# Heptameron (1989)

## **General description**

The poetry collection Heptameron consists of seven books: five main books and two subsidiary books. The basic books each comprise poems the number of which is determined by a power four. The Book of the Word, for example, contains  $4^1 + 1$  poems. The First Book of the Flesh contains 42 + 4 poems. The Second Book of the Flesh contains 4<sup>3</sup> + 16 poems. The Book of the Soul contains 4<sup>4</sup> + 64 poems and the Book of the Spirit contains 45 + 256 poems. This makes a total of 1,705 poems. The last two books, The Books of Punishment and Reward (called, for the sake of convenience, The Book of Punishment and Reward) each contain a random number of poems, determined by the degree to which the system in the five basic books has been adhered to or not. In this particular case, this resulted in 194 poems. So the entire Heptameron collection was to consist of 1,705 + 194 poems = 1,899 poems. However, the system is not adhered to in the second half of the Book of the Spirit - it exceeds itself or restricts itself in accordance with the content or the book itself, which claims that no system can be faultless and perfect. For that reason, 305 poems have been removed from the Book of the Spirit. So Heptameron consists of a total of 1,899 poems - 305 poems = 1,594 poems.

To describe the structural cohesion of the collection of poetry, I would like to use an image that perhaps is not completely adequate but that gives a good impression of the inner cohesion of the collection. The first poem we can refer to as a cell. A cell is characterised i.a. by an information code that contains information as to how that cell is to develop, grow and divide in order to become a larger organism. A code that determines that this cell becomes precisely this or that organism. If we call this point of departure the starting poem a cell, then – to stick to the image – the subsequent corpus of poems must develop and grow out of this cell, since a transfer from part to part determines how the 'organism' the poetry collection grows. This takes place in the poetry collection. An important information code is transferred from poem to poem, from page to page, from book to book – an information code which ensures the inner cohesion of the poetry collection.

The cell unfolds, divides into ever larger contexts, acquires 'body' and 'soul' and 'spirit'. The poem cycle unfolds into ever larger linguistic structures, more and more layers of the linguistic structure are included in the text and always in such a way that an important piece of information is transferred from the previous poem and the previous book to the next poem and the next book. And in such a way that the poems semantically (i.a. because a semantic code is transferred) tell this inner story in the deeper structural layers. The poetry collection narrates, you could say, its own structural and genetic story.

Let poem O in The Book of the Word be a cell that grows and divides into four new cells. Then The Book of the Word consists of 4 poems + the initial poem = 5 poems. Each of the four new cells divides once more into four new cells in The First Book of the Flesh. So The First Book of the Flesh consists of  $4^2$  + (the four initial poems) = 20 poems. Each of the new 16 cells now divides once more into four new cells in The Second Book of the

Flesh. So The Second Book of the Flesh consists of  $4^3$  + (the sixteen original poems) = 80 poems. Each of the sixty-four new cells now divides again into four new cells in The Book of the Soul. So The Book of the Soul consists of  $4^4$  + (the sixty-four original poems) = 320 poems. Each of the 256 new cells now divides again into four new cells in The Book of the Spirit. So The Book of the Spirit consists of  $4^5$  + (the original 256 poems) = 1,280 poems.

As can be seen, the original cell divides into more and more cells, which in turn divide until the organism has been formed. And always in such a way that an important information code ensures and governs the process, the division, the course of growth. In such a way that the inner cohesion of the structure of the poetry collection is guaranteed. There is also room for 'mutations', random changes in this control code, but only within certain limits. If these limits are exceeded, a correction takes place. The result of this correction can be seen in such poems as The Book of Punishment and Reward: The random mutations ensure a certain neo-formation of the structures. The correction ensures that these neo-formations do not get out of control and break down the structures. A cell has grown via a controlled information process into an organism.

## **Special description**

The idea underlying the poem collection Heptameron is, on the basis of a single poem (the axiom) to develop a text corpus in which increasingly larger areas of the linguistic structures are involved. The initial axiom starts with the beginning of St John's Gospel. This poem consists of a defined quantity of various kinds of sign (letters, linguistic categories, inflections, word classes, sentence members, clauses) and a defined reciprocal sequence of these signs. Every sign combination has what is called an information measurement, an entropy  $H = \Sigma p \log l/p$ , which indicates which order governs the combination, partly with regard to the reciprocal quantitative ratio and partly with regard to their reciprocal sequential ratio (the formula for the reciprocal sequential ratio of the signs is not the above-mentioned formula. It is much more complicated and will not be reproduced here. I only mention this because the two formulae are so often confused.) More generally: every sign combination has an entropy that indicates which order governs it.

