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BEYOND DESIGN SCIENCE: OBTAINING TECHNOLOGICAL BREAKTHROUGHS IN ZERO TIME

Summary: In furthering our researches into the 3M equation and logosynthesis we recognise in 'Media' both the architect and the architecture of all acts of creation; and outline the attainment, true role and character of genius.

In reaching into the very core of the design process, as we have been patiently doing over the last twenty five years, it seems to us that we have reached ultimate principles in the 3M equation (1) and its ancillary formulations. By focusing directly on the essential components of all creative action, we uncovered a method which could utilize everything in the environment without getting entangled in superficial techniques, elaborate subterfuges or ponderous and inept decision mechanisms; everything that was needed to fulfill the underlying purpose could be generated from contact with that purpose, including both disciplines and exercise of the imagination, logic and inspiration, hypothesis and verification. It then seemed to us that there should be a condition which we called 'logosynthesis', (2) in which such creation or design would be continuous, since at every step in our individual and collective life we are in front of the unknown and choose the routine only by default. In logosynthesis, there are not just machines or systems to be invented, not just particular problems to be solved; logosynthesis is a total process, applying at every point and to everything, a straight forward recognition of the reality of human freedom and the human need to lift human life to the highest qualitative and experiential levels and not have it by way of imitation. Instead of regarding the domain of human action as a kind of arena in which events to do with discoveries and inventions such as those of the transistor and penicillin spike out into a third dimension, events from which results spilled downhill and collected into streams and rivers of influence on the plain or ordinary human life; we came to regard the real human world as fully three dimensional with its own evolving geography. In the place of a bewildering mosaic of localised acts of design, we understood there was to be discovered a pattern. This pattern we did not think of as some kind of static blueprint, or already fixed Platonic world of Ideas, but a pattern arising out of and consisting of, essentially, a communication of meaning.

It is fairly well known that creative people do not appear to have much success at communicating with each other on the personal level; indeed, it has almost become a commonplace that interpersonal dialogue is fairly foreign to them. Part of this is a caricature made by people who have had no experience of the creative world, who are trying to demean the geniuses of the world by catching them out in terms of some supposed deficiency. Part of this is readily understandable once one realises that such people are dealing in things that transcend ordinary concerns - a passion for the mysteries of energy and communication is far removed from the conveniences of alternating electricity, so people can forget or treat as merely eccentric the genius of Tesla which made switching on lights a commonplace - so that they are in process of creating the very language in which to talk about these things. But, there is something more: the essential communication is one that is between meanings rather than between people or personalities. It is known that inventions and discoveries often happen in synchronous ways; perhaps a discovery is 'in the air' as it is often expressed, 'the time is ripe'. Although this aspect of creativity is hardly ever taken seriously enough nor simply enough; it is implicitly assumed that there is some kind of world mechanism which is unfolding possibilities of making connections that allows, at first a few, and after them, many to begin to manifest more of what is behind the surface of human knowledge.

Similarly, it is often said that a man of genius is 'ahead of his time', which suggests that there is already unfolding something which is as yet so unformed that only the very few can see it. This idea has been worked over frequently with respect to invention, discovery, science and art; so it regarded that e.g. relativity theory in some form was inevitable, or the breakdown of tonality in music, or the move towards abstraction in painting, or the democratization of the developing countries. Geniuses are then seen as actors within the framework of a script that is being written on the basis of some sort of inevitability that is inherent in human and social conditions, the structures of knowledge and power, access to resources and all that has gone before. In these treatments, it is hard to remember that we are dealing with, in the creative aspect, something unformed; that history only looks inevitable in retrospect. To be realistic, we have to find a way of dealing with human creative action that situates itself in the creative process and not in the results which flow 'downhill' from them. It is in this area that creative people have more difficulty than anyone for they can do more than they can say, because to say something means to deal in things which already exist in recognizable form.

