Breaking from a broken tradition? Guéguen's *Jeux cosmiques* (1929) and the ambiguities of French avant-gardes towards the poetry of science

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Amid the many writers who played a part on the blooming creative stage of interwar Paris, Pierre Guéguen (1889-1965) has hardly left his mark in the history of the avantgardes. He is mostly remembered for the children's book he created in 1933 with the painter Maria Helena Vieira da Silva, $K\hat{o}$ & $K\hat{o}$ les deux esquimaux [$K\hat{o}$ & $K\hat{o}$ the Two Eskimos] (Guégen and Vieira da Silva). Guéguen's text contains such finds as "The sea and the sky are two slices of bread covered with blue jam" ("La mer et le ciel sont deux tartines de confiture bleue"), which one contemporary critic deemed to be of the highest quality ("première force") and which he placed "on the borders of surrealism" (Noël 6). Vieira da Silva's plates, verging on the abstract, are striking in their bold simplicity. In addition, children were provided with two separate plates, out of which they could cut some of the characters and freely move them around the pages. The limited-edition book was commissioned by the gallery owner and publisher Jeanne Bucher — who printed other art books featuring Max Ernst, Miró, Hans Bellmer, Tzara, Éluard or Man Ray — and it was exhibited at the Salon des Surindépendants [Salon of the Overindependents], in October 1933.

By that time, however, Guéguen had established himself on the literary scene as a poet, a prose writer and one of the leading columnists of Les Nouvelles littéraires. artistiques et scientifiques [Literary, artistic and scientific news], a weekly launched in 1922, that he joined at the end of the 1920s and for which he covered the latest in poetry. In his chronicles, Guéguen praises Tzara as well as Valéry, and if he has some reservations about Surrealism, he only attacks the systematisation of certain of the group's procedures¹. For him, contemporary poetry is characterised by its density and, breaking with Mallarmé's legacy, he sees it as "more murky than obscure, more ambiguous than hermetic" (Guéguen, "Actualités poétiques" ["Poetry News"] [4]).² At times, this undecidability leads him to localise poetry outside of the verbal sphere, for example when in 1931 he deems it impossible to close one of his columns "without proclaiming the living poem that the prodigious Barbette for a month now has been composing each night in Paris" – a tribute to an androgynous American performer who was also admired by Cocteau and whom Guéguen hails as a "man-woman" ("hommefemme"), "exactly the Swan and Leda, no longer united, but consubstantial"³ (Guéguen, "Actualités poétiques" [3]). Although he can hardly be attached to a specific avant-garde, Guéguen may be considered as an actor and proponent of novelty in literature. He was friends with Max Jacob (Jacob 139), Le Corbusier (Le Corbusier 267) and the sculptor Jacques Lipchitz, to whom he sent a copy of his *Jeux cosmiques* [Cosmic games]. And when this collection of poems appeared, in 1929, it was published by Jacques-Olivier Fourcade along with works by Fargue, Michaux, Jouve and Tzara, an editorial salvo highlighted in each of these books by a similar advertising insert. Yet, Jeux cosmiques differs from the other titles in that it gives a prominent place to contemporary sciences. Setting the tone, the first poem is an ode to the pioneer of atomic physics, Ernest Rutherford (1871-1837), who received the Nobel prize for

chemistry in 1908 and, according to the second stanza, brought into this field the epic intrepidity that drove his Anglo-Saxon forefathers onto the seas:

The genius of muscular races
Mutates in you, O ripe phosphorus!
And dedicates you to the more subtle
epics of the pure mind.
The upturned boat is a laboratory
With a hundred batteries of instruments:
Here gleams for victory a marvel of optics,
The clairvoyant ultra-microscope.

(Guéguen, Jeux cosmiques 19)4

The burlesque metamorphosis of Rimbaud's "seer" ("voyant") into a microscope is echoed throughout the collection by other wordplays, as the punny title of the "The Long Course of the Eel" ("Long-cours de l'anguille"), a poem that paints the long-distance migration of the eel while delivering a zoological course on the fish. Other pieces sing geology, osmosis or the dew point. Classical verse is used alongside free verse where rhyme gives way to assonance, and each piece is preceded by a prose "Argument" that summarizes its content. Finally, the volume is flanked by a dedication, emphasized by the use of capital letters:

TO THE MASTER PAUL VALÉRY
POET AND THEORIST
OF PURE POETRY,
BUT INDULGENT OF HERESIES,
I DEDICATE THESE ESSAYS
OF DIDACTIC FANCY,
WHICH ATTEMPT A RETURN
TO THE TRADITION
OF THE GREAT ANCIENT POETS
AND THE MOST DESPICABLE
FRENCH POETS

(Guéguen, Jeux cosmiques 8)⁵

The paradox is blatant. On the one hand, in a seemingly very unmodern gesture, Guéguen presents his project as a retrograde endeavour: he aims to "return to [a] tradition", a statement normally reserved for the defenders of established norms. On the other hand, this tradition is strongly divided: it brings together "the great ancient poets and the most despicable French" ones, so that, being a French poet himself, Guéguen claims to voluntarily write *Worstward Ho* (to quote Beckett), a choice rather irreconcilable with any nostalgia for classicism. Still, to place the dialogue between poetry and science under the aegis of fancy is a way to take seriously the warning formulated in 1917 by Apollinaire in "*L'Esprit nouveau et les poètes*" ["The new spirit and the poets"]. In this famous lecture, Apollinaire argues that contemporary poetry aims at combining "fancy" ("fantaisie") and a new "concern for truth" ("souci de vérité"), but that scientists have grown more adventurous, more capable of novelty and thus more like poets than most of his peers. If "the surprise, the unexpected, is one of the main driving forces of poetry today," it is urgent to realise that science risks outrunning poetry and to fight "an unbearable state of affairs," the fact that "scientific

language" has become "in profound disagreement with that of the poets" (Apollinaire 947-54).6

In the vast history of the avant-gardes, *Jeux cosmiques* is a tiny detail. However, by showing that Guéguen's dedication finds clear echoes, first in the contrasting reception of the collection, then in the broader discourse that addresses the potential relationship between poetry and science within *Les Nouvelles littéraires*, I will argue that this liminary text masterfully exposes the difficult anchorage of scientific poetry in the French literary culture of the inter-war period, because it insists on the negative role played by the memory of previous illustrations of the genre, even though and in fact precisely because that tradition had long been expelled from the national canon.

A Brand Old Novelty

To understand the tension that the dedication installs, a brief historical recapitulation is necessary. From the late Enlightenment to the First Empire, French poetry was dominated by a current already advocating the opening of verse to current sciences. André Chénier summarized this program in his unfinished *L'Invention* [*Invention*], composed around 1790:

Torricelli, Newton, Kepler and Galileo [...] Have opened a treasure trove to any new Virgil. All the arts are united: our sciences Have not been able to extend their empire, Without also enlarging the career of verse⁷.

(Chénier 125)

By defending a coextensive conception of poetry and sciences, Chénier called on his peers to seize on recent discoveries to reignite the grand didactic tradition represented by Virgil's *Georgics* or Lucretius's *On the nature of things*, while simultaneously breaking from them, inasmuch as recent discoveries provided poets with uncharted territories or topics to explore and exploit. The result would prove wrong those for whom the growth of science was drying up the poetical mind or exiling it from its previous domains, forcing it into the margins of culture. Indeed, although the innovations of a Newton, for instance, were widely felt as befitting poetical recognition, the suspicion of irreconcilability had been more and more often voiced of late and these two contradictory representations of the relative place of science and poetry were to keep clashing in a durable way.