The first poem, the axiom, the poem with the code name O is transferred unaltered with regard to the quantity and order of the letters to the next page and is now given the code name OP, which indicates that the transformation that has taken place is predetermined. The linguistic category structure of this poem (OP) is transferred to the four surrounding poems via an aleatoric distribution of the elements of the poem OF), via a probability distribution of the elements of the structure (the poem OF), via a probability distribution of the elements of the structure (OS) and via a statistical, average distribution of the elements of the structure (OG). These five poems constitute The Book of the Word. An important item of information has been transferred from the poem O to the four surrounding poems. The code for the nature of the information transfer is indicated above each poem. This code could be referred to as the genetic code. Each of the four corner poems in The Book of the Word are now transformed as regards their word-class structure to form The First Book of the Flesh (e.g. OFP) and this structure undergoes, as far as each poem is concerned, a similar transformation as described

above, first an aleatoric (e.g.  $OF_pA$ , then a free  $(Of_pF)$ , then one determined by probability  $(Of_pS)$  and one by statistics  $(Of_pG)$ . The First Book of the Flesh will then consist of 16 poems plus the four 'core poems' transferred from The Book of the Word = a total of 20 poems. The 16 corner poems from The First Book of the Flesh are now transformed with regard to their inflectional structure to The Second Book of the Flesh (e.g.  $OF_pFP$ ) and this structure undergoes, as far as each poem is concerned, a similar transformation as described above, first an aleatoric (e.g.  $OF_pF_pA$ ), then a free (e.g.  $OF_pF_pF$ ), then one determined by probability (e.g.  $OF_pF_pS$ ) and one by statistics (e.g.  $OF_pF_pG$ ). The Second Book of the Flesh will then consist of 64 poems plus the 16 'core poems' transferred from The First Book of the Flesh = 80 poems.

The 64 corner poems from The Second Book of the Flesh are now transformed with regard to their syntactical structure to The Book of the Soul (e.g. OF<sub>p</sub>F<sub>p</sub>FP) and this structure undergoes, as far as each poem is concerned, a similar transformation as described above, first an aleatoric (e.g.  $OF_pF_pF_pA$ ), then a free (e.g.  $OF_pF_pF_pF$ ), then one determined by probability (e.g.  $OF_pF_pF_pS$ ) and one by statistics (e.g.  $OF_pF_pF_pG$ ). The Book of the Soul will then consist of 256 poems plus the 64 'core poems' transferred from The Second Book of the Flesh = 320 poems. The 256 corner poems from The Book of the Soul are now transformed with regard to their clausal structure to The Book of the Spirit (e.g.  $OF_pF_pF_pFP$ ) and this structure undergoes, as far as each poem is concerned, a similar transformation as described above, first an aleatoric (e.g. OF<sub>p</sub>F<sub>p</sub>F<sub>p</sub>F<sub>p</sub>A), then a free (e.g.  $OF_pF_pF_pF_pF_pF$ ), then one determined by probability (e.g.  $OF_pF_pF_pF_pS$ ) and one by statistics (e.g. OF<sub>p</sub>F<sub>p</sub>F<sub>p</sub>F<sub>p</sub>G). The Book of the Spirit will then consist of 1,024 poems plus the 256 'core poems' transferred from The Book of the Soul = 1,280 poems. But, as mentioned, the structure is either exceeded or restricted or broken here in The Book of the Spirit in accordance with the content of the whole of Heptameron, which means that in the structure of The Book of the Spirit 305 poems are lacking.

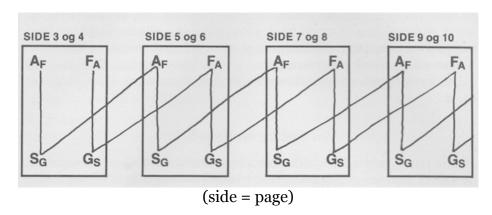
Generally speaking, one can express the above as follows: that an important code from a previous book is transferred to the next book. It is constantly ensured that the code of this information is preserved within fairly precisely determined limits. When these limits are exceeded (see the technical description) or are kept completely precisely, correction and rewarding takes place with poems for respectively The Book of Punishment and Reward. The codes of the individual poems in this book indicate which poem the correction is related to (e.g.  $OF_pF_pF_pF_pG$ -X), and which poem the reward is related to (e.g.  $OF_pF_pF_pF_pG$ -1), with X, Y, Z indicating correction, and 1, 2, 3 indicating reward.

The genetic code of each individual poem in Heptameron can now be read in such a way that it indicates the origin of the poem (the series of signs) and the level in the structure (p = o, the category structures; p = 1, the word-class structures; p = 2, the syntactical structures – where p indicates the process; and also indicate what transformation we are dealing with (A = aleatoric, F = free, S = probable, G = static, average, P = predetermined, X Y Z = corrections, 1 2 3 = rewards). Let us take an example. The code  $OF_pF_pA$  indicates that the poem derives from the poem  $OF_pF_p$ , which in turn derives from the poem  $OF_pF_p$ , which in turn derives from the poem O = and it indicates that we are at the inflectional structural level (p = 2) and it further indicates that the transformation that takes place in this particular structure is aleatoric (the final A).

The inner structure of the Heptameron collection is also held together by a semantic regulation, in that the concrete vocabulary of all the 'core poems', the central poems, is transferred according to precisely laid-down rules to the respective corner poems (the four poems surrounding the core poem). See under the technical description.

As a curiosity, it can be mentioned that the graphic model of the structure of Heptameron has a certain similarity with the graphic model of the so-called double helix as depicted in James D. Watson's book *The Double Helix*. The double helix model expresses graphically one of the most important connections in genetics. It portrays graphically the way in which the genes are linked together structurally.

If we look at a random page in Heptameron, for example pages 3 and 4, an A poem on page 3 will be linked to an F poem on page 4, and an F poem on page 3 to an A poem on page 4. Similarly, an S poem on page 3 will be linked to a G poem on page 4, and a G poem on page 3 to an S poem on page 4. The AF poems, in order to complement themselves, will 'search' for SG poems, and FA poems will 'search' for GS poems for the same reason. Graphically, this can be expressed as follows:



Every individual page in Heptameron also has a certain structural similarity as seen in the X-ray of the double helix, namely the famous X.

Finally, I would like to more than just imply that the poem collection Heptameron and the poem collection Home belong together. One could say that they are two editions of the same book. Or that Heptameron is the 'inner' Home, while Home is the 'outer' Heptameron. Heptameron could begin there at the centre of Home where certain poems are lacking, and Home could begin there in the periphery of Heptameron where likewise certain poems are lacking.

## **Technical description**

Axiom: The first poem (poem O), which is a slightly rephrased and shortened version of St John's Gospel, I, vv.1-24.

#### **Transformation rules**

### For The Book of the Word

Poem O is transformed completely unaltered with regard to the quantity and sequence of the letters to the first core poem (the poem in the middle). The category structure of this poem is transformed to the surrounding four corner poems in this way: to the A poem via an aleatoric distribution of the category elements while the quantity remains unaltered, to the F poem via a distribution of the category elements, while as far as the quantity is concerned, a deviation of one element for each category, to the S poem via a probability distribution of the category elements while the quantity is determined by the probability matrix, to the G poem via a statistical element quantity and a free element distribution – permitted deviations: each category may quantitively not deviate by more than one element.

#### Semantic transformation rules:

All the words of the core poem are freely transformed to the four corner poems, permitted deviation: 1 word.

#### For The First Book of the Flesh

The four corner poems from The Book of the Word are transformed unaltered determined with regard to the word-class structure of the poems when it comes to quantity and distribution of the four core poems of The First Book of the Flesh (the poems in the middle). Each of the determined word-class structures of these poems is transformed to the respective four surrounding corner poems in this way: to the A poems via an aleatoric distribution of the word-class elements while the quantity remains unaltered, to the F poems via a free distribution of the word-class elements, while as far as the quantity is concerned, the following deviation is permitted: not more than half of the classes may deviate by one element, to the S poems via a probability distribution of the word-class elements while the quantity is indicated by the probability matrix, to the G poems via a statistical element quantity and a free element distribution – permitted deviation: not more than half the classes may quantitively deviate by one element.