The power of meaning in human life is something that we can appreciate even before we attempt any disciplined definition of the term: it is more than a term, it is something immediate on the basis of which all else is connected together. In previous papers, we have made reference to the work of Frankl in logotherapy, which offered a practical way of psychic rehabilitation without the imposition of theoretical structures of the human psyche such as the Freudian or Jungian. Man lives or dies by meaning, whatever this 'means' to him. Meaning is the substance of communication and the simplest explanation of what happens in the patterning of human discovery and invention rests, we believe, on the fact that meaning communicates with meaning in a meaningful way and that this is not reducible to the interaction between human personalities which is, itself, only an approximation to communication. This is the central premis of logosynthesis and, once it is understood, very much is opened up - for example, creative action in

any one sphere can immediately have relevance in any other, a possibility which must seem very remote in an age of increasing specialisation and fragmentation as is concerning people in such areas as mathematics. It is simply, the case. Once introduced to this possibility, all sources of experience become mutually enriching; and, what seemed to be irrelevant or even distracting, becomes a nourishment. In mentioning the work of Frankl, we had something further in mind to do with the positive healing aspect of logosynthesis: for, in this process, there is no longer any of that mutual repulsion and separateness which bedevils human interaction. The one central meaningful thing is the increase of meaning; this arises according to its own laws through the communication of meaning with meaning everywhere, and anything that obscures this is a misunderstanding which can always be cleared up. The dynamical and 'logodelic' - or meaning expanding - world is the third dimension of human life, the source of the pattern which, up until now, we have hesitantly pointed to as lying behind the unpredictable emergence of innovations. Instinctively at least, we refrain from treating genius as the ancients did the Gods; that is, as capricious and beyond the scope of human purpose: in some way we know, that the whole is making sense, even in this time of anxiety and unease, because we have the purpose in us which says that it must.

Thus, our investigations into the design process, which we have rapidly summarised and reduced to a few notions here, have led us to the primacy of a realm of communication, something prefigured from the beginning in the notion of MEDIA. It is through Media that Meaning communicates; even though it is widely supposed that it is through Matter. Let us explain. Something is created of great import such as Tesla's alternating current generator; it then seems to us that what concerned Tesla himself fades out of the picture and all we need to look at are the economic etc. ramifications of having widely available electrical power in the material visible world. This is quite mistaken. Only by way of illustrating the point, let us remind ourselves that Lord Kelvin found close agreement with Tesla in areas which would appear to the majority as fantastical, such as communication with extraterrestrials: but they live on as in the present SETI, which has important implications for the future of mankind though it seems to fail. Almost as a joke against ourselves, we have to take the attitude of the public, which is formed through what is ordinarily thought of as the 'media', as an aspect of the communication taking place. Even popular newspapers have a place in the totality of media communication of meaning.

Media is the realm of zero time. This assertion can be made in more accessible language. There is in creative action something that is not a process; there is something that 'takes place' without requiring any time to come about. Such ideas are unequivocal in the literature of creativity but we want to say more. This zero-time action is an event and can be studied, though in a way which must correspond to its character; and it is part of our design methodology to acquaint people with this study which is, in fact, the same as enabling them to make breakthroughs and not a study that draws back from action into a purely theoretical concern for the sake of an imagined 'objectivity'. Indeed, there is another kind of 'objectivity' here which is not at all like that of matter. It depends on the recognition of meaning by meaning: "like finding like".

Making a breakthrough in zero time has always been the way in which it has been done A big mistake that has been made is to look for psychol-

ogical explanations of the way in which this comes about: such researches can be rewarding and of value but fail to realise that any psychological insight which comes to light is itself a creation, a breakthrough; instead, such researches tend to end up with the frustration of determining to find a psychological mechanism just where all notion of a mechanism must be abandoned. What is important and what is 'working' is beyond any psychological model, although it may enter into the arising of any psychological insight. In the real world, there are no complete and fixed structures and never have been. The psychology of man is like a book that needs to be constantly rewritten by everyone that reads it. So how can we imagine to ourselves a realm of zero time, a realm which is the medium of communication between the meanings that are arising in every moment? How can we attend to this aspect of reality when we are in the habit of letting our attention spark and die away between 'this' and 'that' as if there were really separate things? To make no bones about it, there is an ego problem: our attention sparks and dies in reflection of our own lighting up and blanking out; the great burden or task of media awareness is the requirement for continuous consciousness, which means to tune into the consciousness which is there all the time in spite of our relapses and which, even when we are most distracted, informs us of our distraction. Our very own consciousness is the living expression of media in us. It is not material and it is not psychic. It is the medium in which is communicated all our meanings; and a genius is one in whom this communication has reached a critical level so that nothing that happens to him or in him is ever without its enlightening meaning.