One of the main actors of the movement advocated by Chénier, and certainly the most popular one, was Jacques Delille (1738-1813), who wrote long poems largely open to the sciences, in particular *L'Homme des champs* [*The Rural Philosopher*] (1800) and *Les Trois Règnes de la nature* [*The Three Realms of Nature*] (1808), and who met with immense acclaim, to the point of being held as a leading author in France and in the rest of Europe. When *L'Homme des champs* was published, the 30,000 copies printed sold out within a few weeks and the work underwent fourteen translations over the following years. With such triumphs, the end of the Enlightenment and the beginning of the following century saw scientific poetry (re)establish itself as a major genre. However, the heyday was short-lived and the genre was quickly downgraded. The first French avant-garde, Romanticism, defines itself against Delille and his school. In the 1830s, Sainte-Beuve portraits his own generation as that of the "posthumous mockers of Delille" ("railleurs posthumes de Delille") (Sainte-Beuve 295) and he imposes the idea that the alliance achieved by Lucretius or Virgil had long since ceased

to be possible. Around 1850, Delille's disqualification is almost complete, and from that time onwards, the genre to which Chénier and he intended to add new masterpieces becomes as famous in France for its antique achievements as for its ulterior failures. Poets tempted by this program are invariably accused of merely setting into verse a simplified scientific teaching, a didactic pose which Baudelaire, following Poe, denounces as a "heresy" (Baudelaire 333). Worse, the wannabe poets of science are reproached for mimicking a Delille now only recalled for the spectacular downfall of his fame. Finally, every new apparent exception to this disqualifying rule tends to be dismissed more or less quickly as another failure, a process well illustrated by the fate of Sully Prudhomme. Although Sully Prudhomme produced, like Delille but at the end of the 19th century, much admired poems that were fuelled by science and irreducible to didacticism, and although he was awarded the first Nobel Prize for Literature in 1901, he too was soon ranked among the victims of an encyclopaedic spirit fatal to true poetry.⁸

It is now easy to understand why Guéguen speaks of a tradition emblematised by the greatest ancient poets and the most detestable French ones. Around 1930, this remains a perfect definition of the dominant understanding of any poetry openly conversing with sciences. Originally excellent, then consistently mediocre, the genre discussed under the names of *poésie scientifique*, *didactique* or *philosophique* is a contested one, for lack of recent masterpieces, and a paradoxical one, since it keeps going on by producing failures. As for Guéguen's own position, it is profoundly ambiguous, insofar as returning to the tradition of the most detestable French poets amounts to returning to a broken tradition, even an anti-tradition, whereas returning to the tradition of the great ancient ones would form a program far more ambitious, but entirely identical to the one followed by his disqualified predecessors. Therefore, the AND (*et*) that coordinates the two branches is by no means an OR (*ou*): the conjunction is unavoidable, one cannot recall the one without the other.

To put it another way, given that scientific discoveries and new hypotheses should, thanks to their recent date, anchor the poem that evokes them in the present, the dedication of *Jeux cosmiques* raises two major questions. Does scientific innovation allow for the production of poetic novelty, or does its very scientific nature condemn one to address it in a poetically outdated and aesthetically aberrant discourse? Does the memory of solutions tested under the Enlightenment and invalidated for almost a century really keep conditioning the attitudes of readers in 1930?

The Annoying Persistence of the Past

Scrutinising the immediate reception of Guéguen's book makes it possible to measure the strong diffusion of the aporetical understanding of the genre, as well as the old age of the arguments that were rekindled and put forward for or against *Jeux cosmiques*. Very few reviewers choose to ignore the ambiguity of the dedication. In *La République* [*The Republic*], Daniel-Rops commends Guéguen for having looked for new material in the sciences, as if no one had done it before:

Giving up themes that we are only too convinced have had their day, [Guéguen] draws his subjects from contemporary science. Indeed, the renewal of sensations made possible by scientific discoveries was bound to tempt a poet, and the idea itself is a curious one. The constitution of matter, that instability that is so stable, that dancing equilibrium of opposing electrical forces – aren't these genuine subjects of poetry? (Daniel-Rops 4)⁹

Daniel-Rops also praises the poet for penning perfect lines despite the technicality of the topics: "[People will tell me] that there's no rhythm of poetic sensuality possible with such abstract themes. Big mistake! The rare merit of [Guéguen] is that he knows how to inscribe perfect verses on crudely scientific data" (Daniel-Rops 4). ¹⁰ But, consciously or not, Daniel-Rops takes up arguments already present in the commendations received by Delille's *Homme des champs*. Then too, many reviewers were impressed by the poet's capacity to find in science "a repertoire of beauties [...] blossoming for the first time in the field of our poetry" (Guingené 48), ¹¹ thus allowing his readers to correct the notion that "mineralogy and botany are sciences that [...] have no kindred with poetry" (Mackintosh 12). And then too, one marvelled that, despite the topics, "there is hardly a single verse that does not offer a model of elegance and precision" (Fontanes 430). ¹²

Another critic, André Billy, also makes Guéguen's thematic choice the means of a marked break with overused themes, for he presents *Jeux cosmiques* as one of the recent symptoms of the end of the great wave of personal lyricism which, flowing from Lamartine to Apollinaire, seems to have dried up. Billy's reading stresses this affective shift:

Sentimental emotion plays no part in the inspiration of Pierre Guéguen's *Jeux cosmiques*. Rather than singing his loves, this poet prefers to sing the profound secrets of nature [...]. His favourite authors are, one guesses, Valéry and Lucretius [...]. His poetry can be defined as a tension, a vibration of the intelligence resolving and exhausting itself in rhythm. (Billy 4)¹³

However, this predilection for science is not entirely divorced from emotions, for Billy quotes two stanzas from the "Ode à Rutherford" and concludes: "Doesn't it seem to you, as it does to me, that modern poetry is on its rightful track, singing in this enthusiastic mode of the discoveries of science?" (Billy 4)¹⁴ *Jeux cosmiques* is thus treated as a convincing example of innovative lyricism, less sentimental than intellectual, a stance that one would again easily find in a Delille or a Sully Prudhomme, although Billy says nothing of this lineage.

That is why all other critics recognise that Guéguen follows in their footsteps and that this observation alone risks being tantamount to disqualification. This logic, directly in line with the positions of Sainte-Beuve, can be clearly observed in Henri Dérieux's 1935 retrospect of the poems produced over the last half-century. In this essay, scientific poetry is presented as a recurring temptation, invariably doomed to fail – a failure that Guéguen was no more able to avoid than others:

[The appeal that sciences have had on certain authors is one of the concerns] that periodically recur in poetry. The example of Lucretius always suggests to poets the idea that their art is perhaps not averse to interpreting the conquests of the mind. This was Chénier's ambition [...]. It was, in the times of the *Parnassiens*, that of Sully Prudhomme. [...] Pierre Guéguen also looked for subjects in the works of science [...]. Poetry seems to rebel against these descriptive efforts, whose virtue, whether picturesque or simply mnemonic, is hardly in fashion. But researchers are not discouraged and periodically we see poets lending their rhythms to the formulas of philosophers and scientists. (Dérieux 170-72)¹⁵

The divergence from Billy, for whom *Jeux cosmiques* paths a right way for modern poetry, is complete. For Dérieux, Guéguen's collection cannot be modern. It is hardly in fashion, not because it does not take on new material, but because it belongs to a genre always revived in vain.

To get around the difficulty, another reviewer somewhat neutralises the critical judgement on Guéguen's predecessors. Auguste Dupouy explains that *Jeux cosmiques* abounds in verbal prowess and "tasty mismatches" ("mésalliances savoureuses") which make each line "a kind of surprise package" ("une sorte de cornet-surprise"), but he notes that these surprises are developed on a very familiar framework. The desire to combine "knowledge and poetry" ("savoir et poésie") must be recognized as the resumption of the project adopted during the second Enlightenment, and thus as a contribution to a debate worth cliché:

[This project is] an old thing, which André Chénier defined in the most prosaic of ways:

All the arts are united: our sciences Have not been able to extend their empire Without also enlarging the career of verse.

