CONCEPTUAL ALTERNATIVES FOR THE ANALYSIS OF COUNTER-DISASTER ORGANISATIONAL NETWORKS

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INTRODUCTION

Within sociology the two sub-disciplines of Organisation Studies and Disaster Research have occasionally been combined in an effort to increase our understanding of organisations and groups of organisations, disaster events, or society in general. In some instances studies have provided insights into more than one of these three substantive areas. The significance of organisations within our western society and the influence that organisations have over most - if not all - of our everyday lives is an accepted part of twentieth century existence. It should not be surprising therefore, that when disruption to ongoing social routines are caused by an external natural hazard agent, which may result in disaster, that we again are directly influenced by the actions of particular organisations and by the decision-making responses of specific organisational encumbents.

However, within the context of a disaster event the priorities for community survival are not the same as they are in non-disaster situations. The priorities that communities accept as legitimate in a non-disaster situation are rearranged in times of disaster because they are no longer appropriate to the new social environment (Wenger, 1978). Inherent within the new arrangement of societal priorities is the re-alignment of organisations, both those who are charged with disaster ameliorative tasks, as well as organisations which have no apparent role in counter-disaster activities.

Organisations that are influential in 'normal' periods of community life may not be influential, or their ability to influence may be curtailed, under atypical periods such as the occurrence of a natural disaster event. A natural disaster, by definition, causes a temporary unravelling of the social fabric which encapsulates the processes, structures and interactions that we expect to be present within our social routines. The fragmentation of normative prerequisites following disaster that jeopardises individual and group existence also affects the survivability of organisations and organisational networks.

This disruption to organised behaviour should be expected within a disaster situation, yet it is often overlooked in terms of probable consequences following natural disaster impact; all too often, disasters are only regarded as a problem for the individual or a small group of significant others to cope with. Admittedly this is a more realistic

appraisal than the time when disaster was seen only as a matter for engineers to be concerned with, but it is still not the full story. Because our western world is so tied up with the "origanizational society" (Etzioni, 1964), a lot more consideration should be given to the inter-relationships between natural disasters and formal organisations.

The consequences of disaster impact on organisations is also overlooked by officials within organisations as well as by researchers. Such a disruption is resisted by organisational personnel, whose roles within the organisation may be altered, just as the role of the organisation may be altered, due to the changing circumstances caused by the drastic alteration of the social environment. Within the organisational setting a number of changes can be witnessed following impact. Similar adjustments may occur when a natural hazard agent threatens a comunity. A good example of this is in Northern Australia following the issuance of a 'cyclone warning' by the Bureau of Meteorology (see Britton, 1982). Some organisations will assume a change in responsibilities; their power to initiate and enforce existing, or newly-created roles, may be increased at the expense of other organisations. The structure of an organisation as well as the task that an organisation performs may alter (Dynes, 1970). Specific office bearers in one organisation may find they not only have the power to initiate actions within their own organisational settings, but also are able to deploy the resources and direct the decision-making capacities of other organisations, thereby exhibiting the ability for role-and/or boundary-expansion. These two features have been noted in some of the studies that have been conducted on organisations within extreme environments. On some occasions, also, special legislation is brought into operation. For example, State or Territory disaster Acts can over-ride routine social processes and structures and install other contingencies in their place. This latent capability of disaster planning can alter organisational and institutional procedures, rendering normally manifest social activities both inappropriate and inoperable. The balance between networks of organisations may also be offset as the disaster event introduces a new - usually only temporary - social environment within which new opportunities for 'territorial' acquisition and boundary expansion may be created.

This paper will focus on a particular group of organisations - those that are empowered to counter a natural disaster impact within Australia. This group of organisations will be termed the 'disaster-relevant organisational network'. The emphasis in this paper will be to illustrate that there are forces within this specific organisational network that operate to reduce the overall effectiveness of counter-disaster measures. Further, the paper will show that there is a hierarchy of organisations within this network. Within this hierarchy, organisations with the greater amount of power and influence

need not necessarily be the organisations with the most potentially effective or appropriate counter-disaster resources. These powerful organisations may not utilize their resources as well as they could during a disaster event. Conversely, the organisations at the lower end of the hierarchy, those which may have the greatest potential for effective action within a disaster context, may be prevented from optimizing their role. 'Higher-order' organisations are able to manipulate the external environment affecting the performance of the 'lower-order' organisations, as well as the internal functionings of these organisations. These actions reduce the overall effectiveness and efficiency of the disaster-relevant organisational network. Because of the specific characteristics of the 'higher-order' organisations it is necessary to develop a new taxomony that recognises the implication of these characteristics toward overall effectiveness in organisational response. Therefore, a taxonomy developed on the basis of the ability of organisations within the disaster-relevant organisational network to:

(i) influence the direction of the organisational network; and
(ii) determine the organisation's own role within that network

will be introduced and discussed.

