

# **Fifty Years On: The Far Reaching Consequences of *The Causal Texture of Organizational Environments***

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In 1965 Emery & Trist published a paper which was to have dual significance with far reaching consequences, for social science in general and strategic management and planning in particular. The first significance was that it completed the open system by conceptualizing the environment within which systems existed and the second was that it specified the nature of that environment as it had changed over human history, describing for each era, its *causal texture*, the interdependencies and processes within the environment that form the determining conditions of its exchanges with organizations or systems. Emery & Trist refer to organizations throughout but as the concept developed over time, it became clear that the model was one that applied to all systems.

The paper was entitled *The Causal Texture of Organisational Environments* and arose out of Fred Emery's interest in the behaviour of very large organizations in the face of very devastating winds of change. Fred first presented it to the Informal European Group early in 1963, a circle of eleven to thirteen organisational theorists who met for a couple of days every so often on the edges of formal conferences for the purpose of working through new ideas. When published it was called a Citation Classic by the Institute for Scientific Information in 1980 (Emery, F. E. 1987). It had been cited more than 7,000 times by 2026, (Google) making it one of the most cited papers in organisational and systems theory. However, as Emery noted several times, it is much cited, little used. This follows a pattern first noted when the final paper was presented at the International Congress of Psychology in Washington, D.C. in 1963. At the end of their presentation, there was dead silence and there were no questions. Emery and Trist later received a letter from the chair of their session, explaining that it was only after the conference that the meaning had become clear to him. Many years on now, the import of the paper plus its many subsequent developments has certainly become clear but just as clear has become the fact that many reject, explicitly or implicitly, the idea that the environment significantly affects human behaviour.

Before we examine the implications of the 1965 paper, a brief detour. The 65 paper preceded the publication of the design principles by two years and inevitably, they came to play a crucial role in all the work that followed in understanding these social fields. The role they played in particular in shaping the systems in these fields was known to all of us and assumed in all our work but had not been explicitly spelt out in writing.

The following detour is taken from the revision and update to Part I of *Searching*, 1982, now named *Cultural Contexts* (Emery M, 2020).

## **The Detour: Causal Textures and Design Principles**

As we trace back through the two chapters here, (of Cultural Contexts) firstly *Recent History*, we are actually tracing the evidence for the growth of DP1 structures and their effects through Western culture and in the second, *New Visions and Old Worlds*, we are compiling evidence that the ancient cultures were indeed primarily based on DP2. My

original writing however, did not at all make this explicit. I believe it is now definitely the case and have edited the originally text to reflect this conclusion.

The main conclusion was only finally arrived at in late 2020 during the period when I was finishing the writing up of the research report on the data from scans of the extended social field from 1973-2009. I suddenly thought of Part I of *Searching* (1982) and returned to it immediately to check my memory, and then it struck me - Emery & Trist's (1965) social fields, excluding Type I and V which are theoretical or limiting cases only, cover the environments arising from cultures based primarily on one or other of the design principles plus the transitioning between them (see table below).

Classification of Emery & Trist's environmental types by primary organizational design principle		
Type	Name	Primary design principle in cultures
I	Placid, random	Theoretical or limiting case, can be approached in reality only
II	Placid, clustered: <1793	Design principle 2 (DP2), redundancy of function
III	Disturbed, reactive: 1793-1953	Design principle 1 (DP1), redundancy of parts
IV	Turbulent: >1953	Mixture, transition from DP1 back to DP2
V	Vortical	Theoretical or limiting case, can be approached in reality only

In numerous publications subsequent to the 1965 classic, Fred Emery and others have worked on these various environmental types to both clarify and elaborate their natures. "Most of the collecting, hunting and early agricultural societies appeared to have lived in such environments" (as Type II, Emery F, 1977a, p7). He then goes on to clearly identify the Type III as one in which "elements of a competitive, zero-sum game, have been introduced as it is not likely that the optimal location is big enough for all" (p8). As the Type III becomes more disturbed and reactive, organizations devise ways of operational planning to out-manoeuvre the other, and as we know from observations of the massive bureaucratic structures that surround us, that is a perfect description of how these behemoth pyramids behave towards each other in a constant management game of out manoeuvring the competition.

Emery's description of the behaviour of these organizations in the Type III field is the perfect description of DP1 structures as we find them today, relics from a bygone age, the pyramids. *He has all but said it here himself that the typical organizational structure for the Type III was built on DP1.*

### First Consequence – from closed to open

Von Bertalanffy was known as the Father of Open Systems but he left the model at the point where there was no specification of the environment of the systems within it with their transport equations in and out of it (1950). We knew that things went into an environment and emerged transformed but the nature of *it* which transformed them remained a mystery. The model was, therefore, still closed and incomplete.