Generations of secondary school students have worked on this essay subject. Thanks to Pierre Guéguen, teachers will now be able to vary the formula: because the teachers' hobbyhorse [is to find] verses or phrases of a new air on subjects of proven antiquity. They, who love didacticism like their own brother, will be delighted to find in *Jeux cosmiques* poems about hydrogen, the ion, the proton, and the migrations of the eel, with the little explanatory argument in prose. But they won't be the only ones. (Dupouy 1)¹⁶

The use of the article of notoriety in the turn "the little explanatory argument in prose" ("le petit argument explicatif en prose") shows Dupouy's excellent knowledge of earlier French scientific poems, for the device employed by Guéguen can indeed be read as a pastiche of similar summaries found, for instance, in Delille's works. But if Dupouy, like Dérieux, resolutely anchors Guéguen's attempt in a tradition to which Jeux cosmiques merely gives a new air, this anchoring does not take on a negative value, as Dupouy strongly attenuates the pejorative charge associated with the didactic poetry of Chénier, Delille and their peers. The attack on Chénier's supposed prosaism is discreet, and if Guéguen is classified as a poet for professors, the last sentence promises him a wider audience.

It remains, however, to motivate the prediction, and to that aim, the dominant strategy of the other critics in favour of *Jeux cosmiques* consists in highlighting the elements likely to show that Guéguen's handling of scientific poetry *does* in fact contrast with the model it pretends to adopt.

An Exception?

In La Grande Revue [The Great Magazine], Crouzet begins his review with a significant hesitation: Guéguen is "an innovator, or rather a renovator" ("novateur, rénovateur plutôt"), for the tradition he revives has been marked, at least since the beginning of the 19th century, by a series of setbacks:

Ever since Casimir Delavigne sang of Jenner and inoculation, ¹⁷ poems devoted to the conquests of science have fallen into deep disrepute. Because the genre,

while in itself no better or worse than any other, is particularly difficult to tackle. When Vigny pictured the locomotive as an "iron bull that smokes, blows and bellows," in order to introduce it in great lyricism, he was as unfortunately inspired as Sully Prudhomme would be forty years later, with his all-too-famous poem on the ascent of the *Zenith*. Such falls have made the breed of poets cautious; Mr Marinetti himself quickly exhausted the lyrical resources of aviation. (Crouzet 503)²⁰

Yet, for Crouzet, Guéguen "has taken up this dreaded theme: celebrating the discoveries of modern science" ("a repris ce thème redouté: célébrer les découvertes des sciences modernes"), with a "courage that his talent holds and rewards" ("courage que son talent tient et recompense"), because he has selected topics that subtle links connect to "the mythology most familiar to poetic inspiration" ("la mythologie la plus familière à l'inspiration poétique"), for instance in the stanzas of the "Ode à Rutherford" dealing with the speed of light. In this way, the critic believes, "The ancient and the modern unite [...] in a radiant garland, served as they are by the author's consummate knowledge of the resources of prosody". This "rare and precious success" ("rare et précieuse réussite") requires no small talent: it exists "at the pinnacle of literary artifice, in the most laudatory sense of the word" ("au comble de l'artifice littéraire, au sens le plus élogieux du mot"). One must therefore admire "the ingenious and brilliant way in which the achievements of science are reintegrated by Pierre Guéguen into the realm of poetry". Yet one must also recognise that he has walked "a little too far on the tightrope [...] for anyone to dare imitate him" (Crouzet 503-504).²¹

Truc also insists from the outset on the paradoxical history of a genre that he prefers to call "philosophical poetry": "Philosophical poetry has always been held in high esteem. But it has had few illustrious representatives. It is a difficult genre, and one may even wonder whether it's a genre at all." (Truc 3)²² Truc develops this remark by combining two arguments. On the one hand, rare successes, such as that of Lucretius, rub shoulders with failures such as that of Sully Prudhomme – way of emphasizing that, in order to be acknowledged, a genre implies both the possibility of elaborating analogies between works and the possibility of constructing a prestigious genealogy. On the other hand, for Truc, philosophical poetry can seldom be voluntary:

The writers who have introduced the most thought into their work have done so occasionally. [The philosopher poet] wants to express an idea, a system, with his words. He runs the risk, to which he often falls, of lapsing into didacticism and becoming icy, or of condensing his subject matter and becoming obscure. Lucretius needed the strength and breadth of Latin words to set out the theory of a school of thought in a grandiose way, and in our days it took a lot of genius for Paul Valéry to uphold the truths of method in verse. [...] Sully Prudhomme, on the other hand, failed to sing of balloons and the telegraph. Once again, this vein of philosophical poetry is not something to be sought after, the gifted ones come across it on their path. (Truc 3)²³

Here again the cautious preamble leads to a praise of *Jeux cosmiques*, hailed as an exception. For Truc, Guéguen "almost wins the challenge of talking in beautiful verse about ion, phosphorus, thorium and the Avogrado hypothesis."²⁴ Carried by a "sacred emotion" ("émotion sacrée"), an enthusiasm in the face of scientific discoveries and skilfully using "technical terminology" ("terminologie technique"), "[he] gives an apparently cold subject matter a warm accent [and] sacrifices neither idea to form, nor

form to idea."²⁵ Yet, the balance is not perfect. Truc regrets an excess of verbal richness: Guéguen "weaves around himself a web of images" which he at times allows to "replace movements and events", "tire the reader without nourishing him" and eventually compromise his "more serious philosophical substance".²⁶ In short, Truc reproaches Guéguen for his *fantaisie* (understood here as a lack of seriousness that contradicts sincere emotion) and for his practice of a didactism "which seems to lend itself above all to virtuosity" ("qui semble se prêter surtout à la virtuosité") (all quotes from Truc 3).

Still, deliberately or not, Crouzet and Truc reactivate an argument that was already in place more than a century earlier. Crouzet's praise of the marriage of the ancient and the modern is strongly reminiscent of Chénier's most famous line, "Let us write ancient verses on new thoughts" ("Sur des pensers nouveaux faisons des vers antiques", Chénier 127), what sounds in 1930 less like an avant-gardist posture than a pledge to *retour à l'ordre*. The idea of a success that would prove dangerous for others to emulate was often applied to Delille, of whom Ginguené, for instance, warned: "[he] can all the more lead astray, as he seems more worthy of leading" (Ginguené 37). ²⁷ Many critics of Delille had already asked: "in a poem that is not supported by interesting action", "why pile up [so many pages] that tire with too much brilliance?" (Geoffroy 7)²⁸ And works like *L'Homme des champs* were attacked as sheer "tours de force", which called no more or less applause than a showman's tricks ([Anon.] 283).

Crouzet and Truc's desire to welcome *Jeux cosmiques* as an exception to the rule of failure that affects the genre chosen by Guéguen thus comes up against a double obstacle. Their wish to read the work as a serious attempt to converse with the sciences is undermined by the suspicion of dealing with a pastiche aiming at virtuosity. And statements dating back to 1800 do not only find an echo in the way they phrase their reservations; they also resonate in their texts when they want to prove that Guéguen succeeds where Delille and the like failed.

Toward a Modernity of the Non-Serious

For several other reviewers of *Jeux cosmiques*, the solution to the dilemma is to be found in the humour that unsettles Truc. Here, the tongue-in-cheek dimension of the collection and the fact that science provides a pretext for verbal prowess is not a cause for lament: these features are hailed as the (only) means of a successful reactivation of a genre so long stagnant.

In February 1928, Jean Cassou, who works like Guéguen for *Les Nouvelles littéraires*, devotes a first favourable article to the still to be published collection. Commenting on the few poems that have already been issued in literary journals (notably *Europe*), Cassou awards his colleague a patent of "didactic poet" ("poète didactique") but cannot bring himself to treat his *jeux* as anything other than "humorous and fulminating poetry" ("poésie humoristique et fulminante"). Since the will to mix science and poetry is "the most absurd game you can imagine" ("le jeu le plus absurde qu'on puisse imaginer"), Cassou first justifies Guéguen's choice by his liking for "fierce names" ("noms farouches"): it is his passion for "barbaric language" ("langage barbare") that has led him to throw himself "voraciously on the scientific vocabulary so rich in monstrous suggestions" ("avec voracité sur le vocabulaire scientifique si riche en suggestions monstrueuses"). Then, the critic presents Guéguen as a disciple of Jules Laforgue, who drew from an acute awareness of the vanity of scientific knowledge the will to amalgamate it with the rhythms of popular song, and the parallel allows Cassou to make a firm distinction between what could be a valid modern approach of scientific

poetry and the practice of the poets of the late Enlightenment. Erasing the diversity of tones they adopted, Cassou states:

Certainly, for the didactic poets of the 18th century, science was a majestic object to such an extent that only the most majestic poetry could be worthy of it. The point of view has changed: everything matters so little now that we can leave the vestiges of our knowledge and experience to poetry. Poetry, at least, may do something with it. (Cassou "Poésie" [1] 4)²⁹

Guéguen thus creates a scientific poetry whose modernity lies in its absence of any reverence for the results of science, now understood as waste to be recycled. This is why his "priceless seriousness" ("sérieux impayable") can only be a joking pause. He is the "ironic continuator of Lucretius and Abbé Delille" ("ironique continuateur de Lucrèce et de l'abbé Delille"), and this ironical twist is the condition of admissibility of his attempts. In sum, Guéguen is a Delille trained by Sainte-Beuve; his scientific poetry lives on by performing the posthumous mockery of its own genealogy. However, this reading comes up against another observation: "In the realm of constancy and rigor, [Guéguen] must at all costs invent whims, intentions, a motive for reveries. But he often lends himself submissively to the scientific game and even raises the stakes."30 This hint of docility, of complete adhesion to the sciences, prevents Cassou from concluding that the posture is wholly fanciful, in the same way that the signs of humour and virtuosity prevent Truc or Crouzet from concluding that the collection is perfectly serious. Hence a third argument: Cassou presents Guéguen's fidelity to scientific statements as a constraint freely embraced. A disciple of Valéry, Guéguen experiments with "a poetry that is poetry, that breathes and lives as such only insofar as it constrains and submits to certain principles comparable to those that the scientist recognizes in the order of the world" (Cassou, "Poésie." [1] 4).31

On the whole, the presentation is so close to the one put forward, two years later, in the dedication of Jeux cosmiques that it is likely that Cassou, in this preannouncement of the collection, followed the author's own directives.³² However, when Cassou reviews the complete volume, his argumentation somewhat evolves. Jeux cosmiques remains a form of "objective poetry that revels in its own game of verbal illusions", "an adventurous, good-natured blend of pedantry and fairground parade."33 But, its status as "divertissement" is nuanced. Cassou now emphatically correlates this opinion with the limits of his own scientific culture. Rutherford's work on particles is, he writes, "an operation that my ignorance of these things, combined with the poet's restless lyricism, endows for me with an aspect of hilarious enchantment and insoluble strangeness."³⁴ He also insists on another element entirely absent from his first article: emotion. Buffoonery, he concedes, is replaced by "a very fine and very delicate tenderness" when the text "becomes a lullaby to sing the nocturnal birth of dew and this delicious phenomenon of molecular eroticism which bears the adorable name of osmosis."35 And Cassou attributes to Guéguen a "big heart" ("grand cœur") which reminds him of Michelet's attitude towards nature and which endows the collection, now also understood as the display of "a beautiful soul" ("une belle âme"), authentic lyricism (Cassou, "Poésie" [2] 7).

Another example of readings praising the histrionics of *Jeux cosmiques* is provided by Henri Pourrat. He too underlines the paradoxical status of the tradition associated with scientific poetry: "Guéguen has attempted [...] a return to an island thought to be lost in the icy seas, behind the greyness of icebergs and fog. It is "the tradition of the great old poets and of the most despicable French poets" (Pourrat "Des

îles" ["On Islands."] 467). From the outset, the genre is placed under the double sign of oblivion and coldness, and the collection is pictured as an unexpected signal, both because it attests to the fact that a traveller has returned to the lost island and because an active part of present does reside there:

In these regions of didactic poetry whose paths we no longer know, here comes the aurora borealis, [...] strange lights suddenly illuminating a world that we have difficulty in considering our own. The mysteries and wonders of science, or rather of the universe. (Pourrat, "Des îles" 467-68)³⁷

Still, Guéguen's humour and style become here again a way to avoid the suspicion of sincere didacticism: the poet invests "an uncanny arctic domain, childlike and prodigious, where we wander among flashes of ideas, alliterations and puns" (Pourrat, "Des îles" 468).³⁸ By noting that a text supposed to guide turns into a text that makes one stray, and by moving from the playful to the childlike, Pourrat manages to reconcile his own condemnation of the genre (a lost land of icy poetry frozen by the coldness of science) and the pleasure he takes in its return onto the modern stage. Since he acts like a child, Guéguen can write as if he was ignorant of the tradition mentioned in his dedication, while placing himself as if in the very infancy of the genre, in that period when, according to Sainte-Beuve, a genuine poetry of the sciences remained possible.

Finally, Pourrat and Cassou's choice to present the auto-ironic and irreverent character of the collection as a way to have its scientific poems welcomed as a valid contribution to contemporary creation is mirrored by a last series of commentators, this time very critical of the work, who focus on the same traits to attack modernity as a whole. For them, Guéguen's casualness, far from saving the genre from the negative weight of its own past, is perceived as a symptom of the excesses of the avant-gardes or of a new crisis in poetry. According to François Ménez:

[Guéguen is] irritating when he sacrifices everything to the need, which in some cases he pushes to the point of obsession, for originality, for the complicated and the rare, when, driven by the desire to look good on the page, he indulges in the imitation of avant-garde authors whose excesses he is more inclined, by temperament, to retain than their qualities. (Ménez 1)³⁹

The same reservations are expressed by Henri Clouard, who condemns the "modernist pose" ("pose moderniste") which pushes Guéguen towards a "préciosité" which prowls "across all our current poetry" ("à travers toute notre poésie actuelle", Clouard 493), while Ernest-Charles presents *Jeux cosmiques* as the perfect example of a now dominant poetic intellectualism:

Our era is perhaps one of those in which poetry is most debated, and most fruitlessly. Poets do not see this as a reason to stop writing original works. [...] But they are so witty that they seem to write them for fun, and to amuse us. [Their] poems are intellectual exercises in which an amiable, premeditated fancy unfolds. They don't give in to the momentum of inspiration; they don't give in to any spontaneous drive. On the contrary, they only do what they want, very precisely, and they do it with as much ease as industry. (Ernest-Charles 4)⁴⁰

Therefore, if Guéguen "is renewing scientific poetry and, at the same time, didactic poetry," while also stressing that he writes sheer amusements, one must treat his book as another proof that, from now on, "poetry is for its best writers a sheer game of the mind, a high form of intellectual entertainment" (Ernest-Charles 4)⁴² – and it is obviously the influence of Valéry that Ernest-Charles intends to stigmatize. In this view, current poets do not only treat science and scientific poetry as discredited values, the disqualification extends to poetry as a whole and to every possible poetic subject.

In summary, the best synthesis of the ambivalences that *Jeux cosmiques* exploits was probably penned by Schwab, who speaks of "a half-passionate, half-sarcastic attempt [...] to draw modern poetry from the great constructions of the most abstract science" (Schwab 498).⁴³ The undecidability of the self-parodying or sincere status to be given to the book explains the very varied range of reactions it has received.

Science and Poetry in Les Nouvelles littéraires, artistiques et scientifiques

As announced in its full title, the weekly, which brings together literary and scholarly contributors, is also an attempt to prolong a dialogue, even restore a union between literature and science⁴⁴. It therefore regularly features comments on their co-evolution and on their possible articulations, what makes it possible to approach the questions raised by *Jeux cosmiques* without solely focusing on the collection, nor on its reviews, but by examining a leading literary periodical of the time. In this respect, three salient points are noteworthy.

