

OULIPO

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The name OuLiPo has already appeared in Word Ways in connection with "L'Egal Français," a bilingual vocabulary written for the group which bears that name.

What is OuLiPo, and who, and why?

OuLiPo stands for Ouvroir de Littérature Potentielle: "charity bazaar of potential literature." Ouvroir does not exactly mean "charity bazaar": it is, or used to be, a place where well-to-do ladies would gather to sew or knit clothes for the poor. This word was used to indicate, with self-deprecating irony, the communal, beneficial nature of OuLiPo's work. "Potential" was preferred to "experimental" because what counts with OuLiPo is the literature it makes possible rather than what it actually realizes.

The OuLiPo at present consists of eighteen members, for the most part mathematicians or writers, or mathematicians and writers. They meet once a month in Paris to present and discuss the results of their OuLiPian labors. These are devoted to the study and invention of novel constrictive literary forms. This preoccupation, different as it is from those of Word Ways logophiles, has produced results that may be of interest to them. First, however, a few brief general remarks.

Constrictive form of some kind or other is present in all literature (and indeed in all language). It might be argued, if it is acknowledged that poetry is the highest kind of literature, that the more elaborate the constraint, the more remarkable the result. In any case constrictive forms have always abounded. Most of them have become part of literary tradition and lost their power to provoke new ideas and feelings: a familiar example of such evolution is the sonnet, which was once a radical experiment and is now a convention. The purpose of the OuLiPo is to rediscover old forms that are unfamiliar (or that can be exploited in unfamiliar ways) and to invent new ones. It thus aims, on the one hand, at providing writers with appropriately new ways of saying whatever they have to say; and, on the other, at providing analytical and manipulative forms that, applied to pre-existing texts, can reveal unsuspected attributes latent in them.

The members of the OuLiPo are not concerned with evaluating the structures they discover in terms of the results they may or may not produce: only their potentiality is important. Many explore and ex-

plot that potentiality in the course of their work as individuals, but, in the context of the group, each structure discovered is given only a few non-exhaustive illustrations. The only apparent exception to this statement lies in certain new uses to which old forms are put, where it is by the exemplary demonstration itself that the OuLiPian point is made: thus the palindrome became a very different medium of expression after Perec composed one that was several thousand words long.

The OuLiPo was founded in 1960 by Francois LeLionnais and Raymond Queneau. The two men share an encyclopedic turn of mind, a passionate interest in new uses of language, and what one of them has called "mathematical gluttony." Both are distinguished mathematicians. LeLionnais is, among other things, France's foremost authority on chess problems. Queneau is a novelist and poet of the very first rank. The pair joined forces at a moment when Queneau was stalled in the composition of his One Hundred Thousand Billion Poems (see below) and LeLionnais was contemplating the creation of an experimental literary workshop. With the other's help, both projects were realized, and LeLionnais's postface to One Hundred Thousand Billion Poems can be considered the first manifesto of the OuLiPo.

The fact that Queneau and LeLionnais founded the OuLiPo is a crucial one in explaining the group. Both men have often stated that for them the transposition of mathematical structures to literature is the most fruitful method of creating new means of expression. Their initiative gave the group a mathematical orientation that is fundamental, one that exerts an influence even on those members who are (to their regret) innocent of advanced mathematics. Their approach has also led to the consideration of "purely" literary questions in mathematical terms: for instance, the problem raised by the sestina -- that is, in what circumstances can a sestina-type of permutation occur -- was originally raised by Queneau in the OuLiPo and partially solved by him. (It was later definitively solved by two American mathematicians.)

Since its foundation, the OuLiPo has little by little grown to its present size. Its French membership includes Noel Arnaud, Marcel Benabou, Jacques Bens, Claude Berge, Paul Braffort, Jacques Duchâteau, Luc Etienne, Paul Fournel, Francois, LeLionnais, Jean Lescure, Michèle Métail, Georges Perec, Raymond Queneau, Jean Queval, and Jacques Roubaud. There are three foreign members: André Blavier (Belgium), Italo Calvino (Italy), and Harry Mathews (USA). With the exception of André Blavier, all members live at least part of the time in Paris.

To eliminate theoretical questions as much as possible, I have simply listed some of OuLiPo's achievements that may interest readers of Word Ways. The only division is into work that uses pre-existing structures and texts and that which uses new structures. Those who read French can find much of the material referred to in this article (and much more besides) in a paperback, La Littérature Potentielle (Collection "Idees", Gallimard, Paris), published by the OuLiPo in 1973.