Emery & Trist **completed that model** with the proposition that understanding organizational behaviour required some knowledge of each member of a set: L<sub>11</sub>, L<sub>12</sub>, L<sub>21</sub> and

L<sub>22</sub> where L means a lawful relation and the subscript 1 refers to the organization and 2 refers to the environment. L<sub>11</sub> therefore, refers to the internal interdependencies of the system, L<sub>12</sub> to those transactional interdependencies when the system acts on the environment, L<sub>21</sub> to those transactional interdependencies when the environment acts on the system and L<sub>22</sub> refers to those processes through which parts of the environment become related to each other, and through which it exerts its influence on the systems within it, that is, its causal texture. In this formulation, system and environment determine each other, they are co-implicating. Further work (Emery & Trist, 1972) elaborated and clarified the open system with the L<sub>22</sub> later fully defined as the extended social field of directive correlations (Emery F, 1977a) This later formulation in terms of directive correlation allowed much greater precision and quantification in any analysis.

This conceptualization clarified the distinction between open and closed (Emery M, 2013) such that theories which do not include an environmental component with lawful relations with the systems within it are definitely closed systems theories. One only has to ask the question of 'adaptation to what?' to sort out our various theories claiming to explain adaptation – if they do not contain this component, they simply cannot answer the question.

Also as more has been learnt, it has become clear that the old distinction between living organisms and inanimate objects cannot be maintained in terms of open and closed as all systems are indeed open to their environment in some way. *There is no such thing as a closed system* as no fully enclosed system has even been found or built (Emery M, 2026). Closed systems theories are, therefore, inadequate and misleading as they do not and cannot accurately explain reality (Emery M, 2000)

Emery & Trist had several attempts at explaining the emergence of this distinctively strange Type IV environment, in the original paper and particularly in *Futures We Are In* (Emery, 1977a). Increasingly, Fred found them all unsatisfactory and finally found his satisfactory explanation of its origins in the period immediately following WWII (Emery F, 1977b). The answer lay in the demise of two silent assumptions that provided the historical rationale for the persistence of the principle of hierarchical domination, in all areas and importantly in the subordination of the individual to the state.

The two assumptions were:

- 1) that there is not enough to go around, necessitating some centralized bodies or agreed practices to ensure survival of the worthy, and
- 2) preservation of the nation state as the prior requirement for having adequate centralized power to allocate, and hence all individual aspirations must be subordinated to the nation's requirements for waging war and preserving and enhancing that power. Together they enshrined a struggle for the survival of the fittest and the indispensability of elites.

The productivity achieved during the war was astounding and destroyed the first assumption. The rapidly developing cold war with the explosion of the USA's first thermonuclear bomb in 1952 and the USSR's first in 1953 put paid to the second assumption. These events were followed by the MAD (mutually assured destruction) strategy which triggered protests to Ban the Bomb around the world and left people asking—should I be serving my country? What country?

As the rug was pulled out from hierarchical domination, so went with it so many other beliefs, attitudes and values, particularly those within the constellation of effects of DP1 structures and various forms of autocracy, that it was indeed a *cultural revolution*, not simply

one as so many had been, e.g. the French and Russian Revolutions, to change the bosses. This threw societies around the world into turmoil which is still being resolved. It also seriously disturbed the elites who later extracted revenge with neoliberalism, a story continued below.

This turmoil was regularly reflected in analyses of the social field, the L<sub>22</sub>, which we conducted as the first part of the Search Conference. For most of the 1970s, we saw groups and communities divided when creating their most desired futures from the database they had compiled on the L<sub>22</sub>. There was serious conflicts revolving around attitudes towards authority with both sides arguing the toss until it became clear that there would be no resolution and we had to resort to using the rationalization of conflict. This conflict gradually subsided over the years and from about the mid 1980s on, we saw more conflict about the most probable future than the most desirable. It remain this way today. My interpretation of this is the straightforward one, namely that the intensity of the relevant uncertainty characteristic of the Type IV is diminished, but to what point? We continue this discussion below.

### **Second Consequence - with many tentacles**

The second consequence was identifying four 'ideal types' of causal texture over historical time with an hypothesis that these types roughly form a series of increasing complexity but may also exist simultaneously for any organization. Subsequent research clarified these points. The latter point that these fields could exist simultaneously for different environments was quickly clarified as by 1977, Emery could state "I am further contending that the L<sub>22</sub> has been evolving in ways that significantly change what is possible and probable in the L<sub>12S</sub> and the L<sub>21S</sub>...His thought had moved from there being L<sub>22S</sub> as above to just an L<sub>22</sub> as we had already demonstrated through many Search Conferences that the L<sub>22</sub> was a global entity. The question of complexity is discussed below.