Some examples will be drawn from the recent wildfire situations experienced in Tasmania (1982) and Victoria (1983) to illustrate the general concept. Prior to this, however, a brief discussion will be provided which will set out what I mean by a 'disaster' and what the important components are in the condition we refer to as a 'disaster'.

WHAT ARE DISASTERS ?

The word 'disaster' is a descriptive label that has been employed by a diverse range of people to explain a wide variety of different situations and consequences. Four main categories of usage within the disaster literature can be discerned. First, disaster often refers to a destructive agent (for example, a tropical cyclone, wildfire, earthquake, or flood). Second, disaster also refers to the physical impact which that agent has sustained (for example, loss of life; damage to property). Third, disaster can also mean the evaluation of the physical event (that is, evidence of physical damage is evaluated as being disastrous). Lastly, disaster can also refer to the psycho-socio-economic disruption created by the physical agent (See Dynes, 1970).

These four categories of 'disaster' are augmented further by the popular usage of the term. This leads to greater confusions of the meaning of the term, a situation that is probably generated by the fact that the word 'disaster' is used to describe any number of different types of unfortunate, unpleasant or unexpected events that occur to people. This confusion is further compounded by people's insistence on

using 'disaster' to describe not only situations that affect large groups of people, but also unpleasant, unfortunate or unexpected experiences which affect only individuals. Thus, one reads of a 'personal disaster', through to a national disaster. 'Personal disaster' is a gross misuse of the term, because disaster refers to collective stress situations not individual plights, whatever the cause may be.

The best way to describe the term 'disaster' is to look at the difference between 'disaster' and that of 'accident' and 'emergency'. These terms are often used as synonyms by people ("My car accident was a disaster!!"), but in reality these three terms have strict definitions. In order to point out the difference between these terms, and to illustrate just what a disaster is, three parameters will be used:

1. the number of people affected;
2. the degree of involvement of people within the affected area;
3. the amount of disruption caused by the event in question.

(Britton, 1983a)

An accident can be defined as having the following properties:

A. Both the immediate and the long-term consequences of the incident are restricted in geographical area; that is, it is an extremely localised event.

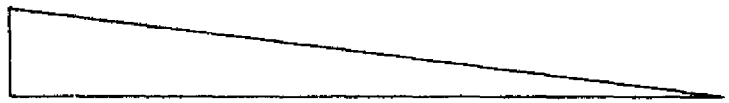
B. It is restricted to a small group of persons involved plus their significant others. 'Proximal others' may be involved, but the long-term consequences, if there are any, will not usually affect these 'proximal others'. An accident involves only the disruption of a specific interest group which is composed mainly of the victims plus their significant others.

C. There is little, if any, disruption of 'generalised others' within the greater population of the community. There may be slight disruption around the immediate incident site (for example, a road may be blocked because of a vehicle accident), but these disruptions are minimal.

Emergencies in many respects, can be regarded as 'mass-accidents'

A. The geographical area which an emergency covers is still localised, but need not be as narrow as that which typifies an accident (for example, the 1980 Bilbao, Spain school explosion; the 1981 Las Vegas Hilton hotel fire).

PARAMETERS: (1) Number of people involved
(2) Degree of involvement of population within the 'affected' social system
(3) Amount of disruption by the collective-stress agent on the social system



Disaster Emergency Accident

Disaster	Emergency	Accident
(1) Widespread and near-complete disruption of ALL social processes, social structure, and primary/secondary interactions	(1) Focalized disruption interfering with ongoing activities of specific people involved, plus	(1) Disruption of specific interest group of victims and significant others
(2) Widespread destruction of functional infrastructure (buildings, communications networks, social support networks)	(2) Disruption of a number of peripheral persons, either by relationship (i.e. significant others) by chance (ie proximal others), or by position (role incumbent)	(2) No disruption to larger societal population
(3) Affects: System of biological survival System of order System of meaning System of motivation System of crisis management capabilities	(3) Noticeable time-lapse between event and resolution of event	(3) No disruption of social infrastructure
	(4) No disruption/destruction to overall social structure or social system processes although localized disruption probable	
Example: 1974 Darwin(Australia) cyclone 'Tracy' 1982 Tonga cyclone 'Isaac' 1968 Inangahua (New Zealand) earthquake	Example: 1977 Granville (Australia) train crash 1981 Las Vegas Hilton 1980 Long Beach, California, explosion	Example: car accident; unexpected sudden death; lightning strike; suicide

FIGURE 1 : CONTINUUM OF COLLECTIVE STRESS

B. The number of persons directly involved as participants (victims and helpers) can be substantial, and the numbers of significant and proximal others are high because of this.

C. Because of the larger area affected and the larger number of people ultimately involved, an emergency is more complex in terms of remedial actions necessary; hence there is a conspicuous time lapse between event and the resolution of the event.

D. This is due to the possibility that an emergency can also imply that a small section of the community's infrastructure is temporarily rendered inoperable as the emergency services attempt to rectify the incident (for example, in the 1977 Granville, Sydney train-crash, and the 1980 Long Beach, California liquid naphthalene explosion, sections of the community were cordoned off while rescue and restoration services were active), or, because of the physical impact of the incident itself.