To talk as we do of zero time does suggest some static unchanging realm; but we have denied the 'blueprint' idea and pointed towards to hermetic function - not of closure but of communication, Hermes being the god of communication, or Mercury with his lightening speed. What is this zero time? It is a practical notion: ... it is the interval between this moment and the next which I cannot measure or separate out. In this interval, something can take place; and what takes place is an event of communication. In Descartes' writings, he supposed that this must be God; but we can think only of the communication and not imagine some external source or being somewhere 'else' who is setting it up. We might take this as a principle: **there are no unfilled intervals**; wherever we suppose that there are intervals or gaps, in those spaces we shall find communication which we have not listened to. This can be extended, in principle, in a fractal way; so that it is easy to see that we are not introducing here something spurious or 'extra' but saying that we can go further into the gaps, and further still and it has no limit. This is **extremely important**: instead of demanding of ourselves and others, or of the systems in which we feel we are embedded, some release of restraint, some addition of external resources, some extension of time - more finance, if you like - we can look into the intervals of our situation and begin to 'hook' more and more expertly on the energy waves of zero-time. So every interval is God i.e. Ground of Doing.

It is now a hackneyed phrase when we say 'we do not have to put it together, it is together', which is unfortunate because it says something very important in a simple way that has hardly been bettered. But, what we need to add is that this concerns media and meaning rather than matter. It would be folly to claim that the conditions of human existence are in anything other than a mess of separateness and disorder and conflict; yet we know that artists and visionaries have seen in this very disorder a total meaning

that rises above the pain and misery which it causes. The artists are not perverse: they are simply reporting on their own communication with the realm of media. They realise that what they see is not some incipient millenium, in which in some future age will come peace and harmony to all mankind but a reality that is within or between every moment. If they are writers, then literature itself becomes a reflection of the objective media which they are tapped into; and it is the same for music, dance and painting which have, all the time, been telling us something very obvious and which it is important for technologists to register: the one is realising in matter what the other is communicating in meaning, even though neither 'side' is acknowledging this. They are not realising it yet because they do not yet see what it is that creates in them, and feel they are different because the one creates mechanical objects and the other cultural objects; a book does not seem the same sort of thing as an electrical generator. ... Yet all of us can already know what will not work, which is a matter of trying to achieve goals with methods which are incompatible with those goals. That is all. ... How do we know what is incompatible? This is also a matter of zero time consciousness or, to put it yet another way, we travel into the future to find out how things work out, then back into the present to set a right course. If we allow a true meaning to creativity, then 'setting a right course' becomes the key. We cannot know in advance what to do; any system we set up will inevitably introduce extraneous elements which slow down the process of realisation. At certain times, individuals arise who know how to act to realise certain kinds of discovery; but it is usually of little value to imitate what they do in other domains. One could almost say that they and their situation are drawn together and articulated under the guidance of a media communication; but this is to look at it after the fact because they have been proved successful. The Gottingen School laid the foundations for much of the atomic revolution. When that kind of free association broke down, as it did with the approach and onset of the Second World War, creation became reduced to mammoth team work directed by the military. Setting a right course means obeying the dictates of media and this depends on accepting the totality of communication. Otherwise what should happen in zero time can take months, years or centuries.

Zero time does not mean an instantaneous process, which is a contradiction in terms. What it does mean will be spelled out in a paper we are preparing for the conference in Dubrovnik in two years time, (3) where we will show for the first time what the essence of Tesla's genius consisted of. We are setting a right course in doing this. What we can say at this time is that the realm of media has itself many levels and it becomes possible to pass from one to another. Transition between levels is non-temporal and has not developed more widely because of ignorance of its possibility. What we are talking about is having access to the deepest know-how of the universe. We do not consider that human creativity is any accident in this universe and can only suppose that it is embedded in a totality of creation of immense and subtle range and power. It is widely thought that all of human inventions are prefigured in nature: so they are, but, in a more profound sense, so is the power of producing them. We are not after imitating nature in terms of its results which we can see around us but in its workings and this, inevitably, leads us to suggest a view of nature as something more alive than we are and more intelligent than we can yet manifest. Intelligence and creativity are not in some narrow band of our universe's material - i.e. in ourselves - but in its foundations, whether in life or in stars and galaxies. We think that we look to the outside of things to learn about

what it is possible for us to do; but the real action takes place in and through us within the media of meaning, as participants and not merely as observers. Why do we insist on going the long way round when we have it in us to go direct?