Type I is called placid, randomized with goals and noxians (goodies and badies) distributed randomly. In this field, there is no distinction between tactics and strategy, when you see it, grab it. Learning accrues mainly from trial and error.

Type II called placid, clustered is characterized by clustering of those goodies and badies on the basis of natural laws with survival dependent on knowledge of the physical environment. This leads to a distinction between strategy and tactics but the tendency of organizations to grow large and hierarchical in Type II has not been confirmed by further research. On the contrary, Type II has been shown to be the most adaptive and long lasting environment yet tried (Emery M, 1982 Searching; Graeber & Wengrow, 2021).

Type III called disturbed reactive, developed and consisted of large similar hierarchical organizations which are in competitive relationships, each choosing strategic objectives to win which they pursue with campaigns or operations.

Type IV is called turbulent because like the Type III, it is dynamic but unlike the Type III, the dynamism arises not from the actions of systems within it but from the field itself. **The ground itself is in motion.** This feature causes *relevant uncertainty* with the actions of individual systems becoming increasingly unpredictable. Emery & Trist hypothesized that this unique field would demand cooperation for adaptation and the emergence of values which have overriding significance for all members of the field. Subsequent work showed it was the small set of ideals which played this role, not values (Emery F, 1977a; Emery F & M, 1979; Emery M, 2021).

Baburoglu (1988) identified a fifth type of environment he called vortical from observing Turkey's troubles. It was a field in which adaptation is not possible as complexity had

become so overwhelming that everything became frozen. People have to play possum. However, like the Type I, the Type V could only be a limiting case as it is possible only in theory, only an approximation to reality rather than the real thing (revised edition of Emery F, 1977a).

The three fields with profound implications for research, Types II to IV, have now been extensively researched and their validity established. The Type II existed roughly from the beginning of time to the Industrial Revolution. The Type III existed from the Industrial Revolution to approximately 1953 although there were probably pockets of it with structures governed by the first design principle, DP1, throughout history, e.g. the Roman Empire. It was, therefore, the shortest lived global environment because it was essentially maladaptive. The Type IV is still with us.

The Type II consisted primarily of systems governed by the second design principle (Emery F, 1967; Emery F & M, 1974;) where cooperative relationships with other people and the environment produced an enormous diversity of thriving human cultures with abundant arts and cultural pursuits amidst healthy ecosystems supplying abundance (Emery M, 1982; Emery M, 2021; Graeber & Wengrow, 2021).

The Type III came into being as people whose lives had been dominated by the seasons and circadian rhythms were recruited from the farms and cottage industries to work in the factories. They proved unreliable at working in factory regimentation so supervisors were added but the supervisors proved unreliable so additional layers were piled on. For the first time, ordinary people, not the Royal Court and the ruling elites, were forced into dominant hierarchies governed by the first design principle. The maladaptive effects of these systems in the Type III emerged quickly as human relationships deteriorated accompanied by accumulating damage and destruction in the global environment (Carson, 1950; 1962).

### **The Tentacles**

These ideas grounded in the 65 paper proved exciting to many and several different lines of research were initiated, amongst them a much more detailed enquiry into the natures of the three reality based environments identified. Another arose from an already existing embryonic stage of research into what lay behind the changes that formed the basic data of the L<sub>22</sub>, the ideals and their relationship to values. As this work proceeded, it merged with yet another but interrelated line of enquiry, that exploring not only the ideals but their counterparts, the maladaptions. And then it became clear that what we were dealing with was essentially a whole field of research as the environments themselves could be judged on the degree of adaption and maladaptation inherent in them.

As these lines of research developed several tentative conclusions emerged from it. These posed more basic questions for OST and social science more generally as they touched upon our very reasons for working or existing as a field of research; the social engagement of social science.

What do we really think we are doing?

What is the purpose of this work, organizational theory or OST? Or what should be the purpose of this work?

### *1. Elaborating the Types II to IV*

We deal with these environments in the order best understood, Type III, to the present, Type IV, somewhat understood to the future, Type II, about which there are multiple misunderstandings, some of which are precisely contradicted by the evidence. Not only is the Type III best understood, it is still frequently mistaken for today's environment, particularly in the corporate world which clings to some remarkably maladaptive beliefs. It is essential that we understand the Type II which contains at its core, some basic lesson with far flung repercussions for Earth and our survival on it.

#### *Type III*

Some of the brief description above of the origin of the Type III came from our new research but it is generally a period which is fairly well understood today. It was a time of the Dark Satanic Mills and Dickens with his very accurate pictures of life during those years. Working conditions were grim with long hours, child and unsuitable female labour and generally appalling dangers and hardship. The environment became filthy with the Great Smog of London, polluted air and waterways and little public or private sanitation. Diseases were rife and life expectancy was low.

