament over the rise of insensitivity and emotional numbness that has become fashionable in his hyper-televized information society, which looks remarkably similar to our own. In the face of apocalyptic announcements of the end of ethics – the inevitable consequence, it is claimed, of the demise of idealism – he chooses to climb to his habitual seat on the rubbish dump and bring the zone and its inhabitants into being through the act of thought. The much-trumpeted end of ideology or idealism does not, Cohen suggests, mean the end of ethics at all: Dainez's engagement with the zone is both intimate and compassionate. Nor does his self-consciousness paralyze him. Ignoring the hypocritical hand-wringing that accompanies the noisily proclaimed crisis of values and the end of ideology, he simply gets on with the task of imagining and creating new things.

When no philosophy proves to be of much help and the deceptions and weaknesses of all systems of thought have been laid bare, there always exists the option of going forth to create, with or without their assistance. As Cohen states,

Mi utopía es constituir nuevas comunidades con los requechos materiales, filosóficos, narrativos y espirituales que encontramos. [...] La oportunidad es ver que nos han dejado ruinas, reducirlas a corpúsculos y empezar de nuevo.<sup>151</sup>

My utopia is to constitute new communities with the material, philosophical, narrative and spiritual remnants we come across. [...] The opportunity comes from seeing that we have been left ruins, reducing them to corpuscles and beginning afresh.

As in nature, nothing here is wasted; the recycling of material does not point to a lack of innovation but is the chief process by which life is created, with simple molecules and organisms transformed and organized into higher forms, and functioning together in different ways to construct systems of increasing complexity. The implications of this non-hierarchical, rhizomatic vision of creativity for an understanding of authorship are explored further in Chapter 4, which focusses on the supplanting of the Romantic figure of the author in Cohen and Piglia by thoroughly depersonalized, transubjective, machinic, and anonymous forms of authorship, far more fitted for creative rebellion against the political and economic systems within which they are trapped.

Cohen reads Wallace's (Romantic) sense of his consubstantiality with the world around him – which becomes the source of great creativity – against a similar perspective in Ballard, which leads instead to an unremitting and carceral oppressiveness. While for Ballard the merging of mind and landscape produces horror, for Stevens, as Cohen points out, it is a cause for poetic celebration:

la idea fundamental de Ballard, que está en sus novelas apocalípticas, es que entre el paisaje y la mente no hay distancia. Una idea que, de otra manera, está también en Wallace Stevens, cuando dice: “Soy lo que me rodea” o “Una mitología crea su región.”<sup>152</sup> La diferencia es que esto para Stevens es motivo de felicidad y de fervor poético y para Ballard es terrible. El hecho de que no exista ninguna distancia entre mente y paisaje significa, para Ballard, que sólo llegando al fondo de la desintegración del paisaje se puede encontrar el pequeño nódulo de realidad a partir del cual se puede salir. Por eso sus personajes se quedan siempre en medio del desastre, no escapan nunca.<sup>153</sup>

Ballard’s fundamental idea, present in his apocalyptic novels, is that between landscape and mind there is no distance. An idea that, in a different way, is also present in Wallace Stevens, when he says “I am what surrounds me” or “a mythology creates its region.” The difference is that for Stevens, this is a reason for happiness and poetic intensity, and in Ballard it is terrible. The fact that no distance exists between mind and landscape means, for Ballard, that only by reaching right down into the decomposition of that landscape can one find the tiny nodule of reality through which escape is possible. For this reason his characters always remain in the midst of disaster, they never escape.

The general turn towards apocalyptic narratives in science fiction represents for Cohen “una forma más de la culpa y el miedo con que buena parte de la cultura nos paraliza y nos entristece” (yet another form of the guilt and fear with which a great deal of culture paralyzes and saddens us) and has the effect of ageing the genre, including – he admits – his own earlier fiction.<sup>154</sup> By contrast, Cohen’s later novels, notably *Un hombre amable* and also *Donde yo no estaba* (2006) and *Casa de Ottro* (2009), are brimming with new beginnings, surprising revelations, transformations, and renewals. The following chapter explores in more detail the critical dialogue his texts establish with Ballard’s apocalypticism.