

Creation, Co-Creation and The Ethics of Pro-Creative Cloning

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ABSTRACT

Creation of the universe and of humankind is a wonderful expression of love in God. The love that not only unifies the Triunity of the Father, Son and Holy Spirit but also enables the universe and humankind to have a relationship with their creator.

This love, however, can only be understood in the context of some other uncreated elements in God such as order, freedom and otherness. This is why, for example, there can be no love without relationship and there can be no relationship without otherness. By studying these uncreated elements in God which enable the existence of love, we can expand our vision of a creative God and of creation ethics. This will enable us to show that both (i) the creation of personal otherness by God and (ii) the outpouring of His love can be considered as expressions of the same profound action.

This 'creative-love' action can also furthermore be considered on a human level. In this way, when contemplating the ethical creation of human children, it is suggested that the matrix or pattern of creation in God should continue and not be distinct from the love between the three co-creators (mother, father and God). Thus, Divine creation and Human Co-creation express the same elements. Human creation will then form, as it does with Divine creation, a unifying and wonderful communion and mutual belonging between the partners, whilst creating another communion between creators and creatures.

On a biological level, creation is also related to genetics in that each one of us has an indisputable chromosomal stamp stating firstly who our human creators really are and secondly that our creators have become one in a communion of distinct persons to which we also belong.

Finally, It is because pro-creative cloning dissociates creation from the communion of triune othernesses of God and the two parents and reduces it to a form of 'mono-une' creation that real communal love cannot be expressed in this act of creation.

Key Words: Creation, Co-creation, Pro-creation, Cloning, Bioethics, Ethics, Children, K.Barth, Mutual-belonging, Love.

PART I

Elements of Creation and their Relevance to the Co-Creation of Human Persons

Introduction

Creation defined as “make out of nothing or bestow existence upon” [1] has been the source of some of the most complex theological, philosophical and scientific discussions down throughout the ages. It is indeed a most fascinating concept for human beings to contemplate. Creating entails bringing forth something that did not previously exist in time and space; that is to say, there is a kind of ‘magical moment’ at which nothing existed and after which we have existence.

Though only God will be able fully to understand the wonder and magnificence of the reality of creation of the universe and humankind, an intelligible glimpse of this wonderful act is possible if we are careful not to limit ourselves to only one discipline such as science, theology or philosophy. Indeed the best ‘view’ is obtained by looking at the interactions of these disciplines, especially when they are so profoundly involved and expressed in an act like creation. Such an intersection between disciplines can then be assisted and supported by what theologians call natural theology which is defined as theological information provided by observations of the ordinary course of nature.

What we can discover through the natural theology of our universe then directs us to attributes and characteristics of creation and Creator. Wilkinson states that “if God is Creator, then one would expect that theological and scientific descriptions of creation would interact” [2].

But this interaction needs Divine revelation. We cannot have any knowledge of God by ourselves. Wilkinson describes natural theology as being brought into the embrace of revealed theology [2]. He follows Polkinghorn, in this respect, who states that “science and theology seem ... to have in common that they are both exploring aspects of reality. They are capable of mutual interaction which, though at times puzzling, can also be fruitful.” [3]. Indeed, it would be unhelpful to insist, like the early Karl Barth, that man has no knowledge at all of God apart from the Gospel [4].

With respect to creation, many theologians are convinced that there are marks of the character of God in it and it is not totally neutral. T.F. Torrance describes this by stating that “Natural theology in itself alone is incomplete ... for it makes use of concepts and theorems which lack meaning and cogency in themselves but which may become meaningful and cogent when they are sublimated and interpreted from the level of divine revelation.” [5]. In other words, natural theology can be a help in examining the character of God but cannot do it independently of divine revelation.

I. God’s Creation

As a first step in our study of a rational and theological interpretation of the reality and awesomeness of God’s creation it is essential that we begin by studying the initial acts of creation in Genesis.

“In the beginning God created the heavens and the earth. Now the earth was formless and empty, darkness was over the surface of the deep, and the Spirit of God was hovering over the waters.” [Gen: 1:1-2]

In ancient Jewish tradition God created order from what the Hebrew characterises by the words *tohu-bohu*. The word *tohu* representing a nothingness or a sort of ‘desert’ uninhabited and uninhabitable in which one cannot have any references of space and time. The word *bohu* meaning a state of ‘void’, ‘emptiness’, or more exactly of mist. So defined, *tohu-bohu* is a ‘nothing’ independent of any organised order characterised by measurements of space and time [6].

But the creation account in Genesis also involves Divine actions which are quite different in nature. To understand the differences in creation we must again return to the Hebrew. When God creates the universe the verb *bara* is used signifying the specific activity or initiation of God which only He can do. It also expresses the incomparable creativity of God, in which word and act of creation are one [Gen: 1:1; Ps 148:5]. But this is not the only time the word *bara* is used in the Biblical text. When God creates human kind, represented by *Adam* with the specific name *Haadam*, in His own image, the word *bara* is also employed [Gen: 1:27; 5:1] in contrast to *asa* which has the meaning of ‘to fashion’ or to ‘make’. *Asa* is much broader in scope and does not involve specific Divine action. This is the word which is used for ‘making’ or ‘fashioning’ the third, fourth, fifth and sixth day as well as the animals [7].

