LEWIS CARROLL: THE SYMBOL AND THE LETTER

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THE LETTER: FROM KNOWLEDGE IN THE REAL TO THE SYMPTOM

A writing of the knowledge in the real

A reference to the letter, in the diverse senses of the term, traverses Lacan's teaching: from the missive of the story by Edgar Alan Poe in *The Seminar on 'The Purloined Letter'*,[1] the destiny of which serves to evoke that of the signifier, to the alphabetical letter, in particular in the symbolic use made of it by mathematics, in *Encore*.[2] In between, the letter acquired a conceptual value, beginning with *The Instance of the Letter in the Unconscious* where Lacan defined it as 'the essentially localised structure of the signifier'.[3] Its definition is finally elaborated and pinned down in *Lituraterre*: it is that which constitutes the border between the symbolic and the real, knowledge and *jouissance*.

> "Is the Letter not... more properly littorale [coast-line], figuring that one domain in its entirety makes for the other a frontier, because of their being foreign to each other, to the extent of not falling into a reciprocal relation." "Is the edge of the hole in knowledge not what it traces?"[4]

This concept draws its pertinence from its relation to writing [*l'écrit*]. 'We have seen changes in writing since language has existed. What is written are letters, and letters have not always been fabricated in the same way.'[5] It finds its logic in the support that Lacan draws from mathematics for the formalisation of psychoanalysis, as he indicates in *Encore*:

> "Since what is at stake for us is to take language as that which functions in order to make up for the absence of the sole part of the real that cannot manage to be formed from being [*se former de l'être*] — namely the sexual relationship — what basis can we find in merely reading letters? It is in the very play of mathematical writing [*l'écrit*] that we must find the compass reading toward which to head in order to draw from this practice — from this new social link, the analytic discourse, that emerges and spreads in such a singular fashion — what can be drawn from it regarding the function of language, that language in which we put our faith in order for this discourse to have effects — middling, no doubt, but tolerable enough — so that this discourse can prop up and complete the other discourses".[6]

In order to elaborate psychoanalytic theory, Lacan takes as a model the use that mathematics makes of alphabetic letters, insofar as they support the writing [*écriture*] of a knowledge in the real.

> "Following the thread of analytic discourse goes in the direction of nothing less than breaking up anew [*rebriser*], inflecting, marking with its own camber — a camber that could not even be sustained as that of lines of force — that which produces the break [*faille*] or discontinuity. Our recourse, in llanguage [*lalangue*], is to that which shatters it [*la brise*]. Hence nothing seems to better constitute the horizon of analytic discourse than the use made of the letter by mathematics. The letter reveals in discourse what is called — not by chance or without necessity — grammar. Grammar is that aspect of language that is revealed only in writing [*à l'écrit*]."[7]

Jacques-Alain Miller underlines that Lacan's teaching supposes that there should be some symbolic in the real, 'a certain knowledge which is the unconscious itself'. "And this response", he continues, "is inspired by science, situating knowledge, the mathematical articulation, in the real, as inspired in any case by physics".[8] Mathematical formulae constitute the writing of this knowledge. Jacques-Alain Miller notes that this model is what led Lacan to the theory of the four discourses "which implies precisely that there is discourse in the real, that there are formulae, which the subject obeys without knowing it".[9] "Without doubt", Jacques-Alain Miller again indicates, "as discourse, science is for Lacan an articulation of semblants, but semblants which touch the real".[10] Hence in *Encore*, Lacan assimilates mathematical writing with the image of the spider's web:

"[...] can't the formalisation of mathematical logic, which is based only on writing [*l'écrit*], serve us in the analytical process, in that what invisibly holds [*retient*] bodies is designated therein?" "If I were allowed to give an image for this, I would easily take that which, in nature, seems to most closely approximate the reduction to the dimensions of the surface writing [*l'écrit*] requires, at which Spinoza himself marvelled — the textual work that comes out of the spider's belly, its web."[11]

If psychoanalytic theory has for its object the unconscious as knowledge, then it has as its charge the task of elaborating and of transmitting a knowledge of the real. Mathematical writing again provides a model in this regard insofar as Lacan indicates that the real "can only be inscribed on the basis of an impasse of formalisation".[12] Jacques-Alain Miller comments upon the implications of this thesis: "you take language, you evacuate meaning and, to the degree to which you perform this evacuation, you are then able to proceed to a demonstration of impossibilities, which then deliver some real to you, starting from language itself."[13] Indeed, in *Encore*, Lacan emphasises that the evacuation of meaning in mathematical formalisation is what permits one to touch the real: "That is why I thought I could provide a model of it using mathematical formalisation, inasmuch as it is the most advanced elaboration we have by which to produce signifierness. The mathematical formalisation of signifierness runs counter to meaning — I almost said *à contre-sens*".[14]