Work Using Pre-Existing Materials

a) The lipogram. A number of interesting lipograms (in a, e, etc.) have been written by various members of the OuLiPo. However, all pale beside Georges Perec's monumental La Disparition (Denoel, Paris, 1969), a novel exceeding Wright's Gadsby in length and no doubt in quality. Composed entirely without the letter e, the work is an elaborate, funny story of unbelievable virtuosity: some critics even failed to notice that the book was a lipogram. Here is a paragraph from the postface, in which the author explains his reasons for undertaking such a task:

Ainsi naquit, mot à mot, noir sur blanc, surgissant d'un canon d'autant plus ardu qu'il apparaît d'abord insignifiant pour qui lit sans savoir la solution, un roman qui, pour biscornu qu'il fût, illico lui parut plutôt satisfaisant: D'abord, lui qui n'avait pas pour un carat d'inspiration (il n'y croyait pas, par surcroît, à l'inspiration!) il s'y montrait au moins aussi imaginatif qu'un Ponson ou qu'un Paulhan; puis, surtout, il y assouvissait, jusqu'à plus soif, un instinct aussi constant qu'infantin (ou qu'infantil): son goût, son amour, sa passion pour l'accumulation, pour la saturation, pour l'imitation, pour la citation, pour la traduction, pour l'automatisation.

b) The palindrome. Perec again outdid the rest: in 1969 he constructed a palindrome of over 5000 letters. It began and ended:

Trace l'inégal palindrome. Neige. Bagatelle, dira Hercule. Le brut repentir, cet écrit né Perec. L'arc lu pèse trop, lis à vice-versa Désire ce trépas rêvé: Ci va! S'il porte, sépulcral, ce repentir, cet écrit ne perturbe le lucre: Haridelle, ta gabegie ne mord ni la plage ni l'écart.

Translation: Trace the unequal palindrome. Snow. A trifle, Hercules would say. Rough penitence, this writing born as Perec. The read arch is too heavy: read vice-versa Desire this dreamed-of decease: here goes! If he carries, entombed, this penitence, this writing will disturb no lucre: Old witch, your treachery will bite into neither the shore nor the space between.

c) $N + 7$ (in French, $S + 7$). N here stands for noun, and $N + 7$ is a particular form of the more general $W + n$, where W stands for word. $N + 7$ means simply that every noun in a given text is to be replaced by the seventh noun following it in a given dictionary.

This is perhaps the best-known OuLiPian invention. I include it in the first half of the list because it is nearly always applied to pre-existing texts. Here are several treatments of the last sentence of Wuthering Heights.

Original: I lingered round them, under that benign sky; watched the moths fluttering among the heath and hare-bells; listened

to the soft wind breathing through the grass; and wondered how anyone could imagine unquiet slumbers, for the sleepers in that quiet earth.

N + 7, Random House Unabridged: I lingered round them, under that benign skyflower; watched the Mother Gooses fluttering among the heathenese and haircots; listened to the soft windcheater breathing through the grasshopper; and wondered how anyone could imagine unquiet slurs, for the sleeping chairs in that quiet earthiness.

N + 7, Harrap's Shorter English-French Dictionary: I lingered round them, under that benign skyway; watched the motives fluttering among the Hebraism and harms; listened to the soft windmill breathing through the gratuitousness; and wondered how anyone could imagine unquiet smacks, for the slenderness in that quiet ease.

W + 10, Harrap's (where W = noun, verb, adjective): I lived round them, under that bestial slacker, wove the motorcades following among the hecatomb and harlots, lobbed to the sorrowful windrow brimming through the grave; and wrangled how anyone could immolate unreceipted slynesses, for the slickers in that quotable easement.

d) Combinatorial techniques include verbal permutation (e.g., the first noun in a work becomes the last, and vice versa), a process studied at length and with considerable diversity by Jean Lescure, the inventor of N + 7; and the perverb, which has been treated by Harry Mathews in both English and French. A perverb consists of the first part of one proverb joined to the last part of another, an achievement of no OuLiPian interest except when (1) the number of proverbs used as source material is strictly limited, and (2) when the proverbs are organized into new forms. Here is an example taken from Mathews' Selected Declarations of Dependence (Eternal Network, Toronto), a book based in its entirety on a group of 46 proverbs. As will readily be seen, in this poem the perverbs are grouped into stanzas determined by initial and final identities.