We have, therefore, a specific powerful and intrinsically Divine act of creation in *bara* for both the universe (space-time dimensions) and human persons who were the crown of God’s Divine action out of nothing. In this way, the two acts of creation are, in some profound way, unified in their essence and reality which enables us to suggest the presence of a unified rationale of creation in God. In this respect, we can also note that both creative acts of God have their source in the same intrinsic Divine love. But, as we shall see, it is more than just a source or an origin! In a mysterious way creation of autonomous otherness is an expression of profound and real love. In other words, creation and love are aspects of the same action in God.

That creation and love are wonderful mysteries of the essence of God is also reflected in the way Jewish tradition insists on the fact that no one can completely understand this love and the beginning of all things. It belongs exclusively to the realm of God. They portray this impossibility of totally understanding creation by using the letter *Beth* as the first letter of the Biblical narrative and not the *Aleph* which is the first letter of the alphabet. Before the *Beth* there is therefore the *Aleph* which is impossible to determine or understand [8].

Interestingly, this theological situation is very similar to the present understanding of modern astro-physics concerning the beginning of the Big-Bang in which there is a boundary defined as the Planck-wall limited by 5×10^{-35} m in space and 5×10^{-44} sec in time beyond which it is physically impossible to gain any prior knowledge [9].

Such a point in space-time, like the Big-Bang, is an example of what mathematicians call a singularity, in which the laws of physics break down. In other words, a singularity is a point in space-time which scientists are conscious of never being able to understand completely.

Theologically speaking, singularities can also appear when a precise act of God has its incomprehensible source in God which humankind will never be able to fathom. Theologians suggest, in this respect, that the incarnation of Jesus [10] and *bara*-creation by God can also be considered as singularities.

This suggestion may help us when considering the ever present question in bioethics of when life begins. If we can compare the *bara*-creation of the universe with that of a person, possible 'Bio-Planck-walls' in time and space could be considered corresponding to the point in space-time at which no understanding of the beginning of life of a person could take place. This would be the case when considering the point in space-time of fertilisation when the two nuclei containing the chromosomes of the sperm and egg 'feel' each other. Moreover, these values would probably be different for reproductive cloning, and twinning in which cases personal life would be limited in their origin by other Bio-Planck-walls.

Creation *ex nihilo* out of love

Since the time of the early Christian Church fathers the theory of *creatio ex nihilo* which means that the universe came forth physically from absolutely nothing has been generally supported by the Church, i.e. the universe 'just appeared'.

Furthermore, many theologians now accept the reality of *creatio continua* in which creation is seen as a continuous process in which the creative action of God is an ongoing process having its origin in the initial act. Hence both *creatio ex nihilo* and *continua* are accepted together by theologians such as Ted Peters who explains that "The act of drawing the world into existence from nothing is the act of giving the world a future. As long as we have a future, we exist". He adds: "God continues moment to moment to bestow futurity, and this establishes continuity while opening reality up to newness. Future-giving is the way in which God is creative." [11]

Here, Peters is what we call a theist who describes God's work as ongoing after the initial creation. God remains faithful and sustains His universe which He has created and does not retreat out of any involvement with His creation.

But if we have a *creatio ex nihilo and continua*, this does not mean that everything we ever encounter has been created since many elements characterising and reflecting God, the creator, were not physically created and can still be observed in this world.

II. Un-created attributes of God present in creation

To help our understanding of creation - in the best possible way- it is important to avoid using words and meanings expressing created realities like scientific logic and time. We will avoid in this way the ubiquitous mistake of some apologetical natural theologians of trying to define creation through created elements. For example, the 'beginning' of the universe and the 'beginning' of human life do not impose anything specific to God who is outside the concept of time. Indeed, when time can no longer be considered, the word 'existences' may become more appropriate than the word 'beginnings'. Therefore, we should use elements in God which were not created but which continue to be present and reflected in creation. Moreover, though these words may seem to have different meanings in themselves to the observer, they are actually profoundly related by expressing the same reality of love in God. Indeed, they are all indispensable to the concept and meaning of love.

Here it may be useful to present a short list of some uncreated elements of creation which belong together and which are important to express the same reality of love in God.