First, *Les Nouvelles littéraires* entirely reject the idea that scientific material is inherently anti-poetic. Cassou writes in 1929 that the overcoming of the formal criteria which used to limit poetry to certain literary genres brings it "today on the edge of the indefinable" ("aujourd'hui aux confins de l'indéfinissable"). This blurring makes it possible to recognise poetry in Joyce's novels, in Surrealist performances (what recalls Guéguen's tribute to Barbette's shows) and beyond:

It is not just in the categories and genres set by the old rhetoric and the old distribution of intellectual activities that poetry is spreading the ravages of its anxieties, its hopes and its pleasures. The serial novel, the fantasies of painting, travel, disorientation, the dark opium of cinema, the visions of sciences and of a psychiatry to come – it is perhaps childish to see all this as its realm; and yet [poetry] cannot live and breathe without the support of all these succulent reveries. (Cassou, "La poésie en vacances" 8)⁴⁵

This link between the "visions of sciences" and poetry is echoed, in 1930, when *Les Nouvelles littéraires* praise the founding of the *Union rationaliste*, which brought together leading scientists and writers such as Georges Duhamel and Philippe Soupault, with the intention of "spreading the spirit and method of science" and of fighting against a series of obstacles including, as the group's program states, "the too widespread belief that the scientific mind is incompatible with poetry and sentiment, that it can only give rise to cold and inadequate wisdom," belief that the *Union* intended to combat by seeking "the way to make the scientific spirit accessible to the people, how to make them feel the beauty and poetry of science" (Boll 12). Reading Cassou's remarks and the manifesto of the *Union* together is enlightening, because it brings us back to Apollinaire's lecture and reminds us that around 1930, and in fact since Delille's time, the idea was largely acquired that the poetry of science could exist outside of poetry *sensu stricto*, in the texts and creations of certain scientists, and in the museums dedicated to popularization (Fargue). To put it differently, the need to recognize the

possibility of scientific poetry is crucial for many contributors of *Les Nouvelles littéraires*, but this notion is only weakly correlated to that of the possible modernity of scientific poetry understood as a literary genre, even less as a didactic one. And that is why *Jeux cosmiques* provided so eccentric a contribution to this broader debate.⁴⁸

Second, several of the weekly's contributors engage in a cross-history of science and poetry that rejects a model of direct, mutual influence, but argues that effects of convergence happen. For instance Robert de La Vaissière, meditating on the way in which poetry seems to have shifted over the centuries "from certainty to uncertainty" ("du certain à l'incertain"), writes:

The poems of those who assert a doctrine never move us as much as the poems that expose the anguish of a fate apparently ruled by the demons of which Guillaume Apollinaire spoke so magnificently, *les démons du hasard*⁴⁹. [These] demons are brothers of those of the physicist Maxwell [...]. What are we to make of this? Perhaps we need simply to think that the triumph of the scientific spirit has done much to make precariousness a factor of poetry.

It is in fact the scientific spirit that, [...] turning in on itself to the point of devouring its own substance, has held all truth to be relative, and therefore provisional, throwing us back to the original lapping, to chance. (La Vaissière "Poésie de l'incertitude" 8)⁵⁰

La Vaissière insists that modernity is an age of specialisation. He points out that "The greatest among these poets who have suffered the effects of chance are those who have freed themselves from any scientific analogy, because our universe is also that of division"⁵¹ – division that however has made poetry a "mode of knowledge [which] joins the other modes of knowledge" ("mode de la connaissance [qui] rejoint les autres modes de la connaissance") (La Vaissière, "Poésie de l'incertitude" 8).⁵² Consequently, didacticism is firmly rejected: doctrinal poems hardly move their readers and a sound division is to be preserved if poetry and science are to keep exploring their own substance. However, these types of comments, which seek analogies between scientific modernity and poetic modernity and make the emergence of uncertainty and of precarious truths their clearest commonality, also offer a different framework for addressing the potential scientificity of Guéguen's collection. In this light, the ability of Jeux cosmiques to enter into dialogue with science is no longer tied to the viability of the didactic tradition to which the dedication so strongly draws attention. It rather relies on the fact that the dedication forces Guéguen's readers to identify didactic poetry as the most precarious and undecidable available genre: a genre that may not be a genre, that is antique and national, laudable and loathsome, broken and continuous, serious and fanciful, contemporary and hackneyed.

Third, Les Nouvelles littéraires, for reasons that I have explained above, hardly recognise any success in the history of French scientific poetry. In February 1930, on the occasion of a falsely eulogistic review of the work of a rival in didacticism, André Martel, Guéguen simultaneously asserts that Martel "reminds [him] of Delille" ("[lui] rappelle Delille"), although he himself has never read more than "four or five verses" ("quatre ou cinq vers") by the author of L'Homme des champs (Guéguen, "Actualités poétiques" [2] 7) – declaration that would make him a poor connoisseur of the detestable poets he has claimed to imitate in Jeux cosmiques and that completes the indecisiveness of his position with regard to this tradition. However, Les Nouvelles

littéraires readily hail foreign works, by Walt Whitman or Goethe (6 November 1926, p. 6, and 9 April 1932, p. 4), as successful illustrations of the poetry of science.

The reception of *Jeux cosmiques* shows in an exemplary way the importance of the long history of the relationship between poetry and science in the conceptualisation of the forms that any "modern" scientific poetry could take. Although Delille or Chénier's scientific poems are not read and hardly known today, Guéguen's dedication and its perfect clarity for his readers of 1929 shows how much the memory of these allegedly faded works has endured. No less striking is the fact that the reviewers of Jeux cosmiques repeat arguments already employed in the early nineteenth century. This poses a complex issue of periodisation. Combining a long, genealogical perspective, as the dedication invites us to do, while paying attention to the immediate context of the collection (a context that I have here artificially reduced to Nouvelles littéraires and that could only be fully grasped by quoting more literary periodicals⁵³), allows us to nuance this feeling of fixedness. La Vaissière's remarks, in particular, provide a way to think differently about the aptness of the generic choice made by Guéguen: here, scientific poetry may have provided a fitting form to mix poetry and science not because it could be taken seriously, but because it was the most uncertain form of poetry. However, the problematic status of scientific poetry as a genre and of the broader articulation of the two fields seems rather specific to French culture and, to quote Guéguen's dedication one last time, to French poets. Other European traditions have not been haunted, I believe, by spectres comparable to the ones left by Delille and his peers, and in the English-speaking world for instance, the playfulness of Jeux cosmiques could probably have been linked to the poetry of nonsense explored earlier by Edward Lear, this "tissue of quips and jokes" charting "its own physiography and natural history" (Jackson XXIII). If Paris is really to be held as the main centre of avantgardism during the first part of the 20th century, it would therefore be worthwhile to evaluate to what extent this massive hesitation to revisit scientific poetry remained a French trait.

Notes

- 1. In 1931, Guéguen, obviously thinking of Breton's first *Manifeste* and its list of ways to create disconcerting images, regrets: "the best Surrealists have been imitated by a multitude of lesser sub-Surrealists who help one better understand [...] the dangers of the movement. Here, poetry is but monotonous and flat rhetoric" ("les meilleurs surréalistes sont imités par quantité de petits sous-surréalistes qui nous montrent mieux [...] les dangers du mouvement. Avec eux, la poésie n'est plus qu'une rhétorique, monotone et plate"), as they keep launching "firecrackers" ("pétards") that fail to surprise anyone ("Actualités poétiques" [4] 5). Similar comments are frequent at the time. In 1933, an art critic pictures "the avant-garde of surrealism [already] dragging its leg like a rear guard" ("l'avant-garde du surréalisme [déjà] traînant la jambe comme une arrière-garde") and warns that the group's latest contributions offer "nothing unexpected for anyone familiar with the quirks and mannerisms of Salvador Dali, Yves Tanguy, Man Ray" ("rien d'imprévu pour qui connaît [leurs] manies et [leurs] maniérismes") (Fiérens).
 - 2. "[...] plus trouble qu'obscure, plus équivoque qu'hermétique".
- 3. "[...] sans proclamer le poème vivant que, depuis un mois, compose chaque soir, à Paris, le prodigieux Barbette"; "exactement le Cygne et Léda, non plus unis, mais consubstantiels".
- 4. "Le génie des races musclée / En toi mute, ô phosphore mûr! / Et te dédie aux épopées / Plus subtiles de l'esprit pur. / La barque retournée est un laboratoire / Aux cent batteries d'instruments: / Merveille opticienne y luit pour la victoire / L'ultramicroscope voyant".
- 5. "AU MAITRE PAUL VALÉRY / POÈTE ET THÉORICIEN / DE LA POÉSIE PURE, / MAIS INDULGENT AUX HÉRÉSIES, / JE DÉDIE CES ESSAIS / DE FANTAISIE DIDACTIQUE, / QUI TENTENT UN RETOUR / À LA TRADITION / DES GRANDS POÈTES ANCIENS / ET DES PLUS DÉTESTABLES / POÈTES FRANÇAIS".
- 6. "[La] surprise, l'inattendu est un des principaux ressorts de la poésie d'aujourd'hui"; "Déjà, la langue scientifique est en désaccord profond avec celle des poètes. C'est un état de choses insupportable".
- 7. "Torricelli, Newton, Kepler et Galilée [...] / À tout nouveau Virgile ont ouvert des trésors. / Tous les arts sont unis: les sciences humaines / N'ont pu de leur empire étendre les domaines, / Sans agrandir aussi la carrière des vers".
- 8. On the concept of scientific poetry and its controversial history from Ancient Greece to present times, see Chométy and Marchal. For a focus on the 18th and 19th centuries, see Marchal ed., *Muses et ptérodactyles*; Ringuedé. On the role of the references to Delille in the disqualification of the poets who tried to discuss sciences after him, see Marchal, "Hommages et contournements".
- 9. "Abandonnant des thèmes dont nous ne sommes que trop persuadés qu'ils ont fait leur temps, [Guéguen] demande ses sujets à la science contemporaine. Le renouvellement des sensations que nous permettent les découvertes scientifiques devait, en effet, tenter un poète, et l'idée, par elle-même, est curieuse. La constitution de la matière, cette instabilité si stable, cet équilibre dansant des forces électriques de sens contraire, voilà-t-il pas de véritables sujets de poésie?"
- 10. "[On me dira] qu'il n'y a pas de rythme de volupté poétique possible sur des thèmes aussi abstraits. Grosse erreur! Le rare mérite de [Guéguen] est de savoir inscrire des vers parfaits sur des données crûment scientifiques"
 - 11. "[...] un répertoire de beautés [...] écloses pour la première fois dans le

