

ON GOD AND BOUNDARIES: T.T. Cloete's *Tristetrahedronis* as a model of expanding boundaries

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Abstract

The significance and the possibilities of defining borders as a means to create perspective of what lies beyond limitation can be introduced through poetic strategies. In a volume of poetry named 'Driepas' (1989), the poet T.T. Cloete explores the signification of tripartite forms in nature, in science, in art and as symbols in places of worship. This voyage of discovery concentrates in a poem under the title Tristetrahedronis ('Driepas' 1989:160). The poet counterbalances concepts of finiteness and infinity, exploiting poetry's convention of superfluous design. The worship of a Trinitarian Creator is perceived as simultaneously a restriction and a creative discovery of infinity. This strategy reveals the possibility of an 'expanding universe' where each limit functions at the same time as point of reference and as signification of what lies beyond. The outcome of the poetic process is not the arrival at a final conclusion but the implication of an imaginary dance transcending limitation. Signatures of a Divine Creator, perceived as the personification of a multifaceted geometric structure, the tristetrahedron, can be traced in the poem's design as clues to the poet's quest.

Outline of Issue

With respect to the relation to reality, metaphor is to poetic language what the model is to scientific language. Now in scientific language, the model is essentially a heuristic instrument that seeks, by means of fiction, to break down an inadequate interpretation and to lay the way for a new, more adequate interpretation...The model belongs not to the logic of justification or proof, but to the logic of discovery. - Ricoeur (1993:240)

Poetry has been referred to as *bound speech* (*gebundene Rede*), language subjected to additional constraint (Preminger 1993:983).¹ Verse form does more with less by heightening the degree of design or order. This excessive design gives to the language of poetry a supercharged quantity of meaning, a semantic density not found in ordinary prose (Brogan in: Preminger, 1993:983). Poetry can be described as confined multiplicity. In a publication under the title *Redrawing the Boundaries*, Greenblatt and Gunn (1992:5) pointed out: 'Any study of literature...is necessarily bound up implicitly or explicitly with an interrogation of imaginary boundaries...'

In this article the creative use of poetic language will be analysed in an attempt to gain insight into a strategy of restriction as a means to understand infinity and movement, which implies an overcoming of restriction. *Limit* is a fundamental concept of Mathematics

1 Cf. Ilson 1984 : *bound* Past tense and past participle of *bind*. -adj. 1.a. Confined by bonds; tied. b. Restricted; obstructed.

(Gandy in: Bullock et al 1988:478). The poem which will be analysed, incorporates mathematical principles which can be compared to the mentioned poetic bounding. In utilising such principles the opposition or / and interconnectedness of limitation and limitlessness are dramatised.

The paradoxical urge to signify infinity by means of and in spite of finiteness can be identified as a recurring theme in T.T.Cloete's oeuvre. This theme is well represented in his poem *Tristetrahedronis (Driepas* 1989:160) which consists of four lines, organised into two stanzas. The poem affords the opportunity to explore the functioning of boundaries or limitations in a poem.

A deliberate signification of bound space in Cloete's poem can be contrasted to deconstruction and postmodern tendencies to destabilise boundaries.² The notion of 'expanding boundaries' differs from what Rowe (in Greenblatt & Gunn 1992:179) typifies as 'the transgressive function of postmodernity'. The following semantic values of the concept *expand* indicate possibilities for the analysis of the examined strategies:

1. *To open up or out; spread out; unfold.*
2. *To increase the dimensions of; cause to swell; distend.*
3. *To increase the scope of; extend; develop.*
4. *Mathematics. To write (a quantity) as a sum of terms, as a continued product, or as another extended form (Ilson 1984).*

Poetic framework

The poem *Tristetrahedronis* is grouped within a subdivision titled *Klawer* (trefoil / shamrock / clover) in the volume *Driepas*. (See p 506 for poems) This connects it clearly to the emblem on the flyleaf (see figure 1, p 507). Symbolism represented by these concepts are polysemous. The trefoil signifies foresight and inspiration. The plant is often praised by poets far beyond its beauty, because of its association with the Great Goddess (De Vries 1974:475). The three-leaf clover is a symbol of spring and renewal (De Vries 1974:103). The three-leaf shamrock signifies Trinity in unity (De Vries 1974:418). Trifoliate and tripartite forms such as the Gothic three-lobed arch, incorporated in the emblem on the flyleaf, as well as triple time in music bear the same significance, namely that they function as emblems for the Trinity (Cirlot 1982:50). One of the nuances of meaning signified by the emblem of the *trefoil* or the Gothic arch is: 'ardent but humble love of earthly and divine things' (De Vries 1974:103). This quotation functions as introductory motto in Cloete's volume, *Driepas*. It implies that devotional love for both the earthly and the divine is a main theme of the volume. The *Driepas* signifies, among other semantic possibilities, the triple time dance rhythm. One of the poems in a group of 23 which includes *Tristetrahedronis*, connects rhythm in nature to a dance dictated by God. It evokes human response, through the ages reflected in poetry and music. The poem is called '*Beroerde tyd*' (agitated time) and the relevant lines read as follows:

*God hou tyd, en sy tye van beroering, antiek
of primitief, onder watter naam ook, Renaissance,
of Barok, dit bly genesing vir nou, in die liriek*

word na sy pype van ontroering gefluit en gedans

2 Cf. Hutcheon 1988:23 : '...postmodernism is a fundamentally contradictory enterprise: its art forms (and its theory) at once use and abuse, install and then destabilize convention in parodic ways...'