As above, it was the product of the Industrial Revolution with the birth and early years of structures based on DP1 from top to bottom. Many today who sincerely believe this is the only way to organize, are not aware of just how new it really is. The environment they produced was the perfect illustration of what you get when DP1 is wholeheartedly applied not only to people but also to the natural world. Seeing oneself as above and superior means you can use the world for your own personal ends resulting in the destruction of family and social life and the physical environment. People hated this new world and there were never ending protests of which the Luddites are probably best known but trade unions flourished and were finally legalized in 1824. Many other protest movements sprang up during the Type III including the Suffragettes.

#### *Type IV*

Ushered in by the nukes, the intensifying cold war, and the total disillusionment with the elites and authority in general, the Type IV environment sparked waves of activity at all levels of society.

Following the early protests such as the global *Ban the Bomb* rallies, the world (un)settled into a period generally called the Cultural Revolution, an amorphous varied movement with different primary features in different nations and cultures carried mainly by youth. It could not be missed.

On the ground, the youth movement as it was also called was characterized by showing the rest of the world what a new world looked like. Love, peace and freedom, let a hundred flowers bloom, young people modelled their new world with love ins, communal education, drug taking and some efforts at more direct action such as storming university council meetings. Depending on the culture, their different efforts were variously met by different strategies including levels of violence, co-option or ignoring it if they could.

It wasn't simply action on the ground, it was a huge wave of new and radically different music, art and literature as decades of submission and convention gave way to creativity unleashed in every field. It was more than sufficient to seriously disturb the elites who saw their power fading into the past.

However, despite the scope and the intensity of this huge movement on the ground and the solid belief that they were remaking the world "It didn't happen" (Gottlieb, 1987). Slowly but surely, the intensity faded and the youth got older. Those co-opted became unhappy board members while others forced to earn a living joined the ranks of wage slaves. The music and the arts remained as a reminder of the dream and the hope. It had been a glimpse of a new world, one which could not be ignored.

Some comments from America around the time described it variously as:

"The most rapid cultural realignment in history... a new mind" (Ferguson, 1980, p.23) or "For those who see it, the new society within the old is not a counterculture, not a reaction, but an emergent culture – the coalescence of a new social order" (p.38).

"I have called it prefiguration" (Mead, 1972, p.38).

It is the new democracy – "the movement present in the world creating a new form of life" (Megill, 1970, p.144).

In Australia, it was seen as:

"All around... there is a stirring in the community which is responding to the opportunity to be able to communicate again, to share and shape their lives together again with a common language of care, trust and support. People wish to regain control of their lives, and what they are doing, without an institution lurking in the background. Together with this is an awakening of the potential of their own power, rights and justice. People are awakening to the fact that public money is their money and they have a right to it" (quote from Gary, p.48 in Stewart, {ed.}1979).

The Cultural Revolution of 1960-70s was the first attempt to capitalize on the realizations that brought on the Type IV, to build the new found freedoms into a new way of life for all. Many saw in the upheaval, possible new paths which captured some of the great wisdoms of the past together with our ideals and the laws of nature.

A short selection illustrates the commonalities:

- Robertson (1978) discerned a *Sane Alternative* future he called the Sane, Humane, Ecological or SHE alternative. This requires a change in direction towards his key concept of *balance* "within ourselves, between ourselves and other people, balance between people and nature".
- A group of young Australians came up with Convivial Equity based on four principles; A conserver society, democratically based, open and informed, and permeated by feminist principles, is needed to enable Australia to flourish. Such a society will be convivial, sharing, egalitarian, participatory, innovative, self-adjusting, consensus-achieving, pluralist and decentralized. A non-exploitative and internationally responsible Australia will have an Asia/Pacific orientation. In this convivial equity society Australians will be more self-realizing, creative and tolerant (Henry & Thompson, 1980).
- Fred Emery foresaw in his vision of *Futures We're In* is that of a genuinely participative democracy which has in common with the other scenarios, the health, vitality and ideals which accrue from living and working in organizational structures in which all have equal status.

- Skolimowski (1978) developed *Eco-philosophy* which illustrates the common themes on a metaphysical plane. It is life oriented with a commitment to human values, to nature, quality of life with wisdom and responsibility for our oneness with the whole; a new mythology to replace mechanism.

Three dominant threads from these new paths or visions are clear:

1. The work of the new day is concerned with wholes, not parts
2. The vision is not new
3. The ideals it embodies have long been preserved. While they are known by many names, they are the essence of the eternal feminine.