champ de notre poésie".

- 12. "[II] n'est presque pas un seul de ces vers qui n'offre un modèle d'élégance et de précision".
- 13. "L'émotion sentimentale n'entre pour rien dans l'inspiration des *Jeux cosmiques* de Pierre Guéguen. Que ses amours, ce poète aime mieux chanter les profonds secrets de la nature [...]. Ses préférences vont, on le devine, à Valéry, à Lucrèce [...]. Sa poésie peut se définir comme une tension, une vibration de l'intelligence se résolvant et s'épuisant dans le rythme."
- 14. "Ne vous semble-t-il pas comme à moi, que la poésie moderne est dans sa vraie voie, en chantant sur ce mode enthousiaste les découvertes de la science?"
- 15. "[L'attrait que les sciences ont exercé sur certains auteurs fait partie des préoccupations] qu'on voit revenir périodiquement dans la poésie. L'exemple de Lucrèce suggère toujours aux poètes l'idée que leur art n'est peut-être pas rebelle à se faire l'interprète des conquêtes de l'esprit. C'était l'ambition de Chénier [...]. Ce fut, aux temps Parnassiens, celle de Sully Prudhomme. [...] Pierre Guéguen a cherché lui aussi des sujets dans les travaux de la science [...]. La poésie semble rebelle à ces efforts descriptifs, dont la vertu, pittoresque ou simplement mnémotechnique, n'est guère de saison. Mais les chercheurs ne se découragent pas et périodiquement on voit des poètes prêter ainsi leurs rythmes aux formules des philosophes et des savants".
- 16. "[Ce projet est] une vieille chose, qu'André Chénier définissait de la plus prosaïque façon: / Tous les arts sont unis: Les sciences humaines / N'ont pu de leur empire étendre les domaines / Sans agrandir aussi la carrière des vers./ Des générations de lycéens ont planché sur ce sujet de dissertation. Grâce à Pierre Guéguen, les professeurs pourront désormais en varier la formule: car la marotte des professeurs [est de trouver], sur des sujets d'une antiquité éprouvée, des vers ou des phrases d'un air nouveau. Eux qui aiment le didactisme comme un frère, ils seront ravis d'avoir dans Jeux cosmiques une poésie de l'hydrogène, de l'ion, du proton, et des migrations de l'anguille, avec le petit argument explicatif en prose. Mais ils ne seront pas les seuls".
- 17. In 1815, Delavigne submitted *La Découverte de la vaccine* to the annual poetry prize of the Académie française and received a distinction that launched his career.
- 18. Alfred de Vigny used the periphrasis in a well-known poem deriding technical progress, "La maison du berger" (1844).
- 19. Le Zénith (1876) belongs to the many poems inspired by the tragic fate of the scientists who had just died onboard the observation balloon of the same name.
- 20. "Depuis, à peu près, que Casimir Delavigne a chanté Jenner et la vaccine, les poèmes consacrés aux conquêtes des sciences sont tombés dans un profond discrédit. C'est que le genre, s'il n'est en soi ni meilleur ni pire que tous les autres, est particulièrement difficile à aborder. Vigny parlant du 'taureau de fer qui fume, souffle et beugle' pour introduire la locomotive dans le grand lyrisme est aussi fâcheusement inspiré que Sully-Prudhomme le sera quarante ans plus tard avec son poème trop fameux sur l'ascension du *Zénith*. De telles chutes ont rendu prudente la race des poètes; M. Marinetti lui-même épuisa vite les ressources lyriques de l'aviation."
- 21. "L'ancien et le moderne se marient [...] en une radieux guirlande, servis qu'ils sont par la connaissance consommée que possède l'auteur des ressources de la prosodie"; "l'ingénieuse et brillante façon dont les conquêtes de la science sont réintégrées par Pierre Guéguen dans le domaine de la poésie", "[...] un peu trop sur la corde raide [...] pour ne pas défier l'imitation".
- 22. "La poésie philosophique a toujours été en estime parmi les hommes. Mais elle a eu peu de représentants illustres. C'est un genre difficile et on peut même se

demander si c'est un genre."

- 23. "Les écrivains qui ont introduit le plus de pensée dans leur œuvre l'ont fait à l'occasion. [Le poète philosophe] veut, lui, exprimer par son verbe une idée, un système. Il court le danger, où il tombe souvent, de verser dans le didactisme et de glacer, ou de resserrer sa matière et de s'obscurcir. Il a fallu à Lucrèce la force et l'ampleur de la parole latine pour exposer de façon grandiose la théorie d'une école, et, de nos jours un beau génie à Paul Valéry pour soutenir en vers des vérités de méthode. [...] Sully Prudhomme, par contre, a échoué à chanter les ballons et le télégraphe. Encore une fois, cette veine de la poésie philosophique ne se cherche pas et une nature heureuse la rencontre aisément sur sa route."
- 24. "[...] bien près de gagner cette gageure de parler en beaux vers de l'ion, du phosphore, du thoriom et de l'hypothèse d'Avogrado".
- 25. "[II] donne à une matière en apparence froide, un accent chaleureux [et] ne sacrifie ni l'idée à la forme, ni la forme à l'idée".
- 26. "[II] tisse autour de soi toute une toile arachnéenne d'images [...] et ne prend pas toujours garde que ces images finissent par se substituer au mouvement ou à l'événement et fatiguent désormais le lecteur sans le nourrir, [compromettant] une substance philosophique plus sérieuse".
 - 27. "[II] peut d'autant mieux égarer, qu'il paraît plus digne de conduire"
- 28. "[Dans] un poème qui n'est pas soutenu par une action intéressante [...] pourquoi entasser [des morceaux] qui fatiguent par une lumière [...] trop vive".
- 29. "Certes, pour les poètes didactiques du XVIIIe siècle, la science était un si majestueux objet que seule la plus majestueuse poésie en pouvait être digne. Le point de vue a changé: tout importe si peu à présent que l'on peut abandonner à la poésie les reliefs de notre savoir et de notre expérience. Elle, au moins, en fera peut-être quelque chose."
- 30. "Dans le royaume de la constance et de la rigueur, il [faut à Guéguen] à tout prix inventer des caprices, des intentions, un motif à rêveries. Mais souvent il se prête docilement au jeu scientifique et même surenchérit sur lui".
- 31. "[...] une poésie qui n'est poésie, ne respire et ne vit comme telle qu'en tant qu'elle se contraint et se soumet à certains principes comparables à ceux que le savant reconnaît dans l'ordre du monde".
- 32. One could also speak of ideas strongly circulating between both men. As if mirroring Cassou's view that contemporary science has ceased to fuel admiration, Guéguen writes a bit later: "Poetry used to record the achievements of science; now it embalms its glorious failures" ("La poésie autrefois enregistrait les réussites de la science; maintenant elle embaume ses glorieuses faillites" (Guéguen, "Actualités poétiques" [2] 7).
- 33. "[...] poésie objective qui s'amuse de ses propres jeux d'illusions verbales", "mélange aventureux et bon enfant de pédanterie et de parade foraine".
- 34. "[...] une opération que mon ignorance de ces choses, jointe au lyrisme trépidant du poète, revêt pour moi d'un aspect de féérie hilare et d'insoluble étrangeté".
- 35. "[...] une tendresse très fine et très delicate"; "se fait berceuse pour chanter la naissance nocturne de la rosée et ce délicieux phénomène d'érotisme moléculaire qui porte le nom adorable d'osmose".
- 36. "Guéguen a tenté [...] un retour vers une île qu'on croyait perdue dans les mers glaciales, derrière la grisaille des icebergs et des brouillards. C'est 'la tradition des grands poètes anciens et des plus détestables poètes français'".
- 37. "En ces régions de la poésie didactique dont nous ne savions plus les chemins voici que s'allument des aurores boréales, [...] d'étranges lueurs illuminant