The subgroup which includes this poem as well as the example poem is titled *Trigloop*. According to Van Dale (1961) a *gloop* is a small arch. It is an architectural term used for the embellishment engraved above windows in Gothic tracery. Since it mostly appears as triplicates, the use of *trigloop* is evident. Since a *trigloop* is an engraving, it can also be associated with a *triglyph* (from *tri-*, three + *gluphé*, carving), also an ornament in a Doric frieze, consisting of a projecting block having parallel vertical channels on its face (Ilson 1984). The subdivision under the heading *Trigloop* is thus closely related to the title of the volume as well as to the emblem on the flyleaf. These signs function in places of worship as engravings glorifying the Trinity. Any triad or trinity representing the Holy Trinity is considered essential to Gothic art (De Vries 1974:475). In the section *Trigloop* the celebration of tripartite traces functions likewise as worship, as can be deduced from the submotto to the *Trigloop* subdivision. This motto, coming from the Dutch poet, Marthinus Nijhoff, reads: *De vergankelijkheid [heeft] eigenschappen / die haar...aanbiddeijk [maken]* (transcience has features which make her adorable).

It is relevant for an analysis of the poetic strategies in the example poem to keep in mind the following remarks by Chetwynd (1982:416) when he accounts for the symbolic signification of the Unknown or the Transcendent:

Without relating to the unknown and the unconscious, it is impossible to extend the boundaries of what is known, or to gain new consciousness.. Once particular speculations have passed into the sphere of knowledge, they become redundant. But the capacity to speculate through symbols, through the imagination, shifts its ground, extends its bounds - or atrophies. Only a particular attitude of openness, emptiness, can liberate the individual from his personal confines and limitations.

The first motto to the subdivision *Trigloop*, like that of the example poem, taken from Dante's *Divine Comedy* reads:

*State contenti, umana gente, al quia...*³

It is significant that the poem *Tristetrahedronis* is included in a well defined section of the volume. Another group of four poems⁴ under the heading *Indeling*, forms the next subdivision and deals with a human tendency towards classification. It also introduces the important role of the number 3 by referring in the first poem to Dante's use of this number in structuring the *Divine Comedy*. The tripartite division in the Comedy establishes well defined boundaries between hell, purgatory and heaven. The second poem in the subsection *Indeling* under the title *Die 3 en 33 nulle* (The 3 and 33 zeros), gives the following information:

humans share the earth with more than 3 000 000 000 000 000 000 000 000 000 000 000 000 000 000 000 000 other living things.

In its context the number mentioned functions as an image or metaphor (cf. Biblical use of number in Revelations). It signifies the wholeness or perfection (the 33 zero's) of the repetition in the series of three.

In the third poem of the latter section the theme of *isomorphism* in nature (features of one specie reflected in another) can be identified. This concept is also significant for the example poem. The poem *Tristetrahedronis* is purposefully positioned relative to

3 Cloete uses the Haghebaert (1947:27) translation which reads: '*Vergenoegt u met het quia, menselijk geslacht; / want hadt gij alles kunnen zien, dan was / 't niet nodig dat Maria baarde*'. '*Quia*' suggests that human beings should be satisfied to know that what is, is, without insisting to understand the exact origin.

4 Poems appear as attachment to the article.

significant subdivisions within a markedly extensive volume of poems. It is thus clear that the structured subdivisions under which it is placed, can be numerically represented as follows, starting with number one as representation of the volume: 1.11.1.1.4 (each number further on indicating its hierarchy in the particular subdivision. See figure 2, p 507). This strategy relates the poem to important semantic themes in the volume.

The imagery mentioned thus far enables the reader to identify several codes governing the signification process. Geometrical, physical, numerological, musical and theological codes should be taken into consideration, besides the obvious literary codes. Additional fields open up as contexts for the poem when the evident intertexts operating in the poem are taken into consideration, namely Dante's *Divine Comedy* and the Christian Bible. Already at this stage it becomes clear that the framework of this strictly limited poem functions like a window which directs the reader's view towards a vast landscape beyond its borders.⁵

Title of the poem

The most striking feature of this seemingly simplistic poem is the extraordinary, clearly technical title, *Tristetrahedronis*. Its unfamiliarity is counterbalanced by the fact that it is recognisable and traceable as a technical term. The use of such sophisticated and poetically alien terminology, without a clear indication that it is integrated into the poetic structure, could be counterproductive. Therefore, in order to establish its role in the example poem, the title must be analysed.

The *Oxford English Dictionary* (1989) defines a *tristetrahedron* as a solid showing 12 triangular surfaces. Each group of three faces corresponds with one surface of a *tetrahedron* (from Greek *tetraedros*, four-faced). The term is derived from terminology used in *Geometry* and *Crystallography*. Both fields are well represented in Cloete's oeuvre.