1. Love and Faithfulness

Though Greek writers have defined four kinds of love: (i) *eros*, erotic love, (ii) *storgé*, family affection, (iii) love which cherishes and (iv) *agapé*, noble love as towards God, it may be helpful to also include in this ensemble the Hebrew word *chesed* which expresses loving kindness [12]. Unfortunately, in English we only have one word 'love' and we will need to bear in mind that it includes all of the previous five facets at the same time. Creation, however, is dominated by agape or charitable love which is a willingness to give freely to another without any thought of reciprocity, though as we will see, a reality of 'mutual belonging' may be initialised between the creators and creature. Another way of expressing this is best represented as a willing disposition (and not a feeling) to put the other first. But by putting a person first in love we are also, in this way, showing our total acceptance of them without conditions, i.e. to be totally accepted and to be totally loved can be considered as the expression of the same thing. Love is about giving from oneself what the other needs. But there is also a uniting experience in love which can be characterised as a willingness to become one with the otherness through mutual acceptance.

However, though love is the most important concept in God and is directly related to all the elements in creation it can continue to be one of the most difficult to define. Many writers have sought to characterise this great action [13] but the direct words of Biblical scripture can remain the most appropriate.

"Dear friends, let us love one another, for love comes from God. Everyone who loves has been born of God and knows God" (1 John 4:7). In this verse we are made aware of a direct relationship between love and creation through birth. Moreover, "God is love. Whoever lives in love lives in God, and God in him" (1 John 4:17) which gives us a glimpse into one of the most profound relationships of all i.e. the relationship between mutual belonging and love.

One of the strongest expressions of love is also characterised by faithfulness. This is expressed in that even when God realised that His creation had turned away from Him in the Fall, He did not reject nor abandon it. The amazing love of God was seen through His faithfulness in the incredible act of sending His son Jesus to redeem and to die for the whole of creation.

2. Existence.

One of the most profound attributes of humankind, which animals do not have, is their ability to conceive of the concept of existence both of themselves and of God. As Dostoevsky famously put it: "What is strange, what is marvellous, is not that God really exists, the marvel is that such an idea, the idea of the necessity of God, could have entered the head of such a savage and vicious beast as man". [14] This fascination with existence is moreover transferred onto the possibility of creating new 'beings', reinforcing in this way their initial existence. Indeed, we have a sort of 'I create therefore I am' experience whereby creation is a force coming from existence. Though some like Tillich have suggested that God is beyond the

limitations of existence and beyond the range of conceptual thought, since both existence and conceptual thought belong to the realm of the finite and are limited in time and space [15] we can nevertheless conclude that initial space~time-matter reality comes from God's existence and His creation. Hence because God exists and is love, the act of creating existence is in some way intrinsically related to the act of loving. In other words, the act of creating is related to the act of loving the existence which one has created.

3. Order

The existence of love as an un-created reality amongst the persons of the Triunity presupposes a relationship of order which is far beyond our understanding. Indeed, it is often difficult for us to equate order with love, but if order did not exist we could not understand love. Furthermore, order in the same way as love brings back together that which is different and originates from oneness.

Some theologians even suggest that the belief in order in theology has its ground and source in the love of God. As Thomas F Torrance explains "...it is ultimately God's love which is the power of order in created existence,.... disorderly ways of behaviour being the very antithesis of what God is." He continues: "The kind of order that ought to be realised in the world is the law of God's love." [16] It also means that because natural and theological science both operate under the constraints of order, an ultimate ground of order must exist which will not allow a divorce of actual order from the order that ought to be. This shows us that there is only one rational order pervading the entire universe [17]. Scientific patterns and matrices constitute in their rational order, therefore, a 'created correspondence' to the uncreated rationality of God Himself [18].

In this way, the accounts and images in creation can look beyond creation itself to reflect God's essence, love and character which can be used to determine creation ordinances and actual moral principles. This view suggests that by studying nature and the Genesis account we are also given a 'Creator's instructions'. [19]

It is because of this existence of harmony in God, expressing a meaning in love, that ethics can be discussed as the expression of a rational set of standards by which humankind can decide what to do with respect to an ordered decision. In this way, since many forms of the order of God, reflected in His love and grace, can be studied by us, we can try to understand patterns or principles in the love of God which are expressed in our lives. In other words, rational ethics can also be considered in creation as a reality reflecting a way in which creation should be pursued in accordance with the uncreated attributes in God found in our limited and human understanding of love.

4. Freedom and Risk

The whole process of creation and the presence of the tree of life and death in the Garden of Eden (Gen 2:17) symbolised a risk, the risk of giving personal othernesses the immense danger of having free wills. It means that real freedom and risk inextricably exist together. To quote Karl Barth "God in His own freedom bestows human freedom ... Human freedom is the gift of God in the free outpouring of His grace." [20]

But why did it need to be a risk? The answer to this question can only be understood by acknowledging that in some profound way risk involves love. Without love there is no risk and without risk there is no love.

Also, what we experience as human freedom or the freedom of a person is what we really mean by a function of a self. i.e. The expression of a whole human person who is not a thing but rather a self with a rational capacity to deliberate, make decisions, and shoulder responsibility [21].