Sense in the Real

Lacan's thesis supposes, as Jacques-Alain Miller reiterates, that there is "something of the real in language even beyond number".[15] The elaboration of the letter as a concept participates in this movement which led Lacan to grasp the articulations and then the knotting between the three dimension of the real, the symbolic and the imaginary and the border-effects between them. In particular, in *Encore*, he strives to emphasise that there is *jouissance* in language, at a time when the topological model becomes dominant in his teaching. The letter is at the articulation of the symbolic and the real. As Eric Laurent emphasises "beyond any signifier, the letter [...] allows us to reveal the hole that it indicates... The letter designates a point of a real *en souffrance*".[16]

Jacques-Alain Miller, however, demonstrates that the real that psychoanalysis is concerned with is not the same as the real of science. The symptom, he indicates following Lacan, implies that "sense cannot be eliminated from the real with which psychoanalysis is concerned".[17] He continues:

"Even if the real, in its scientific definition, excludes sense, for psychoanalysis there is sense, nevertheless, in the real with which it is concerned. This is what constitutes the extraordinary exception of the symptom, if one admits that the symptom is not of the order of the semblant, but of the real and that, though being real, it nevertheless retains its Freudian sense."[18]

The end of analysis is indicated by the identification with the symptom, the reduction of the symptom to its formal envelope and the emergence of the master signifiers of the subject — noted S_1 — which fix his *jouissance*. Thus, Jacques-Alain Miller underlines:

"In psychoanalysis, we can even claim that our knowledge inscribes itself not in the real but in the true [...] It remains that maybe what inscribes itself in the real for us is not knowledge, but perhaps only a signifier, a signifier 'one', and this is why Lacan, on occasion, defined the symptom as that which of the unconscious is translated by a letter."[19]

In this sense, the S_1 is a letter which operates a 'fixation of *jouissance*'.[20] In this perspective, the letter establishes a connection between the real and sense. It is at the foundation of the writing of the blueprint of the symptom which knots the real, the symbolic and the imaginary. The theory of the symptom finds its elaboration in the seminar dedicated to James Joyce. As Jacques-Alain Miller has emphasised, if science continues to provide models for the theory of psychoanalysis (in particular topology), the reference point for the last period of Lacan's teaching is art.[21] This holds for the disparity between the real of science and the real of psychoanalysis which can be found, according to Lacan's expression, 'in the entanglements of the true'.[22] "Man gets entangled with the real, and one can even say that, with this, one approaches the most probing definition that one can give of it".[23] He underlines that the mark that

there is a real in the symbolic and in the imaginary is that one gets entangled in these dimensions. This is what the knot indicates. Thus he situates in this logic the landmark which Lacan provides for the end of analysis as a knowing how to do with one's symptom.[24] As Jacques-Alain Miller continues, if science is Lacan's reference point at the beginning of his teaching, when he proceeds towards a reduction of the real by the signifier, "at the time of the last period of his teaching, Lacan's reference point is art. Art, in its difference to science is a certain *savoir y faire*, and even *savoir faire*, but beyond the prescriptions of the symbolic".[25]

The concept of the letter has for its characteristic the fact that it crosses these two fields. If it takes the use of the letter in mathematics for its reference, it is nonetheless defined, in *The Instance of the Letter in the Unconscious* and then in *Lituraterre* with reference to literature. Thus, when Lacan distanced himself from the logical model and turned towards topology, in *Le sinthome*, his seminar on Joyce, the letter retained its particular pertinence for the formalisation of the symptom elaborated in relation to the field of literature.

THE USE OF THE SYMBOL IN THE MATHEMATICAL WORK OF LEWIS CARROLL

Classical logic and formalism

The work of Lewis Carroll presents a particular interest for us here as it developed in the two domains of literature and mathematics. Known essentially for the two volumes of the adventures of Alice, *Alice in Wonderland* and *Through the Looking-Glass*, Charles Lutwidge Dodgson, whose pen name was Lewis Carroll, was professor of mathematics at Oxford and he wrote no less than twenty-odd works bearing upon arithmetic, geometry and logic. His interest for this last discipline marks his entire work as, preceding the movement which would lead to the logicisation of mathematics with Frege as well as the axiomatisation of geometry with Hilbert, Lewis Carroll essentially set himself the task of logically ordering the propositions of Euclid. Similarly, *An Elementary Treatise on Determinants* aims to logically order the presentation of arithmetic. He defined his project in the following terms:

> "To present the subject as a continuous chain of arguments, separated from all accessories of explanation or illustration, a form which I venture to think better suited for a treatise on exact science than the semi-colloquial form often adopted by Mathematical writers. I say 'semi-logical' advisedly, for nothing is more easy than to forget in an argument thus interwoven wit illustrative matter, what has and what has not been proved."[26]

His argument is as modern as his later attempt to formalise logic through diagrammatic representations, as well as through an indexical method for the resolution of syllogisms. In fact he dedicated the end of his life to writing a manual of logic entitled *Symbolic Logic*,[27] echoing Venn,[28] which he did not hesitate to call 'A work for God',[29] while he held his literary creations to be simple fantasies whose author, on occasion, he pretended not to know. If it is clear that his interest essentially leaned towards his researches into logic, his work in this domain has little marked posterity in spite of the few finds that it harbours (in particular, one finds there a first anticipation of truth tables).

The pedagogical modernity of his project is in fact counter-balanced by the conservative nature of his orientation. Profoundly attached to the Euclidean system and its empirical elaboration, he could not proceed towards a logicisation of mathematics. Moreover, the exigencies which he demonstrates, in particular in matters of ontology, were an obstacle to his proceeding further on the way to the axiomatisation of geometry or even to the mathematisation of logic as Frege (from 1879), and then Russell, did. For Carroll it was about saving Aristotelian logic from the threats which had been weighing heavily upon it since the beginning of the mathematisation of logic, in particular through the work of John Venn and Augustus De Morgan. His square diagrams, for example, aimed at saving the existential import of universal propositions, which Venn's diagrams, proceeding from the interpretation of universals as hypothetical propositions, rendered obsolete.[30] Lewis Carroll seems to have discerned the ontological cost implied by the mathematisation of logic. In order to become a science, it was necessary for logic to break free from the grammar of natural languages as well as from an essentialist conception of judgement in order to constitute an operative and universal symbolic grammar of reasoning by displacing the accent from semantics to syntax. Such attempts could only be realised at the price of differentiating between logical validity and truth. Moreover it was necessary to effect a radical negation of the connection between language and the order of things.

When George Boole established a parallel between the laws of logic and those of algebra by looking for a coincidence between algebraic functions and the structures of language, it is thought itself that he made appear as a formal construction, language as a network of combinations.[31] From then on, Boole's formalism broke with the essentialist conception of judgement at the foundation of classical logic, through which logical proposition is an attribution of essence. Augustus de Morgan's logic of relations made the copula 'is' finally loose its preponderant role. Conceived in terms of attribution of essence, the propositions of classical logic were constructed from the verb to be ('I walk' had to be analysed as 'I am walking'). They rested upon an existential interpretation of the copula (which implied a confusion of existence, predication and identity). These principles were put into question by mathematicians contemporary with Lewis Carroll, and then by their successors, Frege, Peano and Russell who made formal logic the founding language of mathematics. The stakes of the formalisation of logic were considerable, making nonsense appear at the heart of language and contributing to dethrone being and the subject of thought. Without doubt this was a decisive stage in mathematics' definitive break with the search for sense in the real.

A non-operational symbol

For his part Lewis Carroll sought to preserve the Aristotelian system and remained attached to the fact that logic should unfold in the terms of natural languages. Consequently, his symbolism is only a commodity of writing and cannot succeed in constituting a veritable propositional calculus. In *Symbolic Logic*, letters underline the form of logical reasoning, notably in the square diagrams, but they never have the status of symbolic variables, they do not serve to operate a calculus. The presentation of syllogisms bears this out, for each example the word which gives its identity to the symbol is clearly specified:

(1) Babies are illogical;
(2) Nobody is despised who can manage a crocodile;
(3) Illogical persons are despised

Univ. 'persons' a = able to manage a crocodile; b = babies; c = despised; d = logical.[32]

When Lewis Carroll introduces a symbol in his mathematical work, it is because of its univocity and the economy of writing that it represents. Thus, he presents the introduction of graphic symbols in *The Formulae of Plane Trigonometry* in this way:

"The pamphlet is published with two objects: first to exhibit a specimen of a collection of *Formulae of Pure Mathematics*, which I am preparing for publication; secondly to suggest the substitution of symbols for the cumbrous expressions 'sin', 'tan', 'cosec'... at present employed in Trigonometry [...]." "The use of symbols would save much time, space and labour."[33]

Further, the symbol must knot sense to representation:

"It seemed necessary, then, that symbols for such a purpose should be — easily written — suggestive (as far as possible) of their meaning — connected with each other — and, above all, distinct from all symbols at present in use [...]. I took as principles [...] to make them suggestive of their meaning, that they should represent (as nearly as possible) the grammatical lines to which these ratios belong."[34]