soudain un monde que nous avons peine à considérer comme le nôtre. Les mystères et les merveilles de la science; ou plutôt de l'univers."

- 38. "[...] insolite domaine arctique, enfantin et prodigieux, où nous errons parmi les éclairs d'idées, les allitérations et les calembours".
- 39. "[Guéguen est] crispant, quand il sacrifie au besoin, qu'il pousse en certains cas jusqu'à la hantise, de l'originalité à tout prix, du compliqué et du rare, quand entraîné par le désir de paraître bien à la page, il se laisse aller à l'imitation d'auteurs d'avant-garde dont il est plus porté, par tempérament, à retenir les outrances que les qualités".
- 40. "Notre époque est peut-être une de celles durant lesquelles on disserte le plus, et le plus vainement, de la poésie. Les poètes ne se croient pas autorisés pour cela à ne pas écrire des œuvres originales. [...] Mais ils ont tellement d'esprit qu'ils ont l'air de les écrire en s'amusant, et afin de nous amuser. [Leurs] poèmes sont des exercices intellectuels au long desquels s'étale une aimable fantaisie préméditée. Ils ne cèdent pas à l'entraînement de l'inspiration; ils ne s'abandonnent pas à je ne sais quelle spontanéité dominatrice. Ils ne font au contraire que ce qu'ils veulent très précisément et ils le font avec autant d'aisance que d'industrie."
- 41. "[...] renouvelle aujourd'hui la poésie scientifique et, par la même occasion, la poésie didactique".
- 42. "[La] poésie est pour les meilleurs un simple jeu de l'esprit, un divertissement intellectuel de qualité".
- 43. "[...] un essai [...] mi-passionné, mi sarcastique, pour tirer une poésie moderne des grandes constructions de la science la plus abstraite".
- 44. The new century will have to reconcile "tout l'esprit et la matière, la poésie et la science", if it is to be "le siècle de la connaissance" (Pourrat, "Lettre" 7).
- 45. "Ailleurs que dans les catégories et les genres de l'ancienne rhétorique et de l'ancienne distribution des activités intellectuelles, la poésie étend le ravage de ses inquiétudes, de ses espoirs et de ses plaisirs. Le roman-feuilleton, les phantasmes de la peinture, les voyages, les dépaysements, le ténébreux opium du cinéma, les visions des sciences et des psychiatries futures, il est peut-être puéril de voir dans tout cela son royaume; et pourtant, [la] poésie, désormais, ne saurait vivre et respirer sans l'appoint de toutes ces succulentes rêveries".
- 46. "[...] la croyance trop répandue que l'esprit scientifique est incompatible avec la poésie et le sentiment, qu'il ne peut donner naissance qu'à une sagesse froide et insuffisante".
- 47. "[...] la façon de rendre accessible au peuple l'esprit scientifique, de lui faire sentir la beauté et la poésie de la science".
- 48. In 1929, another contributor had warned: "A poetry of science? It does exist, but it remains attached to the works of the scientists and does not separate itself from them; it is not easy to see a poem about radium or relativity. The attempt has been made and has so far failed because of ridicule or boredom." "Une poésie de la science? Elle existe, mais elle reste adhérente aux œuvres des savants et ne s'en sépare pas; on ne voit pas facilement un poème sur le radium ou la relativité. La tentative a été faite et a jusqu'ici échoué sur le ridicule ou l'ennui" (Burnet). And in his review of *Jeux cosmiques*, Raymond Cogniat significantly writes: "The work undertaken by Guéguen is [...] all the more impossible to achieve since the stunning poetry of physics or astronomy resides in science itself [...]. Words, poor words, can add nothing to this monstrous poetry." "L'œuvre entreprise par Guéguen est [...] d'autant plus impossible à réaliser que l'étourdissante poésie de la physique ou de l'astronomie reside dans la science elle-même [...]. Les mots, les pauvres mots, ne peuvent rien ajouter à cette

poésie monstrueuse" (Cogniat).

- 49. La Vaissière quotes Apollinaire's "La chanson du mal-aimé" (1913).
- 50. "Les poèmes de qui affirme une doctrine ne nous émeuvent jamais autant que ceux où se relève l'angoisse d'un sort sur lequel nous voyons régner les démons dont a magnifiquement parlé Guillaume Apollinaire, *Les démons du hasard*. [Or ces] démons sont frères de ceux du physicien Maxwell [...]. Que penser de cela? Peut-être faut-il en penser simplement que le triomphe de l'esprit scientifique a beaucoup contribué à faire de la précarité un facteur de poésie. / C'est en effet l'esprit scientifique qui, [...] se repliant sur soi jusqu'à dévorer sa propre substance, a tenu pour relative, donc provisoire, toute vérité, nous rejetant au clapotis originel, au hasard."
- 51. "[Les] plus grands parmi ces poètes qui ont subi l'emprise du hasard sont ceux-là mêmes qui se sont dégagés de toute analogie scientifique, car notre univers est aussi celui de la division".
- 52. A similar plead for a unifying division of the tasks can be found in an interview with Maurice Blondel. The philosopher argues that the "genuine science of the real" ("science authentique du réel") is protected by multiple locks, which require keys provided by art, "positive science, poetry, well-understood metaphysics, asceticism, even mysticism" ("la science positive, la poésie, la métaphysique bien comprise, l'ascèse, la mystique même") (Lefèvre). For a study of the replacement of "ontology" by a "metaphysics of probability" in Mallarmé's *Coup de dès* and Valéry's "Cimetière marin", see La Vaissière, "Poésie de la mer".
- 53. To name but one, *Volontés*, a monthly published in Paris in 1938-1939, brought together contributions by Guéguen, Eugene Jolas, Raymond Queneau, Aimé Césaire, Henry Miller, Pierre Klosssowski or Michel Leiris, as well as Le Corbusier or a major physicist, Frédéric Joliot-Curie. In 1938, Queneau (p. 6) used it as a platform to attack the primacy of personal lyricism and the exclusion of didactic poetry, "a particularly irritating genre for those who revel in their own ignorance or wallow in their lack of culture" ("un genre particulièrement agaçant pour ceux qui se repaissent de leur propre ignorance ou se vautrent dans leur inculture").