As far as could be traced the technical term is best known in *Crystallography*. Even a few basic characteristics of this structure, selected from a layman's view, manifest its polysemous potential as a metaphor or poetic image. If it is furthermore considered that Cloete, in one of his poems, implies that a poem is a *linguistic crystal (taalkristal)*⁶, it prompts the reader to note possible morphological analogies between a specific crystallographic form and this specific poem, as it is implied in the title of the example poem.⁷

Crystallographic Reference

In *Crystallography* a *tristetrahedron*⁸ is described as a crystallographic form with 12 faces (which) can be conceived as a tetrahedron, each face of which has been raised to accommodate three others (Klein & Hurlbut 1993:97). It is also named a '*trigon-tritetrahedron*'. The *tetrahedron* is composed of four equilateral triangular faces, each of

5 f. Uspensky 1973:137 : 'Intrusion of art into life changes the borders of the artistic space without destroying them.'

6 The relevant lines read (V11 Leopold in *Idiolek* 1986:63): '*die ganse heelal / is daar ter wille van 'n taalkristal*'.

7 Cf. M.C. Escher's wonderment of and play with crystal forms in his graphic representations: 'He was fascinated by the regularity and the inevitability of these shapes, which are to men at once secret and almost wholly unfathomable. And this is what they were to him also, as he modeled them in all sorts of materials and depicted them in many different positions on his paper' (Ernst 1976:93)

8 The poet's metaphorical use of a technical concept in this specific field may account for this spelling instead of the Afrikaans translation *-tetraeder*.

which intersects all the crystallographic axes at equal lengths (Klein & Hurlbut 1993:96). The *tristetrahedron*, a combination of *tetrahedrons*, belongs to the *tetrahedric group* in the *isometric system*. The crystal forms of classes of the *isometric system* have three axes of equal length at right angles to one another. Because they are identical, they are interchangeable (Klein & Hurlbut 1993:93). Crystals in which the centers of the constituent atoms occupy geometrically similar positions, regardless of the size of the atoms or the absolute dimensions of the structure, are said to belong to the same structure type. Such substances are said to be *isostructural* or *isotypous*. Occasionally the term *isomorphism*⁹ is used instead of *isostructuralism* (Klein & Hurlbut 1993:151). The angular relationships, size, and shape of faces on a crystal are aspects of crystal morphology (Klein & Hurlbut 1993:32). The external crystal form of a mineral (its morphology) is an expression of its internal order...The three-dimensional internal order of a crystal can be considered as the periodic repetition of a *motif* (a unit of pattern) in such a way that the environment of each repeated motif is identical (Klein & Hurlbut 1993:20). In the *tristetrahedron* the constituent *tetrahedrons* are assembled on a basis which is *isomorphic*.

Geometrical Reference

Considering the context of Geometry, the *tristetrahedron* is an example of a *polyhedron*. Some basic observations¹⁰ is also relevant in an analysis of the semantic possibilities suggested by the title of the example poem. *Polyhedra*¹¹ are geometrically interpreted as denuded forms which function purely spatially. The *tetrahedron* is the simplest *polyhedron*, since it has the least number of faces required to enclose a portion of three-dimensional space. Certain properties immediately appear in it which are characteristic of the entire set of uniform *polyhedra* (Wenninger 1971:14). A *tetrahedron* (a triangular pyramid) is sufficient to illustrate the three physical dimensions. In the *tristetrahedron* three tetrahedrons are assembled in one structure of which the different triangular surfaces face into different directions (See figure 3a, b and c, p 507). The construction of complicated *polyhedra* from the basic regular *polyhedra*, distinguished by Plato (*Timaeus* trans. 1888:195), is not only highly sophisticated, but also decorative. Coxeter (in Wenninger 1971:X11) defines it as 'a perfect instance of the connection between truth and beauty'. The poet's attraction to one of these geometric figures in the example poem, shows much of the same motivation as the following analysis by Read (1972:28): '...in the plastic arts certain geometrical proportions, which are the proportions inherent in the structure of the world, may be the regular measure from which art departs in subtle degrees. The extent of that departure, like the poet's variation of his rhythm and metre, is determined not by laws, but by the instinct or sensibility of the artist'.

Cloete's interest in geometric form and mathematics as poetic tools can be related to some basic facts about geometric form. The beauty of form appeals to the eye in much the same way that abstract mathematics appeals to the mind of a mathematician (Wenninger

9 In symbolism *isomorphism* is related to *parallelism* or *magic analogy* (Cirlot 1982:291), a significant perspective because of the poet's focus on metaphor.

10 These observations are based on discussions with different scholarly persons in the field.

11 a. Wenninger 1971:1 : 'A polyhedron is defined as a set of plane figures enclosing a portion of three-dimensional space.'

b. Wenninger, 1975:1 : 'The study of polyhedra is an ancient one, going back to the dawn of history. It is especially those polyhedra that are called uniform that have evoked the greatest interest and provided the most fascination.'

1971:IX).¹² The original human experience of space is vague and varied: space is extensive and hollow, both fixed and the locus of movement.¹³ Through Euclidean geometry space is analysed axiomatically in terms of the things (lines, triangles, circles) which can be moved around within it.