The new graphic symbols make it possible to designate mathematical realities with even greater perfection than alphabetical symbols: 'sin', 'cos'... which become no more than the names of the symbols. 'The new symbols would still be called 'sin', 'cos' so that the old names would not die out', he says.[35]

"When I use a word [...] it means just what I choose it to mean — neither more nor less", says Humpty Dumpty to Alice in *Through the Looking Glass*.[36] The nominalist affirmations of this character contrast with the use that the author of the *Alice Books*[37] makes of the symbol in his mathematical work. Yet, Alice reminds Humpty Dumpty of the submission to the linguistic code: "The question is [...] whether you *can* make words mean so many different things".[38] Some years later, in *Symbolic Logic*, Lewis Carroll's position aims to correct nominalism through common sense. Indeed he affirms that:

"I maintain that any writer of a book is fully authorised in attaching any meaning he likes to any word or phrase he intends to use. If I find an author saying at the beginning of his book, 'let it be understood that by the word '*black'* I shall always mean '*white'* and that by the word '*white'* I shall always mean '*black'*, I meekly accept his ruling, however injudicious I think it."[39]

For him the stake lies in resolving the difficulties discerned concerning the existential import of universal propositions by reducing them to a question of a language code:

"And so with regard to the question whether a Proposition is or is not asserting the existence of its Subject, I maintain that every writer may adopt his own rule, provided of course that it is consistent with itself and with the accepted facts of Logic."[40]

Later on, he will attempt to demonstrate that common sense, and even the nature of logic, must lead us to adopt a unique conclusion or pay the price of falling into the absurd. His examples underline this bias: what reader would actually have the idea of inverting the signifiers 'black' and 'white' which rest upon a convention too firmly established to be touched? Such a choice, even if he was to accept it, would remain, he says, contrary to common sense. His nominalism is only nominalism on the surface, as his conception of definition again bears out:

"It is evident that every Member of a *Species* is *also* a Member of the *Genus* out of which that Species has been picked, and that it possesses the *Differentia* of that Species. Hence it may be represented by a Name consisting of two parts, one being a Name representing any Member of the *Genus*, and the other being the *Differentia* of that Species. Such a Name is called a '**Definition**' of any Member of that Species, and to give it such a Name is to '**define**' it."[41]

It is the thing itself that is to be defined, moreover the definition must respond to the nature of the thing. This perspective seems to mark a step back in relation to his previous works, in particular *Euclid Books I, II* (1882), in which he defined the term 'definition' thus: "a definition explains the meaning of a word or phrase".[42] From then on, the use of the symbol continues to be strictly correlated to sense or to the thing designated. The symbol does not truly take on its value of letter in Lacan's sense. The formalisation of logic, on the other hand, rests upon the rupture with natural languages, contributing to reduce the importance of the imaginary in the field of mathematics, first aimed at by Lacan when he took as a model for the formalisation of psychoanalysis the letter, which he defined in a first period as 'the essentially localised structure of the signifier'.[43]

The mathematical symbol is rather related to the signifier for Carroll. If, for him, the point is to reduce the ambiguities of language, the symbol only counts as the representation of a sense or the designation of an object. In *Lituraterre* Lacan defines the letter more clearly still in opposition to the signifier, which he calls 'the semblant par excellence',[44] while the letter, through which writing operates, is grasped in its function of furrowing [*ravinement*] in the real: "What is offered to us to be read through that which, of language, exists, namely that which comes to be woven through the effect of its furrowing — it is on this basis that I define writing — cannot be ignored".[45] A captive of the problematic of representation, the mathematical symbol for Lewis Carroll remains a semblant. It retains a function of designating an object of the world and cannot become operational. This conception is even more at odds with Lacan's understanding of the specificity of the letter as assemblage, as he grasps it in *Encore* from the perspective of mathematics, when he says: "Letters *constitute* [*font*] assemblages. They don't *designate* assemblages, they *are* assemblages. They are taken as [*comme*] functioning like [*comme*] these assemblages themselves".[46] The conception of the mathematical symbol that Lewis Carroll proposes thus aims at making the real pass entirely over into the signifier, thus occulting the real in Lacan's sense, there where the letter reveals itself rather as an opening onto *jouissance*. Lacan underlines in *Lituraterre*: "What of *jouissance* is evoked where a semblant is ruptured, this is what in the real presents itself as a channelling. It is from the same effect that writing is in the real the channelling of the signified, that which has precipitated [*plu*] from the semblant in so far as it constitutes the signifier".[47] Moreover, the border-function of the letter delineates the frontier between the symbolic and the real. Lacan underlines: "Is the letter not... littorale [coast-line], figuring that one domain in its entirety makes for the other a frontier, because of their being foreign to each other, to the extent of not falling into a reciprocal relation".[48] The conception and

the use of the mathematical symbol advocated by Lewis Carroll aims rather at overcoming a barely distinguished limit between the signifier and the world of things.