Works Cited

- [Anon.] "L'Homme des champs" ["The Rural Philosopher"]. *Neue Bibliothek der schönen Wissenschaften und der freyen Künste*, vol. 64, n. 2, 1801, pp. 276-297.
- Apollinaire, Guillaume. "L'Esprit nouveau et les poètes." [1918] ["The New Spirit and the Poets."]. Œuvres en prose complètes [Complete Prose Works], edited by Pierre Caizergues and Michel Décaudin, Gallimard, vol. 2, 1991, pp. 941-954.
- Baudelaire, Charles. "Notes nouvelles sur Edgar Poe." [1857] ["New Notes on Edgar Poe."] *Œuvres complètes* [Complete Works], edited by Claude Pichois, Gallimard, vol. 2, 1976, pp. 319-337.
- Billy, André. "Les livres de la semaine. Quelques poètes." ["The Books of the Week. A Couple of Poets."] *L'Œuvre*, 21 January 1930, p. 4.
- Boll, Marcel. "Pour la diffusion de l'esprit scientifique." ["For the Dissemination of the Scientific Spirit."] *Les Nouvelles littéraires, artistiques et scientifiques*, 7 June 1930, p. 12.
- Burnet, Etienne. "Paul Valéry. L'unité de l'esprit." ["Paul Valéry. The Unity of the Spirit."] Les Nouvelles littéraires, artistiques et scientifiques, 09 February 1929, p. 5.
- Cassou, Jean. "Poésie." [1] Les Nouvelles littéraires, artistiques et scientifiques, 25 February 1928, p. 4.
- ---. "La poésie en vacances." ["Poetry on Holiday."] Les Nouvelles littéraires, artistiques et scientifiques, 28 September 1929, p. 8.
- ---. "Poésie." [2] ["Poetry."] Les Nouvelles littéraires, artistiques et scientifiques, 11 January 1930, p. 7.
- Chénier, André. "L'Invention." ["Invention."] *Œuvres complètes*, edited by Gérard Walter, Gallimard, 1958, pp. 123-132.
- Chométy, Philippe and Marchal, Hugues. "Poésie scientifique." ["Scientific Poetry."] Alain Montandon and Saulo Neiva editors, *Dictionnaire raisonné de la caducité des genres littéraires* [A Well-reasoned Dictionary of the Obsolescence of Literary Genres], Droz, 2014, p. 661-682.
- Clouard, Henri. "Les poèmes". ["Poems."] La Muse française, 13 October 1933, pp. 485-495.
- Cogniat, Raymond. "Poésie." ["Poetry."] *Chanteclerc artistique et littéraire*, 18 January 1930, p. 4.
- Crouzet, Guy. "Carnet des jeunes lettres." ["Notebook of the Young Letters."] *La Grande Revue*, 1 January 1930, pp. 501-507.
- Daniel-Rops. "La critique des livres." ["Book Reviews."] *La République*, 8 January 1930, p. 4.
- Dérieux, Henri. La Poésie française contemporaine, 1885-1935 [Contemporary French Poetry, 1885-1935], Mercure de France, 1935.
- Dupouy, Auguste. "L'enfant prodigue de la Domnonée." ["The Prodigal Son of Domnonée."] *Dépêche de Brest et de l'Ouest*, 9 January 1930, p. 1.
- Ernest-Charles, J. "Quelques poètes." ["A Couple of Poets."] *Le Quotidien*, 21 Janvier 1930, p. 4.
- Fargue, Léon-Paul. "Poésie de la science." ["Poetry of Science."] *Marianne*, 8 December 1937, p. 9.
- Fiérens, Paul. "Les deux salons de la Porte de Versailles." ["The Two Salons of the Versailles Gate."] *Journal des débats politiques et littéraires*, 29 October 1933, p. 4.

- Fontanes, Louis de. "L'Homme des champs." *Mercure de France*, 3 September 1800, pp. 409-435.
- Geoffroy, Julien-Louis. "L'Homme des champs". *L'Année littéraire*, 1 November 1800, p. 3-31.
- Ginguené, Pierre-Louis. "L'Homme des champs [...]. 2^e extrait." *Décade philosophique, littéraire et politique*, 2 October 1800, pp. 29-49.
- Guégen, Pierre. Jeux cosmiques [Cosmic Games], J. O. Fourcade, 1929.
- ---. "Actualités poétiques." ["Poetry News.] [1] Les Nouvelles littéraires, artistiques et scientifiques, 28 September 1929, p. 8.
- ---. "Actualités poétiques." [2] Les Nouvelles littéraires, artistiques et scientifiques, 8 February 1930, p. 7.
- ---. "Actualités poétiques." [3] Les Nouvelles littéraires, artistiques et scientifiques, 10 January 1931, p. 7.
- ---. "Actualités poétiques." [4] Les Nouvelles littéraires, artistiques et scientifiques, 7 February 1931, p. 5.
- Guégen, Pierre and Maria Helena Vieira da Silva. *Kô & Kô les deux esquimaux*. [*Kô & Kô the Two Eskimos*.] Jeanne Bucher, 1933; Chandeigne, 2005.
- Jacob, Max. Lettres à Marcel Jouhandeau [Letters to Marcel Jouhandeau], edited by Anne S. Kimball. Droz, 1979.
- Jakson, Holbrook. "Edward Lear: laureate of nonsense". *The Complete Nonsense of Edward Lear*, edited by H. Jackson. Faber and Faber, 1947, p. IX-XXVIII.
- La Vaissière, Robert de. "Poésie de l'incertitude." ["Poetry of Uncertainty."] Les Nouvelles littéraires, artistiques et scientifiques, 7 September 1929, p. 8.
- ---. "Poésie de la mer." ["Poetry of the Sea."] Les Nouvelles littéraires, artistiques et scientifiques, 1 August 1931, p. 5.
- Le Corbusier. *Choix de lettres* [Selected Letters], edited by Jean Jenger. Birkhäuser-Éditions d'architecture, 2015.
- Lefèvre, Frédéric. "Une heure avec Maurice Blondel." ["An Hour with Maurice Blondel."] Les Nouvelles littéraires, artistiques, scientifiques, 19 November 1927, p. 4.
- [Mackintosh, James.] "The Abbé Delille's *Homme des Champs.*" *The British Critic*, January 1801, pp. 9-21.
- Marchal, Hugues, editor. Muses et ptérodactyles: la poésie de la science de Chénier à Rimbaud. [Muses and Pterodactyls: the Poetry of Science from Chénier to Rimbaud.] Seuil, 2013.
- Marchal, Hugues. "Atlas d'atlas: essai d'épistémopoétique." ["Atlas of Atlas: an Essay in Epistemopoetics."] *Romantisme*, 183, 2019, pp. 25-34.
- ---. "Hommages et contournements: Lucrèce dans la poésie scientifique française au XIX^e siècle." ["Tributes and Circumventions: Lucretius in French scientific poetry of the 19th century."] Sylvie Puech-Ballestra, editor, *Lectures de Lucrèce*, Droz, 2019, pp. 127-159.
- Ménez, François. "Rêveries de Domnonée." ["Daydreams of Domnonée."] *Dépêche de Brest et de l'Ouest*, 9 Mars 1931, p. 1.
- Noël, Maurice. "Carnet du lecteur." ["Notebook of the Reader."] *Le Figaro*, 16 December 1933, p. 6.
- Pourrat, Henri. "Des îles." ["On Islands."] *La Nouvelle Revue des jeunes*, 10 April 1930, pp. 467-468.
- ---. "Lettre de Henri Pourrat à Francis Jammes." [Letter from Henri Pourrat to Francis Jammes."] *Les Nouvelles littéraires, artistiques, scientifiques*, 13 September 1930, p. 7.

- Ringuedé, Yohann. Une crise du moderne. Science et poésie dans la seconde moitié du XIX^e siècle. [A Crisis of the Modern. Science and poetry in the second half of the 19th century.] Hermann, 2021.
- Sainte-Beuve, Charles-Augustin. "Poètes et romanciers modernes de la France. XXVI. Delille." ["Modern Poets and Novelists from France. XXVI. Delille."] *Revue des deux mondes*, 1st August 1837, pp. 273-302.
- Schwab, Raymond. "Jeux cosmiques." ["On 'Cosmic Games'."] La Quinzaine critique des livres et des revues, 25 September 1930, p. 498.
- Truc, Gonzague. "Poètes et poésie philosophique." ["Poets and Philosophical Poetry."] *Comædia*, 14 January 1930, p. 3.