The early bird waits for no man.

The early bird gathers no moss.

A bird in the hand is soon parted.

The early bird gets what you can do today.

Red sky at morning gets the worm.

The early bird is soon parted --

The early bird on the other side of the fence!

A bird in the hand, twice shy.

The early bird leaves no stone unturned,

A rolling stone gets the worm.

The early bird is another man's poison.

The early bird from little acorns grows.

A bird in the hand waits for no man.
 Early bird, unlucky in love.
Sticks and stones get the worm.

The early bird has its day.
 The early bird, and half a dozen of the other:
 A bird in the hand is better than no bread.
 The early bird is worth two in the bush.
Time and tide get the worm.

e) Definitional and semi-definitional literature. The former exploits the substitution of words with their dictionary definitions to create new texts. The second complicates the procedure by (1) allowing suggestive definitions such as those used by the compilers of crossword puzzles and (2) requiring the user to reduce two differing and even opposite statements to an identical lexicographic form. The process is analogous to Carroll's doublets and no less fascinating. Unfortunately, its demonstration is far too long for this article.

f) Isograms, called by the OuLiPo heterograms. Here again, Perec has done extraordinary work. He first wrote and published a series of poems composed of isograms using the eleven most frequent letters in French, which are contained in the word Ulcérations, his title. He is at present composing a far longer work in which the eleventh letter of this series is successively replaced by all the letters in the alphabet not among the other ten. Each section is composed with one such variable letter and consists of eleven eleven-line stanzas. Meanwhile, Perec has recently published a beautiful series of poems about the quarter in Paris in which he grew up: here, each poem consists of twelve twelve-letter lines. Of the twelve letters, eleven are those most frequent, and the twelfth is "free". Here is an example, with the undetermined letter represented by +:

CRU+ASTIONLE
 +URESTLOINCA
 CUITONRASEL+
 IERCLOSTANU+
 ITELARCOUS+N
 C+RONETULIAS
 LACOURIN+EST
 RUCTI+LEASON
 +LASCOURTNIE
 RECVLATION+IS
 TOIRE+LANCSU
 RLANUITEC+OS

Cru bastion, le mur est loin; ca cuit,
 on rase l'hier clos, ta nudité, l'arc où,
 synchrone, tu lias la cour indestructible
 à son glas court nié, recu là.

ton histoire:
 blanc sur la nuit,
 échos

Translation: Believed a bastion, the wall is far off: this smarts -- you skim over shut yesterday, your nakedness, the arch where you synchronously bound the indestructible courtyard to its short, denied knell, there received. Your story: white against the night, echos.

g) Other structures or materials utilized by the OuLiPo have been:

poems in Algol (a computer language); "intersections" of literary works (the vocabulary or other elements that two or more literary works may have in common, used to form a new text -- an application of Boolean algebra and set theory); homophonic translation and transformation; the cento; homosyntaxism (abstracting the syntax of a passage and using it as a formula for a new text); poems made up of lines of blank verse found in a given prose work (Dickens would be all too easy!); "snowballs" -- successions of words of one, two, three, . . . letters. Here the record is held by the late Latis, who constructed the following twenty-two word example:

O le bon sens épais duquel sortent finement certaines gracieuses jésuiteries! Rengorgement, calembredaine consciencieuse, épistémologique abasourdissement disproportionnant recroquevillements, impressionnabilités crétinoembryonnaires, hyperschizophréniques pseudotransfigurations!

New Structures

a) One Hundred Thousand Billion Poems. This work by Raymond Queneau is the first, the best known, and one of the most fascinating products of the OuLiPian approach. The book consists of ten sonnets, each line of which is interchangeable with its counterpart in the other sonnets. (Thus, the first line of the first sonnet can be followed by the second line of sonnets 2 to 10, as well as by the one printed beneath it.) The pages of the published book (Cent Mille Millions de Poèmes, Gallimard, Paris, o.p.) are sliced into fourteen bands on a spiral spine, so that the reader can compose the sonnet of his choice from the 10^{14} available to him.

In his introduction, Queneau says that he followed these rules in writing the sonnets:

"(1) The rhymes had to be neither too common . . . nor too extraordinary . . . It was necessary to have at least 40 different words for the octaves and 20 for the sestet. It would not have mattered at all if the same words had occurred at the same point in the rhyme scheme since they would not be read at the same time: I allowed myself this licence only with the word beaux, used once as a noun and once as an adjective.