E. However, there is no disruption or destruction of the overall social structure or to the ongoing social system processes characteristic of the community in question.

Disaster, on the other hand, produces a new and different referential framework within which people perceive and judge their experiences. Accident and emergencies tend to be routinised within the normative structure of social living. Disaster poses a clear, easily perceivable threat to social survival in its broadest context.
Disaster produces an overall, although temporary, breakdown in the established social processes, routines, and interactions, and leads to societal remedy and collective social change, rather than requiring the individual or small group to bear the burden of replenishment from an intact, unchanged society. Thus a disaster occurs when there is widespread disruption of social processes, coupled with the destruction of the functional infrastructure to the extent that ongoing routines can no longer be supported or maintained. If the cause of the disaster is a natural hazard agent, then we label that event a 'natural disaster'.

A disaster, then, is a truly public affair. It is a destructive agent that affects all people within a spatially defined area to some degree or other (there may be differential disruptiveness/ destructiveness within the impact zone due to such factors as the characteristics of the hazard agent, structural design difference of dwellings, topography, soil substructure, and the like). The difference between a disaster and a nondisaster is that under conditions of disaster, social organisation in some way becomes disrupted. The disruption of social organisation is not found within incidents that have been classified here as accidents or emergencies.

The disruption of societal infrastructure through disaster introduces another feature not found within an accident or an emergency situation. With respect to the types of organised behaviour society has at its disposal, the level and kind of organisational involvement changes dramatically in a disaster situation. The traditional emergency service organisations, that is the police, fire services, and medical services, which are usually well-suited to cope with the organised response needed to rectify an accident or emergency may not be capable of coping with wider social disruption if they are confined only to the requirements that have been established for the conduct of their 'everyday' roles. The tasks and structural designs necessary for accident/emergency resolution may not be suitable for a large-scale disrupting event; that is, a disaster event. There is a possibility that this has been recognized by authorities, and it may be plausible to consider this to be one reason why counter-disaster legislation and additional counter-disaster organisational-types have been created. This explanation, however, does not fit in very well with the actual capabilities that some of the additional components can provide within post-disaster circumstances. Nevertheless, the necessity for counter-disaster legislation has overcome some of the difficulties inherent within a system that, through necessity, places emphasis on the 'everyday emergency' problem. It is the 'problem of fit' that forms the basis of this paper. In order to explain this, some background material concerning the components of Australia's organised response to disaster is required.

THE LEVELS OF DISASTER RESPONSE

Four 'levels' of response can be discerned within the institutional framework of Australia's counter-disaster management system. These four 'levels' can be divided into 'public' and 'private' settings.

At the highest public level are the resources of the Federal government system. Although the Federal government is not directly involved in any single State or Territory disaster situation unless it has been specifically requested to do so by the State or Territory concerned, and then only after certain criteria of disruption and resource depletion have been met, it has, neverthless, an indirect but very influential involvement in the overall counter-disaster management scene. This indirect involvement is manifested by the Natural Disasters Organisation (NDO), based in Canberra. Part of the Defence Department establishment (although not under the jurisdiction of the Chief of Defence or the Chiefs of Staff of the Armed Forces), NDO is designed to aid in the mitigation of disasters at the request of the affected State/ Territory, and to support a core civil defence capability. NDO is the vehicle through which resources additional to Local or State governments can be obtained. NDO is also charged with coordinating Federal government resources for stricken areas.

In addition, this organisation provides material to the S/TES that NDO considers appropriate for disaster response and recovery operations. The salaries of some 75 permanent S/TES staff is also met by the Federal government through NDO. The Defence Department also operates a training school (the Australian Counter Disaster College - ACDC) which in the past has provided skills training and management techniques to S/TES permanent and volunteer personnel. The school has also run courses for other specific interest-groups, such as media representatives, veterinarians, and welfare officers.

At the Federal level considerable technological resources are available, such as the Department of Science and Technology's Bureau of Meteorology which operates from decentralized regional offices to provide a comprehensive weather/climate data-base that aids the emergency services in floods, cyclones, wildfire and severe storm relief. The Commonwealth Scientific and Industrial Research organisation (CSIRO) also has specialist personnel and equipment for assisting disaster mitigation actions.

The next public level is the State/Territory government. State governments have legislative mandates to establish and engage emergency management activities. In this respect, the State level is independent from the Federal system: it is up to the individual State or Territory whether or not disaster legislation will be introduced, promulgated or enforced. It is also up to the individual State government to decide what requirements are necessary for counter-disaster activities, what organisations will be responsible for aspects of counter-disaster operations, and what authority each organisation shall receive in order to ensure these functions will be carried out. Of the six States and two Territories that constitute the Commonwealth of Australia, two have no counter-disaster legislation. The remaining six have had Acts of Parliament for varying periods of time, with variably apposite disaster management statements enclosed within the Acts:

1972 New South Wales State Emergency Services and Civil Defence ACT
1975 Queensland State Counter Disaster organisation Act
1976 Tasmania Emergency Services Act
1976 Northern Territory Disaster Act (repealed 1982)
1980 South Australia State Disaster Act
1981 Victoria State Emergency Services Act (also 1983 State Disaster act).