However, for Lacan the mathematical letter does not exactly coincide with the notion of the letter as he defines it. Jacques-Alain Miller situates this divergence in the relation of the letter to *jouissance*: "Science, literature and calligraphy are three modes of using the letter. And what distinguishes literature and calligraphy, in Lacan's sense, from science is that they are two modalities of the letter where *jouissance* is not dismissed, but recuperated in the exercise of the letter itself".[49] From this perspective, the relation between the mathematical symbol and the real as Lewis Carroll understands it, is in fact a characteristic of science, beyond even the opposition between its Platonism and the emerging formalism.[50]

The real of science excludes sense, Jacques-Alain Miller also underlines in the seminar 'The Other which does not exist and its ethical committees'.[51] The real as residue of the signifying articulation proves itself to be antinomic to science, which, moreover, in resting upon the exclusion of the subject, necessarily evacuates the question of *jouissance*. Is the stake of the passage to formalism not partially found in this question for Lewis Carroll? Seeking to save ontology, he was also trying to preserve sense in the real, the question of being in its relation to language, even though his mathematical work tried to annul a knowledge which his literary work allows to emerge concerning the subject of the unconscious, a knowledge unknown, hardly glimpsed. Perhaps the sentiment of non-completion attaching to his logical work rests upon insoluble contradictions at the heart of his work between the successfully demolished solutions that classical logic had seemed to offer to the question of being and his intuitions concerning the subject of the unconscious, the condition for which, in a certain way, was being posed by modern science, particularly insofar as it emphasised nonsense at the heart of language — although for science, the stake is to operate a reduction of the subject to this point of nonsense, rejecting from then on the subject of the unconscious. Thus we may apprehend in the same movement Carroll's temptation to resort to modern science *against* these intuitions, as the essay *The Pillow Problem*[52] still testifies to, since it is destined to '*ordinary mathematicians*'[53] who are fated to occupy their minds by resolving mathematical problems so as to banish all-too-invasive obsessions in the event of difficulties experienced in finding sleep.

If his mathematical work marked posterity little, linguists, philosophers and mathematicians (including John Venn) set about unmasking the intuitions of an extraordinary modernity born by his literary work. The properly literary success of these works, their own resistance also testifies to the fact that they touch the unconscious. Carroll's intuitions concerning language in fact attest to their being correlated with a knowledge of the subject of the unconscious which is delineated in his lines. The mathematisation of his writing contributes to the unmasking of a knowledge of the impossible. The text of his major works shows itself to be governed, from then on, by a dialectic between an intuition of the unconscious and a rejection of the unconscious, which unfolds in terms of an opposition between the ideal of science and the knowledge of what it excludes.[54]

CARROLLIAN NEOLOGISMS: A WRITING OF THE SYMPTOM?

The S₁ and the object of the drive

The use of the letter in the *Alice Books*, and in *The Hunting of the Snark*[55] in particular, opposes itself to the use that Lewis Carroll makes of the symbol in his mathematical works. The neologisms of *Jabberwocky*,[56] just like the trajectory of the signifier 'snark', seem in this respect to condense a knowledge in opposition to the discourse of science, and bear witness to another relation of writing to the real than that induced by the symbols of mathematics. Thus, he writes *The Hunting of the Snark* by beginning with the end, after the conclusive phrase of the tale unexpectedly emerged into his mind during the course of a walk: how can one not see in this the trace of another relation to language, induced by the unconscious, than that advocated by classical logic?[57] Lewis Carroll himself underlined that all his nonsensical writings were in fact born from ideas and fragments of dialogue that came into his mind and which he noted down in order not to forget them, without always being able to relate them to a precise cause.[58] This remark concerning the creation of the work serves to underline the affinities of the latter with the formations of the unconscious. The neologisms are correlated to this. Carroll always affirmed that he did not know what *The Hunting of the Snark* meant, that he "hadn't meant anything but nonsense", and that "a whole book ought to mean a great deal more than the writer meant".[59] In the preface to this nonsensical poem, in the same way, he took refuge behind the theory of Humpty Dumpty who explained to Alice that neologisms were portmanteau words made up of [*qui assemblent*] two significations. Yet, he did not take his

character's thesis very seriously and refused to give an interpretation to the words forged in *Jabberwocky*.