These threads lead us straight back into the Type II but before then, two points:

First, the reason the Cultural Revolution failed was that there was no knowledge of the design principles. Only discovered in 1967, and then only in the preserve of academia until 1971, the youth and their supporters worked on instinct and perhaps vague ancestral memories of a world of equality, freedom and harmony. This provided the slogans and the beliefs but in practice turned out to be primarily Laissez-faire, do your own thing, a recipe proven not to be anything like genuine, participative democracy, and actually destructive (Lippitt & White, 1943). It was doomed to failure.

Second, it has been mentioned that the almost total rejection of what we know now as DP1, authority or autocracy, disturbed the elites and inevitably they fought back. Their most successful resistance came in the form of what we now know as Neoliberalism. An ostensibly economic theory modernizing classical liberalism by Friedrich von Hayek and Milton Friedman, it was enthusiastically embraced by conservative governments, notably

those led by Ronald Regan and Margaret Thatcher. It was also enthusiastically taken up by private enterprises around the world who took the opportunity to tighten up their dominant hierarchies and do their best to convince their employees that money took priority over all human and social values.

Very quickly, the push for free markets, small government and private enterprise, all in the name of individual freedom, rapidly transformed the global economy and human futures as we experienced rapid growth of inequality and mental illness (deGuerre et al, 2008). Concomitantly, there was a burgeoning of diversity in technologies as digital made deep inroads into all aspect of communication and later of life. The elites certainly got their revenge as their solution was the exact opposite of flower power.

All these conflicting movements certainly increased the incidence of unpredictability in technology and the material world but at the same time, around the middle of the 1980s, in Search Conferences, a quite different phenomenon was happening. The degree of conflict in the Most Desirable Future dropped and the degree of conflict in the Most Probable Future increased, the opposite pattern we had been seeing since the first Searches in Australia in 1972. There was a decline in *relevant uncertainty*, the hallmark of the Type IV. This pattern has continued. What this means is perfectly clear – there is no longer a population split between the desirability of subservience to authority or a strong belief in autonomy; authority had lost that battle.

Now, the uncertainty in the technological realm continues as various forms of AI, mainly that of the Large Language Models, are employed by organizations hoping to reduce costs and increase profits but at the inherent cost of problems such as the LLMs 'slop' and 'hallucinations', plus a doubtful public. There are signs that authority is still fighting the good fight particularly in the political arena in some countries, but little sign of it in events such as Searches.

So are we headed towards a modern form of Type II, 'associative, joyful and wise' (Emery M, 1999) and what is the old Type II and proposed modernized version really all about?

### *Type II.*

While the Type III may be reasonably well known, the Type II is definitely not. Today there is a fairly widespread belief that life in the ancient world, the Type II, was some variation on nasty, brutish and short, and 'tribal' meaning there was constant warfare between different groups or clans. Nothing could be further from the truth.

Many different sources present a fairly consistent picture of the ancient world as predominantly egalitarian with pockets of matriarchy and the occasional but certainly rare example of a culture which was competitive, punitive and warlike. These tended to stick out like sore thumbs against the backdrop of the rest (Emery M, 1982; 2021). I am going to draw heavily here from *The Dawn of Everything* which is the most comprehensive and well documented survey.

Certainly the main theme which emerges from *The Dawn of Everything* is Graeber & Wengrow's utter debunking of today's social science orthodoxy which is there is a linear progression or evolution through history from hunter gatherer through agriculture to large complex states, where complex means hierarchical. That orthodoxy is full of sins of omissions and commission, and can as the authors say, be maintained only by ignoring most of the world's history

Reality in the old world was on the contrary, a dazzling diversity of the human experiences in which the genotypical social structures and essential functions were mixed and matched with just about every possible variation on their phenotypes. It was a far cry from the carbon copies of arrangements you find around the world today.

Not only did the old egalitarian societies share their material wealth, they also enjoyed wealth of another sort in that they spent much less time working, working hours have increased over time, and much more time creating, celebrating with ceremonies to both maintain the culture and enjoy social relationships. Significant amounts of time were consumed with playing games, gossiping, arguing and travelling for pleasure. Arts of various sorts flourished throughout the old societies.

Many Enlightenment thinkers insisted their ideals of individual liberty and political equality were inspired by Native Americans, because it was true (Graeber & Wengrow, p37). Some of the Indigenous intellectuals from these cultures such as Kandiaronk who features significantly in the book may not have known the design principles but he knew that the European lack of freedom and punitive laws sprang from "a form of social organization that encourages selfish and acquisitive behaviour" (p53). That is an astute perception of life in a culture governed by DP1.