Human freedom understood as human autonomy entails the quality of personhood, or selfhood or soul. In the life of the Trinitarian God we find aboriginal 'personalness', and this personalness is contagious. It initiates the creative longing for more personhood [22]. Karl Barth further suggests in this respect that God "is the one, original and authentic person through whose creative power and will alone all other persons are and are sustained." [23]. These other persons being totally independent, with a freedom - or risk - to love or to hate.

5. Otherness

As we have seen the deep meaning of love involves otherness. Only through the existence of an 'other' can God love the 'other' person. He created the wonderful personal otherness to fulfil His reality of being love which expresses itself onto and with otherness. The fullness of love in and emanating from God, has a mysterious pressure to explode into otherness such as in the creation of His human children. This creation of otherness arising from the otherness of the persons of the Triunity, who are bound by love.

Karl Barth, again, expresses the same idea when he states that "... the doctrine of creation answers that God, who does not need us, created heaven and earth and myself, of 'sheer fatherly kindness and compassion, apart from any merit or worthiness of mine'"... adding "Creation is grace:... God does not grudge the existence of the reality distinct from himself"[24].

Ian Torrance further develops the doctrine of creation by explaining that it is immeasurably enriched through the doctrine of the Trinity which, of course, is presupposed by the doctrine of incarnation [25]. Both creation and incarnation are even parts of the same Divine and unique action of love and grace. It is because Christ is the Lord of creation but also part of it [26] like ourselves, that He is able to reconcile the world, separated by Adam's fall, to God. The doctrine of the relationship between creation and incarnation as being central to the Christian faith is further revealed by Calvin who argued that without the knowledge of God as our creator and redeemer, we are unable to know ourselves as we truly are [27].

But the extent by which creation and love involves otherness is best characterised by Karl Barth who suggests that "Creation is the temporal analogue, taking place outside God, of that event in God himself by which God is the Father of the Son... what God does as the creator can, in the Christian sense, only be seen and understood as a reflection, as a shadowing forth, of this inner divine relationship between God the Father and the Son" [28].

The implication of this view purports that only in a real relationship of love to God can any meaning be expressed. Human persons were created from and unto a relationship with their Creator.

This theory of relationship is what T.F. Torrance compares to Einstein's relativity theory by explaining that human persons, on their creaturely level, only exist in such a way that the relations between them belong to what persons essentially are. They bear, in this way, a created reflection of the transcendent relatedness or 'community-ness' inherent in God. It is in the light of this personal and interpersonal nature of human beings that we may rightly think of man and woman as imaging or reflecting God the Creator" [29].

In the light of this, Colin Gunton expands T.F. Torrance when he states.. "The one (God) who is known by virtue of His free and personal relatedness to the world is one who is a relational being in Himself. God, that is to say, is a communion.. one who exists in the communion of the Father, Son and Spirit; each with His own distinctive and particular being, yet all only what they are as a result of their relations in *perichoresis* with one another. It follows that God is personal, for to be a person is to exist in relations of free mutuality with other persons. Equally, it follows that God is love, for it is of the essence of love to exist through reciprocal giving and receiving." [30]

This exchange of love is also what should be expressed in the personal relation of complementarity between men and women. Indeed, the division of sexes enables human beings to know the most intimate I-thou relationship, which is love [31]. It is, in this way, eternally prefigures in the communal nature of God, namely in the mystery of Divine Trinity.

It means that God creates using images or templates (usually from Himself in an Imago Dei) so that His creatures can also express the love from which His creation emanates. "God created man in his own image, in the image of God he created him., male and female he created them." (Gen: 1:25)

6. Creative Triunity

The creation of existence can never be understood in a static or passive way. Creation is a dynamic action characterised by love. Indeed since the activity of God in the economic Triunity is identical with the activity of God in the immanent Triunity, then the being of God must be understood not in a static but a dynamic way [32]. In other words, the dynamic activity of God's love and creation are expressing relationships between the othernesses of the Triunity.

In the same way, humankind was created in the image of God in that it expresses and echoes the most central relatedness of all which is to be found in the relatedness of the Father, Son and Holy Spirit expressing a Trinity in unity, and a unity that is trinal. The essence of God's being is to exist in a creative relationship of love and mutual belonging between the communion of the Triunity of Father Son and Holy Spirit. It is this which is replicated in mankind by the polarity of male and female sexes [33].