Mathematics consists the discovery of successive stages of the formal structures underlying the world and human activities in that world, with emphasis on those structures of broad applicability and those reflecting deeper aspects of the world. Development in Mathematics use experience and intuitive insights to discover appropriate formal structures, to make deductive analyses of these structures, and to establish interconnections. In other words, mathematics studies interlocking structures. Because of the distance from immediate concerns, mathematical treatments need be not only rigorous but also endowed with conceptual clarity (MacLane 1981:470,471). Abstraction increases the need for clarity in presentation; if the object of study is abstract, it must be understood not by its intuitive content but by its precise and abstract description. The poet's meticulous utilisation of boundaries in *Tristetrahedronis* ostensibly satisfies a similar requirement. It reminds of the following description by Theseus of the poet's fancies in *Shakespeare's Midsummer Night's Dream* (Alexander 1970:217):

*The poet's eye, in a fine frenzy rolling,
Doth glance from heaven to earth, from
earth to heaven;
And as imagination bodies forth
The forms of things unknown, the poet's
pen
Turns them to shapes, and gives to airy
nothing
A local habitation and a name*

The title of the poem *Tristetrahedronis* is anticipated by the emblem on the flyleaf as well as by the title of the subgroup, *Klawer* (clover). The clover is a flattened pyramid (*tetrahedron*). When the implied circles represented by the leaves of the clover are completed, the resulting figure is a *triquera*, also a significant divine symbol. The blending of the leaves' edges in the *triquera* symbolises the eternal Being of God. At the same time it emphasizes its unity. A triangle can be filled in at the centre of the *trefoil*. The corresponding figure used in Gothic tracery is named a *driepas* (Van Dale 1962). When encircled, like the emblem on the flyleaf of Cloete's volume, the individual leaves of the clover are separated by triangles.¹⁴ Thus the *driepas* is also a multiple triangular figure. Stamford (1944:48) indicates that almost all symbols dealing with divine three-in-oneness are geometrical forms. The *triangular* structure is the most stable known and bound space

12 Cf. Ricoeur 1993:226 : 'Were it necessary to compare poetry with other than itself, that other would be mathematics: 'The poet, like the pure mathematician, depends, not on descriptive truth, but on conformity to his hypothetical postulates.'

13 Cf. the reference in the example poem to 'holte' when it designates the Divine 'dwelling place' and suggestions of the perception of simultaneous stability and repetitive movement in the structure of the poem.

14 According to Wenninger 1971:4 : 'A uniform polyhedron can be enclosed within a sphere, so that its axes of symmetry pass through the centre of the sphere. By central projection the edges of the polyhedron can then be made to generate a network of arcs of great circles decomposing the surface of the sphere into spherical polygons, one for each face of the polyhedron. The planes of symmetry of the solid will likewise decompose the surface of the sphere into a network of spherical triangles, four for each edge of the solid if it is a Platonic solid.'

can be subdivided into triangular structures. The significance of the creative (poetic) developing of triangular shapes in Cloete's *Driepas* can be deduced from his extensive incorporation of these imagery.

Analogous structuring¹⁵

The significantly formalistic title of Cloete's poem invites the reader to focus on the poem's design. Lodge (1977:80), in discussing Jakobson's theory of metaphor and metonymy, points out that 'poetry, which in its metrical patterning and use of rhyme and other phonological devices emphasizes similarity, tends towards the metaphoric pole'. Imitative magic is mentioned by Lodge (1977:81) as one of the devices of metaphor. Keeping this in mind, the imaginative role of analogous structuring features in the poem opens up. In dealing with poetry's trait of *mimêsis* Ricoeur distinguishes (poetic) imitation from mere duplication of reality. He argues (1993:38): '...a tension is revealed at the very heart of *mimêsis*, between the submission to reality - to human action - and the action which is poetry as such...There is *mimêsis* only where there is a 'making (*faire*)' ...*Mimêsis* is *poiêsis*, and *poiêsis* is *mimêsis* (1993:39)'. He identifies that 'it is the 'structure' of plot that constitutes *mimêsis*' (1993:39). A similar approach underlies the analysis of possible analogies.

Like the other three poems in the section *Indeling* (classification), the four lines of the poem *Tristetrahedronis* are organized into two stanzas consisting of three lines and one line respectively. The first poem in the section, referring to Dante's tripartitional cosmic structuring in his *Divine Comedy*, directs the reader's interest to the significance(s) of the motto from the *Divine Comedy* at the beginning of the *Tristetrahedronis* poem. Besides the semantic role of the motto, it activates insight into the relevance of Dante's structuring strategies in the *Divine Comedy*.

The structure of Cloete's four poems in the section *Indeling* can be compared to Dante's structuring principle at the close of each respective canto. Dante uses *terza rima* (tercets of which the middle line of one tercet rhymes with the first and third lines of the following tercet) straight through each canto. It comes to a close at the end of each canto in a single line rhyming with the middle line of the previous tercet. Cloete's poem follows the pattern of these closing four lines in 'each canto. Anderson (1980:285) explains Dante's poetic device as follows:

Each canto is written in the terza rima rhyme scheme, which carries the praise of the Trinity right down into the individual lines of the poem. The nature of this rhyme scheme means that every canto consists of a number of lines divisible by three with one over: in this way there is a return to unity.

In Cloete's poem there is likewise a 'return to one line' following a stanza of three lines (3 become 1). In its context it can be read as signification of the 'Trinitarian structure of the New Testament experience' of *one God* (Dobbin in Komonchak 1987:1051). This experience is implicit in the Lord's prayer, one of the intertexts operating in the example poem.¹⁶ It is also significant in this context to take Mandelstam's remark (in Anderson

15 Analogous structuring can be related to *isomorphism*. Uspensky (1973:130) discusses *isomorphism* as a literary concept under the heading 'The structural isomorphism of verbal and visual art'.