"(2) Even if it was not perfectly lucid, each sonnet had to have its own theme and continuity, otherwise the remaining $10^{14} - 10$ would not have the same charm.

"(3) The grammatical structure was to be the same and remain unchanged by the substitution of one verse for another. An easy solution would have been to make each verse a main clause. I only allowed myself this convenience in Sonnet No. 10 (the last one!). I also made sure that there was no disagreement in gender or number between the verses of the different sonnets."

b) One result of Jean Lescure's work in permutations was the

Lescurian Square: given four words, combine them in every possible order (there are 24 possibilities). The following example (from Mathews, op. cit.) is a special case of a Lescurian square and is mainly quoted here because it is in English: but it should be obvious that the fact that the material used is not original in no way affects the originality of the structure. (It should also be noted that the square has been left incomplete -- but only because the remaining six lines are redundant, as Word Ways readers will quickly see.)

A Partial Survey of Western European Holiday Migrations

EXODUS A

Leeds' roads roam to all?
 Rome's Leeds' road to all --
 All Leeds rode to Rome.

EXODUS B

All Rome leads to roads.
 Rome all leads to roads,
 Leads Rome all to roads:
 "Roam all leads to roads!"
 Roads lead Rome to all?
 All leads roam to Rhodes,
 Lead all Rome to Rhodes.

RETURN A + B

Rhodes roams leads to all?
 Roads lead all to Rome,
 Lead all Rhodes to Rome.
 Rome-roads lead to all?
 All roam roads to Leeds!
 Rome rode all to Leeds.

SUMMARY

All roads roam to Leeds.

c) An interesting discovery, related to the preceding combinatorial forms, is Luc Etienne's use of a Möbius strip to transform specially written poems into new ones, sometimes with opposite meanings. To illustrate the simplest application: if the order of the lines of a poem is originally a b a'b' on one side of a (normal) strip and c d c'd' on the reverse side, when the two ends are twisted and joined to form a Möbius strip, the order of the lines becomes a c b d a'c'b'd'. This transformation corresponds to the old rimes brisées or equivoque (described in Bombaugh's Oddities and Curiosities of Words and Literature). Two twist (or section) strips produce more complex changes.

d) Queneau has written a simple "Tale of Your Choice" to demonstrate the possibility of multiple-choice situations and plots. Paul

Fournel has applied the same principle to the theater (L'Arbre à Théâtre), ingeniously simplifying it so the number of alternatives remains practical without having the audience, who vote on the choices made, realize that the possibilities have been limited in any way.

e) Queneau has put forward, as a tool for analysis as well as for invention, the notion of "x takes y for z", where x, y, and z stand for characters in a story or play: situations involving identities or characteristics and the confusions between them can be schematically dealt with.

f) Jacques Roubaud, poet and mathematician, published his first book of poems (€, Gallimard, Paris) with a set of instructions providing for three different readings of the book: (1) according to possible chronological groupings of the chips of the game of Go, (2) according to groups determined by "mathematical signs non-mathematically interpreted", and (3) according to the progress of a historically recorded game of Go. (A fourth reading -- whatever the reader felt like doing -- was also allowed.) More recently, Roubaud has written a delightful story, "Le Princesse Hoppy", based on Kleinian theory.

g) Michèle Métail has applied the carom-aroma-Roman ... procedure to words which are logically linked by "of" into "genitive skeins" of extraordinary and fascinating length.

h) In conclusion, Italo Calvino's book Il Castello dei Destini Incrociati (Einaudi, Milan, 1973) deserves a place apart, since it is the most notable example to date of what the OuLiPo calls semantic creation: semantic is here used antithetically to syntactic. All the structures and methods so far discussed have been syntactic, that is, they have dealt with language in its concrete or material aspect (even if "Tale of Your Choice" and "x takes y for z" have broader implications). Semantic structures, on the other hand, affect less the physical material of literature (letters, syllables, words, sentences, etc.) than its meaning. The OuLiPo has done little work in this domain, a fact that makes Calvino's work all the more salient. The stories in his book -- the behavior of his characters and the events in which they participate -- are all derived from the multiple readings of a single arrangement of a deck of Tarot cards into vertical and horizontal ranks, each of which is used twice, once in each direction. A detailed description of the method is given in the book.