Neologisms thus, first of all, have the value of enigmas, they are terms divested of signification but which nonetheless have sense in their articulation. The 'snark' engenders the whole of the story and on the other hand, designates the object of the quest of the protagonists. The signifier 'snark' is a signifier void of signification and without referent. In its function of engendering other signifiers it evokes the S_1, the asemantic signifier which designates the subject and governs signification. 'The enigma is the epitome [*comble*] of sense',[60] indicates Lacan in his unpublished seminar entitled *Les non-dupes-errent*; the Carrollian neologisms are an illustration of this insofar as their own enigma governs the sense of the story. "Enunciation is the enigma", Lacan also says in *Le Sinthome*:[61] the enigmatic signifiers 'snark' and 'Boojum' touch upon enunciation and evoke the S_1.

When he finally sees a 'snark', the Baker disappears. Is this an image of the annihilation of the subject in his encounter with the object? The snark in fact turns out to be a Boojum, conforming to the terrible prophesy of the Baker's uncle, who had predicted that if such should be the case he would disappear:

> "But oh beamish nephew, beware of the day,
> If your Snark be a Boojum! For then
> You will softly and suddenly vanish away,
> And never be met with again!"[62]

In the moment of this fatal encounter, the other protagonists only hear an unfinished statement: 'It's a Boo...'. This truncated signifier seems to touch the real, it evokes what is impossible to say, the rest of the signifying articulation. Thus, *The Hunting of the Snark* can be held to be an approach to the symptom. And in fact the snark evokes the S_1 in its function of representing the subject. Let us note in this respect that this snark, object of the Baker's quest, presents itself as a signifier whose referent is lacking, while the Baker lacks a signifier to designate it, as he has forgotten its name. The neologism 'snark' attests to being the signifier of his *jouissance*. From then on, it functions as a letter, a point of connection with the real, through the incomplete statement of the Baker, which establishes a relation of identity between the snark and the truncated neologism 'Boojum'.

Carrollian neologisms, through their enigmatic function, incontestably delineate 'the edge of the hole in knowledge',[63] and thereby indicate its foundational value for sense. R.D. Sutherland has stressed that despite the default of signification of neologisms, the verses of *Jabberwocky*, and particularly the first, conserve a sense, because their ordering is designed according to a syntactical structure which one can discover, and because they bear the mark of their function in the sentence.[64] Hence, they demonstrate their suitability for the evocation of 'the essentially localised structure of the signifier'.[65] The cogwheels of the first verse can serve to demonstrate this as follows:

> *"Twas brillig, and the slithy toves*
> *Did gyre and gimble in the wabe:*
> *All mimsy were the borogroves,*
> *And the mome raths outgrabe."*[66]

> *Twas___, and the ___y ___s*
> *Did ___ and ___ in the ___:*
> *All ___y were the ___s*
> *And the ___ ___s ___.*[67]

The marks of the plural, the 'y' of adjectival endings allow the reader to assign a grammatical function to each of the terms used. The observance of a coherent syntactical structure contributes to the readability of the poem which, although it is devoid of signification, nevertheless makes sense. When she comes to know this poem for the first time, Alice in fact exclaims:

> "It seems very pretty [...] but it's rather hard to understand! (You see she didn't like to confess, even to herself, that she couldn't make it out at all.) Somehow it seems to fill my head with ideas

— only I don't exactly know what they are! However *somebody* killed *something*: that's clear, at any rate —"[68]

Science and non-sense

Neologisms, by not designating a representable referent, or evoking a signification, essentially have the value of being cog-wheels, 'assemblages', once again converging with the function that Lacan assigns to the letter. Through the displacement thus operated from semantics to the centrality of syntax in his neologisms, Carroll paradoxically anticipated the shift achieved by Frege, which would allow logic to become the skeletal frame of mathematics. The literary writing of Carroll turns out to be more formalist, more modern than his logical works themselves. It is however the mathematisation of writing, the letter which allowed him to touch the unconscious, the real of the drive, sense in the real, as the functioning of the snark testifies to — as we have just exposed — but also the intuition of the subject of the unconscious which is deployed in the *Alice Books*.[69]

Lewis Carroll's art reveals itself to be an opening onto the real while the mathematisation of his writing aims at a reduction of the real by the signifier, following the example of science. Lacan stresses in *L'envers de la psychanalyse* that the subject of the unconscious logically follows from the advent of the discourse of science: "As stupid as it might be, the discourse of the unconscious responds to something connected with the institution of the discourse of the master itself".[70] Having said this, the conditions of objectivity necessary for its exercise suppose the exclusion of the subject of the unconscious. The consequences of logical formalism were not acceptable to Carroll when they called into question the fact that there is sense in the real. The metaphysics of ontology, such as he sought to preserve, is however shown to be incompatible with the intuition of the unconscious which is delineated in his literary works and that the formalism of his writing contributed to his becoming aware of. Although on occasion, in his mathematical and literary works, he leant upon the contributions of formalism as a support against the intuition of the subject of the unconscious brought through the *Alice Books* and *The Hunting of the Snark* (hence the apparently paradoxical character of these works), the foundations of modern science seem to have opened up for him a breach onto the real of the drive by highlighting the limits of the symbolic. Perhaps, in the last analysis, this is one of the reasons which impelled him to attempt in vain to save Aristotle.