#### Semantic transformation rules:

The words of the four corner poems in The Book of the Word accompany the respective core poems to The First Book of the Flesh and are now freely transformed over the five new poems (core poem plus the four corner poems). Only nouns, adjectives, verbs and pronouns are taken into account. Permitted deviation: 2 words.

#### For The Second Book of the Flesh

The 16 corner poems from The First Book of the Flesh are transformed unaltered determined with regard to the inflectional structures of the poems when it comes to quantity and distribution of the 16 core poems (the poems in the middle) of The Second Book of the Flesh. Each of the determined inflectional structures of these poems is transformed to the respective four surrounding corner poems in this way: to the A poems via an aleatoric distribution of the inflectional elements while the quantity remains unaltered, to the F poems via a free distribution of the inflectional elements, while as far as the quantity is concerned, the following deviation is permitted: only one third of the instances may deviate by one element, to the S poems via a probability distribution of the inflectional elements while the quantity is indicated by the probability matrix, to the G poems via a statistical element quantity and a free element distribution – permitted deviation: only one third of the instances may quantitively deviate by one element.

#### Semantic transformation rules:

The words of the 16 corner poems in The First Book of the Flesh accompany the respective core poems to The Second Book of the Flesh and are now freely transformed over the five new poems (core poem plus the four corner poems). Only nouns, adjectives and verbs are taken into account. Permitted deviation: 3 words.

#### For The Book of the Soul

The 64 corner poems from The Second Book of the Flesh are transformed unaltered determined with regard to the syntactic structures of the poems when it comes to quantity and distribution of the 64 core poems (the poems in the middle) of The Book of the Soul. Each of the determined syntactic structures of these poems is transformed to the respective four surrounding corner poems in this way: to the A poems via an aleatoric distribution of the syntactic elements while the quantity remains unaltered, to the F poems via a free distribution of the syntactic elements, while as far as the quantity is concerned, the following deviation is permitted: only one quarter of the sentence members may deviate by one element, to the S poems via a probability distribution of the syntactic elements, while the quantity is indicated by the probability matrix, to the G poems via a statistical element quantity and a free element distribution – permitted deviation: only one quarter of the sentence members may quantitively deviate by one element.

#### Semantic transformation rules:

The words of the 63 corner poems in The Second Book of the Flesh accompany the respective core poems to The Book of the Soul and are now freely transformed over the five new poems (core poem plus the four corner poems). Only nouns and adjectives are taken into account. Permitted deviation: 4 words.

# For The Book of the Spirit

The 256 corner poems from The Book of the Soul are transformed unaltered determined with regard to the sentence structures of the poems when it comes to quantity and

distribution of the 256 core poems (the poems in the middle) of The Book of the Spirit. Each of the determined sentence structures of these poems is transformed to the respective four surrounding corner poems in this way: to the A poems via an aleatoric distribution of the sentence structure elements while as far as the quantity is concerned no deviation is permitted, to the F poems via a free distribution of the sentence structure elements, while as far as the quantity is concerned no deviation is permitted, to the S poems via a probability distribution of the sentence structure elements, while the quantity is indicated by the probability matrix, to the G poems via a statistical element quantity and a free element distribution – permitted deviation: none.

#### Semantic transformation rules:

The words of the 256 corner poems in The Book of the Soul accompany the respective core poems to The Book of the Spirit and are now freely transformed over the five new poems (core poem plus the four corner poems). Only nouns are taken into account. Permitted deviation: 5 words.

#### For The Book of Punishment and Reward

The poems in The Book of Punishment are 'correction poems' which indicate that the above-mentioned rules have not been observed. The correction consist in adding as many poems as the number of deviations by which the system has been overstepped. If the system has, for example, been overstepped by two deviations, two correction poems are added, etc. The structure of the correction poems must observe to the letter the system that has been overstepped – although the semantic transformation rules are not taken into account.

The genetic code is indicated precisely where the overstepping of the system has taken place.

The poems in The Book of Reward are 'surplus poems' which indicate that the abovementioned transformation rules have not only been observed but observed even without the permitted deviations. The number of surplus poems is *ad libitum*. The structure of the poems is also *ad libitum*. The genetic code indicates precisely where in the system the precision has taken place.

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