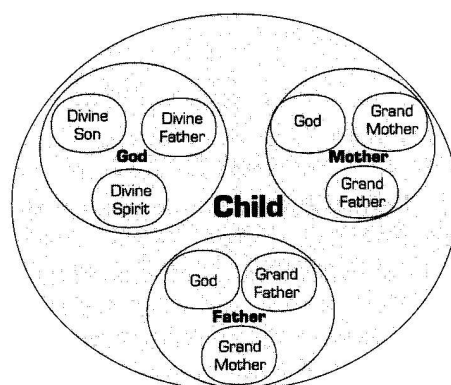
But the communion of One-ness of the Triune God is not the only expression of His reality which are found expressed in the union between man and woman. The profound creative power seems to emanate also from the expression of otherness in the Triunity and the unified man-woman couple. Indeed, the creation of another person by God and by a couple expresses in the most profound sense an act of unity of love in otherness. The creation of a child becomes, in this way, the symbol and

reality of the love and unity of the creators. It means that love is the source for the decision to create in an unavoidable act reflecting the existence of love between personal othernesses. When love exists between personal othernesses, creation of yet more personal othernesses should be intrinsically unavoidable. Hence creation and love express the same action.

What is even more amazing is that this creative power of the Triunity also takes place on the scale of humankind in the same form. As God the Triunity of the Father Son and Holy-Spirit created the universe and humankind, He continues to create through the trinity of God and His created co-creators (man and woman) the ever increasing family of His children.

The term “created co-creators” was used in this respect by Philip Hefner [34]. This term also illuminates in us the *imago dei*, the image of God embedded in the human race, in terms of creativity [35]. In this way a creative triunity of triunities expressing the reality of one-ness and love is in existence. This can be represented in a symbolic way by triunity circles:

Triunity circles



According to this view, the incredible power of love through creation is recognised through the possibility of human persons to become co-creators with God. God always intended men and women to express their love and communion through the acts of creating a symbol and reality of their oneness in a child.

Though it would have been possible for God to create millions of sterile, sexless human persons as His children on Earth, God chose to share the essence of His creative excitement and love by enabling them to co-create with Him independent and free children which all three different ‘independent othernesses’ could love and mutually belong to, i.e. the *bara*-creation continues through the involvement of the parents. The act of creating, in this way, becomes one of the most wonderful and mysterious expressions of real unifying love. In this respect the theory of Traducianism which was supported by Gregory of Nyssa and Luther whereby all personhoods were somehow created entirely and uniquely by God in one single act ‘at the beginning’ and are now simply being propagated like the arms of a tree down the generations can only be considered as mistaken as Aquinas and Calvin thought they were [36]. Indeed in Traducianism any co-operation by the co-creators in creation is sadly impossible.

7. Belonging

As we have seen it is through the importance of the unity, wholeness and oneness of creation expressed in the amazing relationship between the Father and his creature-children that the reality of a mutual belonging is expressed.

When God created the world and His children a deep sense of belonging existed between Himself and His children bonded by a profound reality of love. Even when man revolted against this relationship and was estranged from Him through sin, God did not abandon His creation to go and create another and better universe. The mystery and awesome reality of God belonging to his creation because He created it can only be realised in its most profound sense by the events which took place on the cross.

The idea of belonging in creation is further expressed in the genealogies of the Bible and in the importance often found in the search for one's ancestors or 'roots'. Because the (genetic) genealogies inform us of a series of creators and creatures, a reality of profound one-ness is expressed in the mutual belonging that this represents. This is especially the case in the Bible. Abraham's descendants belonged to Abraham and Abraham belonged to his descendants.

Even when Eve was created from one of Adam's ribs a profound sense of belonging was formed. God separated Eve from Adam who becomes other than himself. The profound love in belonging of Adam for Eve is expressed in that he uses extremely possessive and fusional terms "This is now bone of my bones and flesh of my flesh" (Gen: 1:23). Adam will somehow long for Eve to be 'reunited', assimilated, become identical to himself knowing all the time that she will now be forever 'other' [41]. This deep longing towards the otherness which one has created to somehow re-belong to oneself in a full and complete way whilst respecting and valuing their otherness can be characterised by the profound love between God and His creatures as well as in parents for their children.

Those that are created, however, also often feel this source of oneness from which they originated in the element of love for their creators. This is what causes the unity and oneness of mutual belonging originating in the profound oneness of the creators. Here we can return to genetics in that biology supports this relationship of oneness and mutual belonging. Indeed the genetic proof of the identity of the co-creators and their unity is always found and expressed through the 46 chromosomes of a person (for most people), 23 coming from the father and 23 from the mother. In this way, we have an indisputable biological 'stamp' stating firstly who our human creators really are and secondly that our creators have become one in a communion of othernesses to which we also belong.

III. Procreation

1. Why have a Child?

Humankind has always been urged to procreate and increase in number. Never in all its history has society at large ever decided totally to stop procreating. Though creation was even worshipped in antiquity by many people through the many gods of fertility it still remained a mystery to them. Indeed, the urge to procreate seemed to reflect a profound need of existence which previous people were aware of

possessing. But did they need to procreate a child ‘in their own image’ [42] i.e. *an imago humani* or even an *imago Dei* through their *imago humani*?