Four of these Acts lay the framework for the establishment of a specific counter-disaster organisation (Queensland, Tasmania, Northern Territory, Victoria). The other states, including the two which have not yet passed legislation, also have a State or Territory Emergency Service organisation operating in some capacity within the emergency management system; in all cases these organisations started out as volunteer-based civil defence units. The respective legislation in the four States mentioned above turned these organisations into the present S/TES system.

In addition to the S/TES, the Acts of Parliament also introduced the concept of a State Disaster Committee (SDC or its equivalent - the names vary within the various States and Territories), whose task is basically to oversee all aspects of coordination associated with counter-disaster planning and operations).

Police Departments play a major role in all States within disaster management operations. The Commissioner of Police assumes a very decisive role as a high-ranking encumbent in either the State Disaster Committee (in Tasmania and the Northern Territory the Commissioner is the chairman of the SDC), or the S/TES (in Tasmania and New South Wales the Commissioner is the Director of S/TES). He can also be the State Disaster Coordinator (a position he holds in Northern Territory and South Australia). In a number of other states the S/TES is under the direct responsiblity of the Police Commissioner for the conduct of its operations during emergency periods. In all States and Territories a senior police officer assumes the role of regional (sometime called division) disaster coordinator (or controller).

In each state the traditional emergency services - the fire services, police departments, medical services, and welfare/ social security departments - assume the role of a 'lead combat authority' who have responsiblility for the coordination of hazard-elimination operations. Some specific hazard-agents have been given to various S/TES for them to act as lead combat authorities, for example New South Wales State Emergency Service (NSW SES) is responsible for floods; Victoria State Emergency Service (VIC SES) for wind-storm damage.

The last public component within this system is the Local government. It is at the local level - the local community - that counter-disaster activities have to be implemented, because it is at this level that the physical impact of the disaster agent is usually experienced. Depending on a number of factors, however, the resources available for disaster mitigation and immediate self-help following impact may not be sufficient at this level. The type of activities that any community will initiate in response to disaster and emergency management will be dependent on the available resource-base. One of the resources that can be operationalised are the people themselves. Trained volunteers can complement the local police, fire services and medical services, and in many cases they do. Volunteer-based fire services and medical corps are more the rule in smaller communities than are professional salaried personnel, who epitomise the emergency services of larger urban centres. Whatever the population size and material resources of a community, the available human resources need to be coordinated into a viable operational system. In most states within Australia the S/TES is charged with establishing local voluntary emergency service units (LVES). It is the responsibility of the LVES to train local citizens to be an effective augmentary cadre capable of working alongside the professional emergency service personnel, thereby increasing the overall capabilities of the local

government system in the face of community disruption. How successful the LVES is in achieving this is dependent, amongst other things, on the skills and knowledge of the trainers, the resources available for educating both students and teachers, the cooperation of existing emergency services in accepting the potential resource, and the planning arrangements that are available to implement a volunteer service and to operationalise it.

Apart from employing the available 'raw materials' that any community has to offer, the Local government organisation level is also responsible for developing plans that effectively utilize the available resources. It is well-recognised that 'grass-roots' planning for emergency preparedness is an appropriate means of combatting threats. However, it is surprising to find that very few states have placed local counter-disaster planning as a mandatory prerequisite. In the majority of cases local planning for disaster mitigation is discretionary. There is no enforcement of Local government obligations to develop planning for natural hazard threat, or, for that matter, any threat situation (apart from enemy attack, which is a Federal government matter).

The fourth and last level within Australia's system of institutional arrangements are the private organisations. These can be of two types: They can be organisations that exist primarily to fulfill roles in some or all phases of disaster management. This type of organisation - the volunteer organisation - is represented by the Red Cross and the Salvation Army. The second type of organisation is one that routinely pursues private lines of business unrelated to emergency management, but whose resources can be turned to disaster-ameliorative usage (such as heavy machinery belonging to a private construction company that is used for debris clearance). The private sector includes organisations that are national in scope as well as those with regional or local focusses. This group of organisations can provide a vast array of resources, expertise and experience. It is the responsibility of the State and the Local level systems, however, to incorporate these private organisations into the planning arrangements in order that this resource potential to be effectively used.