These intellectuals exercised significant influence not only on the Europeans but also the Founding Fathers of the American constitution although those advocating for an egalitarian system lost out in the end. It is probably not recognized today that the indigenous peoples in the various new worlds were harshly critical of the invaders' society, particularly their lack of freedom, indeed their hostility to freedom. They criticized the inequality of women, their lack of generosity and cooperation with each other, a critique which was taken seriously by some Europeans. However, this came to be regarded as a danger to the fabric of European society which necessitated a whole new body of theory being created to refute it. It is that evolutionary theory which forms today's orthodoxy, which is clearly at odds with the evidence. Today, the idea that American indigenous intellectuals played a leading role in this conceptual revolution is almost heresy (p35).

While today's view that the progress of Western civilization inevitably makes everyone happier, wealthier and more secure is optimistic and appealing, it cannot account for the fact that this civilization was rejected by the people on whom it was imposed, that it could be forced upon them and maintained only by the power of the gun. Similarly, it fails to account for the fact that many Westerners defected to the culture so conquered – that the conquered were miserable and unfree was simply another myth.

Graeber & Wengrow ask for example, what is equalized in egalitarian societies and hypothesize that it may refer to some sort of homogeneity as an ideal. Similarly, some confuse status with wealth. However, there is little to no evidence to support these hypotheses while the book is stacked with evidence that egalitarian refers to *equality of social status*. That is what the many discussions of e.g. chiefs with no power, the right not to be commanded and the right to easily move, amount to.

What we also see with these societies of equals is that rather than personal dominance based on position on a hierarchy of rank, social influence flowed from esoteric forms of knowledge. Australian Indigenous cultures do not feature prominently in this book but similarities abound. Elders in Aboriginal Australia are so called not because they have reached a certain age but because of what they can do and what they know (personal communication). It is the same system of esoteric knowledge employed by many Indigenous peoples around the world documented here from the Americas. This knowledge was used to advance not the individual holder but the unit in everyday productive pursuits as well as instances of religious and other ceremonies.

Cities first started emerging all around the world in about 4000BC but their diversity defies classification. Not just do some lack class divisions, wealth monopolies or hierarchies of administration, all the features found in today's cities, they exhibit such extreme variability as to imply "a conscious experimentation in urban form" (p285). The early cities showed harmonious beautiful patterns in built spaces, statements of self conscious civic unity as a result of municipal planning. Such spaces were used for festivals and other ceremonies cementing the cohesive unity or identity of the people of the city.

Almost overlooked are what are undeniably large cities in ancient Ukraine, dating back to the early and middle centuries of the fourth millennium, before the better known, and smaller ones in Mesopotamia. Disparagingly dismissed as "overgrown villages" (p289), or simple rather than complex, they show no sign of any centralized government, no form of ruling class. They all showed the prominent role of women, and they all featured circles rather than

linear arrangements for layouts and structures. Far from simple cultures, they organized huge structures over large distances while maintaining peaceful and cooperative relations with all they met. It was not only in what is today Europe that huge cities flourished – Teotihuacan in Mexico, 100BC to 600AD was estimated at about 100,000 and again had found a way to govern itself without overlords but with totally different technologies and ecology. Surprisingly few of the early cities anywhere showed any evidence of authoritarian rule and there was no uniformity of ecological surroundings – farming or legions of slaves to maintain the population were not required. This data chops off another leg of the evolutionary theory.

Decision making was a collective activity. Similarly, the authors note many times throughout when examining different sites or cultures, that although there may have been practice sessions or playful wars, or even people identified as war chiefs, there is an almost total lack of evidence for actual warfare. In some places, conflict was played out through aggressive games. This accords with data from Australia and Papua New Guinea such as *Gardens of War* (Heider & Gardner, 1968). War games were regularly played between tribes and if somebody was injured, it was a tragedy for both sides. The case of North America with its many different nations is dealt with in detail throughout the book and alone, convincingly illustrates that the evolutionary theory of progress plus the inevitability of statehood as the final destination is nonsense.

There is so much bumph written about war today that it necessitates a correction from this book. As Graeber & Wengrow note frequently throughout, they find there is no actual reason to believe that war has always existed. By war they mean not just organized violence but a kind of contest between two clearly demarcated sides. War involves two teams who employ the principles of 'social substitutability' whereby any member of one team treats all members of the other team as equal targets. For most of human history people obviously didn't see much reason to kill others or even engage in destructive conflict at all.

There are some rare scattered instances of warfare presented and as the examples unfold, we can see that they take place in societies governed by DP1. Graeber & Wengrow struggle to explain the correlation between the patriarchal household and military might but students of OST could help them here. There is a wealth of evidence scattered throughout the book that societies built on DP2 were generally gender equal with women governing without recourse to violence, adversarial politics or rule by command. This was sometimes limited to the more domestic area but not always. Some cities and centres show unmistakable signs of female or feminine rule but this does not mean dominance. Feminine rule or matriarchy in every sense featured equality with governance featuring human, social and ecological values. A safe rule of thumb is that where the governing principle is DP1, there is gender inequality. Inevitably there, women are treated as inferiors. And there is conflict. DP2 shows the opposite.