16 Cf. 'As Jesus taught them, the early christians prayed to God as Father. This prayer was made in solidarity with Jesus who was most properly the Son and whose special relationship with God was shared by his followers...the Spirit was the very divine presence immanently empowering them to pray, to prophesy, to love, to live' (In Komonchak 1987:1051).

1980:245) into consideration that the *Commedia* can be described as a single crystal with 13 000 facets - each line reflecting the essential unity out of which the poem was made. Cloete's 'linguistic crystal' reflects four faces (four lines), imitating the four faces of the basic *tetrahedron* of the title. The four lines are, however, subdivided into three lines and one line respectively which activates a further inquiry into possible semantic similarities between the different contexts of application.

Keeping in mind Dante's meticulous structuring of his poem, analogous structuring in Cloete's poem requires further analysis of what is achieved in the latter poem.

Such an investigation produces significant results. In poetry, where sound patterns play a significant role, the syllable as articulative unit is relevant.¹⁷ The arrangement of syllables in a poem can contribute in different ways to the structure.¹⁸ Counting the syllables of each line in the example poem, reveals the following pattern:

13

15

16

13

The first line of the poem, beginning with 'Onse Vader' (Our Father), and the last line ending with the phrase, 'U die getripleerde trigoon', has the same syllable count. These lines (significantly at the beginning and at the end of the poem) are evidently also semantically related, both 'addressing' the Divine. This syllable count also reflects the 'image' of 1, 3, signifying a triunity. This image is detectable in other elements of the poem.

The middle two lines of the poem are also semantically closely connected by the word pair 'woon' (dwell) en 'werk' (work / create). These two concepts are furthermore linked by means of alliteration. This highlighting of the interconnectedness of a Divine Creator's traces implies his integrity. Where He is, there He creates.

This leads to a further inquiry into the significance of the numerical values represented by the syllable count. When the syllable counts of the middle two lines are added up, based on their semantic and acoustic unity, it comes to 31, the reversal of 13. This structuring of syllables dramatises the 'integrity' of the triangular form, poetically perceived - whichever side faces 'forward' in a single unit, the counterpart shows the same pattern (cf. the pair *woon* and *werk*). It likewise reveals a mirror 'image' of 3 and 1. It also supports an illusion of repetition or movement, showing alternative but analogous features. This principle is built into every aspect of the structure of the poem.¹⁹

17 According to Kayser 1965:82: 'Als eine allgemeine Bestimmung des Verses lässt sich angeben: Der Vers macht aus einer Gruppe der kleinsten artikulatorischen Einheiten (den Silben) eine geordnete Einheit. Diese Einheit weist über sich hinaus, das heißt sie verlangt nach einer korrespondierenden Fortsetzung.'

18 Cf. also Waugh's (1980:64) discussion of Jakobson's theory of equivalence or similarity: 'In poetry, the projection of the principle of equivalence from the axis of selection into the axis of combination means quite simply that such sameness is used as (the major) means of constructing the whole sequence. This projection is in fact the defining characteristic of poetry... Thus, syllable is equated with syllable..., whereas in 'ordinary speech' (the referential function) speakers do not measure the number of syllables'.

19 Numerological structuring in the example poem shows coincidental but notable analogy with Labuschagne's (1992:89) findings in his research on the function and symbolism of numbers in Biblical antiquity. He indicates the numerological values of what he names the 'proclaiming strategy' (verkondigingstechniek) of the creed 'The Lord our God is one Lord' (YHWH 'éhad Deut.6:4) as follows: 26 + 13 + 39, where 13 is the representation of 'one'. He mentions that in Deuteronomy this creed is proclaimed 'through every possible mode'.

The suggested subdivision of the first stanza into one line and two lines respectively can furthermore semantically be related to the human urge to comprehend *The One* (signified in the first line). Human understanding 'degrades' the perception of three-dimensionality to two-dimensionality, represented by the following *two lines* in which the concept of the Trinity, notwithstanding, manifests itself in the syllable count. This interpretation is supported by the references to the humanly perceived dwelling place of the One Creator as a *dome* (*afgekoepelde hemel*) or a *hollow* (*holte*) in the two middle lines. It signifies human restrictions of the Creator. In spite of such 'defect' the stanza can be poetically organised into a single unit, glorifying the Trinity. The structure of the poem reflects a signification of the Trinity as One God. It reflects furthermore the relation of the Trinity to its creation, or his activity in creation, represented by the four lines of the (completed) poem.

The progressive increase in the syllable count of the first three lines of the poem (13, 15, 16) before its return to the first syllable count (13) in the fourth line, is accompanied by an intensifying in the appearance of 'U' (*Thou* - once in the first line, twice in the second line and thrice in the third line). This may be interpreted as an intensified awareness by the observer of the presence of the 'U' (*Thou*) when perceiving his works. This leads to a logic return to 'one line', reflecting the same syllable count as the starting point where 'One Father' was introduced.

The numerical organization of syllables in lines reflecting a meaningful pattern, focuses the reader's attention on the possibility that the poem can be read as a canon, alternating immanence ('afgekoepelde hemel' - confined sky) and transcendence ('buite u holte' - outside your hollow).