DISASTER-RELEVANT ORGANISATIONS AND EMERGENCY-RELATED ORGANISATIONS

One approach to looking at the disaster management system is to focus on the task-specificity of the organisations that make up the system. Various studies have been conducted that have devised labels appropriate to the type of formal, complex organisations which become involved in events that follow from natural hazard impact. Labels such as "major crisis organisations", "emergency organisations", "community emergency organisations", and "crisis-relevant organisations" have been used by researchers interested in the sociology of natural

hazard and disaster. The labels so applied are always broad in terms of the organisations that can be subsumed under those labels, with little attempt apparently being made to differentiate between the innumerable activities which are necessary following an impact. There is no temporal distinction, for example, implied in any of the labels mentioned above that can assist in differentiating one phase of post-impact from another. This is surprising because it is known that different organisations have prority over others within a disaster situation because of the specialised services or the domain a specific organisation has (one must keep in mind, when referring to phases in disaster, that disasters are processural, hence the 'phases' that have been identified by some researchers can be expected to blend into each other). Rather than isolating groups of organisation, these lables have been used to describe all the organised activities which follow impact, including all the formal and informal, public and private organisational responses for all phases identified with the immediate post-impact and early restorative periods of a disaster.

Another problem which complicates things is that clear distinctions between organised responses is difficult to achieve because of the inter-dependence of one 'type' of organisation on the performance of another organisational 'type' (for example, a fire truck may have to wait until a public works grader clears the road before firemen can gain access to burning structures). However, there is value in attempting to differentiate organisational response using organisational domain and community values as focal criteria within a broad time-order specification, so that the importance of organisations which become involved during disaster can be more clearly illustrated. Within this specification a two-fold categorization has been developed, which is outlined below (see also Britton, 1983b).

The term disaster-relevant organisation (DRO) is applied to refer to a set of task-specific organisations within a community whose legislated and, in most instances, legitimated activities require that they be the vanguard of any organised attack upon the consequences and implications of a hazard agent. The publicly-acknowledged tasks of these specific organisations are concerned directly with avoiding any disruption to the status quo within the social system, and of saving and preserving lives and/or property. This set of task-specific organisations includes the police, the fire services, medical services, the S/TES, and (indirectly in the case of natural disasters) the NDO. Of course, whether all of the above become involved in any particular situation, and the extent of their involvement, depends, among other things, on what the threat is and what the presumed consequences are, both in the long and short-term. DRO's represent a community's frontline force for the organised response to anticipated emergencies, and for the amelioration of unanticipated disaster impacts. They are also the organisations with the

responsibility of disaster mitigation.

The importance of saving lives and property is reflected by the high priority this value has in our society. DRO's epitomize the enactment of this value because members of society have conferred upon these organisations the duty of safeguarding, restoring and maintaining human life and human possessions. By grouping these organisations into a specific category the actions commensurate to the importance of this value as an organisational domain is highlighted; and the role of these organisations is enhanced. The DRO's are usually the first-called organisations cannot act alone, and they are not capable of restoring the disrupted social system back to its pre-impact (status quo) level without the assistance and the integration of other organisations. Hence, the inter-dependence mentioned earlier.

The term emergency-related organisation (ERO) is applied to a collection of organisations which can be either public or privately owned, whose primary contribution is to maintain and service the physical appurtenances within society, and to provide general welfare and relief facilities during periods following disaster or other collective stress situations. This label comprises all those organisations which are essential to the effective restoration of an impact zone. ERO's consist of organisations such as the Red Cross Society, Salvation Army or other religious/volunteer welfare-oriented agencies, as well as state or federal welfare departments; the city or country councils, electricity and gas utilities, main roads departments and insurance companies. Also within this collection of organisations are the public information and media dissemination agencies. The prime responsibility of this sub-group is to collect, collate and disseminate information about the disrupting event to the wider interested and concerned community.

Within this two-way split of organisations, six specific organisational types can be discerned: three types or organisations related to the DRO's, and three to the ERO's:

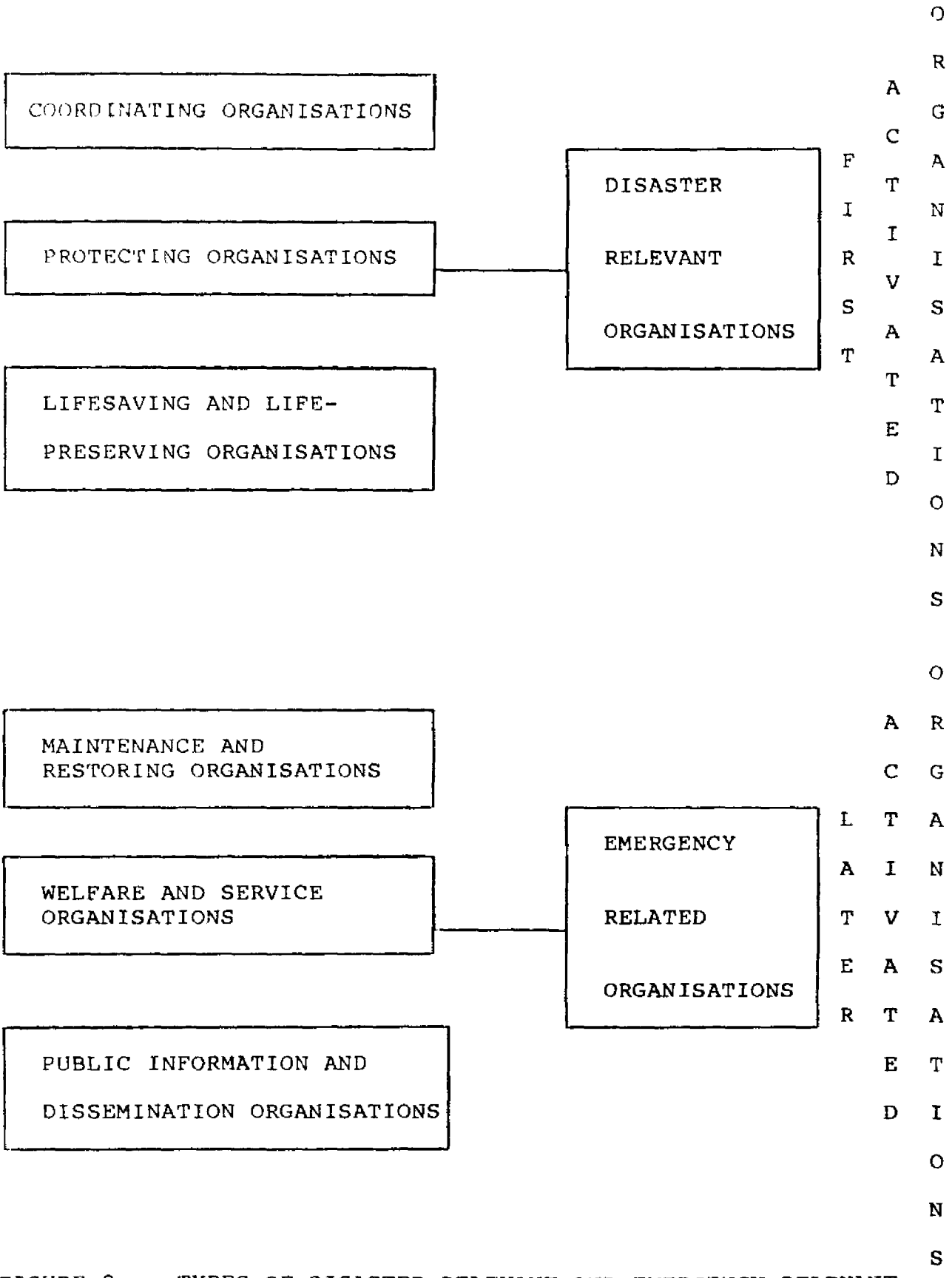


FIGURE 2: TYPES OF DISASTER RELEVANT AND EMERGENCY RELEVANT ORGANISATIONS

Within the DRO group, the first type of organisation is the coordinating organisations. These organisations have the responsibility for coordinating organisational activities during the disaster period. The State Disaster Committees and in some respects the S/TES are examples of coordinating organisations within the Australian situation. Police Departments also are within this cell. Protecting organisations are those organisations, such as the Police and Fire Departments, which are expected to protect life and property. These are the organisations which disaster planning manuals refer to as 'lead combat authorities'. Life-saving and lifepreserving organisations constitute the third type of DRO. These are the hospitals and medical service, along with ambulance companies, which provide essential life-saving assistance to disaster victims.

The ERO group of organisations consists of the maintenance and restoring organisations, those which repair and restore the physical infrastructure of society. The welfare and service organisations highlight the restoration and maintenance of human requirements: psychological services, clothing, food, financial support. The last organisational type is the public information and dissemination organisation; the function of this has been described earlier. It is significant to note that no other taxonomy of organisations related to disaster has included media organisations, despite the very significant part these agencies play in any disaster impact situation.

This taxonomy is a refinement of one developed by Anderson in 1972. Anderson's taxonomy was based primarily on a loosely-conceived division of organisational labour which did not include any time-frame. Hence, his categorization of organisational involvement did not state which of the four specified types of organisations and activities they under took had priority during the periods following disaster impact. Like most of the taxonomies proposed by sociologists in their endeavours to understand organisational involvement

in disaster situations, it would be fair to say that Anderson's conceptualization had its origins in the work conducted by Dynes a few years earlier (and which, in this particular case, was based on studies conducted by Quarantelli in the middle 1960's).

Dyne's approach to the conceptualization of organised behaviour in relation to natural disaster situations was based on the following two variables:

(i) the relation of the disaster event to the nature of the tasks which are undertaken by the community organisations; and

(ii) the post-impact structure that these organisations developed as a result of the disaster event.

Dynes stated that in every disaster situation a number of different types of organisations carry out tasks that assist in some way to ameliorate impact. These tasks may be old, routine, assigned, everyday tasks (which he termed 'regular tasks') , or they may be new, novel or unusual ones for the particular organisation ('non-regular tasks'). Similarly, Dynes suggested it was possible to distinguish organisations on the basis of their organisational structure. In particular he distinguished between groups with an old or 'established' organisational structure from those which had a new or 'emergent' structure.

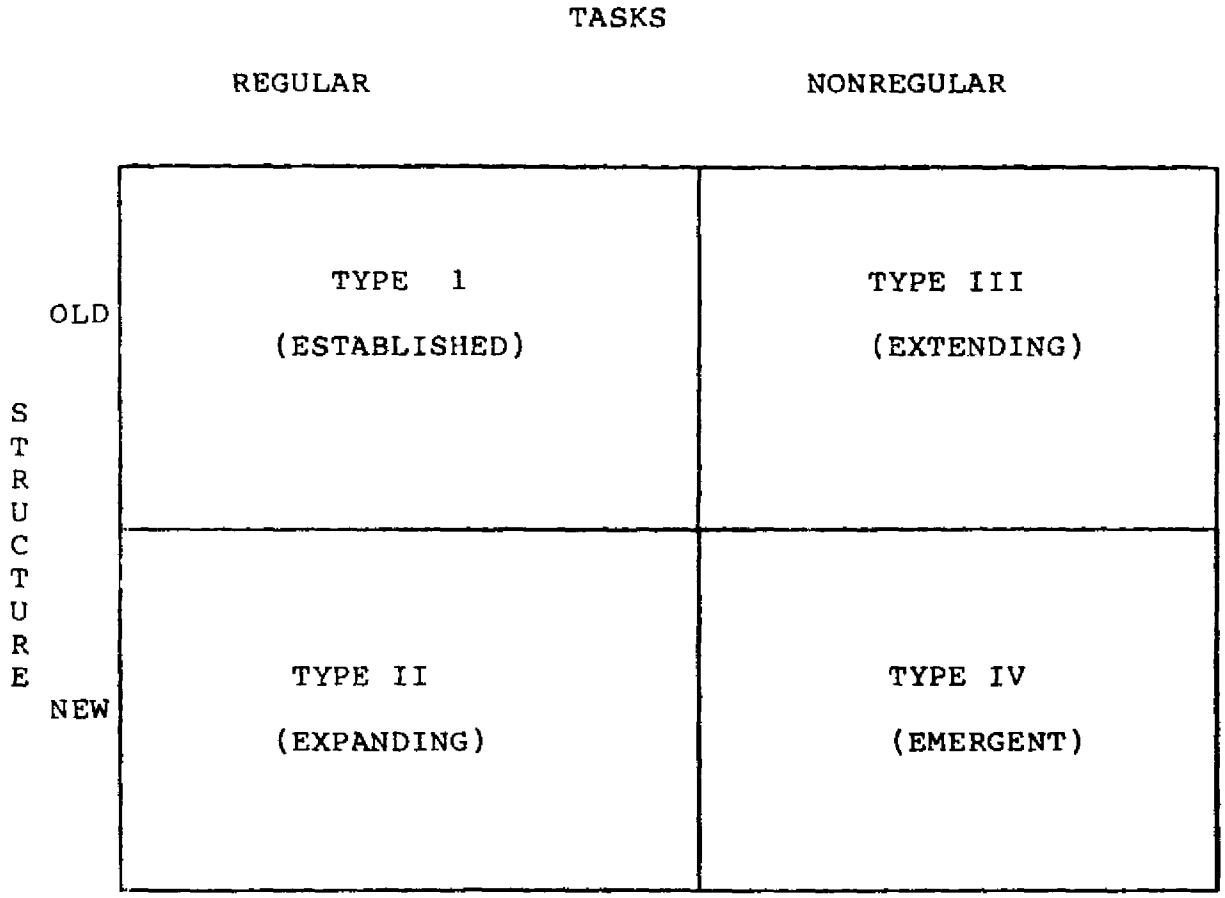


Figure 3: Types of organised behaviour in disaster (from Dynes, 1970)

From these two variables four types of organised behaviour were developed based on the task the organisation performs and the structure that the organisation assumes. Type I organisation is an established organisation carrying out regular tasks. These types of organisations are initially involved in any community emergency (the term 'emergency' has been used to describe all three types of collective stress situations mentioned earlier). There is a public expectation that they will be involved, either on the basis of previous

activity or by the definition of the emergency relevance of the organisation. Because of their pre-existing structure these organisations can mobilize quickly and efficiently.

Type II organisation is an expanding organisation with regular tasks. These organisations are most often the results of community or organisational planning. The organisation exists on paper and the core of it exists prior to the disaster event. These organisations usually become involved next after the established organisation. They are in a state of readiness and both the expectations of the community and of the organisational personnel themselves move them towards mobilization and involvement. These organisations tend to be mobilized in the event of anything but a most localized accident, but their mobilization is slower because they have to bring in voluntary personnel to increase the small cadre of permanent officers.

Type III organisation is an extending organisation which undertakes non-regular tasks. This is best illustrated by the example provided previously of the construction company utilizing its men and equipment to dig through the debris and assisting rescue operations following impact. They are possibly the most numerous organisational group. The usual task of the group is disrupted by the disaster, or the achievement of their usual task seems inappropriate within a disaster situation, and hence the efforts of this group become diverted into disaster activities.