Aristotle was probably the first philosopher to try to confront and understand this will to procreate by parents. In *De Anima* he writes.. “For this the most natural function of living creatures... namely to make another thing like themselves ... so that in the way that they can they may partake in the eternal and the divine Now the living creature cannot have a share in the eternal and the divine by continuity, since none of the mortal things admits of persistence as numerically one and the same, but in the way it does have a share in it ... and persists not as itself but as something like itself “ [43].

Aristotle recognised, in this way, that there was something divine and eternal in creation. Also he further develops the idea of belonging and oneness in his *book Nicomachean Ethics* in which he states that parents love their children as ‘part of themselves’ adding “for one’s offspring is a sort of other self in virtue of a separate existence” [44].

More modern researchers have suggested [45] that persons choose to have children for either social or personal goals. However, the deep urge for childbearing can often remain hidden.

2. Belonging in Children

There is often a tendency in human and non-human beings to seek protection and comfort by means of belonging to a group offering similarities, acceptance and safety.

The notion of belonging is also reflected in the desire most humans experience of knowing who they are and from where they came, exemplified in the importance people give to their family name, the knowledge of their roots in the past and their kinship identity. It is because of this need for identity that many adopted children try so often to discover their original genetic parents [46].

The deep feeling of belonging is however reciprocal. One wants to love and belong to others while, at the same time, one enjoys others belonging to and loving oneself.

This mutual exchange becomes the source of the deepest friendships and ‘oneness’. As we have seen, in the case of parents and children the important order which states that the creator and receiver of life **belong** together is fulfilled.

Although the important realities of creation, love and mutual belonging existing in God and parents for their children are ignored and disregarded by many in our present society, they are not neglected in the planning of families by parents. The same patterns are present though sometimes unrecognised. Parents, as the responsible partners in the creation of life, know that in some way they belong to the child and the child in receiving life belongs to them.

The deep sense of loss or incompleteness by parents, unable to be directly responsible for the creation of life in their child, is the essential cause of their interest in certain forms of assisted reproduction. They apprehend the possibility of their own inability to feel a sense of belonging to the child and the difficulties the child itself would experience in feeling that it did not belong to them [47]. The costly and

sensitive procedures considered by all families seeking artificial conception are a pointer to the importance they attach to biology and genetics as opposed to adoption.

Genetic terminology enters the discussion when the word 'life' is replaced with the word 'genes'. Though this approach could well be considered as reductionist, the possibility for the genes to be responsible, in a physical sense, for the life, body and character of their child, is not forgotten by the parents.

Moreover, the idea that the blood tie or the gene bond is unbreakable, no matter what happens in a family or between parents and children, is also present in the security people obtain from these ties.

IV. The Conception of Children

In Judeo-Christian theology the procreation of a new person, whereby the man and the woman collaborate with the power of the Creator, must be the fruit and sign of mutual self-giving by the spouses of their love and fidelity [49].

The sexual act is experienced as a synchronised complete and synergetic mutual-belonging and self-giving of each partner to the other in which each receives more than they give, a representation of the union of two beings into one flesh. They are then never empty but filled with the other to form one reciprocal and complementary unity. Hence, when any sexual relationship reflects exclusively mutual selfish desires by each partner, it can only be seen as contorted in the eyes of God. The creation act then becomes unholy and supremely devalued. Conception without mutual-belonging, self-giving and faithful love can only represent a caricature of the real essential relationship.

Ideally, self-giving should be assured when conception occurs with the formation of the new genome, defined as the totality of the chromosomes, of the child. The resulting combination of the two genomes of the parents, represents in this unity the presence of reciprocal belonging between them and the child.

The giving of genes in this way also symbolises for the parents the giving of love and of themselves to one another as well as to their child.

V. Sexual Creation Ethics

From the previous study of natural theology, creation by God and of co-creation by His human children we can now obtain an interpretation of creation ethics described as an act of rational creation in love. In this way the creation of human beings should never be envisaged as being distinct or separated from self-giving love, be it by God in the creation of Adam and Eve, or by parents as co-creators with God during conception.

Sadly, ethical creation is no longer found in some of the modern procedures presented by assisted reproduction. Indeed, the foundation of mutual love by the co-creators does unfortunately no longer exist when human persons (and their genomes) are the result of conception procedures involving third or fourth parties. For example, donor insemination (DI) can assist couples where the man is infertile. The specimen is obtained through masturbation from an anonymous male donor. It is then injected into the future mother at the appropriate time. However, following what we have determined, DI with sperm or ova and Surrogacy would all be acts of

contorted creation. As such, they would not be acts of adultery, but of creation without mutual love by the co-creators. The child conceived as the result of gametal donation would no longer be the fruit of marriage or conjugal love [46]. This does not mean that the child will not be wanted nor loved since this would be contrary to the experience of many adopted children but that the actions of creating and loving have been torn apart.

This proposal may seem insensitive to many since the reality of the pain of infertile couples is extremely profound, being often similar to the psychological distress of a bereavement. But we cannot avoid concluding that the reality of a profound relationship between **creation** and mutual belonging expressed in love, sadly no longer exists in these previous cases.