This interpretation is supported by the introduction of a musical code in the volume's title, as already mentioned. A *canon* is a contrapuntal composition in which a melody (which implies some sound pattern) introduced by one voice is repeated by one or more other voices, each entering before the previous voice has finished, so that overlapping results (Jacobs 1977:67). Applied to the poem, this strategy provides another signification of unity in multiplicity. The procedure of alternating two different levels of experience (transcendence and immanence in the poem) and at the same time creating the illusion that it can be repeated endlessly in spite of confinement (suggested by the rhyme scheme and the rhythm of the poem), can be termed as 'tangled hierarchy' (Hofstadter 1979:10). The concept of infinity is implicit in this representation (Hofstadter 1979:15).

The musical code is closely related to the numerological code.²⁰ Leibniz, contemporary of Bach, defined music as follows: '*Musica est exercitium arithmeticae occultum, nescientis se numerare animi*'.²¹ One of the most important functions of the musical reference in the poem is that it signifies movement (dance rhythm). Music as a rhythmic art form is universally considered as a symbol of creation (Cirlot 1980:76). *Drieapas* thus signifies in Cloete's volume of poetry the creating, dancing God. The human attempt of understanding an omnipresent Creator implies limitation ('...omdat ons U wil begryp, beperk / ons U...'). This limitation is transcended in the poem through recognising the rhythm of repetitive (moving) 'confinement'.

The example poem reflects in different ways the structuredness of crystals, highlighting the important role of the triangular form as a unified structure.

20 Maor (1979:421), in an article titled: 'What is there so mathematical about music?', remarked: 'There comes to mind Einstein's famous admiration of the fact that mathematics - itself a creation of the mind - so perfectly describes the laws of nature. May not we add to this the laws of music?'

21 'Music is the hidden practice of arithmetic by man who unconsciously counts.'

Numerology

The role of numbers in the example poem cannot be overlooked.²² Both apparent intertexts, Dante's *Divine Comedy* and the Christian Bible's version of the Lord's Prayer, are numerically organized.²³ The numbers 3 (tris) and 4 (tetra) are represented in the title of the poem, where it is incorporated in one concept, signifying a structure consisting of 12 (3x4) different triangular faces. This one structure is 'analysed' in a poem where it is presented by four semantically and acoustically (through rhyme) closely connected lines (faces), subdivided into two uneven stanzas consisting of three lines and one line respectively. This represents triangular patterns organised within four lines (analogous to the four triangular faces of the *tristetrahedron*). This makes clear that number, in this poem, functions metaphorically.

The following explanation by Anderson (1980:285) of the significance of numbers in Dante's poem is also relevant to the role of numbers in Cloete's poem:

Two stands for duality that must be overcome, whether in the division between creation as a whole and its creator, or in the gap between soul and its origin, or in the division of will and intellect in the individual that must be brought into harmony. Three is the harmonising force that resolves those dualities, through, for example...the three stages of the mystical way, purgation, illumination, and union. Four as the number of completeness, may be seen as the universe or what the Trinity acts upon.

The duality acted upon through the creative activation of the number 3 in Cloete's poem is manifested in the pronouns 'U' (Creator) and 'ons' (creatures) in the example poem. These pronouns are conspicuously represented in the ratio 2 to 1 (eight times 'U' and four times 'ons'). This 'imbalance' is repeated in the semantically opposite pair 'oral' (omnipresent) and 'beperk' (limited).

A metaphorical functioning of the number 9 is introduced by the phrase 'getripleerde trigoon' (trigon i.e. triangle - therefore 3:3 - triplication of the triple). In this context it echoes the Biblical concept of the *Trisagion* ('Thrice holy', Deist 1987).

The 39 words representing the basic material into which the poem is organized, complement the metaphorical signification through numbers. Three and 3 x 3 respectively are represented by the number 39; also: 3 x 10 + 3 x 3; also 3 x 13. The linguistic signification of the concept of the *Trisagion* is represented structurally by three times repeating the numerical 'image' of 1, 3 in the syllable count of the mentioned lines of the poem. In the context of the poem it changes into 3, 1 through human perception but yet 'can' return to 1 and 3 when the poem is completed in a fourth line.

The concept *trigon* has different significant uses in the context of the poem. It denotes a triangular lyre or harp of Roman and Greek antiquity (Ilson 1984). It thus relates the *Holy of Holies* with an instrument creating music. The musical principle introduced by this metaphor is 3 / 3-time (triple 'driepas'!). The organising principles in the example poem based on the number 3, are pivotal.

The term *trigon* also introduces the astronomical code since the concept denotes any of the four groups of signs into which the zodiac is divided, each group having three parts. The

22 Coxeter (1969:135) quotes J.L. Synge in a chapter under the heading *Complex Numbers*, as follows: "The northern ocean is beautiful," said the Orc, "and beautiful the delicate intricacy of the snowflake before it melts and perishes, but such beauties are as nothing to him who delights in numbers, spurning alike the wild irrationality of life and the baffling complexity of nature's laws".

23 'The six entreaties in the Lord's Prayer are, in the words of Tertullian 'a breviary of the whole Gospel'. The very first words of the prayer already include all that follows as petition' (Barth 1981:50).

Trine of the Zodiac means that the angle between two planets is 120°. This is considered to be the most positive aspect of all (Liungman 1991:35). The ternary in the universe represents the spiritual principle within totality (De Vries 1974:475). The concept *trigon* furthermore relates to *crystallography* where it is used in connection with the description of a specific crystal system (Oxford 1989). Both the latter meanings focus on the appearance of triangular geometrical form in creation.