Type IV organisation is an emergent organisation engaging in non-regular tasks and is usually the last type of group to become involved. Its development is brought about by the inadequacy of the first two types of organisational groups to satisfactorily fill all the requirements and gaps that have been created by the disaster situation. For example, an emergent organisation may be an ad hoc group of people who have got together to direct search and rescue operations because none of the other groups has considered the necessity to undertake such a task through their pre-disaster and post-disaster planning arrangements. Emergent groups tend to take on new tasks that have not been incorporated into the overall counter-disaster strategies adopted by the established or expanding organisations.

This particular taxonomy spawned a vast number of subsequent disaster studies related to organisational response to disaster. The taxonomy which we will concentrate on for the remainder of this paper has recently been conceptualized (Britton, 1984a, 1984b) and follows the tradition of disaster sociology by having its roots placed within Dynes' pioneering work. The focus of this study is the Australian State and Territory Emergency Service organisation (S/TES). In terms of Dynes' categories, Australia's S/TES does not fit neatly into any of the four organisational types. The nearest it gets to Dynes' formulation is to straddle both the 'established' and the 'expanding' organisational types. It has characteristics

of both types of organisations. The task is similar to that described within the 'established organisation', yet its structure is more like that suggested by the "expanding organisation". This problem is not as important, however, as the difficulties that are encountered when explanations of the relationships between the organisations that make up the disaster-relevant organisational network are attempted (as indicated in Figure 2, most of the DRO's fall into Dynes category of 'established organisations'). Another conceptualization is required if we are to understand how the organisations that are charged with countering the effects of a natural disaster inter-relate when operationalised. A step in this general direction has been made with the development of a taxonomy which focusses on how power in the form of control and influence is shared amongst the organisations that form the counter-disaster network.

THE S/TES AS A "CONSTRAINED ORGANISATION"

Within any ideal counter-disaster organisational network there is a necessity for a specific organisational arrangement to be established that is dedicated to counter-disaster/ emergency management activities, and not to have disaster coordination and control incorporated within the functions of an existing organisaton. There are a number of reasons for this: Traditional organisational roles become considerably stressed in times of social crisis periods because of an increase in role demand and role expectations. This may hinder the organisation from effectively implementing additional roles that are relevant only in times of disaster. Counter-disaster management is only a part of the functions that the counterdisaster organisations perform. As it is not a continuous function in terms of everyday organisational demands, resources within the organisation have to be channeled from the more routine types of activity when disaster strikes. The high likelihood that disaster-management is a secondary organisational task may also imply that personnel are not as highly trained for this task as they are for the primary organisional tasks (special training and knowledge is necessary for appropriate disaster management actions). This factor may introduce a time-lag between impact and effective organised response. Also, if there is no dedicated coordinating/ controlling organisation, communication between DROs may be undesirably slow because each organisaton will, for a time, remain linked in to its routine communication linkages, attempting to determine the extent of disruption through its own network first as it responds to the increased demands placed on it by the public. Only when the realization occurs that the event is of disaster proportions - which may not always be obvious in the initial stages of crisis development - will individual organisations 'hook' into an inter-organisational system that will eventually tackle the problem on a united front.

Barton (1960) identified these problems and suggested a resolution to them by introducing the concept of the 'synthetic organisation'(see also Thompson, 1967). It refers to a temporary inter-organisational system whereby the multiplicity of responding units are coordinated and would alleviate many of the difficulties confronted by emergency organisations as they face both traditional role demands and new role demands. It is in the attempt to set up something similar to a synthetic organisation that one can see the rationale for the establishment of the S/TES's. Unfortunately, the establishment of this organisatonal type was compromised even before the final organisational design was thoroughly developed. The new organisation was seen as a threat to the prestige, placement and influence of the traditional organisations who were happy with the way things had been in the past.

In order to illustrate how the dominant coalition of traditional disaster-organisational officials have compromised the position of the S/TES, seven variables related to the effectiveness of the organisation will be looked at. The seven variables are: the legislative base; the power base; resource allocation; organisational autonomy; organisational domain; recruitment of senior staff; and organisational legitimation. The influence that the dominant coalition has over the S/TES through their influence over these variables is an important consideration in the development of the new taxonomy.

1. THE LEGISLATIVE BASE

A feature of the legislation related to the development of the S/TES is the influence that senior officials within the traditional DROs appear to have had in moulding the final legal base - either that, or the Acts of Parliament related to counter-disaster actions can be cited as examples of the inadequacy of the legislative process. Enclosed within most counter-disaster legislation are clauses that enable senior officials within the existing DROs to enhance the position of their organisation within the disaster management system, and/or to ensure that existing organisations will not be encumbered by the creation of a new organisational type. The implications of these practices for the eventual effectiveness of the newly-created organisation, or indeed the disaster management system itself, was obviously overlooked. As specified within the Acts, most of the S/TES are answerable to their respective Commissioners of Police (the exception being Queensland SES which is responsible to the Coordinator-General), who, under the legislative framework has direct influence over the S/TES in operational aspects. In some cases, this influence is continued in non-operational, routine matters.