Part II

Creation, Co-Creation and the Ethics of Pro-Creative Cloning

As we have seen, God always intended men and women to express their love and communion through the acts of creating a symbol and reality of their oneness in a child. Though it would have been possible for God to create millions of sterile, sexless human persons as His children on Earth, God chose to share the essence of His creative excitement and love by enabling them to co-create with Him independent and free children which all three different 'independent othernesses' could love and mutually belong to. The act of creating, in this way, becomes one of the most wonderful and mysterious expressions of real unifying love. It also illuminates in us the *imago Dei*, the image of God embedded in the human race, in terms of creativity.

Mono-une Creation:

But what of creative "mono-unities" where the existence of three persons is not found. Indeed, this would be the situation of human reproductive cloning when it will be accepted by society. Interestingly, creative or sterile mono-unities are described quite frequently both in the Bible and in ancient mythologies.

The most infamous sterile unity is, of course, the evil-one who, though he may be 'composed' of othernesses, is/are not the **independent** othernesses found in the Divine Triunity or amongst God's children. As Gunton puts it: "God creates freely, out of love, but it is a love which leaves the creature something to be and to do: to live in time, to praise its Creator and to return, perfected, to the one who made it" [37].

With the evil-one, othernesses are instead 'eaten-up' or aborted to form one single entity. The evil-one then increases his own area of selfhood at their expense. As C.S. Lewis so graphically describes it

"His dream is of the day when all shall be inside him and all that says 'I' can say it only through him" ... "On earth this desire is often called 'love'. In Hell I feign that they recognise it as hunger." [38] Here it is important to remember that the evil-one is not creative. Though his strength may be immeasurable, he does not know or understand love and therefore cannot create. With so much power he can only be

fascinated by the wonderful possibilities of creating othernesses bestowed upon our vulnerable and weak humanity. But this fascination has also become an obsession, an obsession to destroy and consume othernesses through ownership, which is unhappily very similar to what some parents want of their children.

Moreover, his sterile mono-unity can only serve to exacerbate his longing to create which he does not understand. In this respect it is interesting to notice that many occult myths of ancient civilisations were fascinated with the same possibility of creating from mono-unities.

Myths of the conception of the world as being born from one embryo or from one seed are frequent. For example, a papyrus dating from the XIII century B.C. reads: "O creator of oneself, perfect power, who unites his seed into his body to give birth to his egg in his own mysterious bosom." [39] (my translation), equally we find in the myth of Heliopolis (Egyptian) another similar story [40].

Procreative Cloning

The procedure of cloning consists of the replacement of the nucleus, containing the genetic material of a pre-existing egg with that of a cell from another living being. The following insemination of the egg into a uterus results in the asexual creation of an identical twin of the donor.

Many different applications for cloning have already been expressed to date in literature [50].

Since the first successful attempt in cloning sheep was presented in the journal Nature through somatic cell nuclear transfer by Ian Wilmut in Edinburgh [51], many amongst the general public and academia have gone into what Ted Peters defines as cloning shock [52]. He characterises this as an immediate reaction of withdrawal into what we would hope to be safety. Usually this translates as a big 'Please do not disturb' sign. Indeed what is new is often somewhat frightening, we do not know what to think, we are unsure, uncomfortable and feel therefore vulnerable. We end up renouncing our responsibilities to think and say simply 'No' to the new procedure [52].

Many, in the past have avoided a full rational reflection for precisely these reasons. Often arguments against human cloning were constructed to reflect the a priori views of the person concerned.

For example, the argument which states that cloning is ethically unacceptable because it would be a violation of the uniqueness of human life, which God has given to each of us and to no one else, has been shown to be inconsistent with the existence of monozygotic (identical) twins who share the same genome. Galton denounces this argument by explaining that, logically, we would then need to condemn identical twins who share the same genome to a life of inevitable indignity [53].

From a theological perspective, a statement in 1997 from the Centre for Theology and the Natural Sciences has been more careful in accepting the cloning potential as 'good' since it was considered similar to the creation of identical twins:

“Even though they share the same genome, there is no threat to the cloned person’s individual identity or dignity although recognising the need for further theological reflection” adding “if this new process is used wisely, then God could be seen as continuing to create through human agency, just as God continues to create through the natural processes ...” [54].

To date very few solid arguments against human cloning have been proposed. Because of this, those in favour of human cloning such as Prof. Harris of the Institute of Medicine, Law and Bioethics of Manchester University in the U.K. have even affirmed that no rational argument against human cloning has ever been presented to him [55].

But to suggest a rational discussion concerning pro-creative reproductive cloning we must first consider the specific action of **creating** in this way before considering the results of the action and the possible situation of a cloned child.

Theological perspective on cloning

Initially, it may help us to remember that God, in His love, did not consider the possibility of cloning Himself when considering the creation of othernesses. Neither was it God the Father, Father and Father that created the universe and humankind but God, the Father, Son and Holy Spirit. In other words it is because of the love of the Trinity in otherness that creation can exist. This implies that the action of creation of othernesses should initially involve the profound relationship of love between othernesses for it to be ethical or rational. Creation should have as its source the love between the already existing **othernesses** which should ‘expand’ unto the creature. And this profound pattern or matrix is what we should find both in God and in human parents.

Any mono-creativity such as adult reproductive cloning in which mutual love with existing othernesses is not present can only be understood, therefore, as one of the strongest ever antitheses of love.

It is also important to remember that in a genetical sense, clones are brothers and sisters of the **one** from whom they have been created. Indeed, both the creating adult and the created cloned child would be composed of the same 23 chromosomes originating from the original adult’s father and mother. They will, in this way, both be genetically stamped with the stamps of the same genetic creators. This is central since, as we have seen, any creation action which is not coupled with the creative decision of the genuine creators through their genetic stamps can only be considered as irrational and unethical. In this respect, if cloning could be considered as some kind of twinning [56] it would be for the real genetic parents - the parents of the cell donor used for the cloning process - to decide to create and love another twin. The donor twin himself (or herself) should not take part in the decision.

But there can also be some severe social problems with cloning. Indeed the asexual creation of a cloned child would be done without any normal perspective for it. Furthermore, a child needs the differences between a father and a mother in a psychological, social and physical way to enable it to grow into a balanced person.

It is also important to emphasise that any ethic of creation is specific to the act of creation and not to the child created in this way. In the same way that no illegitimate child is ever born - since only illegitimate **acts** of creation exist and are not persons

in themselves - future children born through procreative cloning should be loved by society as much as any other child. God will continue, of course, to love this child which He has bought back through the body and blood of His son Jesus so that He can re-create him/her into His child.

Conclusion

Einstein once asked the question:

“How much choice did God have in constructing the universe?”

According to Paul Davies the answer would be ‘not much’ unless He wanted it to go unnoticed [57]. However, another answer could be ‘not much’ unless He wanted it to be unloved. But this is also true for human children. Unfortunately the increase in technicalisation of human reproduction is encouraging the tearing apart of creation from love. Creation of a person has somehow lost its wonderfulness and fascination. Maybe this is because it has become so clinical but perhaps also because it is a part of the *Imago Dei* in us which has been most devalued.

In this respect, some recent discussion has even been present as to which of the two terms ‘creator’ and ‘donor’ should be used when considering the person from whom a cell is taken for cloning.

Axel Kahn [58] uses the word ‘creator’ and ‘created’, others prefer the word ‘donor’ since it implies a gift, a free handing-over of individuality of the person cloned.

The same problem appears when the term ‘Donor Insemination’ (DI) is used as opposed to the possible term ‘Creator Insemination’. What is being suggested is that a person is only giving their gametes with no underlying awareness of mutual belonging in this gift/donation. Indeed, no reality of profound love or mutual belonging between the co-creators or for the child created as a result of these gametes will be encouraged in the ‘donor’. However, what is being overlooked is that the resulting child will probably not experience this ‘gift’ in the same way. Indeed, it has been noticed that many children created from donated gametes undertake extensive and costly investigations to find their ‘real’ genetic ‘parents’ when they grow-up [59]. In some mysterious way, the children know that they have been created and not ‘gifted’.

This is because the act of creation is far deeper and more profoundly binding than a gift of life which does not underlie any mutual obligations. It was because God created and did not give life to His human children that He went to the cross for them. Indeed, God did not donate His universe, He created it.

However, though the child may not be a gift, the possibility of creating by parents is itself a wondrous gift by God. Creating another human is one of the most extraordinary and exciting acts that can ever be contemplated by humans and one which is also the most Divine. In this respect, a space-time-logic universe is but a support for the real expression of existence, love, belonging, faithfulness and otherness. Moreover, when one of these elements is not present, creation cannot exist or can only become a tasteless, insipid and unethical consideration.

But when we observe the love of God and the expression of His love through creation we can only wonder at the active expression of this. Creation is the

expression of love which unifies the Triunity of othernesses in faithfulness, order, freedom and mutual belonging. But this union is also fruitful. In love, the Triunity of God created othernesses which reflected in this same rationality of love the communion of the Triunity of the Father, Son and Holy Spirit. And since these created othernesses have their origins in God, a mutual relationship of belonging exists between them.

With the creation of other children, the matrix or pattern of creation should continue and not be distinct from the love between the three co-creators (mother, father and God) forming a profound and wonderful communion and mutual belonging, whilst creating another communion between creators and creatures. In other words, only when love exists should the creation of other existences be envisaged. However, this is not the case for cloning. It is because pro-creative cloning dissociates creation from the communion of triune othernesses and reduces it to a form of 'mono-une' creation that real communal love cannot be expressed. The act of creation then becomes divorced from existing love.

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