Translated by Philip Dravers

1. J. Lacan, *Le Seminaire sur 'la lettre volée'* in *Écrits*, Seuil, Paris, 1966); *The Purloined Poe*, The John Hopkins University Press, Baltimore and London, 1988.
2. J. Lacan, *Seminar XX: Encore*, 1972-73, trans. Bruce Fink, Norton, London, 1998.
3. J. Lacan, *The Instance of the Letter in the Unconscious or Reason since Freud* in *Écrits: A Selection*, trans. Alan Sheridan, Tavistock/Routledge, London, 1977, p. 153.
4. J. Lacan, *Lituraterre* in *Ornicar?* No 41, 1971, p. 7-8.
5. *Encore, op. cit.* p. 46.
6. *Ibid.* at 47.
7. *Ibid.* at 44.
8. J.-A. Miller and E. Laurent, *L'Autre qui n'existe pas et ses comités d'éthiques*, unpublished, 1996-97, (18.12.96).
9. *Ibid.*
10. *Ibid.*, (15.1.97).
11. *Encore, op. cit.* p. 93.
12. *Ibid.*
13. J.-A. Miller and E. Laurent, *op. cit.* (15.1.97).
14. *Encore, op. cit.* p. 93. (As Fink points out '*contre-sens* means 'counter meaning', 'counter direction...' but in relation to the present study of Lewis Carroll it seems necessary to indicate that it can also mean 'nonsense' [TN].
15. J.-A. Miller and E. Laurent, *op.cit.*
16. *Ibid.*, (11.6.97).
17. *Ibid.*, (15.1.97).

18. *Ibid.*
19. *Ibid.,* (26.2.97).
20. *Ibid.*
21. *Ibid.* (11.6.97).
22. J. Lacan, *Le sinthome* in *Ornicar?* No 8, Hiver 1976-77, 10.2.76, p. 11.
23. J.-A. Miller and E. Laurent, *op.cit,* (11.6.97).
24. J. Lacan, *L'insu que sait de l'une-bévue s'aile à mourre* in *Ornicar?* No 12-13, December 1977, (16.11.76), p. 7.
25. J.-A. Miller and E. Laurent, *op.cit.* (11.6.97).
26. C. L. Dodgson, *An Elementary Treatise on Determinants*, Macmillan, London, 1867), p. iii.
27. J. Venn, *Symbolic Logic*, Macmillan, London, 1881.
28. L. Carroll, *Symbolic Logic,* Macmillan, London, 1896), New York: Dover Publications, 1958.
29. M. N. Cohen, ed., *The Letters of Lewis Carroll*, OUP, New York, 1979, p. 1100.
30. Venn interprets the propositions of the type 'all x is y' as hypothetical propositions, that is to say: 'if there exists one x then x is y'. On his diagrams the universal proposition 'every A is B' is noted by the existential negative: 'there exists no As which are not Bs'. It is represented by two sets with one intersection, the compartment A is filled in with the exception of the intersection. The compartment B remains empty, as does the intersection, so that the universal does not imply the existence of a subject that would verify it. Only the formal existential is noted by a cross. The empty compartments made the erroneous character of one of the most ancient laws of logic, through which existence could be deduced from the universal, appear.
31. J. Kristeva, *Recherches pour une sémanalyse*, Seuil, Paris, 1969, p. 142.
32. L. Carroll, *Symbolic Logic*, *op. cit.* p. 112.
33. The symbols introduced are: Sine ⟨symbol⟩, Cosine ⟨symbol⟩, Secant ⟨symbol⟩, Cosecant ⟨symbol⟩, Tangent ⟨symbol⟩ , Cotangent ⟨symbol⟩ , Versed-sine ⟨symbol⟩ . Charles Lutwidge Dodgson, *The Formulae of Plane Trigonometry*, (Oxford: James Wright, printer to the University, 1861,) p. 3.
34. *Ibid.*, p. 4.
35. *Ibid.*, p. 3.
36. L. Carroll, *Through the Looking Glass, and What Alice Found There,* Macmillan, London, 1872, in *The Annotated Alice*, ed. M. Gardner, Harmondsworth: Penguin, (1965), 1970, p. 269.
37. The *Alice Books* included *Alice's Adventures in Wonderland* (London, Macmillan, 1865), in *The Annotated Alice* and *Through the Looking Glass*, *and What Alice Found There, op.cit.*
38. L. Carroll, *Through the Looking Glass, op.cit,* p. 269.
39. L. Carroll, *Symbolic Logic, op.cit.*, pp. 165-6.
40. *Ibid.*
41. *Ibid.*, pp. 196-7.
42. Ch. L. Dodgson, *Euclid Books I, II,* Macmillan, London, 1882, p. 107.
43. J. Lacan, *The Agency of the Letter in the Unconscious, op.cit.*, p. 153.
44. J. Lacan, *Lituraterre, op.cit.,* p. 10.
45. J. Lacan, *Encore, op. cit.*, p. 67 [Trans. mod.].
46. *Ibid.* pp. 47-8.
47. J. Lacan, *Lituraterre, op. cit.*, p. 10.
48. *Ibid.*, pp. 7-8.
49. J.-A. Miller, *Remarques et questions*, *Lacan et la chose japonaise*, Navarin, col. *Analytica*, Paris, p. 103.
50. N. Charraud recalls the philosophical positions of the ordinary mathematicians, arranged in three categories: "Platonic realism believed in a pre-established mathematical universe which the mathematician only has to render explicit and discover, a Platonism which is opposed to the intuitionism for which a mathematical object only exists if it has been constructed, and not only postulated or defined. [...] Lastly, formalism also introduces objects which do not exist *a priori*, these objects get confused with their definitions given in axiomatic language. The object here is confused with its symbol". She also underlines the dominant Platonism of mathematicians, more or less avowed. *The Psychology of Invention in Mathematics*, Doctoral thesis in psychology, directed by Jean-Claude Maleval, submitted at the University of Rennes 2 in January 1998, p. 18.
51. J.-A. Miller and E. Laurent, *L'Autre qui n'existe pas et ses comités d'éthique', op. cit.*, (18.12.96).