Nor is there evidence that war followed the adoption of farming as there were long periods of peace in farming communities. There is no reason to believe war is "in any sense hardwired into the human psyche. On the contrary, it's almost invariably necessary to employ some combination of ritual, drugs and psychological techniques to convince people, even adolescent males, to kill and injure each other in such systematic yet indiscriminate ways" (p506). Even in the matter of punishment, the cultures based on the two principles were found to be poles apart. For example the Wendat, from the Mississippi delta, when visiting France were appalled by the whipping, hanging and killing of their own kind. Their own

ritual punishments were designed to absorb the strength of the enemy making themselves more powerful; the ritual of the Europeans revealed a dissymmetry, *an imbalance of power within the culture itself*. This of course makes the current fad of referring to instances of aggressive behaviours which destroy or divide as 'tribal', just so much nonsense. It is yet another example of just how ignorant and conceited we have become in our beliefs that the old cultures arranged into 'tribes' were an inferior bunch compared to ourselves. We are the aggressive ones with the warring tribes, not the ancients. Graeber & Wengrow have documented some of the almost unbelievable failures of social science as it operates today, a very sad story indeed.

Leaving aside the massive failure of the social sciences, the picture that emerges of the Type II with its diversity within egalitarianism, its rich quality of life for all and its nurturance and cultivation of the natural world providing an abundance for all, is a sharp, portrayal of something approaching an ideal world. Its longevity testifies to its ability to adapt to changing environmental and internal purposes, and in most cases the end only came by the invasion of the warlike empires inflated by the early products of the industrial revolution. Those 'frontier' wars were brutal and often long lasting with the conquerors attempting to maintain the ascendancy by the gun, massacres, denial of basic human rights plus denial of use of language and culture to cause cultural collapse plus ultimate demoralization and destruction.

There is no doubt about the damage caused and the intergenerational trauma that haunts every generation but in their ultimate aim to annihilate these cultures and people, the invaders have failed. Despite everything, the Indigenous are showing a resounding purpose, reviving their cultures and rebuilding the best of their old life with the best of today. There is absolutely no doubt that the Type II environment was the most adaptive, healthy and productive we have ever tried. It stands as a glowing light to which we as social scientists should orient all work.

When we run today a 2 stage model, Search Conference plus a Participative Design Workshop modified for design, we see all the elements of the Type II gradually assemble into a pattern. The participants genuinely *associate* as they work closely and collaboratively on tasks close to their heart, grasping the *wisdom* inherent in the process of ideal seeking and above all else, experience the waves of *joy* that accrue and wash over them when in the creative working mode, they crack jokes, play with words and generate energy and motivation as they sense their achievements and ideals moving closer (Emery M, 1999). These are the elements of the Type II discernible in modern methods, the overall feel of positive, rather than the negative affect which is so commonly on show today, the sense and reality of people working voluntarily and closely together with the regard and respect paid to the ancient knowledge, the wisdom of the ages passed down through the generations to generate a more desirable future for all.

We know these methods work, the theory and practice of *active adaptive planning*, and *organizing*, particularly since the completion of the theory with the addition of conscious conceptual knowledge of the design principles to give the 2 stage model (Emery, M, 1999).

.All this research made one thing clear, the adaptive outcome for humans and the planet *is a modern form of Type II environment*. The *first implication* of this is that our methods

should have as their goal, a modern Type II. All methods should both use and educate about the open system and the second organizational design principle. OST methods have proven successful in those aims.

The **second implication** is that social scientists working with organizational dynamics and performance with the aim of improving DP1 structures without changing the design principle are pursuing maladaptive ends. Similarly those who are using methods such as planning suitable for Type III and varieties of the old STS method which do not specifically address the design principles are also not only doomed to failure, but are also contributing to our maladaptions. See here some of the examples of documented maladaptation (Emery M, 2024; 2025.)

## 2. *Ideals and Values*

The 1965 statement that the Type IV field would demand cooperation for adaptation with the emergence of values which have overriding significance for all members of the field conflicted with first hand experience in Search Conferences. We found that that participants with extremely diverse, even conflicting values, such as different religions or none, or ethnicities that may have been in conflict, had no difficulty cooperating on strategies and action plans for purposes close to their hearts.

Over the years, there came to be even less doubt that I>V, shorthand for the fact that ideals take precedence over values or outweigh values. Fred Emery had also delved into the nature of ideals and values and concluded that although they were similar in that they both referred to potentiality, "they differ in that ideals refer to people's ultimate striving for perfect beauty, perfect health, etc, but people do not try to 'reach' the value of fairness; 'fairness' guides their behaviour" (1977a, p70). This clarified and confirmed the behaviour in Searches and at the same time, corrected the original 1965 statement about the importance of values. What proved critical for adaptation was the elicitation of ideal seeking so that the ideals built into the current tasks formed a common ground on which groups and communities could proceed into the future.

## 3. *Ideals and Maladaptions.*

The work on values and ideals was embedded in a much longer piece of work on the phenomenon called the ideals and ideal seeking. Human history has long recorded ideal seeking as this quite special type of behaviour and social science had looked the nature of the ideals. Ackoff & Emery (1972) evolved a theory of ideals from their work on the nature of people as purposeful systems while Fred Emery began the work of hypothesizing what active adaptation and maladaptation to the Type IV field would entail (Emery & Trist, 1972).

Fred Emery published a full scale revision of the theory of ideals in 1976, 1977a, pp77-80.

- Only individuals can be ideal seeking systems
- Individuals can sustain the ideal seeking mode only temporarily
- It is only within group life that ideals emerge – i.e. within DP2 structures
- No ideal can be pursued singlemindedly without sacrifice of the others
- Deciding on what sacrifices of other ideals should be made in any particular choice between purposes is the essence of wisdom

The ideals themselves and their alternatives or opposites were rigorously defined as:

- Homonomy                      selfishness
- Nurturance                    exploitation
- Humanity                      inhumanity
- Beauty                         ugliness

This whole theory of ideals has been tested and validated in countless Search Conferences and 2 stage models.

But when confronted with Type IV fields with its relevant uncertainty, Fred recognized one option is always to degrade the field yielding not adaptation, but maladaptation. This dimension of futures research had already fired up new work such as that on the active maladaptive scenario named Synoptic Idealism (Crombie, 1972). By 1977, the full categorization of passive maladaptive scenarios had been explored and by 1978, when we used the L<sub>22</sub> scans from 94 Searches held around the country as the database for identifying Australia's 'state of the nation', those explorations had been clarified and consolidated into a mutually exclusive and logically exhaustive set.

We already knew from individual Searches that the perceptions of the people were accurate and from other tests, that the coding into a set of corresponding ideals and maladaptions, both passive and active, again validated through practical work with L<sub>22</sub> scans, proved realistic. As its first test as a database for large scale research projects, Project Australia proved it to be highly meaningful. It showed that it was possible to mount large scale research projects documenting cultural change over time, e.g. Did 9/11 change the world? (Emery M, 2021).

Apart from much else, this 2021 study showed that the advent of neoliberalism did indeed set back many of the gains made during the cultural revolution of the 1960s and 70s. It documents the waves of social change as the maladaptions powered largely by neoliberalism fought it out with the ideals over the period of 1977 (in Australia) to 2009 (internationally). Neoliberalism could not last however, as the power of the ideals proved too strong.

### **Note on Complexity**

A general theory that complexity increases with evolution was in vogue at the time as the 65 paper and without the intelligence that the design principles brought to the sequence, such a conclusion as the types of causal texture formed a series of increasing complexity, seems to have been warranted. However as per the note up the front, documenting the correlation of causal textures with the design principles shows this is more a case of qualitative difference.

Springing from much the same sources, at much the same time, is Complexity Theory which like OST discusses a variety of systems including complex adaptive systems and self organizing systems. These latter have been hypothesized by Stuart Kauffman (1993) who proposed that the universe and life self organize into ever more complex forms. It could be said that OST and Complexity Theory have much in common but for all of its work, Complexity Theory contains no element of environment. For all its discussion of adaptivity, it remains a closed systems theory, one of those which cannot answer the question of what, apart from the physical environment in general, complex conscious humans and their creations are actually adapted, or maladapted to.

## Conclusion

Emery & Trist's 1965 paper has proven to be one of the most significant papers in the social science literature. It introduced a concept into the field which has had two sets of implications for the future of social science. The completion of the open system has firstly given us a marker for distinguishing open from closed systems which in itself, over time, has proved to be a powerful way of approaching the evaluation of contributions to our social science knowledge. Theories and methods without an environmental component, particularly those treating human beings as closed systems, have been shown to be wide of the mark and misleading.

The second major source of significance for the future of social science was the identification of the different environments, social fields humans have created over our history. As all the ramifications of this have progressed through different strands of research to today, it has become clear exactly what our most productive social science should be pursuing, what is actually adaptive. This extensive research has delineated ideals from values, ideals from maladaptions, active adaptive behaviours including in social science, from the maladaptive, and together with the design principles, has come full circle to show the relationship between all these dimensions of the theory and the social fields themselves.

For one paper, that is a huge contribution.

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