We need to have the attitude of turning ourselves away from being secondary, imitative creators, to being primary, original creators. What there is for man to create may be unique to him; but we all suspect that it involves access to the powers of the universe, even those which we might associate with energies far beyond our capacity to generate or control at present, energies which are present in the collapse of stars, perhaps. Just as Tesla's genius nurtured itself in the medium of the energies of electricity and magnetism, so there will be geniuses who nurture themselves in the media of the strong and weak forces and, eventually, in gravitation. This is something that extends far beyond the scope of what we think of as 'atomic power'. It is also a matter of control: there are possibilities of delicacy of control which we are presently ignoring. All this must be indicated because we have reached a very critical point in technological development, even though this development is chaotic and often brutal. The criticality concerns what is apparent to almost everyone looking at the rate of invention over the recorded time-span of human existence; that it is increasing at an exponential rate. Even the crudest extrapolation should convince us that we are approaching a time of multiple over-lap wherein invention loses its previously linear character - of one thing arising out of another. If one understands this, then it is almost obvious to see that, instead of mistakenly trying to build invention upon the past, it must be built upon the future; and that we are now in a period when technology can be built in terms of the future instead of in terms of the past. ... This is the historical meaning of technological breakthrough in zero time: we are standing at the threshold of this state of affairs and must be ready to take it on.

The unease which has assailed people of the twentieth century, rising out of the confidence in progress of the previous century, is a crisis in time itself. There is a massive overall communication in progress, crucial to which is a new attention. The present state of crisis is an almost 'fictional' representation of the signal that there is a need for a technology which is appropriate for the time. The 'time' is not some abstract spiritual *zeitgeist*, but simply the accumulated weight of the meaning generated during the last centuries as it is in communication now. Being in communication now also includes the future. Looking in terms of the past (matter) we see crisis; looking in terms of the future (media) we see the birth of something beyond design science. ... We have to be ahead of the game; though this need not mean that we are defeating others in some kind of competition: rather it means that we reach ahead of our own faults and have a technology that is not disruptive, ecologically unsound, perverse or distracting; a technology that will uncover a new stratum of human purpose. Then, and only then, new technologies can open up which really do correspond to an enrichment of human life and better prepare mankind for the future shocks and challenges which are, in their own way, inevitable, because media is making them happen.

A breakthrough in zero time is a matter of control, a 'meta-control' that in any moment is intimately in communication with any other moment, past or future. Also with synchronous present moments throughout space-time.

On previous occasions when we have introduced the idea of a 'meta-control' corresponding to this state of affairs, it might have been too easy for our audience to assume that this was a matter of isolated self-control, something performed by a person upon himself. It has a more objective import, one in which the person and his psychology appears as only one aspect of the whole. The meta-control of genius is seamless. It has ramifications far beyond the attainments possible in peak experiences or moments of inspiration. The continuous state of meta-control allows just this intercommunication of all moments - the total space-time accessing and sharing rather than personal possessing of all moments which is crucial for breakthroughs in zero time. Once meta-control is engaged, the work of assembly, the making of connections, the development of materials and systems, the evolution of new mental skills, the working out of consequences, the understanding of what it will mean in the long run and how it will reshape future thinking are all immediately present without any activities of deliberation and/or construction. It is very impersonal and would be, to some, terrifying because it demands total immersion in THE UNKNOWN. This is the 'entry condition' for making real contact with media; and only through solving of problems in this mode and level can a feeling for the pre-existence of media turn to assurance and contact with media deepen. Progressively we then find that what we took to be real problems were misunderstandings, or only partial views of particular needs. Our concepts about what is important, as well as our concerns with our own status or ambitions, go further and further into the melting pot as media assumes its correct - the central - place in our work. What at first appears to be a state of privation or ignorance then turns out to be one of wealth and effective knowledge. Such a possibility needs to be approached step by step; and we have outlined a procedure for this in various papers; ... the contents can be only indicated here since they deal in detail with the various steps whereby intelligent thought and action may be raised level by level from talent to genius.

This 'Everest' climb begins with an examination of the negative states which divert people from even beginning an ascent. The crucial point to reach is that of Intentionality, which means a true freedom of willing or the '~~will-to-meaning~~'; bringing a high degree of independence from pressures, conditions and expectations. This is a setting free of a capacity to entertain alternatives, to focus anywhere, to increase the options open to oneself; a capacity that is, potentially, vast. It is the ability to start afresh in each new moment. The 'zero level' of intentionality can then lead into level one, the level of Intellect. This is where one aims for specific goals. There is not a direct access to meaning, because the dominant mode of thinking is inferential. At this level, access to media is severely restricted, possibly as something too disturbing and unpredictable; and all procedures are governed by an explicit logic. But this is a level above 'ordinary life' because of the heights of excellence to which it can lead; though it remains restricted within the confines of material circumstances.