52. Ch. L. Dodgson, *The Pillow Problems,* Macmillan, London, 1895; New York: Dover Publications, 1958.
53. *Ibid.*, p. xiv.
54. Cf. S. Marret, *Lewis Carroll: de l'autre côté de la logique,* (Rennes: Presses Universitaires de Rennes, 1995).
55. L. Carroll, *The Hunting of the Snark, an Agony in Eight Fits.,* Macmillan, London, 1867, in *The Annotated Snark*, ed. M. Gardner, Harmondsworth: Penguin, 1967/1974).
56. Nonsensical poem figuring in *Through the Looking Glass, op. cit.*, pp. 191-7.
57. *Cf.* Lewis Carroll *Alice on the stage* in *The Russian Journal and Other Selections from the Work of Lewis Carroll,* E.P. Dutteon & Co., New York, 1935; Dover Publications, New York, 1977, p. 192.
58. *Cf.* Préface de *Sylvie and Bruno*, Macmillan, London, 1889, in *The Penguin Complete Lewis Carroll*, 1st ed. Nonesuch Press, 1939, Penguin Books, 1983, p. 255.
59. *Cf.* Extract of a letter of Lewis Carroll of which the addressee remains unknown, cited in S. D. Collingwood, *The Life and Letters of Lewis Carroll*, T. Fisher Unwin, London, 1898, and in the preface of M. Gardner to *The Annotated Snark,* Harmondsworth: Penguin, 1979, p. 22.
60. J. Lacan, *Les non-dupes errent*, unpublished, (13.11.73).
61. J. Lacan, *Le Sinthome* in *Ornicar?* No 11, September 1977, 11.5.76, p. 9.
62. L. Carroll, *The Hunting of the snark*, *op. cit.* p. 64.
63. J. Lacan, *Lituraterre,* 1971, *op. cit.*, pp. 7-8.
64. *R. D. Sutherland, Language and Lewis Carroll,* La Hague: Mouton, 1970.
65. J. Lacan, *The Agency of the Letter in the Unconscious, op.cit.* p. 153.
66. L. Carroll, *Through the Looking Glass, and What Alice Found There*, *op. cit.* , p. 270.
67. R. D. Sutherland, *Language and Lewis Carroll, op. cit.*, p. 208.
68. *Through the Looking Glass, and What Alice Found There, op. cit.*, p. 197.
69. *Cf.* S. Marret, *Lewis Carroll: de l'autre côté de la logique, op.cit.*
70. J. Lacan, *Le Séminaire, Livre XVII, L'Envers de la psychanalyse*, 1969-70, Seuil, Paris, 1991, p. 104.