Anderson (1980:116) explains the significance of numerology as follows:

Numerology was particularly linked to the tradition of Sapiientia. There is a virtue in numbers far beyond their nature as ciphers or their use for practical purposes in trade, construction or warfare. By understanding the virtues of different numbers, the relationship between them, their squares and their cubes, and the process known as mystic addition, we can grasp the connections between our natures and the universe because they are built according to the same mathematical laws. More than this, we can also understand our own creations. To make perfect works of art, the numerological symbolism best suited to the work in devising its proportions or the relationship of its parts to the whole, must be employed.

Such method of approach can be deduced from Cloete's poetic strategies in the example poem. The poetic process is activated by a well defined geometric structure, ostensibly through its physical appearance in nature. The poet's imaginative poetic development of this structure in a poem reflects significant features of the original form.²⁴

Scriptural intertextuality

Although the context of Cloete's poem relates through its motto to the context of Dante's *Divine Comedy* where the Lord's Prayer is prayed on Mount Purgatory, Cloete in writing his own version of the prayer implies interaction with Matthew's version of it.²⁵ The poet confines his version of the prayer to the first seven words according to the Afrikaans translation (1953 translation) of Mat.6:9.

In dealing with the concept of 'Father' as a title for God, it is pointed out in Louw & Nida (1989:140) that in a number of languages it is necessary to distinguish clearly between 'Father' when referring to the heavenly Father and 'father' as a reference to a human father. This is essential in a prayer. In order to identify the use of 'Father' as a title for God it is possible in many languages to use 'Father in heaven' or 'Father above' or 'Father God'. It may even be necessary to identify the 'Father' as the creator and therefore employ a phrase such as 'our Father who created us'. When 'Father' is used as a title for 'God' in his relationship to people generally, then one may speak of 'our Father'. Cloete incorporates these linguistic devices in his poem emphasising the distance between the unique Father and his human children. Human perception of his 'presence' is circumscribed.

Prayer is revealed as a strategy of restriction - because we want to apprehend we circumscribe a Divine Creator in a comprehensible context ('*omdat ons U wil begryp, beperk / ons U tot ons afgekoepelde hemel*'). The significant concept 'begryp' reflects the semantic value of *comprehend* from Latin *comprehendere*: to grasp mentally: *com-*, together in mind, mentally + *prehendere*, to seize, grasp (Ilson 1984). The juxtaposition of *begryp* and *beperk* at the end of line one of the poem emphasises restriction.

24 Coxeter (1969:401) quotes Samuel Butler's remark in a chapter under the heading *Constructions for regular Polytopes*, as follows: 'Though analogy is often misleading, it is the least misleading thing we have'.

25 The phrase 'Onse Vader' suggests Matthew's version because it does not appear in this combination in Luke's version (Luk.11:2-4).

Semantic significance of the Dante motto

The prayer quoted in the motto of the example poem is said by the penitent Proud on *Mount Purgatory*:

*O padre nostro, che ne' cieli stai,
Non circunscritto...*²⁶

Among them is the artist Oderisi, who discourses upon the vanity of earthly fame (Sayers trans. 1976:150). Anderson (1980:281) comes to the conclusion that if *Purgatory* can be regarded as the purification of the imagination, Dante through these images was 'raising the imagination of our ancestors out of the grasp of sightless rock into the light of conscious awareness'. This background to Cloete's poem *Tristetrahedronis* is significant in the light of the following comment by Dyson (1964:133) in connection with the cosmic theories of Plato and Kepler:

A physicist builds theories with mathematical materials, because mathematics enables him to imagine more than he can clearly think. The physicist's art is to choose his materials and build with them an image of nature, knowing only vaguely and intuitively rather than rationally whether or not the materials are appropriate to his purpose.

The contemplation of confined structures implied by the integration of geometric form into the structure of the poem, enables the imagination to worship the Infinite. Jasper (1989:130), in his evaluation of the interaction of literature and religion, points out that 'the concern of the imagination is not, in the first instance, ontological, but, in art, the control of perspective in such a way as to invite *perception* (Coleridge's word in *Biographia Literaria*) and prompt a tendency'.²⁷

Conclusion

The analysis of the poet's exploitation of bound space revealed a creative utilisation of boundaries. It prompted him to imply more than can be rationally accounted for. The strategy of creating limits is the poet's way of admitting that he does not know but that he explores into the unknown. In his poem *ubiquiteit* (*Idiolek* 1986:134) Cloete substantiates this in the following lines:

*daar is nate
gestik om ons dogma
om ons verstaan
van Sy getalle en fisika

die universum se hoeveelheid
en die aarde s'n ontglip
soos 'n mot wat ons wil vang
met ons hande ons begrip*

In the same poem the paradox of the poet's bound speech is expressed in the following stanza:

26 According to Sayer's (1976:150) translation: 'Our Father, dwelling in the Heavens, nowise / As circumscribed...'

27 Cf. Ricoeur 1993:210: 'Poetic language is that language game (to use Wittgenstein's terms) in which the aim of words is to evoke, to arouse images.'