The second level of the 'Everest' climb is that of Imagination. What is painfully calculated at level one may be, at level two, seen at a glance. There is some sensitivity to media and much wider embrace of the realm of matter. The level two man is catholic in his interests and capable of stumbling upon insights, though not of directly accessing them. He has gained the freedom to form images in many dimensions but there is

no guarantee of their substantial worth. Imagination does not entail a falling below the level of Intellect, an inadequacy of discipline or failure in control. It is an expansion of mental embrace. ... In the next level this expansion proceeds in depth releasing the capacity for empathy; for this reason, it has been given the name Identification; meaning the ability to enter into other realms of experience besides one's own. This is extremely powerful. The empathic function gives access not only to the 'inner workings' of other people but also to the inner workings of all forms of life and the inner workings of nature in all its forms. Everywhere in nature there are centres of experience which carry media messages according to their own specific character and these messages can be inherited by the man of level three. Then the detached observer of level one has become a true participant within every moment of every other. We remain still within the realm largely determined by the nature of the strivings and goals of the person. ... At the fourth level, we have the extreme case of this where an increased sensitivity to media now begins to make possible a direct answering of questions; but, these questions are still those the person wants to ask and may not be those he needs to ask. The name we have given to this level is Intuition but we must emphasise that this is active, purposive intuition and not a matter of gratuitous insight. The skill to participate acquired in level three can now 'take wings' and participate in actions of virtually any character, wherever in space-time one cares to cast one's net.

Up until now, the Intelligence has been 'led' by 'matter', i.e. specific personal concerns and purposes, the desire for solutions and the like, all of which stem from matter. When we enter into level five, Inspiration, media begins to 'take over' and lead the way. Now answers begin to happen without first posing questions. This is the most critical threshold because, in order to pass over it, there has to be a letting go of all prior orientations and egocentric alignments of the will. Obviously no valuable work is going to arise miraculously of itself. In fact, this level of work is the hardest work for anybody: a new level of effort is required in spite of the loss of egocentric motivation. The work is in the present moment and in keeping oneself in the present moment, moving on from the crystallising tendencies of the past into a non-determined future. It gives rise to 'peak experiences' which provide their own intrinsic rationale, a learner's initiation into obtaining of crystal clear insights in zero time, the work of level six.

At the genius level of continuous meta-control, level six, the fabled 'third eye' insight is a matter of course and no longer a thread of beads, or peak experiences. Then, there is all the time in the world because everything is in place; linear temporal sequence is no longer of primary significance; the products of such an intelligence are all inwardly connected with each other as one whole event (even if this may not be visible to others); nothing is left out of account. One is in the realm of the 'fait accompli', in which time does not apply. Level six ... 'Illumination', changes entirely what is to be meant by technological breakthrough. At this level a person has become at-one with pure media, i.e. with pure intelligence; that impersonal primal intelligence that is totally beyond and devoid of all matter; the formative force that is incessantly active beyond - but also within - all natural creation, in its every cell and structure throughout every universe, both existent and emerging.

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WOKOŁ NAUKI KONSTRUKCJI OSIĄGANIĘ "TECHNOLOGICZNEGO"
PRZEŁOMU CZASU ZEROWEGO

S t r e s z c z e n i e

Przy dalszym prowadzeniu naszych badań w sprawie równania 3M i logosyntezy rozpoznajemy w "mediach" zarówno budowę jak i budowni czego wszelkich działań twórczych i zarys osiągnięć istotnej roli i charakteru geniusza.

ПО ИЗУЧЕНИЮ КОНСТРУКЦИИ - ПОЛУЧЕНИЕ "ТЕХНОЛОГИЧЕСКОГО"
ПЕРЕЛОМА НУЛЕВОГО ВРЕМЕНИ

Р е з ю м е

При дальнейшем проведении наших исследований в области уравнений 3M и логосинтеза различаем в "носителях информации" как строение, так и строителя всяких творческих действий; достижения, существенную роль и характер гения.

Recenzent: prof. dr inż. J. Dietrych

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