*en al weet ek dit is te gering
 en te eensydig
 vir sy almagtige alles
 bewoon ek die gedig*

Transcending limitation by means of 'bound speech', relativises postmodernist views of boundaries as 'lies' which should be transgressed to be exposed.²⁸ The poet (as the mathematician and the composer) utilises the 'illusionary' as a purposeful tool to create perspective.²⁹ Within the example poem's restricted boundaries the verbal material displays 'overall a hierarchical structure of symmetries, based on repetitions, regularities, and systematizations of various kinds...such parallelisms created a network of internal relations within the poem itself, making the poem into an integrated whole and underlining the poem's relative autonomy' (Waugh 1980:64). This creates a context for surprise and wonder.

To close with Cloete - in his poem *palingenese* (*Idiolek* 1986:121)³⁰ he summarizes what was also achieved through the 'restrictive boundaries' of *Tristetrahedronis*:

*die bevrydende binnensmondse gebed
 laat my toe om op enige tydstip
 uit enige klooster te glip
 en my in Hom bevrydend te laat red*

By integrating geometric and poetic symbols, Divine infinity has been understood humanly as 'harmonising isomorphism' (multiplied confinement)³¹ in Cloete's example poem.³² Against the background of the Dante intertext, this perception is presented as a devotional prayer by the penitent poet.³³ This proves true to Cloete's (1984:20) pronouncement that the game played by the poet's 'dream-thoughts' satisfies the poet more than moving mountains or states by it with a frowning forehead and vigorous certainties.

28 In an analysis of postmodern views Rowe (in Greenblatt & Gunn (1992:179) remarked for instance: 'In what might be characterized as a counternarrative, the postindustrial social and economic forces still reshaping national and global politics constituted a postmodernity in which traditional disciplinary distinctions were fundamentally challenged.'

29 Cf. a. Anna Katerina Emmerich in Cirlot 1962:125: 'Nothing is pure form. Everything is substance and action by virtue of signs' and
 b. Eco 1983: 'A sign is something which can be used to tell a lie. Something which cannot be used to tell a lie cannot be used to tell the truth.'

30 *Palingenesis* - the doctrine of transmigration of souls; metempsychosis (Ilson 1984).

31 Cloete's linguistic strategies can be compared to M.C. Escher's graphic strategies of the 'Quasi-Infinite'. Cf. Ernst's (1976:90) remark in *The magic mirror of M.C. Escher*: 'Escher has tried to represent the limitless and infinite in many of his prints...In his limit prints, both the square and the circular ones, infinity is depicted by the continuous serial reduction of the figures' dimensions'.

32 Cf. Ricoeur 1993:204: 'An entire poem is needed in order to open up a world and create, 'in convergence, the harmony of a universe in motion!'

33 Cf. Ricoeur (1993:13): 'Poetry does not seek to prove anything at all; its project is mimetic'.

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1. *Trigloop*

State contenti, umana gente, al quia...

Dante Vaevuur 3de sang vs. 37

*De vergankeljkheid [heeft] eienskappen,
die haar...aanbiddeljk [maken].*

I Indeling

1. VUUR LIG EN VLAM

*Dit is alte eenvoudig menslik om jou voor te stel
daar is net, afsonderlik van mekaar, so 'n plek
soos vaagweg 'n suiwerende vuur. 'n ver hemel en 'n hel,
met afgemete ringe, elkeen met sy heining en hek*

2. DIE 3 EN 33 NULLE

*humans share the earth with more than
3 000 000 000 000 000 000 000 000 000 000 other living things*

*Daar is buite my greep die totale en die hele
maar in die verskeidenheid, die oorgange en krulle
lê wonderere en in die deeltjies van die ten dele
ken van daardie 3 met agteraan die 33 nulle*

3. BLOMSKULP [ECHINODISCUS BISPERFORATUS]

*So volmaak delikaat as in die blom self is sy blare
op die skulp se bokant geteken en aan die onderkant
is daar boomtakke, rivierlope of die hart se are
soos die groewe van die oorspronklike Hand*

4. TRISTETRAHEDRONIS

*O Padre nostro, che ne' cieli stai,
Non circunscritto...
Dante Vaevuur 11de Sang Vs. 1 e.v.*

*Onse Vader, omdat ons U wil begryp, beperk
ons U tot ons afgekoepelde hemel, U wat ook woon
buite u holte oral waar u werke is en U wat werk
oral waar U woon, U die getripleerde trigoon*

Figure 1:

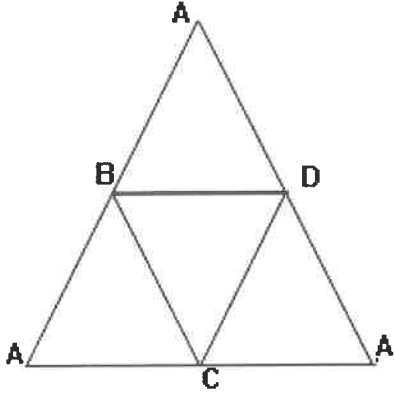


Figure 2:

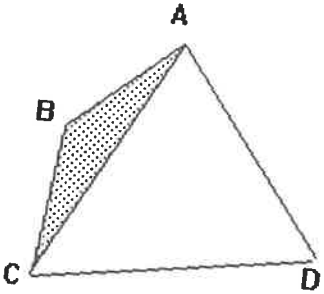


Figure 3:

