van de SANDE

ON CROWDS

The social psychology of crowd behaviour

ubi sacra sancta acutis ululatibus agitant
(..where they act out their sacred rites screaming shrilly)
Catullus, 63.24

INTRODUCTION

Some people seem to assume that eventually mankind will loose its negative characteristics like aggression, stupidity or mobbing. Such an eschatology is not that of the writer of this book. Aggression, stupidity and crowd behaviour have always existed and I assume that they will exist as long as mankind survives, because they rest on just as solid a ground as our more positive characteristics: Human nature. There are however different ways of coping with negative characteristics: some ways are sensible, and some are much less so. As it is clear that in order to do sensible things, one must have wisdom and experience, and not everyone is in a position to gain that, the aim of this book is, in so far as it lies within my reach, to provide the reader with experience in the form of cases and analyses, and wisdom in the form of theory. Or, as Matthew Arnold, the 19th century high priest of Anglo-Saxon culture liked to put it: Before a radical change in the organization of society is undertaken 'the firm, intelligible law of things' should be established. In a more modern way we could say that prescriptive theory, giving rules for improving matters, should be grounded on descriptive, empirical work.
In some phases of our history, crowd behaviour like riots, revolutions, rumours, fads, or mania's abounded, other times were relatively calm. I believe that it will not take very long until we come to the end of the relatively calm period we, in Western Europe and Northern America, are presently enjoying (somewhere in the very early beginning of the 21th century). Inescapably a time of turmoil will come. It is with an eye on this future time that this book is written. In the troubled seventies and eighties much knowledge was gained about human behaviour in crowd situations and since then some remarkable progress was made. I intend to give an overview of what is presently known on this field. An important part of this job will be rethinking firmly established truths and rephrasing old and established prejudices in such a way that they offer an accurate picture of actual behaviour. That this is possible is due to the fact that important and exciting new insights have been gained in the course of crowd-research, and to the development of biological-evolutionary theory in such a way that acceptable explanations for puzzling aspects of human behaviour begin to emerge.
When we focus on the paradoxical and counterintuitive aspects of crowd behaviour, interesting questions come up. What exactly is the fascination that riots, panics or fads offer? Why does, even in the midst of a severe riot, only a small part of the public participate? Why is it that such a small fraction of a population can have such a large effect on the majority? Why, if this majority keeps calm, do we talk and think about them as dangerous idiots? Why is the normal state of affairs one of order? Why do people get 'carried away' in some situations and not in others? In this book we will try to find reasonable and state-of-the-art answers to questions like these.

MISPERCEPTIONS

Crowds and crowd behaviour are fascinating, impressive and thus salient. In crowd phenomena like stock market crashes, the sources of wealth and poverty can be found, in revolutions and civil wars lie the sources of political power, in panics, riots, pogroms or lynchings life and death are questions at stake, in parties, carnivals, fads, or revivals human delight and distress emerge, human fantasy can be admired in rumour formation, fads and fashions, in short, crowd phenomena are very powerful instruments in the hands of what we call fate. No wonder that mankind has always been fascinated by it, and has always been willing to participate in it, or at least to witness it with avid attention.
It is probably this fascination that causes so many firm assertions about crowd phenomena and crowd behaviour and at the same time so many common misperceptions and biases. These misperceptions and biases clearly have, as we hope to show, their rationales, even so far that they can be said to be valid in a limited and very special sense. This limitation is however not the sense in which they are commonly understood, so we need to examine them more closely. The scrutiny of possible biases is the more necessary when we are dealing with a subject that proves very inhospitable to the person willing and trying to gather reliable and valid data on it. This characteristic of crowd phenomena, their elusiveness, and the resistance they show to systematic research, offers a strong seduction toward using data or even intuitions that are not sufficiently tested and consequently may be biased.

The mechanisms of biases and misperceptions have been extensively studied in social psychology. We will give a short overview of some of these biases and their consequences for thinking about crowds

KINDS OF BIASES

Dreams, biases or prejudices are said by some to be the stuff that we live on. At the same time humans are very good at drawing logical conclusions from facts. It may thus be that biases and prejudices are logical conclusions out of false data or premises. But the state of affairs is even worse, as Kahnemann & Tversky (1980) showed. Even out of true and reliable data humans quite often draw wrong conclusions, motivated as they are to rather reach quick, welcome and, if necessary, false conclusions than slowly and painstakingly work towards the often unfriendly truth.

One thing that has become very clear is that if people do not have the true facts at their disposition, they quite easily make up a plausible truth about them. Anything rather than uncertainty and loss of control over reality, seems to be the universal rule, as students of rumour formation (Allport & Postman, 1950; Shibutani, 1970, Rosnov, 1991) repeatedly showed. An important field of study in social psychology has thus been to discover the rules that determine which kind of made-up truth emerges from equivocal data. An important class of these rules are those associated to the attribution of causes, a very important one being the *'Observer bias'* (for a treatment of attribution biases see Fiske & Taylor, 1991). When we witness a certain happening, there is a clear tendency to seek the causes for the behaviour of those we are observing in their dispositions, as these are the most salient to us. The actors themselves however have a different bias: they tend to look to their surroundings in order to find causes. For an actor it is his situation that is most salient in his view of things. As all writers on crowd phenomena are almost by definition observers, they will have a tendency to see the participants in a crowd, either as individuals or as a group, as the prime movers. Not only those who are housed in the ivory towers will have this tendency, also the people involved in the management of crises show this observer bias. That this may lead to erroneous decisions was seen quite early (c.f. Sighele, 1893). Participants in riots, panics or other kinds of crises will have the opposite tendency, they will preferably see their surroundings, such as the political system, or the brutal behaviour of police forces as the causal factors. These tendencies, suggested by the observer bias, will be reinforced by another attributional error known as the *Fundamental attribution error*, which means that humans have a strong tendency to seek the causes of behaviour in characteristics of persons instead of in the situation that those persons are placed. In crowd situations this means that people participating will tend to ascribe their behaviour to the persons that form part of the situation, and not so much to the impersonal aspects of it. We will see that such a perception of the situation brings with it a strong tendency towards escalation. Moreover it will lead to all kinds of conspiracy theories, even in situations in which there is no objective reason for it. In this book we will take the stance that the subjective experience of the situation offers an efficient method of explaining crowd behaviour, and consequently we will try to systematically analyse this experience.

Another important class of biases is that associated to maintaining a positive image of oneself or of one's group. These biases are called *'self serving'* and they operate clearly during and after crowd action. If you do not belong to them the participants of an observed crowd action are seen to behave in morally contemptible ways, either because they are bad, as an observer from an opposed party would say, or because they are regressed, hypnotized, or whatever a more impartial observer could devise. In any case, they tend to be seen as inferior. Own actions, on the other hand, are seen in a much more positive light. If you belong to the group of active participants you will have the tendency to see yourself and those belonging to your party as morally and physically superior. In this book we will try to avoid moral judgments, by keeping in mind that morality is often (but not always) a question of which side you are on.

A fourth kind of bias is caused by the fact that people tend to make quite *simple inferences*. We attribute the causes of behaviour to those factors that we are aware of, and mostly these are very obvious, common sense and unsubtle ones. For instance: an outsider has no way of knowing all the motives that a rioter may have, so he simply puts him down as criminal or morally inferior. Or: for deaths due to a fire there may be multiple causes, but we tend to select only one, such as panic, as our pet theory (see Sime, 1980). In this book we will tend towards a certain eclecticism, in this sense, that if part of a theory must be

rejected, we will not automatically reject all aspects of it. We will thus rather be oriented towards finding out what is worthwhile than toward falsifying theories.

The four attributional biases described here, together with many similar others (for a more complete inventory see Fiske & Taylor, 1991), lie at the root of a goodly number of untrue or partly true ideas that most people have about crowds. In the following paragraphs we will give an inventory of these *idols*, to borrow an apt term from Francis Bacon.

CROWDS SEEN AS UNIFORM IN BEHAVIOUR

A very common idea about crowds, due to the combination of simplification and personalization, is that everybody in the crowd is doing the same thing. Turner & Killian (1987) called this 'the illusion of unanimity'. Uniformity of behaviour is even quite often used as a criterion for speaking of crowds: All the young Palestinian boys throw stones, so this is the Intifadah, all the people during a fire try frantically to escape, so this is a panic, all the people present at a party that went out of control participated, so this was an orgy, all people working in a 'sick building' were actually sick, so this was mass hysteria. Because we think everyone is equally involved we call them a crowd. Careful studies of riots, panics, parties or Mass psychogenic illness, show that it is mostly a small fraction of the people present who actively participate and moreover that the behaviour of people in crowd situations is very much differentiated. Finally research shows that concerted action in crowds mostly is of very short duration (e.g. McPhail, 1991, Adang, 1999)

CROWDS SEEN AS UNITY

The idea of uniformity in behaviour is a very compelling simplification. Even when we see crowd behaviour develop before our own eyes, we tend to keep the impression that everyone participated in the same way. This misperception causes the tendency to see a group or crowd of people as a unity. It does not come naturally to us to concentrate on individuals in a crowd, we tend to perceive in categories. Except for maybe a very short time, when someone does something very salient, we see mainly the impressing multitude. This multitude, the crowd or the group, is seen, thought of and talked about as a unity. Indeed it is difficult to do otherwise. To the unity, thanks to the self serving bias, many characteristics are ascribed (e.g. 'The Millwall crowd is a mean lot', 'police are crafty bastards'). The group thus becomes more than the sum of its members. The group is further seen, according to the standpoint of the perceiver as either 'We' or as 'They'.

CROWD ACTION SEEN AS NEGATIVE

A very common misperception is that of evaluation. We tend to consider all kinds of crowd behaviour as negative, provided we do not form part of it. Panics are dangerous, as are riots or brawls, revolutions and wars are horrible, crazes and manias are ridiculous, and people blowing their tops at parties are silly . The puzzling fact is that all these phenomena are actions of people, living and motivated men, women, and children, who seem to have the feeling that they are doing something very interesting and worthwhile, yes, even something laudable. Moreover a very important characteristic of their behaviour is that there is much cooperation. When we think of it in this way we suddenly realize that crowd phenomena like the French Revolution, the Yugoslav civil war, or the Rwandesean genocide, are evaluated very differentially, depending on the side which you take. Outsiders, like most of us are, tend to condone the behaviour of the most obviously aggressing party. Almost never both parties are held responsible. If you are however involved in some crowd phenomenon there is a good chance of becoming committed, and consequently your evaluation will change. You will see the positive side of killing Tutsi's when you are a Hutu, you will tend not to sympathize too much with the wounded or death Inter supporters if you are a Liverpool hooligan, or you will consider eating live goldfish as a virtue if you are a Phi Beta Kappa member of the class of 1939. Maybe afterwards you may be ashamed, but at the moment you were proud of what you did.

CROWD BEHAVIOUR SEEN AS IRRATIONAL AND DEGENERATED

Not only in direct perception, but also in the way we think about crowd behaviour we tend to err grossly. For instance everyone assumes automatically that crowd behaviour is irrational. It can, and will be shown that this is only true in a very limited sense. Another popular idea is that people in a crowd degenerate morally and intellectually, again something that gets a different meaning when scrutinized. A common, but equally questionable explanation for these assumptions is that some unknown power, like hypnosis, or a groupmind is at work. These and similar ideas do not only form part of what we call naive psychology, they can also be found in scientific theories and publications. Especially in the older theories, like those of Sighele (1893), LeBon (1895) or Freud (1921), but also in more modern views (e.g. Canetti, 1960) biases and preconceived ideas can be easily demonstrated. We will see, when we treat the different theories, in what ways these biases probably were caused. That these biases were the basis of common sense and even of scientific thinking, and still for a large part are, should be cause for concern.
The stance taken in this book will be that rationality is not an objective characteristic of decisions, but always is strongly subjective. What seems to be rational is that which seems to have a positive balance between gains and costs. If it were possible to establish some objective standard, valid for everyone everywhere and everywhen, about what would be a positive and what would be a negative outcome, rationality would be feasible. But as it happens to be the case that every outcome of human behaviour is susceptible to differential evaluation, even by the same person, the axiom of human rationality is untenable.

OVERESTIMATION OF THE INFLUENCE OF PERSONALITY

Our impression of people who are involved in some form of crowd behaviour, be it a panic, a riot, a lynching or a party, is more remarkable than it seems. On the one hand we tend to ascribe their irregular behaviour to personal characteristics. We tend to think that in comparable circumstances we would behave very differently from them, and that the cause for this difference lies in our moral or intellectual superiority, and thus in our personality. The qualifications we give to people who riot or panic or otherwise misbehave in crowd situations tend to be negative: rabble, madmen, vandals, animals, beasts, riff-raff, et cetera.
On the other hand we also tend to think that people's personalities change, albeit temporarily, once they are in a crowd situation, thus implying that they once were normal. As Le Bon (1895) put it so convincingly: 'the normal human being changes quickly into a criminal'. This last stance is considered by McPhail (1991) to be the main fallacy in thinking about crowds. Theories that imply some change in the human character he calls transformation theories, a kind of theory that he is vehemently opposed to.

UNDERESTIMATION OF SITUATIONAL INFLUENCES

In different situations people behave differently. This truth, however small and obvious, seems to have escaped many students of crowd psychology. They do make a distinction between 'normal' circumstances and those in 'the crowd', but too often let it rest with that. It seems to be simply forgotten that within the vague class of 'crowd-situations' enormous differences can exist, and that these differences have a strong influence on the way people behave in such situations. From this omission stems our tendency to see all crowd behaviour, be it panicking or rioting, feasting or striking, fadding or rumormongering, as more or less alike. A much more realistic view develops once we begin to see that under crowd conditions as well as under normal ones the situation has a certain meaning to the participants, that this meaning can moreover be different for different participants and that they will act accordingly. Thus a panic may have some commonalities with a riot, but the differences remain great, and moreover the differences between one panic and another, or one riot and another can be considerable. One source of misunderstanding thus is the fact that crowd situations are seen as more or less alike.
At the same time there exists another misunderstanding, namely that crowd situations are widely different from normal situations. An effect of this categorization bias is that there exists a tendency to make theories and models of crowd behaviour that are quite different from those for normal behaviour. This tendency needs some rethinking, a job that we will undertake in this book.
Another tendency when thinking about crowd behaviour, clearly visible in the theories of LeBon or Freud, is to concentrate exclusively on the psychological side. This can result in one-sidedness that is not always

functional. The things people do and cannot do, perceive and cannot perceive when in crowd situations, are for a large degree influenced by factors that have not so much to do with psychology or sociology, but with logic. Part of this logic is described by Barker in his Ecological psychology (Barker, 1960).
For instance the level of noise can hinder conversation or other forms of communication, the limited space available to each person hinders free movement considerably, the difference between being seated or standing is great, for action as well as for perception. When people find themselves in the midst of a crowd they cannot see what is happening some 10 feet away from them, when people are in the midst of a walking crowd, they do not have many other options than walking along, and so on. We should therefore, wherever possible, use Occam's razor: when there are simple explanations, these are to be preferred over more intricate ones. There is indeed a specialized field of physics, dealing with the dynamics of large masses of things or materials, and aiming at the prevention of transport blockades. In some cases endeavours have been made to apply this knowledge to masses of people (Stills, 2000).

Moreover the situation not only hinders participants, it also provides 'affordances' (Gibson, 1979), opportunities to behave in ways that otherwise are not possible, e.g. in the case of crowds, protection and anonymity are such affordances. These kinds of non-social influences on crowd behaviour may be more important than we commonly realize, and may to an important degree determine the kind of psychological processes that can develop in a given situation.

UNDERESTIMATION OF PHYSIOLOGICAL FACTORS

When people take part in crowd happenings they often find themselves in quite arousing circumstances. The high levels of noise, the many people present, the real or potential aggressive interactions, all these and other factors tend to bring about a physiological condition known as arousal. When aroused, humans and other animals show different behaviour than when they are calm, for instance their attention is directed differently and narrowed down, they tend to show simpler, more direct behaviour, they are less sensitive to pain and punishment, et cetera. This influence of high arousal levels is not always recognized.
Another obvious but easily neglected phenomenon is that in crowd situations we do often find the intake of alcohol, or of other drugs to be markedly higher than normally. The social effects of alcohol or other drugs, in contrast to their physiological effects, are scientifically not yet totally clear. Maybe that is the reason why only seldom these consequences of alcohol use on crowd behaviour are investigated (e.g. Salewski & Herbertz, 1985). In many instances of crowd behaviour there are indications that the participants are in some way influenced by the intake of some kind of drug, mainly alcohol, but nevertheless we tend to ascribe the bizarre behaviour of football hooligans, rioters, mutineers or revellers more to the workings of the crowd-mind, than to their being intoxicated.
A final physiological factor in crowd behaviour that is often underestimated is hormonal influence. It is a well known fact that in riots and other kinds of disorderly happenings, by far the greater part of those participating are young men. We begin to get some insight in the effects of high testosterone levels on behaviour, and if one kind of organism has these high levels it is young human males.

THE VIEW THAT COMPLICATED BEHAVIOUR SHOULD BE ACCOUNTED FOR BY ONE THEORY

Not only laymen have misperceptions, scientists as well can have them, for instance through being victims of groupthink (Janis, 1972), and maybe especially social scientists are prone to some biases and distorted views, having such an utterly complicated subject. One of the most common of these is the tendency of many authors to believe very firmly in their own or their master’s brainchild. Thus the danger is not imaginary that some phenomena are given too much emphasis as examples or paradigms, while others, that do not fit so well in the particular line of thought tend to be neglected. In psychology this last problem may be somewhat less encountered than in some other disciplines, but the problem is nonetheless real. Scientists, working in the ivory towers, prone to the obligation to publish and its concomitant deadlines, and dealing with complex matter, may well be tempted to simplify things a bit, by concentrating on small parts of the problem at hand, thus creating more clarity than is justified. As we will see, it is especially this problem that has hampered progress in the field under scrutiny. I can only hope that it did not make the present author too confident of his own musings.

To sum up the foregoing discussion: Crowds are not what they seem to be. In this book we will try to offer a state-of-the-art overview of what is known or supposed about crowds and of how they influence human behaviour. We will try to avoid the pitfalls that we described by offering a view that is as multifaceted as our subject is.

CHAPTER 1 HISTORY, TYPES AND OCCURRENCE OF CROWDS

SOME NOTES ON THE HISTORY OF CROWD PHENOMENA

In all of known history crowd-like phenomena have been reported. We find them in ancient Egypt, in Greece and Persia, in classical Rome, during the Middle ages as well as in more modern times. The kinds of occurrences that are reported seem to be rather diverse: uprisings, riots, vandalism during sporting events, panics, crowd killings, mutiny, and so on. A chronography of a few important events up to 1900 is given in table 1.

Time	Place	Occurrence	Source
2500 bC	Egypt	uprisings	Inscription
689 bC	Babylon	Uprisings. Sanherib destroys entire city in revenge.	Inscription
73 bC	Rome	Slave uprisings (Spartacus)	Appian (ca. 150)
532	Byzantium	Riots after prohibition arena fights (30.000 dead)	see Guttman (1983)
4th & 5th c.	Europe	Wandering of the peoples	
1096 ff.	Europe	Crusades	Villehardouin (ca.1200)
1358	France	Jaquerie. Farmers slaughter nobles and soldiers	Froissart (ca. 1400)
1450	Europe	Dancing mania	see Hecker (1832)
1534	Münster	Anabaptists try to establish ' New Jerusalem' and are slaughtered	see Howard (1993)
1572	France	Batholomew night. Many Huegenots killed	De Thou (1659)
1637	Amsterdam	Tulipomania	see Dash (1999)
1648	France	Fronde. Farmers and citizens revolt against King.	see Tilly (1986)
1692	Salem	Witch hunt. 400 witches discovered, 20 witches and 1 dog executed.	see Baschwitz (1939)
1720	London	South Sea bubble. Bull market in South Sea shares collapses	see MacKay (1841)
1740	Batavia	Pogrom on Chinese. 10.000 dead.	see Engel (2000)
1780	London	Gordon riots. Anti- catholic uprising.	see Hibbert (1958)
1789	France	Great fear of brigands	see Lefebvre (1970)
1789	Paris	Storming of Bastille	see Tilly (1986)
1795	Vendée	Peasant uprising	see Tilly (1985)
1815	N. England	Luddite and Captain Swing Anti-mechanisation uprisings	see Thompson (1966)
1830	Europe	Period of heavy unrest in many European countries	see Rude (1964)
1848	Europe	Period of heavy unrest in many European countries	see Hachtmann(1997)
1849	USA	California Goldrush	see Holliday (1981)
1871	Paris	Commune	see Cochart (1982)
1892	Europe	Throughout Europe massive Labour day demonstrations	
1898	Moscow	Crowning of Czar, Panic, Hundreds of deaths	

Table 1. A selection of major crowd phenomena from 2500 bC. until 1900 AD.

Although this is only a very incomplete selection, it may inspire in the reader some historical sense. Indeed we see many forms of crowd behaviour that can be found nowadays, we see forms of protest against harsh rulers, against certain classes or races, against hunger, we find killings and looting, we see sports related violence and panics, we see economic crowd movements, and, without doubt, many riots that happen 'just for the heck of it'. There are however some serious difficulties when considering the history of crowd phenomena. The first kind of difficulty lies in the fact that our knowledge of them is

necessarily incomplete and probably false on many accounts. In different sources we often find conflicting descriptions and facts. The second kind of difficulty is that even if our knowledge of what happened was complete and truthful, we would still not be able to draw direct conclusions from this knowledge, as the factual happenings had entirely different contexts from those of today (see Vico, 1744).
Let us first discuss the problem of knowledge. It is clear that the further we go back in time, the less complete our sources become. The first item of table 1, uprisings in ancient Egypt, has come to us by some accidentally preserved inscriptions. The text reads:
'In Egypt murder, robbery and plunder reign. The Nile is full of blood. So is it: laughing perished, the people do not laugh any more. Sadness is over the land, mixed with wailing. The lesser people now possess manors, who formerly made his sandals himself, now can call huge treasures his property. [..]'(Pieper, Die Mahnspruche eines Aegyptischen Weisen).
From such a text we can deduce that there has been some kind of bloody revolution, but all details remain unclear. The text is mainly descriptive of the feelings of the writer, a property of texts that is ubiquitous in historical sources. From these feelings, and the small amount of facts, we can make some reconstruction of what happened, but only on the basis of what we know, or think to know, ourselves of what is likely to happen in such circumstances.
In later times reports on riots, upheavals etc. give us more detail, but nowhere can we be certain that this is exactly what happened. For instance the report by Procopius on the massive Nika riots in Byzantium (532 AD) due to the stopping of Arena fights (munera), is reported by others as having happened in Rome, and moreover is rather doubtful as several sources report that these 'munera' were forbidden from about 326 in Byzantium and 404 in Rome (Carcopino, 1939).

The amount of concrete data that has been delivered to us varies enormously over the ages, depending on all kinds of cultural fashions (sometimes these kinds of happenings were deemed important, and thus reported, as in antique Rome, sometimes not, as in part of the Middle ages) and on the amount of material that has survived. Quite another point is the reliability of these data. Only on certain points can we control for reliability, for instance in the case of the Colosseum in Rome, said by the 'Regionara' to contain 87,000 spectators, but according to modern computations being able to house some 50,000 (Carcopino, 1939). It seems probable that this is only one case of exaggeration among many, and a relative modest one at that. When for instance Dio Cassius tells us that in one 'munus' in 107 AD. 10,000 gladiators participated, or when Carcopino computes on the basis of contemporary sources that ancient Romans had much more than 200 feast days in a year, some doubts as to the general credibility of ancient reports begin to creep in. Another instance: In the Bible (Judges 3:29) there is reported: ‘They struck down at that time about ten thousand Moabites, all robust and valiant men; and no one escaped’. Reports like these seem somewhat exaggerated (although one never knows).
Not only is the amount and quality of information that we have variable, there is another difficulty, one described for the first time by Vico (1725). In order to understand things, one has to integrate them in what one already knows. What one knows, in so far as it is shared with others, is called the ‘senso communis’ by Vico. Only on the basis of such a common sense can we interpret things in a common way. The further people are distant in time, place or culture, the smaller the common sense. We tend to judge historical facts in the light of our present situation, as we have only a very restricted ‘senso communis’ with people living long ago. For contemporary observers the context of judgment was therefore quite different from ours. Even if we are not aware of these differences, we may thus interpret historical reports quite falsely.
For instance when it seems to us that during the middle ages peasants were very rebellious, and city dwellers relatively calm, this may for a large part be caused by the fact that in those times there were almost no city dwellers. When everyone lives in the country it is quite logical that social unrest takes the form of peasants uprisings, just as nowadays many people are city dwellers and consequently a large part of the social unrest concentrates in cities. Another difference between modern and historical crowd happenings seems to lie in the fact that presently social unrest is for a large part caused by young males. From historical reports one gets the impression that this has not always been the case. Rioters often were adults (but people used to reach adulthood considerably earlier than nowadays) and the role of women was much more important than it is presently (e.g. Dekker, 1982).

Still another factor is that in older resurrections and upheavals the distinction between war and riot is difficult. Older resurrections quite often are described to have had leaders and a certain organisation, thus reflecting the social and political organisation of its time. It may be that leadership and organisation was indeed a characteristic of many older crowd manifestations, it may also be that the authors of our sources could not imagine that it could be otherwise. Another difference, the use of deadly weapons by crowd members, is surely due to the fact that in historical times the possession of deadly arms was much more common and much less regulated than nowadays. Moreover people used to have a definite pleasure in watching death and slaughter, as reports about gladiator fights, but also writings from the middle ages witness (see Elias, 1938, part II Ch 7) clearly show. In general we can say that, at least in Western civilisation, the more we arrive in modern times, the more disgusted chroniclers seem to be with violence, aggression and killing. This may well be a reflection of the civilisation process in Western society, as Elias (1938) pointed out.
A very important difference between historical and modern times lies in the ease and celerity with which information and people nowadays can spread. When in modern times something very spectacular happens, like the assault on the WTC in New York, within a few hours billions of people have received information about it. When in modern times large numbers of people get dissatisfied with the place they live in, such as during wars or famines, it is much easier than even a century ago to find transport to some relatively safe and prosperous place elsewhere, however distant from their original dwellings.
These, and many other differences between modern and historical circumstances, make it difficult, if not impossible to interpret the historical information that we have. Nevertheless many eminent historians have treated crowd action in a convincing way and reading of this literature (notably by Tilly and associates, by Rudé or Dekker) can be recommended.

REGULARITIES IN THE HISTORY OF CROWD BEHAVIOUR

It has often been observed that there seems to be a periodicity in human history, which means that history has its logic (e.g. Spengler, 1917). Maybe the most influential proponent of this idea was Arnold Toynbee, who wrote a rather monumental and forbidding work 'A study of history' (Toynbee, 1934 -1961), the main thesis of which was that civilisations rise and fall with a surprising regularity and that the failure of a civilisation to survive was the result of its inability to respond to moral and religious challenges, rather than to physical or environmental challenges. These latter determined the form of civilisation in a more general way. The periods of change in civilisation were at the same time 'times of troubles' and thus could be of interest for our subject. However as the 'time of trouble' that he sees for Western civilisation lies between 1378 and 1797, this macro-view seems not so helpful for our more microscopic approach.
In economics periodicity has also been the subject of extensive study. The best known example of such theories is found in the work of Nicolas Kondratieff (1926), who discovered a regularity in the rise and fall of economic activity, the so called 'Kondratieff cycles'. These cycles concern mainly the output of the dominant economy in a certain period, and thus specific national economies, or prices may develop more or less independently. Global economic crises were found to lie some 50 or 60 years apart. His thesis has given rise to much further work in economics (e.g. Berry, 1991). There have been shown, to my knowledge, no clear-cut and well documented relations between Toynbee's or Kondratieff's cycles and crowd phenomena.

In order to detect regularities or periodicity it is necessary to have reliable and complete historic sources. It is only in quite recent times that such sources, for instance newspapers, exist. Thus Tilly,Tilly & Tilly (1975) studied collective violence in France, Italy and Germany for the period of 1830- 1930. Even for this recent period it proved difficult to find continuous newspaper data. They report that this succeeded best for France (Tilly et al. 1975, p. viii) Nevertheless they came up with some interesting findings. In Table 4 an overview, made by the author of this book, of the central years of unrest recognised by Tilly et al. is presented.

France	1830	1848	1870	1900			1933	1950
Italy		1848	1870	1890	1913	1920		1947
Germany	1830	1848				1920-33		

Table 4. Years at the centre of periods of collective violence in three countries. 1830-1970. (Based on: Tilly et al., 1975)

In their book 'The rebellious century' they present some graphs on the quantity of violent events. One of them, giving the number of violent events in France per year, is reproduced in Figure 1 (Source Tilly et al. 1975, p.57).

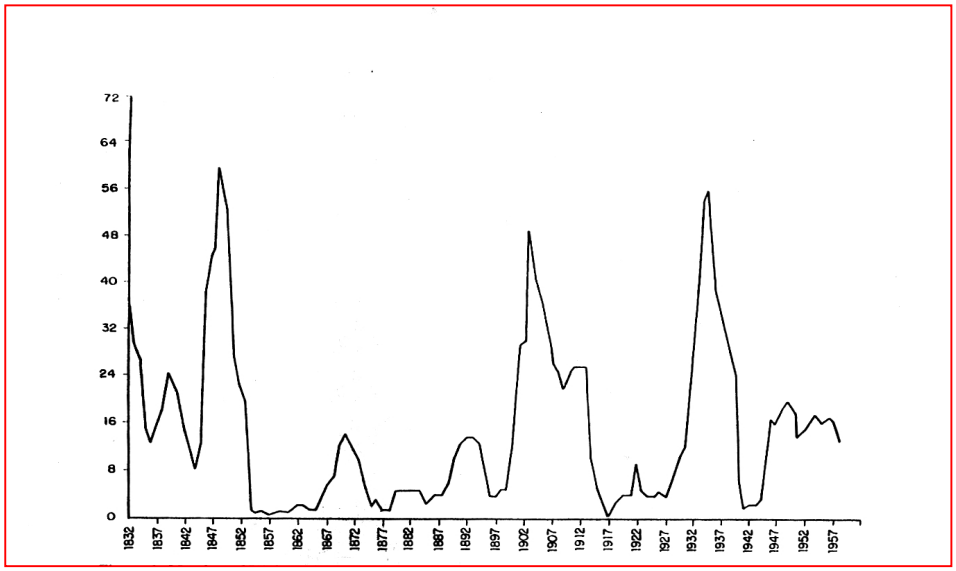

Figure 1. Number of violent events in France 1830-1960. 5 years moving average. (Tilly et al. 1975)

The graph is the result of a newspaper count of instances of violence in which more than 50 people were involved, smoothed out by means of 5 year moving averages. It is interesting to note that there seems to be a certain regularity in the prevalence of peaks, especially when we realize that the 1970's, which just fall outside the graph, were a turbulent period in France. When we look at table 4 we see that the periods between peaks roughly can be counted as: 18, 22, 30, 33, and 17. From the last period of severe unrest, around 1950, until the beginning of the recent period of the 1970's and 80's is another 20 years. The mean number of years between peaks thus was a bit less than 25 years.
The author of this book did a comparable analysis on the material provided by the Dutch historian Dekker (1982), who made a complete inventory of riots in two Dutch provinces between roughly 1600 and 1800. In all Dekker describes 160 riots. For smoothing out the relatively small amount of data a 7 year moving average was used. The graph is presented in Figure 2.

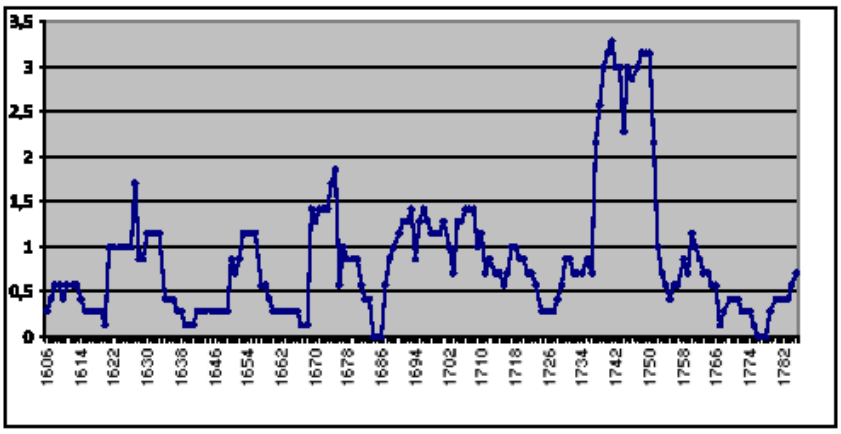

Figure 2. Seven years moving average of riots in two Dutch provinces, 1600-1785.

Just as in the Tilly graph a certain regularity can be noted. Peaks can be seen around 1627, 1655, 1675, then a longer period from 1696 till 1708, a large series of peaks around 1741, and finally a relatively small peak around 1760. Not shown is the period between 1785 and 1795 which was in Holland, as in France, a time of great trouble. The periods of greater unrest in our graph on average have some 26 years between peaks.

Although these data are only suggestive, it seems remarkable that the two analyses come up with a comparable regularity of about 25 years for periods of societal unrest. Moreover this regularity, although concerning two different West European countries, holds true for some three centuries. Its seems then that there may be some method in what Seneca called: 'diseases of the body politic'. One should however bear in mind that these data only concern western Europe, and then by far not all of it. It may well be that in different regions different regularities, or no regularities at all will be found.

The signalled regularity has yet to be proved valid, but tentatively some explanations may be put forward. How could it come about that in some periods social unrest seems to cluster, bringing governments and agents of order to desperation, while at others the instances of unrest do seem incidental and unconnected? The interval of 25 years is suggestive of a generation effect (see Goertzel, 2001). It is not unthinkable that each generation has some 'cause' which is propagated by its corresponding cohort. This cause could well have a kind of magnetic effect on older and younger people and thus, once the desired change has been reached, things tend to calm down, till another generation comes up with another cause.

It not self evident to understand the concept 'generation'. On the one hand there are differences between the old and the young, the so called 'life cycles' and on the other hand between cohorts. Crucial is how these life cycle and cohort effects interact to produce historical cycles. Strauss and Howe (1991) attempt to reconcile the life cycle and cohort approaches by defining a generation as "a special cohort-group whose length approximately matches that of a basic phase of life, or about twenty-two years over the last three centuries" (p. 34). They claim that a distinctive "social moment" has occurred every twenty-two years or so, marking the transition from one generation's period of dominance to that of another.

This kind of reasoning depends heavily on there being recognizable causes for every period of unrest (see Manheim, 1952). If we look at the Tilly et al. data it does not seem impossible to do so. If we constrict ourselves to the 20th century, we first see a series of peaks around 1900, in which period socialism was, through strikes, demonstrations, occupations and blockades, fighting for its place as a regular societal and political power. The next peak centres around 1933, and is clearly due to the consequences of the great depression and its concomitant poverty and loss of jobs. The next peak, beginning shortly after WWII is mainly due to communist agitation, in the endeavour of more radical organisations of the left to crowd out the social democrats. Not shown in Tilly's graph is the last period of unrest, that beginning in 1968 and stretching out till about 1985, in which period the youth of western Europe and America rather successfully strived to gain positions of power for its own generation.

Another explanation of the periodicity may be found in the growing and waning expertise of government, civil servants, police forces and the military in combating social unrest. It seems plausible that the competence in dealing with large bodies of unruly citizens becomes more and more forgotten during periods of calm. If this is true then every 25 years the officials and executives have to discover anew effective strategies and tactics, and are sure to make grave mistakes in the first phases of the developing troubles.
Tilly et al. (1975) remark that the timing of collective violence seems not to be influenced by celerity of urbanisation, industrialisation, or other structural changes. Collective violence on a large scale is mainly found during struggles for power in the political sphere. Even then it mostly starts with peaceful intentions, but during periods of unrest things tend to get out of hand rather easily. During relatively calm periods of course some collective violence is also found, but a large part of protests, intended as peaceful, remains so. As an example they give data on France, where in the excitement from 1890-1914 some 20.000 strikes were counted, of which some 400 showed violence, but during a calmer period (1915-1935) in only some 50 of the 17.000 strikes violence was used. Tilly et al. remark that practically all violence starts after police or armed forces step in. A further observation is that as soon as a dictatorial regime gets settled, such as in Russia and Italy after 1922 or in Germany after 1933, societal unrest is lessened to a considerable degree.
With these observations we close our short and a bit amateurish historical part, to proceed to some definitory and taxonomic exercises.

NAMES FOR CROWDS AND CROWD BEHAVIOUR

Things and phenomena that have a certain importance combined with elusiveness or equivocality about what they are, often have many names. With crowd phenomena this is not different. For large groups we find several families of names. There is a general class for large groupings of people: *Crowd, horde, huddle, mass, meute, mob, multitude, rout, throng*. Another class is derived from the animal world, for instance: *Flock, herd, pack, shoal, swarm*. Still another class of names is derived from the military world*: army, body, brigade, cohort, force, host, legion, squad*. Then there are names that imply some disposition in the group, for instance a negative one: *canaille, plebs, rabble, riff-raff, scum*, or a certain basic form of organisation: *audience, congregation, convention, nation, party, people, public, tribe*. Not only the number of names for these not formally organized groups is remarkable, it is just as remarkable that each name points to a slightly different type of grouping and that we are mostly well aware of these differences. For instance when we call a crowd an army, it has a slightly more positive and organized connotation than when we call it a crowd, and much better than when we call it a mob (see Lipton, 1993).

Not only for groupings do we have many names, for the activities that these groups undertake many names exist as well. A first class of names refers to a seemingly common activity of one or more of the above mentioned groups, for instance: *demonstration, riot, revolution, sedition, mutiny, strike, blockade, upraising, craze, fad, mania, mass hysteria, orgy, revival, feast, party, lynching, looting, panic, stampede*. Apart from denoting some form of activity, many of these names can also be used for a setting wherein such behaviours fit, e.g. people riot in a riot, they lynch at a lynching, they strike in a strike, people panic or stampede in a panic, and so on. For these kinds of settings in which crowd-like behaviour is found, there also exist many names not so easily applicable to behaviour*: Mardi gras, carnival, concert, convention, disaster, meeting, revival, sports, or war*.

As the names which have been devised for crowds and crowd-like phenomena have many connotations, the need for some general name denoting the subject, thus circumventing the problem of connotation, has been felt by several authors. Brown (1954) suggests the use of *collectivity* for denoting some grouping of people, whereby he makes a distinction between collectivities that have congregated, that are more or less in one place, and collectivities that do not congregate, such as TV audiences or even categories of people, such as students or politicians. McPhail (1991), from the same need, uses the term *temporary gatherings*, which is more or less equal to Brown's congregated collectivity. Although there certainly is some merit in these endeavours toward a clear nomenclature, in this work we will in most cases use the term *crowd* as a synonym for the traditional, but in English speaking countries less used term *Mass* (Dutch: Massa, German: Masse, French: Foule, Italian: Folla).

THE DEFINITION OF CROWD BEHAVIOUR

Crowds differ from other gatherings in that the behaviour of the people present differs from what is normally seen. Types of crowds differ because people in these types act differently. Because of this central importance of behaviour it seems crucial to define *crowd behaviour*, the definition of crowd will then be easy: a gathering in which people perform crowd behaviour. The tendency of most writers on crowds is to avoid the definitory stage. This is a defensible gambit, as everyone knows, or thinks to know, what is meant by 'crowd'. On closer view however the exact boundaries are not so clear. Thus there are many authors, most of then sociologists, who prefer not to use the term crowd behaviour, but to name it *collective behaviour* (e.g. Turner & Killian, 1987). In this book we will discuss crowd behaviour, while being aware of its problems, because that is the way it is usually named. But then an important part of our work will be to denude the word crowd from its many undesirable connotations.

In most cases the lack of a clear demarcation of what is or is not a crowd leads to misrepresentations and unclarity, as most writers tend to concentrate on a certain class of crowd behaviour, while pretending that they cover the whole field. Notably the many sociologists who call the field Collective behaviour (e.g. Smelser, 1963, Turner & Killian, 1987), are mostly concerned with more organized or institutionalised forms of crowd behaviour, like political or protest movements, labour unions, et cetera. If an author like McPhail (1991) prefers a term like *gatherings*, suddenly a whole area of phenomena that normally are not included when thinking about crowds becomes relevant, thus making the subject too broad. Then there are authors who discuss mass society and its psychological implications, such as Ortega y Gasset (1927) or Moscovici (1985), a subject related to, but different from crowd psychology.

So, if we do find an attempt at definition, the result can vary widely, depending on the orientation of the author: different schools do have different subjects and thus different definitions. We find these kinds of problems with definition and this one-sidedness in many early writers like Tarde (1901, fashion, fads), LeBon (1895, riots and revolutions), or Trotter (1917, war), but it also goes for more modern writers as Brown (1965, panics), Olson (1965, strikes etc.), or Reicher (1987, riots).

A final, but important impediment towards an adequate definition of crowd behaviour lies in the fact that the attention and scientific study are mainly directed towards the more spectacular forms of it, and then especially those that involve casualties or even deaths. Indeed we find many in depth analyses of such happenings, in historical and in social scientific writings (e.g. General riots: Hibbert, 1958, Rude, 1989, Race riots: NACCD, 1968, Dentler & Hunt, 1992 or Sports riots: 't Hart & Pijnenburg, 1988, Kerr & de Kock, 2002) and these have tended to dominate our thinking about crowds. This is a serious problem, as most crowd gatherings by far are peaceful events (e.g. McPhail, 1991, Adang, 1995) and thus conclusions and definitions based on these more aggressive phenomena tend to be misleading

The question then becomes: is it possible to give a general definition of crowd behaviour that comprises all the usual varieties, but not much more? When we try to do this, three properties of crowd behaviour seem to be relevant: size, copresence and uncertainty.

SIZE

First and most obvious is the fact that crowd denotes a *large group of people*. Interesting then is the question for the lower boundary of the crowd concept. Can a group of two people act as a crowd? It seems a bit far fetched, even naming it a group is disputed. Do we need then at least ten, or maybe a hundred? There is no obvious way of deciding in this matter. LeBon (1895, p.24) for instance states that: 'At certain moments half a dozen men might constitute a psychological crowd...', but this seems a typical example of his predilection for making loose, intuitive statements. When we turn to empirical results in the field of Crowd Psychology, crowd-like phenomena have indeed been reported from rather small groups of 5 or 6 people, bearing in mind that they function within greater assemblies (e.g. Adang, 1998), or in a very special kind of situation (e.g. Mintz, 1951). The fact that rather small groups can act in a crowd-like fashion leads us to another complicating factor, namely that it is not so much the group under consideration that determines crowd-like behaviour, but rather its imbeddedness in a crowd or crowd-like context. Instances of this can be found in football hooliganism, in crazes or fads, in economic crashes or in panic situations. This crowd-like context can be real, but also more or less imaginary, as in small groups

of hooligans operating quite detached from actual crowds, or of small groups of boys wreaking havoc on school buildings or telephone booths.

It is because of these reasons that not only Le Bon, but also several other early authors (e.g. Bentley, 1916, Park & Burgess, 1921) have opposed the quantitative criterion of size. For practical matters, such as crowd management, it remains however an important factor. The problem seems to be that problematic crowd behaviour is almost independent of numbers, but that crowd management poses different demands according to numbers. Therefore some authors have suggested a classification of crowds according to their size (e.g. Newton & Mann, 1980)

The other side of the matter is the question: Is there an upper boundary? The answer to this can be an easy: No. There is no concept for a larger grouping of people than 'crowd'. The theoretical upper boundary of a crowd is then the number of people on earth. This is of course a purely theoretical point, although it is surprising to imagine that the whole human population can be packed in an area of 35 x 35 kilometres (at 5 per m^2). One of the largest densely packed crowds in history is probably that at the funeral of Ayatollah Khomeiny in 1989, consisting of more than 3 million people.

The conclusion concerning size as a definitory factor is rather disappointing: Almost any size will do, but small groups (from 2 to 10 people) usually only show crowd- or crowd-like behaviour in a larger crowd-like context, or in very special, highly compelling situations. Larger groups can create their own context, the larger they are, the easier this happens, thus we usually reserve the term mass or crowd for groupings of about 50 upward. This delineates crowd psychology from fields such as group dynamics or microsociology, that deal with small groups, nevertheless it does not seem very useful to give size an important role in the definition of crowd behaviour. Another conclusion can be that what we call the crowd is only in very special cases synonymous with those acting within its context, very often the crowd *is* the context

CO-PRESENCE

A second property of crowd-behaviour is that it is shown by people gathered *in one place,* forming a more or less continuous gathering. This delimits the field of crowd-behaviour from those of political, economic or communicative behaviour. In the latter branches of social science people explicitly do not have to be in each other's vicinity to show interesting behaviour. It also implies that collectivities such as families, tribes, or populations only have the liability to become a crowd when assembled. When people are near to each other, the possibility of direct interaction emerges, and this clearly is a condition for speaking of crowd-behaviour. The interaction does not have to be verbal or even very explicit and clear, it suffices that people see, and hear, eventually smell or feel each other. Thus people in a crowd perceive the reactions of others, be it on their own behaviour or to some occurrence, like the jokes of a comedian, a bomb exploding, or people moving in a certain direction, and in their turn react to the occurrence or on the behaviour of others. The messages that comprise the interaction are thus mostly very simple and quite often of an emotional kind, such as seeing aggression, hearing cries of joy or laughter, seeing people flee or getting angry. All these can be viewed as simple messages that have a certain influence on the onlooker. As these kinds of very simple interaction cannot be avoided when people are in each others vicinity, the most sensible second defining property is *Co-presence*. This part of the definition is crucial in delineating crowd psychology from the psychology of mass communication.
That people have to be gathered in a certain space does not at all imply that the behaviour of all present will be uniform. Within the, often very loose and changing perimeters many subgroupings can be present, showing different kinds and intensities of behaviour.

UNCERTAINTY

The third, and most important criterion for speaking of crowd-behaviour is that *the normal rules of behaviour and the normal forms of organisation partly and for a limited time loose their power*, and that new and quite often simpler norms and organisations emerge. It is especially this feature that makes crowd phenomena unpredictable, as predictability supposes regularity, through organisation, roles, norms and rules. In normal, everyday interaction people are supposed, and indeed compelled by a large set of mostly implicit norms, to inhibit their more direct impulses. A good description of this kind of constraints can be found in Goffman's 'Behaviour in public places' (1963). As soon as the situation becomes so that

these normal rules do not function anymore, people are more or less left to their own devices. In such a situation of uncertainty and equivocality new norms can and will be developed, although this may not be an absolute necessity.
This characteristic of crowd behaviour can also be described in a more sociological manner. Culture, which in some of its aspects can be seen as a form of organisation, is for some social settings a very powerful determinator of behaviour (e.g. ceremonies, work situations), while for other settings, notably for crowd situations, relatively few cultural patterns, in the form of norms or roles, lie ready at hand. Accordingly many sociologists say that crowd behaviour is 'emerging' behaviour, its organisational forms, norms and significance emerge during the interaction (Turner & Kilian, 1987, Marx & McAdam, 1994). It is characteristic for the sociological stance that these authors then become more interested in regularities in the organisation of social movements, than in the unorganised parts. The reasons why there are regularities in what emerges while things are still unorganized, do however have little attraction for most sociologists, excepting maybe Marsh et al. (1978) and McPhail (1991). It seems to me, that the task of crowd psychology is to do just that: explain why there is some system in the madness that crowds seem to possess. This tendency to be especially interested in the unorganised workings of the crowd is recognizable in all forms of crowd psychology, as opposed to crowd sociology, from Le Bon to the present book. Our task is thus seen as making sense of crowd by means of psychology, but we will only summarily treat the field known as collective behaviour.

Our definition then will have as its central tenet: Crowd behaviour is behaviour that is less than usual determined by norms and organisational forms, and shown by individuals in the context of some kind of gathering. Consequently our definition of crowd is: *Crowds are impermanent groupings of people in one place and time where the usual norms and organisation forms have lost at least part of their power.*

THE GROUP: A UNITY OR AN AGGREGATION?

In order to understand crowd phenomena one is obliged to define the acting agent. Is it the crowd itself, a unity consisting of people or animals, but nevertheless a unity, or is it purely the aggregation of individuals, each acting more or less in the same way that they do when alone, or when in some indifferent company? This point was discussed quite early, when Allport censured Le Bon for his concept of group mind (Allport, 1924, p.295). The individual in a crowd, Allport stated, behaves just as he would behave alone ‘only more so’. This implied that crowds do not form unities with their own characteristics, but this implication is contrary to common sense. For instance the names that we usually give to crowd-like groupings suggest such a unity. On the other hand modern research seems to point in the direction that this unity is more a question of bias than of reality (e.g. McPhail, 1991, McClure,1990).
Related to this dilemma, and quite often erroneously mixed up with it, is the question whether the members of a crowd become more uniform in their beliefs and their acts or that they keep their individuality. In the first case the group, or the crowd can be said to be something special, namely more than the sum of its members (e.g. Durkheim, Le Bon, Lewin), in the second it just is that sum and nothing more (e.g. Allport, McPhail). This problem is relatively old in social science, already a hundred years ago it led to lively debates. We will elaborate these two views in order to come closer to a solution of this problem that is so central to social psychology.

The first view, the group as a unity, is certainly the oldest. We do find in history many descriptions of mobs, crowds, hordes or other groups in which the group is obviously considered as an entity (c.f. Dekker, 1982, Moscovici, 1985, McClelland, 1987). According to this view *the group* makes its plans, and acts accordingly as a unity, it reacts on all kinds of happenings from outside as a unity and the acts of individuals are only cited as examples of what the crowd is doing. This way of speaking about things that happen is of course in an important degree a figure of speech: 'The savage Huns ravaged the countryside', 'The army was routed', 'The people revolted'. There is no sensible other way to express these ideas, no way to say it in such a manner that it is clear that a collection of separate individuals is meant. There is moreover no need to do this, because all the individuals that are meant in those statements are supposed to be acting more or less in the same way: all are ravaging, all are taking flight, or all are fighting with state

forces. Maybe in reality they were not all doing the same thing, but as the art of observation has only quite recently been the object of systematisation, earlier observers had hardly the means to make sensible quantifying statements on crowd behaviour. We can thus say that the tendency to talk about groups, crowds or mobs as such, is embedded in the peculiarities of language, but there is more to it. We will discuss four reasons why it is feasible to look at crowds as unities, namely *organisation, collective psychological processes, convergence and political factors.*

ORGANISATION

Quite often a crowd will be, as LeBon pointed out, organised to a certain degree. He even used that characteristic as a mainstay of his taxonomy: organized versus unorganised crowds. Organisation is of course, as a means of ensuring that behaviours of members are coordinated, a powerful factor in establishing this perception of unity. Correspondingly in organisation psychology there exists a clear tendency to speak about organisations as entities.

Collective psychological processes

Some organisational psychologists, notably Weick (1986), point out that organisations are not things, but processes. He therefore uses the concept of collective mind to explain organisational performance in situations requiring nearly continuous operational reliability. Collective mind is conceptualised as a pattern of heedful interrelations of actions in a social system. Actors in the system construct their actions, understanding that the system consists of connected actions by themselves and others, and interrelate their actions within the system (Weick, & Roberts, 1993). A consequence of this view is that the uniformity of behaviour will be greater as the behavioural options become simpler. Thus, in so called panic situations, people have only very limited options, and therefore their behaviour will be more uniform. This uniformity can be attributed to different causes: a common definition of the situation, common ways of information processing, or, in common sense language: a common mind. In this way LeBon's concept of group mind is denuded of its more obscure connotations. However that may be, as long as we talk about crowds in the sense as defined above, there will generally be little formal organisation, and the question remains: to which degree are behaviours of crowd members 'heedfully' coordinated, and what causes this coordination?

CONVERGENCE

Many students of crowd behaviour point to the fact that crowds are not random samples from a given population, but that they tend to consist of individuals with common characteristics, such as interests, age, sex, need for sensation, class, etcetera. It is a widely believed and well documented fact that people who are alike also feel attracted towards each other. Newcomb (1962) called this the similarity/attraction effect. Similarity reassures us that our beliefs are accurate (Festinger, 1954), that the chance for conflicts will be small (Insko & Schopler, 1972), and it gives us a sense of unity (Arkin & Burger, 1980). Therefore crowds are more homogenous than the general population and thus they may be seen as more probable to think, feel and act in a concerted way (e.g. Turner & Killian, 1987).

POLITICAL FACTORS

There is still another reason why groups, and especially crowds, would be seen as unities, and that reason lies in the political role crowds can play. It has often been remarked on that fear of the crowds is an important factor in politics (Nye, 1978, van Ginneken, 1985). In a sense a crowd of people revolting against the authorities is playing a part in the political game, they form a power factor. In that sense crowds can indeed be seen as unities, something akin to political parties, except that they generally have less organisation and seldom utter clear and coherent ideas.

Probably these linguistical and methodological reasons suffice for the explanation of the phenomenon that in almost every learned or less learned treatise on crowds or crowd psychology the subject is 'the crowd' and its influence on individual behaviour. Some examples*: 'There are certain ideas and feelings which do not come into being, or do not transform themselves into acts except in the case of individuals forming a crowd.*' (LeBon, 1952. p.27); *'In a crowd, then, you have a number of people united together by the experiencing of the same emotion and the same call to action.'* (Sprott, 1958, p.162); *'Once men have been drawn together and fused into a crowd, they lose most of their critical sense.'* (Moscovici, 1985. p.31*); 'They [the police] were stoned by a large crowd gathered opposite the café.'* (Reicher, 1987, p.192).

Without an elaborate description of what exactly is meant, the term crowd is indispensable. At the same time its use can be very misleading.
There are however more compelling reasons for considering groups or crowds as unities than linguistical or methodological reasons. When one looks at others, or at oneself for that matter, it seems obvious that in groups one behaves differently, qualitatively and quantitatively, from when alone. Also in different groups people behave in different ways. Moreover, it has been shown that in one crowd phenomenon, say a large festival, a riot or a panic, individuals behave in different ways (e.g.Adang, 1998). The reason why these differences exist lies, apart from the obvious differences in characteristics of individuals, in the special situation that is created when groups assemble. In groups and especially in crowds it is simply not possible to perform standardised, intricate and cultural behaviours like elaborated and rational planning, quietly ruminating on some subtle line of thought, extensive discussion or reading a book. One earlier author put it this way: "*Crowds are notoriously anaesthetic towards the finer values of art, music, and poetry*" (Martin, 1920, p. 18). And in one situation different sub-situations or niches may be found, wherein different kinds of behaviour are shown.
This line of thought is elaborated by Barker (1960) in his ecological psychology and by Gibson (1979) in his theory of affordances. According to these theories situations differ in the limitations and possibilities they offer for behaviour and consequently for cognitive processes. These differences range from very simple and obvious ones, e.g. in groups people talk, or have fights, but not when alone, to more intricate differences, e.g. in shops people normally take their merchandise and pay, but in some crowd situations they omit the paying, whether from an absence of cashiers or from effects of conformity. These differences in behaviour must have a cause, and it is a very common bias for humans to see causes as things, thus in this case to see crowds as things. If the exact processes whereby groups have influence on their participants or on onlookers are not known, then the tendency to see groups as unities does not lessen, it rather will be stronger. The individual is therefore easily seen as changing by becoming part of a larger unity.
In a sense it is not such an unlikely thought as well. What we view as a unity depends to a large degree on our focus. When we take the universe as our focus, the earth forms a unity, when taking the earth as our focus, continents, seas or mountain ranges become unities, when taking the human body as our focus, bones, hearts or even blood particles become our unities. So why should individuals not be seen as constituents when we take groups or crowds as our focus?

Let us now take a look at what, according to older theories, is supposed to happen to an individual once it finds itself in a crowd. According to early theorizers like Durkheim, LeBon or Sighele, the mental unity of crowds is a fundamental law of social science. The individual would lose his normal rational control over its behaviour and fall back on more primitive decision mechanisms. These are typically thought to be instinct-like, for instance the individual begins to loot, to maim or to murder, all acts obviously considered to be typically instinctive, or it slavishly conforms to the injunctions of some leader, and anyway becomes very emotional. Moreover all crowd members are equally subjected to these adventures. That these kinds of behaviour were then considered as determined by instincts is even more clearly implied in the theories of Trotter and McDougall, than in those of LeBon, who tended to lean also on a different process: hypnosis. But LeBon too had the idea that the regression in individuals would be a regression toward the fundamental characteristics of their race, and therefore was akin to instinct.
A further distinctive mark of earlier ideas about individual behaviour in crowds would be that rationality as expressed in following norms and ethical rules does not work any more. It is typically assumed that in normal circumstances people are rational, and this may imply that following norms or acting morally are also a question of rational choice. Moreover it is stressed that it is the group as an entity, often under the influence of a leader (c.f. Freud, 1921), or at least a leading emotion or sentiment (c.f. Canetti, 1960), that influences the individual. For a causal influence the other way round, the individual influencing the group, the early theorizers seem to have had little interest. Only one special kind of individual, the Leader, has a certain causal role in crowd behaviour, but even he must closely conform to certain procedures, like treating the crowd as if it were a woman (LeBon, 1895), or have special personality characteristics, such as Narcism (Freud, 1921). The rest of the crowd members are considered to be merely followers, and, remarkably enough, at the same time as active criminals, though they cannot be held strictly responsible

for their acts (Sighele, 1893). There also seems to be little interest in one of the mainstays of modern group dynamics: interdependence. Neither in LeBon, nor in Sighele or comparable other authors, much attention is given to the mutual influence of individuals, and thus an analysis of the reasons for this influence, interdependence, is almost totally lacking. When we look at newer theories we will see that a possible solution for the problems the early writers had, can be found in the concept of social identity, an identity that is not fixed, but changes according to the group or category to which one temporarily feels to belong.

Earlier we concluded that unity lies in the eye of the beholder. This has important repercussions for the theory of crowd behaviour. As soon as we see that people exhort each other to do something, we immediately know that there is a tendency in the addressed not to do it. In this sense the continuous exhortations toward the keeping of unity, that can be easily observed in crowds, are telling: Obviously there are tendencies toward dissociation, that must be avoided if the group or crowd is to come to grips with its goal, whatever that may be.

TAXONOMIES: TYPES OF CROWD PHENOMENA

Typology, or taxonomy, the making of a systematic classification, is a precondition for science. Steps in the direction of taxonomies are therefore numerous. They mostly concern activities or settings, taxonomies of different kinds of groupings are seldom found. Even if a distinction seems to apply to the kind of grouping (e.g. *mob* versus *public*), the accent does lie more on the kind of activity.

In general two kinds of taxonomies can be distinguished (c.f. van de Sande, 1996). The first kind is a taxonomy of entities, resulting in a categorical system, such as that of Linnaeus. The entities which fall in a class together form the category, some being prototypical for that category, others lying just within the boundary. The second kind is a taxonomy of properties, resulting in a dimensional system, such as the big five system of personality. Entities ordered in such a manner have a certain value on each of the dimensions. Categorical taxonomies (e.g. ‘riots, panics, feasts”) closely follow the way our mind works in bringing order to the world, but have the disadvantage that they are rather haphazard, have fuzzy boundaries and therefore are difficult to use in empirical work. Dimensional taxonomies are based on a set of polarized characteristics (e.g. Aggressive-peaceful, Large-small) so that every entity gets a score on each of the dimensions. This last kind of taxonomy lends itself much better for empirical work, and as there are no boundaries between categories, fuzziness is as it were inherent .

Crucial is the question what should be the content of the taxonomy, which entities or dimensions should be included and which should not. In the case of crowd phenomena we have several choices: we could make a taxonomy of the phenomena as linguistical entities, e.g. a riot, a panic, a feast, but also of phenomena as they appear in the world, e.g. 'the storming of the Bastille', or the 'Tulipomania'. We could make a taxonomy of behaviours that are shown in crowds, of people or of roles of people in crowds, but also of kinds of groupings. Making a taxonomy of crowd behaviour could be compared to trying to put a large jellyfish in a small bucket: even if you succeed, large blobs tend to hang out of it. The obvious solution to this problem is to chop the animal into convenient pieces. In reviewing the endeavours towards a taxonomy we will encounter interesting parallels to the jellyfish problem.

Probably the first attempt at a systematic analysis of crowd types was done by Le Bon (1895). He made a first distinction between *heterogeneous* and *homogenous* crowds. Heterogeneous crowds, his main subject, are composed of ‘’individuals of any description, of any profession and any degree of intelligence’’ (Le Bon, ed 1952, p. 156). Quite seldom they are composed of people of different ‘races’, and if this happens there will be discord in the crowd. Thus heterogeneous crowds show racial characteristics, for instance: ‘A French crowd lays particular weight on equality and an English crowd on liberty.’ Different heterogeneous crowds can differ widely according to the race from which they are assembled. A further distinction in heterogeneous crowds is that between *anonymous* (e.g. street crowds) and *non-anonymous* crowds (e.g. assemblies, juries). This difference rests on ‘’the sentiment of responsibility present’’. It remains unclear who or what is supposed to feel the responsibility.

Homogenous crowds have things in common, such as *sects* having common beliefs as their connecting link, *castes* having a common profession and upbringing, and *classes* having common interests and habits. Apart from these distinctions Le Bon also makes a difference between *unorganized* and *organized* crowds,

and between the lines another distinction in heterogeneous non organized crowds can be gleaned: between *gatherings*, such as publics, and '*psychological crowds'*, the latter forming his subject, because they possess a 'crowd mind'.
Le Bon's taxonomy is summarized in table 2

	Heterogeneous		**Homogenous**
	Anonymous	*Non anonymous*	
Unorganized	Gatherings vs. psychological crowds		e.g. Classes
Organized			e.g. Armies

Table 2: Le Bon's taxonomy of crowds

Other, mostly similar, classificatory principles were proposed by Bentley (1916), Woolbert (1916), McDougall (1920), Park & Burgess (1921), Freud (1922), Allport (1924) and Young (1930).

An adequate summing up of these earlier attempts for taxonomies is offered by Brown (1954). He began by making a classificatory system for collectivities. This system had four dimensions: Size (room size, public hall size and too large to congregate), Congregation (never, temporary-irregular, and periodic), Polarisation (Not focused on some object, temporary focused and periodically focused) and Identification (never, temporary identification and enduring). This taxonomic system encompasses all kinds of collectivities, and so crowd phenomena only form part of it.

Crowds, Brown asserts, are at least public hall sized congregated collectivities, polarized on a temporary-irregular basis and involving temporary identification. "This means that they will tend to be co-acting, shoulder to shoulder, anonymous, casual, temporary, and unorganised collectivities" (Brown, 1954, p.840).

He then proceeds to presenting a taxonomy of crowds, which is shown in Figure 3. His idea was to make a classification of linguistic entities, on the basis of their characteristics. An unhappy property of his system is that it contains dimensions as well as categories, thus offering a somewhat hybrid whole. We can find one basic dimension in his taxonomy: This dimension is *Active* (Mobs) versus *Passive* (Audiences). The active crowds then are further divided, according to the behaviour displayed, as Aggressive (Lynching, Rioting, Terrorizing), Escape (Panic), Acquisitive and Expressive crowds. It should be noted that this division according to behaviour does not have a dimensional character. It is a categorical sub taxonomy. In the case of panic a further dimensional division is suggested in *organized* versus not *organized*. Lynching, on which subject Brown presents

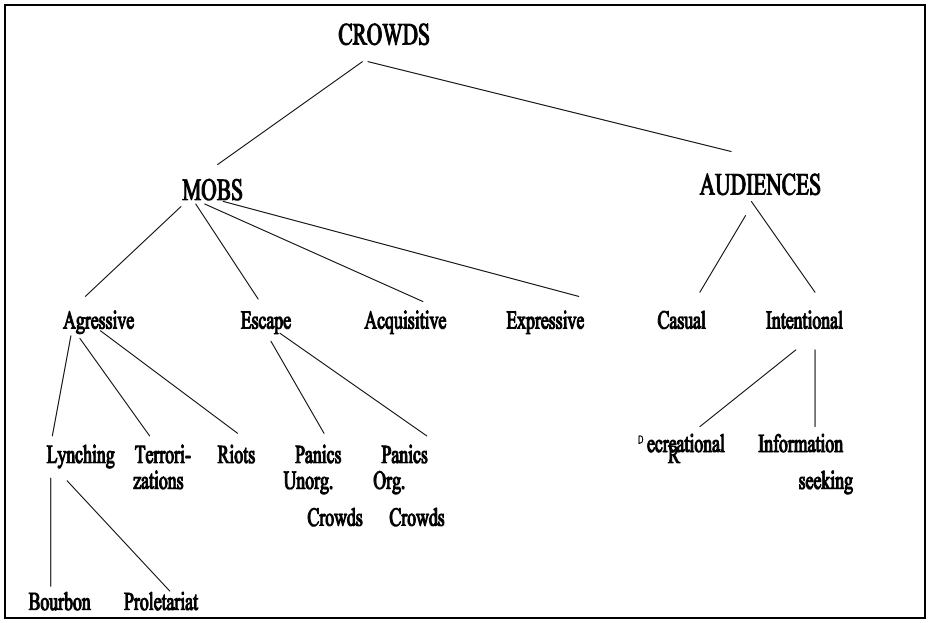

Figure 3. Brown's taxonomy of crowd phenomena (Brown, 1954)

many interesting particulars (Brown, 1954, pp 847-854), is then, following Raper (1933), divided in Bourbon lynchings, a kind of unofficial, but regulated juridical process against a specified alleged criminal, and proletariat lynchings, which much more take the character of 'pogroms' or razzia's. Again *organized* versus not *organized.*

The passive crowds, the audiences, are further divided according to the dimension *Casual-Intentional*, but he omits this dimension in his class of Mobs.

Purely categorical taxonomies were devised by Canetti (1960) and Lofland (1981). Canetti's (1960) main taxonomy (he devised other distinctions, see chapter 3), is based on the leading emotion that guides the behaviour of the participants. He thus ends up with five types of masses: The Killing mass, or 'Hetzmasse' (emotion: aggression), the Fleeing mass (emotion: fear), the Prohibitive mass, or 'Verbotsmasse' (emotion: refusal of obedience), the Inverting mass, or 'Umkehrmasse' (emotion: mutiny), and the Feasting mass (emotion: joy). Elements of this division according to emotions are found in other taxonomies, but Canetti's is special in that it is the first that exclusively rests on this psychological principle. Lofland (1981) discusses several taxonomic strategies and concludes that those based on 'dominant emotions' are most satisfactory. He thus distinguishes between phenomena based on Fear, on Hostility and on Joy. Possible other classes could be those based on Grief, Disgust, Surprise or Shame.

Another taxonomy was proposed by Smelser (1963) who discerned, on the basis of Parson's (1951) four components of social action (values, norms, mobilization and facilities), four types of crowd phenomena. The first of these, Value oriented movements, aim at fundamental changes, such as in revolutions, or fundamentalist movements. The second type: norm oriented movements, seek to redress the way things are done within the bounds of the central values, for instance in civil rights movements, taxation riots, or hunger marches. The third type: hostile outbursts, occur when people gather to right some felt injustice, or to mete out punishment for supposed evil deeds. The final and fourth type arises when avoidance or acquisition of goods or facilities is the aim. It includes: *panics, plundering, fears and crazes.* A critique on this typology could be that only seldom these types are found in pure form, and moreover, one type can easily evolve into another.

Brown's proposal has had more influence than the others described, but his choice of basic dimensions was not the happiest one possible. Moreover he did not purely rely on real dimensions, but partly on a categorical classification, as we saw. Secondly there appear to be considerably more dimensions than Brown's three, and more important ones at that. For instance Marx & McAdam (1994) name some ten factors on which mass phenomena can be described (erroneously called dimensions), and from several works on collective behaviour even more can be gleaned. An overview of possible dimensions is given in Table 3.

Dimension			**Discussed by**	**Name**
Externally motivated (Instrumental, Serious)	-	Internally motivated (Playful, Expressive)	Apter (1980)	'motive'
One party	-	More parties	Reicher (1990)	'categorisation'
Fate control	-	Behavior control	Kelley (1995)	'avoidability'
Heterogenous	-	Homogenous	Le Bon (1895)	
Organized	-	Unorganized	Le Bon (1895)	
Leader present	-	Leaderless	Le Bon (1895)	
Active	-	Passive	Brown(1954)	
Aggressive	-	Peaceful	Brown(1954)	
Large	-	Small	Park & Burgess (1921)	
Open	-	Closed	Canetti (1960)	
Polarized	-	Non polarized	Milgram & Toch (1969)	
Stationary	-	Moving	Fruin (1987)	
Concentrated	-	Ubiquitous		
Short-lived	-	Longer duration		
Traditional/expected	-	Sudden/unexpected		

Table 3. Some dimensions on which crowd phenomena can be ordered

The difficulty in making a dimensional taxonomy of course lies in the choice of appropriate dimensions, this appropriateness depending on the goal of the taxonomist. We will give a simple example. The dimensions that are most important from a practical point of view, such as for authorities or police forces, may well be *'motive'* and *suddenness of onset*. The first dimension has at its one extreme situations in which the participants have some external goal, which they seriously strive after, like in demonstrations, or other forms of protest, in plundering, mutiny or in flight. This motive corresponds with the term 'Instrumental behaviour', that is used in criminological theories (c.f. Vecchi et al, 2005). At the other extreme are situations in which the participants have no external motive, but are mainly interested in amusing themselves, in experiencing sensation, 'kicks' and in the relief of boredom. We could call this an internal motive. It corresponds with the term 'Expressive behaviour' (c.f. Vecchi et al, 2005).
Many crowd phenomena that can be predicted for a long time beforehand, such as traditional riots, important sports games or tournaments, organized manifestations, or large scale festivals or parties, can be placed at the internal motive, or expressive end. Crowd occurrences with a sudden onset, such as panics, some kinds of race riots, or behaviour during disasters, often can be placed at the external goal, or instrumental end of the dimension.
As an illustration we give a 2 x 2 table of some crowd occurrences ordered on these dimensions. We thus get four classes of crowd phenomena (see Table 4.)

	Internal Motive	**External motive**
Expected	Traditional riots Football riots Dance parties Large manifestations	Demonstrations Squatters evictions Strikes, Blockades Revival meetings
Sudden onset	'Summer' riots Improvised parties Brawls Mass Psychogenic Illness	Race riots Escape panics Bank runs Lynchings

Table 4. Crowd occurrences ordered on two dimensions: Suddenness of onset and Internal/External motive.

When, with a practical view towards avoiding negative consequences, we look at crowd occurrences ordered in this way it becomes obvious that for different situations, different approaches should be taken, always keeping in mind that for most occurrences the most common and often the wisest approach is to do nothing special.
When the onset is sudden, exertions to manage the crowd necessarily are based on idiosyncratic experience or on general rules, and as far as these do not suffice, measures should be improvised quickly. In cases in which the occurrence is expected, measures can be devised beforehand, for instance in some form of scenario.
The second dimension, Motive, also has practical implications. When a crowd of people has mainly interior motives, often the wish to amuse themselves, to relieve boredom etc, measures should be taken to provide amusement and sensation. When on the other hand, the crowd has an exterior motive, the former kind of tactics do not work, or even can be counterproductive. In such cases it seems not unwise to let them sort it out themselves, but when trouble arises preferably some form of negotiation should be used.

The example given above illustrates the possibilities of dimensional taxonomies. It can easily be transformed by submitting other dimensions. Of course it is also possible to work with more dimensions than just two. An important aspect of making such taxonomies is the choice of dimensions, after all it is to be expected that some dimensions will be of more importance than others. This importance is of course a function of the use that one wishes to make of the taxonomy. For practical purposes the matrix we presented is well suited, but one could also wish to construct a taxonomy that aims more at gaining

theoretical insights. For instance when it is realised that it is not so much the 'objective' properties of a certain situation that determine the reactions of participants, but much more the appraisal or subjective perception of the situation, it would be worthwhile to base a taxonomy on this appraisal. In order to do this we should know which dimensions people generally use to appraise situations, and then of course especially crowd situations. In a series of investigations on this problem, van de Sande (1996) found a large array of dimensions which were used by subjects to diagnose situations. The most frequently used of these were (in order of importance): Task vs. Social Emotional, Evaluation, Involvement, Emotional vs. Businesslike, Friendly vs. hostile, and Fate control vs. Behaviour control.
The importance of these dimensions is founded on the liability that appraisal influences, through its link with emotional states (Frijda, 1986), the way that people will behave in the situation. For example: if someone sees a situation as hostile, he will tend to be defensive, cautious and will prepare himself to either fight or flight. If however the situation is seen as friendly the person will be much more open, will tend to lose caution and will not be prepared for fight-flight. Another example: If someone perceives a situation as a serious task, he will be goal directed, and he will show seriousness in trying to reach his goal. Moreover he will feel disturbed and distracted by factors that are irrelevant for his goals. If however he sees the situation as more social emotional, he will tend to behave in a playful manner, and will welcome distraction. An interesting aspect of this approach is that personality can be seen as a preference to perceive situations in a particular way.

It is thus possible to base a taxonomy of crowd situations on the way that these situations are perceived. We combine the chosen number of dimensions in a dimensional space and the position of the crowd situation in this space is the determined by its score on the dimensions. In figure 8 an example of such a taxonomy, with three dimensions in this case, is presented. As an illustration some concrete crowd situations are shown in the corners of the cube (of course most situations in reality will not be found at the corners of the space, but somewhere in between).

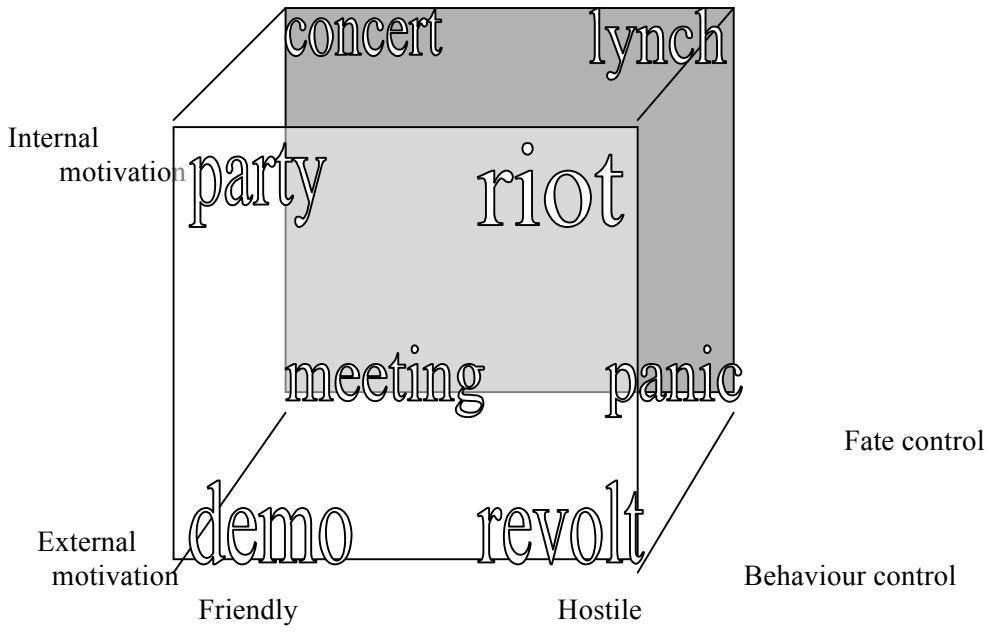

Figure 4. A three dimensional taxonomy of crowd situations

The first dimension of the cube is '*Friendly-Hostile'* which is more or less alike to "one party-two parties' or it could be called 'categorisation'. Examples of situations in which there is essentially only one party, and in which the participants consequently will have some 'We-feeling', are parties, demonstrations, meetings or concerts. Examples of situations with a hostile character, mostly because of the presence of two opposing parties, are riots, revolts, panics and lynchings.

The second dimension used is '*Internal –External motivation'*, more or less alike to 'Playful-Serious', or 'Goal seeking-Goal directed' (Paratelic-Telic, in Apter's terms). It also corresponds to the well known distinction 'Expressive-Instrumental'. People are doing things for amusement, rage or other internal motives in parties, concerts, riots and lynchings. People have an external goal in demonstrations, in (political) meetings, in revolt and in (escape) panic situations.
The third dimension finally is about the restrictions felt in the situation. It could be called 'liberty of choice', or, following Thibaut & Kelley (1958) '*Fate control-Behaviour control'*. When one perceives a situation as under behaviour control one sees possibilities in influencing the situation through ones own behaviour (or through that of the party he belongs to). Situations under fate control are not seen as influenceable, things just happen and there's nothing to it. Behaviour control situations are for example parties, demonstrations, revolts and riots. Fate control situations are lynchings (especially for the victim), panic (escape is only possibility), concerts (the program is fixed) and meetings (also fixed program)
Each of these dimensions seems especially relevant for the way that participants define the situation, and thus they also will have consequences for the way the situation will develop. Consequently it can offer some guidance to the way situations must be approached by people responsible for their results. For different purposes other dimensions than these three can be relevant.
An interesting use of this taxonomic instrument is that it can illustrate what will happen when during the course of a happening the appraisals that people have changes on one or more dimensions. Moreover it can also help in making more concrete the obvious truth that different people have different views, for instance by comparing views of people in different areas of the crowd or of local authorities with that of police officers or with that of the leaders of the happening.

CONCLUSIONS

Crowd action has a long history, probably as long as mankind's, and seems essentially not to have changed much in its forms of appearance. For the last three centuries it was possible to discover cycles of about 25 years, possibly corresponding with the emergence of societal 'causes'. Crowds are defined as *' groupings of people in one place where the usual norms and organisation forms have lost at least part of their power'*. This definition excludes for a large part the field known as 'collective behaviour'.
Who is the acting agent in crowd situations, the group or the individuals? We reached the conclusion that talking about crowd action is very difficult in terms of individuals. At the same time the idea of the group as an organic unity, with one mind and one idea seems as false as the other possibility is problematic. An answer may be found in the social identity theory of Tajfel and Turner (1980) as we will see in chapter 5.
Crowd phenomena come in many different kinds. Some ways of systematizing this chaos were reviewed, and one more taxonomy was added to the number, based on the perception that crowd members have of the situation at hand.

CHAPTER 2 OLDER AND MISCELLANEOUS THEORIES

PRESCIENTIFIC VIEWS

Crowd behaviour has probably in all times been considered interesting but enigmatic. We cited Seneca, who called seditions, riots and revolutions 'diseases of the body politic'. We could also cite Schiller, who remarked: '*Anyone taken as an individual, is tolerably sensible and reasonable-as a member of a crowd he immediately becomes a blockhead'*, or Napoleon: *'In war moral is to the physical as three to one'*. Quotes like these are indicative for the way that people thought about crowds: as amusing, strange and a bit frightening anecdotes, as facts of life from which maxims could be deduced, as phenomena that could only be understood in a metaphoric way. It is only relatively late that we find more systematic attention for crowd phenomena. Maybe the first monograph was Hecker's (1832), who described the dancing craze during the 14th and 15th centuries. He blamed the curious behaviour of its participants to 'morbid sympathy', but this does not amount to a real explanation.

The next important book on crowd behaviour was Charles Mackay's '*Memoirs of extraordinary popular delusions and the madness of crowds*' (1852). This juicily written volume has done much to bring the whole range of what we now call 'crowd behaviour' together. Many subjects that are treated in the present book find their anecdotic counterparts in Mackay. He treats economic mass behaviour, such as the South sea bubble and the Tulipomania, he writes on fears and rumours, he treats the crusades and the witch mania, and amuses the reader with descriptions of all kinds of fads and follies. Something akin to an explanation, let alone a theory is not to be found in Mackay's work.

Marx (1818-1883)

In the same period that Mackay composed a book for the amusement of his contemporaries, Karl Marx was developing a theory that had as its aim their welfare, or to be more precise, the welfare of the greatest number of his contemporaries. In the first volume of his book, *Das Kapital* (Marx, 1867), Marx explained his views on economy. In this innovative book, and in subsequent volumes, he elaborated on the sociological consequences of the developing mass society. He maintained that society was becoming more mass-like in every aspect: the accumulation of massive capital, of masses of iron and coal, the massive means of production, and massive numbers of workers. This change is described by him as: *'Not only have we here an increase in the productive power of the individual, by means of co-operation, but the creation of a new power, namely, the collective power of masses'* (Marx, 1867, P.4, Ch 13). Thus Marx sees a qualitative change produced by mass society. Therefore he urged the workers to unite, to form an organised mass, just as the capitalists formed a coordinated front, in order to restore the balance op power. The state, Marx said, is the executive committee of the bourgeoisie. Thus the state should be revolutionised by the organized masses of the proletariat to become their own executive committee.

Marx cannot be said to have given much thought to the working of crowds, he did not describe, he prescribed. A consequence of his view was that riots, turbulences and seditions were seen by him and his followers as steps in the *struggle of the classes* and as positive steps as well. A somewhat picturesque example of this view is presented by the book 'Revolutionaire massa actie' by a Dutch socialist author and poet (Roland Holst, 1918) who interpreted every social upheaval that she knew of as a proto-socialist revolution. Some followers of Marx, notably Lenin and Trotsky, provided the theory necessary for mass action, and that theory relied heavily on small conspirational and dedicated minorities, guiding the masses by agitation and propaganda (in the Marxian jargon: agitprop).

In presenting a finalistic view of crowd action Marx has had an enormous influence (see also Moscovici, 1985). Not only did he influence society, he also influenced social science and then especially economics

and sociology. In chapter 6 we will elaborate on his influence on sociological views of the crowd. Part of his influence on society is described by van Ginneken (1989) and Nye (1975) who show how gradually during the 19th century the crowd became a fascination for writers and scientists alike. Much of this fascination is ascribed to the echo's of the French revolution, often in the form of pre-socialist and socialist uprisings, such as the Paris commune (1871). These often enormous and dangerous uprisings formed a threat for the essential bourgeois class to which these early students of crowdbehaviour belonged. Gradually some authors, especially those that embraced socialist ideologies, like Rossi in Italy, Sorel in France and Michels in Germany, began to develop a more positive view of crowds (see van Ginneken, 1989), and they can be seen as the forerunners of the later collective behaviour theories in sociology.

GROUP MIND THEORIES

Sighele (1868-1913)

In Italy a rather long line of criminologists and sociologists had shown interest in crowd phenomena (e.g. Lombroso, Sighele, Rossi, Ferri). The first of these to write a monography on crowd behaviour was the lawyer-criminologist Scipio Sighele. Sighele was interested in the question of complicity, and he maintained that complicity in normal crime, such as in the mafia, was quite different from that occurring in crowds. As reasons for this difference he named imitation, contagion and hypnotic suggestion. These processes would work stronger in crowds , due to their inherent primitivity and to the great number of people being present. The result of these processes would be that there arose a common consciousness, or 'crowd mind', which would be responsible for the subsequent behaviour of crowd members. Complicity thus was not willed, it was just a natural consequence of the group mind, working on all present. This idea of a crowd mind was at the time considered as a major insight. It can be shown to derive from the work of a French biologist, Espinas (1878) who in his work 'Les societes animales', laid stress on the uniformity of purpose and behaviour in insect societies, such as those of ants and bees. The concept of collective consciousness was taken up by psychologists as Fechner and sociologists as Durkheim, and had attended a respectable status as a scientific concept.
Although he stated that not everyone was equally susceptible to the crowd mind, it was clear to Sighele that people in crowd situations could not be held totally responsible for the offenses they committed. Moreover he added a very useful and still relevant observation: in the confusion of crowd action, the ones that are arrested mostly are the wrong ones, the naïve in stead of the cunning, so the naive got punished for things others have done. Although the book that contained his theory, *'La folla delinquente'* (Sighele, 1891; Trans.: The criminal mass), essentially was a juridical work, and led to a series of acquittals of strikers, its views on the mechanisms of crowds were very influential.

Le Bon (1841-1931)

Whether Sighele's ideas had directly influenced the French author Gustave Le Bon or not (a case bitterly discussed at the time) is less important than the fact that Le Bon's theory closely resembles, but also significantly elaborates that of Sighele. In 1895 Le Bon, who had studied medicine, but became more and more interested in social science, published the book that was to have such an enormous influence: 'La psychologie des foules'. It has been endlessly reprinted and translated, it has been an inspiration for several dictators, such as Hitler, Mussolini, Stalin and Mao, and it has significantly influenced lay opinions about crowds.
Le Bon has been acclaimed as the inventor of social psychology, but in fact Le Bon did not present so many new ideas. Instead he cleverly combined many existing ones to a more or less reproducible whole. The main points of his theory concern the explanation of crowd behaviour, its supposed uniformity and its concomitant degradation. These ideas were rather based on ideology than on real observations, as authors like Nye (1975) and McPhail (1991) have argued, and as modern observational studies have confirmed, but for a popular theory this can rather be seen as a strength than as a weakness, as most people are rather impressed by the audacity of well presented ideas and less so by the dull facts.
Like all of his contemporaries Le Bon believed in the uniformity of behaviour in crowds. He explained this uniformity through the mechanism of a group mind, an idea that we saw to be quite common at the

time and that derived from the ideas of Espinas (1878). While Espinas and other group mind theorists mainly ascribed its occurrence to instincts or 'nature', Le Bon rather tried to devise social psychological mechanisms that could explain its workings, although he does not shrink back from throwing in some, rather vaguely formulated instincts. He found these mechanisms in *suggestion*, derived from the work of Charcot and others on hypnosis, and in *contagion*, a medical metaphore of a process related to Tarde's imitation. Suggestion or hypnosis could be caused by a group leader, possessing special abilities, or by an idea that somehow connected to the '*racial unconscious'*. In these possibilities Le Bon again followed ideas that were quite common at the time, namely the idea of leadership connected with the idea of the unconscious, later to become the cornerstone of Freuds psychoanalytic theory of the crowd, and the notion of inborn ideas, more or less specific for different races, later to be found in Jung's collective unconcious and his notion of archetypes. As these mechanisms had a strong intuitive appeal, Le Bon could come away with the suggestion of an explanation, instead of a precise, testable theory. This could of course be ascribed to the rather primitive state of psychology as a science, the same objection as is frequently being made to for instance Freud's theory.

An important consequence of the working of the group mind was, according to Le Bon, that crowd members would feel, think and act in a radically different way from what they would do individually. People in a crowd would be less rational, more suggestible, more emotional, they would become more impulsive and they would loose their own moral sense, in short, they would regress to a more primitive level. They would thus undergo a transformation, making them different persons from what they normally are. In fact, their individual personality would disappear temporarily, but: *'it is only the uniformity of the environment that creates the apparent uniformity in characters'* (op.cit. p.26). In discussing these remarkable changes in thinking, imagining and moral reasoning, Le Bon consequently does not say that the individual thinks, reasons or imagines, but that 'the crowd' (meaning the group mind) does so. This idea is remarkable in that it implies that normally individuals have a special way of feeling, thinking and acting, determined by their personality and governed by the precepts of rationality. That this implication is quite antagonistic to what everyone knows about the variablity of individual behaviour, about the constant change of moods and cognitions, obviously totally escaped Le Bon and his readers. He maintains that normal individual cognition and behaviour is rational and conscious, while that of the crowd is irrational and unconscious. It is the loss of rationality and the preponderance of unconscious ideas that he held responsible for the simplification and uniformisation of behaviour in crowds. Again we see some remarkable implications.

Firstly it is implied that rational behaviour is less uniform than behaviour guided by emotions and unconscious motives, and secondly that this loss of rationality makes the postulate of a group mind, working in an almost telepathic way, a bit superfluous. Either, one could say, people in a mass become more primitive and thus resemble each other, or they are together influenced by some external force like the group mind. Le Bon adheres to both explanations at the same time, thus implying that the telepathic forces of the group mind act in a primitive way. This idea can be recognised in modern 'fringe' theories like 'morphic field theory' (Sheldrake, 1988), and is ultimately derived from ideas of Le Bon's contemporary Henri Bergson.

The other mainstay of Le Bon's theory, the moral and intellectual degradation of people in crowds, may be seen as deriving from Le Bon's bourgeois position in society, producing hostile or fearful feelings toward the masses (Nye, 1975, van Ginneken, 1986). Indeed it seems to be a very common fact that an elite sees the uneducated many as inferior and dangerous. Le Bon however clearly points out that regarding the moral aspect not only deterioration is found, but that crowds can also lead to acts of heroism and unselfishness. One could remark that, as these moral evaluations depend heavily on the standpoint which one takes, they can not be objective, again a point that totally escaped Le Bon. What one party sees as a heroic feat of self sacrifice, can be seen by the other side as a wanton and degraded act of cruelty, as wars, revolutions or the happenings of 9-11 show so clearly.

The intellectual degradation, which Le Bon claimed to exist, did not show such a Janus head. People would loose their rationality in crowds, and they would thus show the typical reactions of more primitive, uncivilised beings, like animals, primitive humans, children or women (sic!). As a possible mechanism for this degradation Le Bon, in a somewhat loose way, makes use of the idea of regression, in this case based on evolutionary ideas, specifically those of Spencer, but he also points towards the racial unconscious.

Next to these explanations he offers a more precise and testable hypothesis: in crowds people feel more powerful, less observed and less responsible, and therefore their negative impulses get free play (Le Bon, 1952, p.30). This explanation was resurrected by Zimbardo under the name of *deindividuation* theory.
As a further cause of intellectual degradation Le Bon names hypnosis and suggestion, resulting in a temporary loss of personality and a high degree of contagion of sentiments and acts. Due to these mechanisms 'the crowd' sacrifices its personal interests to the collective interest. Moreover its ideas become fickle, irrational, simple and contradictory. They also resemble religious ideas: they do not stem from reason, but from belief, they are accepted or rejected as a whole and there is a desire to spread them (Le Bon, ed.1952, p.73). They often concern someone or something who is supposed to be superior and who is feared and there is a tendency to consider non believers as enemies. Intolerance and fanaticism are seen by Le Bon as common characteristics of crowds and religion.

Le Bon vindicated

Although Le Bon's book was enormously succesful, and is is still interesting to read, it has endured heavy criticism. As problematic points several elements of his theory have been named : the transformation of personality in crowds (McPhail, 1991), the physical impossibility of a group mind (Allport, 1924), the uniformity of crowds (McPhail, 1991; Adang, 1999), his contempt for the 'rabble' and his utter political incorrectness (Nye, 1975, van Ginneken, 1986).
no As we saw, Le Bon maintained that through the workings of the group mind individuals would loose much of their normal personality, and would become less rational and intellectually and morally inferior. According to modern research this seems not such a good idea. On the other hand we should be aware that in crowd situations people do not have much opportunity to show highly evolved and subtly rational behaviour and the behaviour for which they do have opportunity would indeed be rather stereotypic. Thus, only if we maintain that human behaviour is a direct and exclusive resultant of personality, then a change in behaviour (compared to many kinds of work, to discussion in small groups or meetings, or to writing a book) could, or even should be interpreted as a change in personality. Obviously this is a far fetched idea, and is not a true representation of Le Bon's ideas. Le Bon seems to have a less rigid conception of personality, such as for instance Apter (2001) propagates.
There has, rightly, also been criticism of the idea that the crowd would form a unity on its own, capable of acting, feeling, and thinking. Although this idea was quite early devastated by Allport (1925), the full scope of the human capacity for misperception, which we summarily discussed in the introduction, has only quite recently become clear. It seems a bit hard on Le Bon to demand from him insights that were some 80 years ahead of their time.
Another factor that should be born in mind when criticising Le Bon's conception of the crowd as a unity, is that it may well be possible that crowd phenomena and crowd behaviour have changed in accordance with societal and cultural changes. As many sociologists, following Tönnies, observed a change from collective forms of society to more individualistic forms, it is not wholly unthinkable that crowd behaviour changed accordingly (for an opposite viewpoint see Groh, 1986). That there have been historical changes in crowd behaviour is often observed, for instance by Dekker (1982), who for instance found that in the 17th and 18th century, crowds had rather strict ideas about norms, so that, when throwing the belongings of some hated tax collector in the streets, people who tried to profit from this happening by taking some plunder away, were heavily sanctioned by their comrades. Incidentally Dekker also found that women were much more actively involved in crowd behaviour than nowadays. It is not improbable that in a traditional and collectivistic society crowds act in a more unitary fashion than in ours.
Le Bon is also strongly criticised on his emphasis on the importance of race and of 'inborn racial ideas', which in crowd situations would come to the fore much stronger than normally. We could again say that in this he was a typical child of his time, but we could even go further in acquitting him from this fault. He defines race not so much as a biological notion as well as a cultural one: 'in civilised countries there are no more pure races', 'race is culture and common traditions, based on hereditary accumulations' (Le Bon, 1894, p. 90 ff. adaptation by author).
Regarding this opinion, but then phrased in a more modern fashion, it looks as if Le Bon did have a point. In the last ten years, for instance, we have known a great number of civil wars, such as in different parts of Russia (Tchetchenia, Nagorno Karabach, Armenia, Georgia), in former Yugoslavia, in many African

countries, such as Congo, Rwanda, Burundi, Ivory coast and in several other countries. The invariable pattern that comes up during a civil war, or a comparable situation, is that people from different religions, cultures, or tribes, who formerly lived peacefully as neighbours, suddenly begin to act in sometimes very hostile ways. Some recent examples from a listing of four years newspaper reports. (1998-2002): Bosnians and Serbs, Kosovarians and Serbs, Albanians and Macedonians, Armenians and Azerbaijani's, Israeli and Palestinians, Kuwaiti and Egyptians in Kuwait, Muslims and Christians in the Indonesian Molluccas, Indonesians and Atjeh-ans, Muslims and Hindu's in India, Ibo and Ijaw in Nigeria, Hutu's and Tutsi's in Burundi and Rwanda, Hema and Lendu in Congo, Asians and Whites in England, Turks and Kurds in Germany. For more examples see Horowitz (2001), who analyses some 150 cases. Many evolutionary psychologists found strong evidence for the relation between ethnic diversity and violence (Vanhanen, 1999, Rummel, 1997, Thienpont & Cliquet, 1999).
It looks indeed as if, once a hostile attitude between parts of the population has arisen through political uncertainty, people easily get divided along traditional lines, and their behaviour, especially when united in groups or crowds, becomes very brutal indeed. To call this a consequence of race is not done in these enlightened days, but in essence it is the same phenomenon that Le Bon meant by his emphasis on the concept of race as a partly cultural phenomenon.
If we summarize these points, it seems that not all of Le Bon's ideas were so utterly wrong as it is often posited. It seems wiser to try to interpret at least parts of his reasoning in a more modern fashion, than to reject it integrally.

OTHER GROUP MIND THEORIES

Many other theories formed in the first half of the 20th century had the group mind as a central tenet. As most of them were more or less a repetition of Le Bon's ideas, it will suffice to name a few. Group mind was seen as a central phenomenon in the explanation of crowd behaviour by Ross (1908), Durkheim (1912), Trotter (1916), and Martin (1920), to name a few of the most important authors. Others, like Mc Dougall (1908) or Freud (1921), were sceptical about the group mind as such, but at the same time had the idea that in order to explain the (supposed) uniformity in crowds, something akin had to be supposed.
Not only in crowd psychology, but also in other areas of social psychology the idea that a group was more than the sum of its members was influential. This idea was elaborated by the Scottish social psychologist William McDougall in his book 'The group mind' (1920), where he tried to find a more rational explanation for 'the mental life of groups'. He sought such an explanation in the interactions between members and in the organisation of groups. For these processes a certain similarity of the members was a condition (McDougall, 1920, p. 21 ff.). Another important proponent of this idea was Kurt Lewin (1939), who explicitly held that groups formed a kind of 'gestalt', and that just as in classic gestalt psychology, the unity had more and different characteristics than could be accounted for by its constituent parts. An important part of social psychology, designated as Group dynamics, is based on this idea. Finally we mention Cattell (1952) who endeavoured to measure the 'personality' of groups, by devising means to measure characteristics like Synergy, or Entitativity. The issue of groups being more than a loose association of individuals, more than the sum of its members, is still discussed and investigated in social psychology (e.g. Forsyth, 1999, Kerr & Scott Tindale, 2004). We thus see that an essentially metaphoric explanation can have a great influence.

INDIVIDUALISTIC THEORIES

Some of the early theories about crowd behaviour have a more individualistic flavour than the group mind theories. This does not mean that they did not use the concept at all, but it means that in these theories it was not so much the crowd who reasoned, had emotions and acted, but the individual, albeit sometimes under the influence of some form of collective consciousness. These theories come in several varieties, we will treat here some theories based on learning theory and imitation (Ross, 1908, and Miller & Dollard, 1941), Allport's (1926) views on crowd behaviour, the instinct theory of McDougall (1908 and 1920), and the psychoanalytic theory of Freud (1921). Early sociological theories, like that of Park, will not be treated here.

THEORIES OF IMITATION

Tarde (1843-1904)

Following the trail set out by historians like Taine, the judge-turned-sociologist Gabriel Tarde developed a theory of the crowd, based on the then popular theory of imitation (Tarde, 1890, 1898, 1901). He saw imitation as a broad process, not just copying behaviour was Tarde's subject, but more a view that there was nothing new under the sun, only new ways of combining existing things and ideas (similar to what Kant had named synthetic judgements a posteriori). Furthermore he was influenced by Darwin's thought: *"Self-propagation and not self-organisation is the prime demand of the social as well as of the vital thing. Organisation is but the means of which propagation, of which generative or imitative imitation, is the end."*(Tarde, 1890). From this short quote we can deduce that he saw imitation as a very fundamental process indeed, essential for the existence of living things. (*"What is society? I have answered: Society is imitation"*). So conceived, children could be seen as imitations of their parents, and crowds as conglomerations of people who imitated not only each other in coming to a certain place, but also in ideas and behaviour. It is no wonder then that he did see imitation as the central factor in crowd behaviour, as he saw crowd behaviour as something intimately entwined with the human condition. Of course imitation was not the only determining factor, but for instance 'opposition' was defined by him as the negative of imitation and thus as some form of it. Imitation and opposition would eventually merge into adaptation, also a form of imitation. He seems to have been inspired for this thought by Hegel's dialectics: Thesis-Antithesis-Synthesis.

On the reason why imitation was so important and on how it worked exactly Tarde was not always very clear, but one of the mechanisms he held responsible for this tendency to imitate was 'somnambulism', some kind of trance-like or hypnotic state thus. We will find this idea in other contemporary writers. Another thought of Tarde that was typical for the time, was that through imitation a crowd would evolve to a new entity of its own, having some kind of collective consciousness.

Ross (1866-1951)

An author that leaned heavily on Tarde's ideas was Ross, an American sociologist who published his 'Social Psychology' in 1908, the same year that McDougall published his 'Introduction to social psychology". Ross saw imitation as the central concept for building a social psychology and he treats many crowd phenomena in his book as prime examples of the workings of imitation, ranging from panics and riots to fashion and crazes. In broadening the subject from revolutions to many other fields of human group behaviour, Ross widened the scope of what was to be explained by social psychology considerably. He thus can be said to be a fore-runner of more modern imitation- based theories, like Social Learning theories or McPhail's theory of crowd behaviour. He can also be seen as a forerunner of social interactionism (see chapter 6) as he states that 'social psychology only deals with uniformities due to social causes, i.e. to mental contacts or mental interactions' (Ross, 1908, p.3). These interactions he sees as based for a large part on suggestion, that is: behaviour caused by 'stimuli that reach us directly from without' (Ross, 1908, p. 12). Suggestibility is a universal characteristic of individuals, animals as well as men, and the result of suggestion is imitation. In crowds there are much suggestive stimuli, and therefore the strength of suggestion is at its maximum in crowds. This causes a certain 'deflation of the ego', or, as he almost poetically states: 'in the dense throng individuality wilts and droops' (Ross, 1908, p.61). We can note here that this line of reasoning is parallel to that of Le Bon, but has a more individualistic character. Nevertheless Ross maintains that after quite a long formative period a 'crowd self', something like Le Bon's crowd mind, emerges. In this stage imitation is almost absolute, individuals come in a trance-like state resembling hypnosis, but this will not supersede the individual self for long. Regarding the features of crowds (credulity, irrationality, simple-mindedness, immorality) Ross has the same opinions as his contemporaries, nevertheless his tendency to treat crowd behaviour as a form of normal behaviour is quite remarkable. The main part of his work is dedicated to publics, dispersed individuals, who show interesting features like crazes, fears, fads and fashions. Ross ascribes these phenomena to a group mind, fed by means of mass communication, albeit a group mind of a less virulent sort than that of the mob. He sees fads and crazes as typical for societies in which newness enjoys prestige (such as in the USA of his and our times) and holds that custom and caste are unfavourable for the craze. Furthermore he dedicated an entire chapter (#5) to means of preventing the mob mind and resulting crazes. His recipe is education,

common sense, sports and family life, which through its triviality quite deducts from the positive impression of the rest of his work.

Miller & Dollard

Some 35 years later Miller & Dollard (1941) again tried to explain the characteristics of crowd behaviour by pointing to learning and imitation. That they call imitation 'modelling' seems more a semantic than a psychological innovation. Their well known 'Bobo doll' experiments, showing that imitation worked especially on the forms that behaviour takes, are less revolutionary than they are generally considered. They remark that much of the behaviour in crowds is repetitive (movements, shouting, clapping , et cetera). It is this repetitiveness that contributes to the homogeneity of crowds, partly through its 'hypnotic effects', partly through a mutual intensification of behaviour, which they call 'circular reaction'. It seems rather clear that the first mechanism was directly borrowed from Le Bon and the second from Park and Blumer (see chapter 6). Furthermore Miller & Dollard point to the special character of norms in crowds. They suggest that actions that are habitually restricted by norms, temporally become permitted and acceptable. How this comes about they do not explain clearly, but they point to the tendency of humans to think that there is truth in numbers

Regarding the causes of aggression in crowds the contribution of Miller & Dollard can be seen as more seminal. They developed the frustration-aggression hypothesis, stating that aggression was an automated reaction to frustration This hypothesis has been very influential, in that it directly contradicted instinct-theories, like McDougall's, Freud's or those of the early ethologists, like Lorentz. Especially their denial of catharsis (lessening the tendency to aggress through aggression) and the subsequent empirical corroboration of this idea, can be seen as a real contribution to a better understanding of crowds. Summarizing: regarding imitation we find little or nothing new in their social learning theory. That it is considered influential could well be a result of their doing away with the very narrow reinforcement stance of the behaviourists and reintroducing instinct-like mechanisms as modelling and aggression.

Allport

In his influential book *Social Psychology* (1924) Floyd Allport, who was a behaviourist, although not of the staunch variety, devoted a chapter to crowd psychology. In this chapter he opposes the idea of a group mind by stating: "the individual in the crowd behaves just as he would have alone, *only more so*." (Allport, 1924, p.295). He tries to explain the examples of extreme behaviour in crowds that he presents, by making use of the concept of Social facilitation (see chapter 5): 'action is facilitated and intensified through the presence of the crowd, but it originates in the drives of the individual' (op.cit. p.296).

INSTINCT THEORY

William McDougall (1871-1938)

McDougall said of himself: 'It seems my fate to espouse unpopular causes; but to support them so temperately and with so much critical reserve that I am as little acceptable to the minority in opposition as to the dominant crowd'. Indeed he is almost forgotten now, but wrongly, as his interesting views on social psychology show that he was propagating a standpoint that was at the time beginning to loose its popularity, and only recently regained it. In his work he tried, inspired by Spencer, to lay the foundations of what he calls 'evolutionary psychology' some 70 years before psychologists anew realized how important genetic factors are for our functioning. The main point of his 'Introduction to social psychology' (1908) was that humans have, just as animals, primary driving forces of a much more intricate nature than the single driving force, reinforcement, recognized by his favourite enemies, the behaviourists. These primary driving forces he calls instincts, and on the basis of these instincts all of human social and cultural behaviour is built. Intellect, cognition and many other psychological faculties he sees as 'only the servants, instruments, or means' (McDougall, 1908, p.3) of these sources of energy. In fact this is the same view as Freud was developing at the time, with this important exception that Freud thought one central driving force would be enough, while McDougall enumerates some eleven specific instincts (such as flight, curiosity, pugnacity and reproduction), five more general ones (such as imitation,

sympathy and play) and insinuates that there may be many more. Moreover he treats some non-specific innate tendencies, suggestion, imitation and sympathy (op.cit. p. 93 ff)
His argument for this recourse to fundamental driving forces is that human behaviour has many 'universals', across cultures as well as across time, and that moreover these universals are also found in the animal world. Indeed these arguments also lie at the basis of modern cross cultural and comparative psychology (see Brown, 1991). He further stresses that the instinctual processes are innate and inherited and thus they must have had the function *'to promote the welfare of the individual animal, or of the community to which he belongs, or to secure the perpetuation of the species'* (op.cit. p.27). Such a functional analysis closely resembles that of modern sociobiological authors (e.g. Wilson, 1975, Cosmides & Tooby, 1995), although these tend to lay stress on the individual aspect, as a 'species' does not as such reproduce itself.
The at that time still fashionable term *instinct* was, McDougall wrote in his habitually sarcastic way, *commonly used as a mysterious faculty, intended to disguise the obscurity and incoherence of thoughts*. Therefore he gives a definition: '*an inherited or innate psycho-physical disposition which determines its possessor to perceive, and to pay attention to, objects of a certain class, to experience an emotional excitement of a particular quality upon perceiving such an object, and to act in regard to it in a particular manner, or at least to experience an impulse to such action'* (op.cit. p.30).
One of the problems with taking concepts like instincts, needs or other motivational systems as the core of a psychological theory is that the endeavour easily becomes tautological. As soon as we remark some regularity in behaviour we posit an instinct or a need for it, and that should then function as the cause for that behaviour. McDougall clearly falls a bit in this trap, by naming so many specific instincts.
Another problem with explanations is that they often tend to become monocausal, that only the concept in question is seen as the cause for behaviour. Contrary to his reputation as a somewhat curious monomaniac McDougall realises that instincts may '*have the leading part in the determination of human conduct and mental process*' (op.cit p.24), but that behaviour never can be ascribed purely to instinct. In fact these ideas can be also found in other early authors, such as Wundt or James, who lay stress on the cognitive, conative and affective aspects of instinct.

He thus treats each instinct together with the corresponding emotions, the two being intimately connected. The releasing mechanism of instincts he describes as the combination of 'sense impressions' with a specific psycho-physical process (op.cit. p. 27). He further points out that in humans, and probably in all animals, the obstruction of instinctive striving leads to aversive affect (c.f. Miller & Dollard's frustration-aggression model) and progress and achievement of instinctive striving to positive affect. Finally he stresses that in higher animals, but especially in man, instinctive processes are very much integrated in psychological functioning: they can be released by ideas or learned cues, ensuing behaviour may be very complicated, several instincts can be activated at the same time, and instinctive tendencies become systematically organised around certain objects or ideas. As we will see in chapter 4 when we discuss the biological vision on instinct, McDougall did hit the nail remarkably on its head. The main difference with modern views is that he did not stress the important role of learning and imprinting in shaping instinctive behaviour. He held the opinion that habits mainly confirmed instincts.
One of the instincts he explicitly names is the instinct of *gregariousness*, or, as contemporaries (Trotter, 1917) named it: the *instinct of the herd*. As for many kinds of animals, specifically those that are liable to be preyed upon, the chance of survival was heightened by being in a large group, this instinct would not so much consist of a great sociability in the company of its equals, as in powerful feelings of uneasiness and even fear when isolated, compelling the animal to seek out the group. McDougall gives many examples of this same process as it takes place in humans. McDougall is also special in that, whereas other authors see crowd behaviour as dangerous and even criminal, he points out *that 'it plays a great part in determining the form of our recreations, and [ ] in cooperation with the primitive sympathetic tendency, it leads men to seek to share their emotions with the largest possible number of their fellows'* (op.cit.p.303). To illustrate his talent for saying things which tend to make us a bit uneasy: he ascribes the enormous growth of cities to the attracting power of great masses, and not to economic factors or 'the dullness of the country'. He also remarks, referring to Giddens concept of 'consciousness of kind', that the satisfaction of being in a crowd rests for a large part in the presence of individuals who resemble

ourselves, just as horses and cows, although they sometimes graze together, prefer the company of their own kind. He also foreshadows evolutionary psychology by pointing out that: *'in early times, when population was scanty, it must have played an important part in social evolution by keeping men together [ ] but that in highly civilised societies its functions are less important [ ]*'. About the way the gregarious instinct works he is not very specific, but it is clear that he sees emotions, sprouting from instinctual preferences, as very central concepts in this process.
Another instinct that is of relevance for crowd behaviour is the aggressive or, as he calls it, the pugnacious instinct. This instinct, coupled with the emotion of anger, presupposes the frustration of other instincts, such as the parental, the self-assertion, or the acquisition instinct. He explicitly treats the way this instinct is organised to form bands or even armies and its relation to the instinct of flight (op.cit. pp 285 ff).
In his book 'The group mind' (McDougall, 1920) he elaborates his views on the crowd and other forms of social life, with an emphasis on the psychological differences between nations. He holds that in most assemblies of people, such as nations, some form of organization emerges, and it is through this organization that something like a group mind, or common identity, can come to life. In crowds, which are the lowest form of organisation, the extremity of behaviour is seen as sprouting from 'direct induction of emotion by way of the primitive sympathetic response' (op.cit. p. 25) and circular processes.

PSYCHOANALYTIC THEORIES

Sigmund Freud (1856 –1939)

In 1921 Freud published a small book under the title of 'Massenpsychologie und Ich-analyse'. In this book he begins by following the lines of thinking set out by Le Bon, whom he cites liberally. Many aspects of le Bon's theory and observations are described as fitting in psychoanalytic theory, such as the unconscious, hypnotism, regression, impulsivity, and the authoritarian impulses of crowd members. There is however an important difference with Le Bon in that Freud does not stop with vague claims that a group mind somehow is caused by instincts, suggestion or hypnosis, and causes a regression to the racial subconscious, but presents an interesting and original analysis of the causation of group processes. Now Freud can be said to have been original and interesting in many of his theories, but, especially now that his theories are out of fashion, the question remains: Is it a useful theory? We will therefore describe the main points of his analysis.
In the introduction he explores the differences between individual and group psychology: *"The contrast between individual psychology and social or group psychology, which at a first glance may seem to be full of significance, loses a great deal of its sharpness when it is examined more closely." "It seems difficult to attribute to the factor of number a significance so great as to make it capable by itself of arousing in our mental life a new instinct that is otherwise not brought into play"* (Freud 1921, p.5 ff). This kind of reasoning is rather typical for Freud. He does not invent a new need or instinct for every phenomenon, he economizes his mechanisms, and holds that processes supposed to be working in the individual, do also work in group situations or in crowds.
A central mechanism in crowds is that the individual comes in a situation in which he can shed his central defence mechanism: repression. The seemingly new characteristics that the individual shows are only manifestations of unconscious drives and wishes, that normally are repressed (see also Rey, 1986).
For Freud the most central drive was the 'libido', the strong urge toward fusion with other people, real or imaginary, in sexual as well as in non-sexual sense. Freud stresses that libido is a very general term, it not only limits itself to other people, it can also have as its object the self, a God, or even inanimate things and abstract ideas, thus resembling Plato's Eros (Freud, 1921, p. 33). It is this strong urge that manifests itself in crowd situations, to the detriment of the other strong urge, that of hate and antipathy, the death urge, or thanatos, that Freud sees as connected to narcism. With approval he cites Schopenhauer's parable of the porcupines suffering from cold: they approach to get warm, but their quills drive them apart. In crowds the painful quills temporarily are not felt, but the warmth surely is. Obviously in crowds the normal narcism is not so strong as usual and this can, according to Freud, only come about by some form of love, or libido, for another person. This form of love is called 'identification', it is a non-sexual form of being in love.
In order to manifest itself the libido needs some focus, some point of concentration. This cannot be an abstract collectivity, such as the crowd, but must be an identifiable entity, such as a leader or a God, or eventually a clear and concrete idea such as 'Liberté, égalité, fraternité'. If all the people in a crowd

identify themselves with the leader, this automatically leads to a unity of the crowd, all having the same ego-ideal: the leader. This implies that the superego of crowd members is relegated to the leader, he is the one who decides what is good and what bad. Thus all mass phenomena, Freud suggests, are characterized by intensely regressive emotional ties stripping individuals of their self-control and independence. Rejecting possible alternative explanations such as imitation and unwilling to follow Jung in postulating a collective unconscious, or group mind, Freud emphasized instead individual libidinal ties to the group's leader. He compares the forming of a crowd to regression to a primal horde, with the leader as the 'original father'.
This leader must, of course, have special characteristics in order to function as such. In this regard Freud suggests that narcism plays an important role. The problem of the narcist could be described as the difficulty to reach the high standard that the ego ideal poses. The prototypical leader of the primal horde is supposed by Freud (op.cit. Ch 10) to have loved no-one besides himself, his will needed no acknowledgement of others, he was therefore the typical narcist. This is still, in a certain sense true of leaders, but they may have their doubts. But leaders who are vehemently loved by their subordinates are acknowledged in their narcistic standpoint, and therefore become stronger and stronger, and thus elicit more identification. We may note that in this interpretation of Freud's views on the crowd, a testable theory of charismatic leadership lies hidden. Indeed the famous Milgram (1965) studies on obedience to authority may be viewed as giving some support to the relegation of the superego to the leader. It could also be noted that Freud foresaw in 1921 the coming of mass dictatorship.
Freuds main contribution to crowd psychology can be seen as lying in his analysis of the relation between the leader and the led. As only in a minority of crowd phenomena an identifiable leader can be found, his contribution seems not so important for a better understanding.
Not only Freud, but also other psychoanalysts, like Adler (1937) or Reich (1933) discussed crowd psychology. Moreover many treatises on crowd psychology were influenced by Freuds thinking, such as those of Martin (1920), Kracauer (1927), Broch (1979) or Canetti (1960). We will only treat Canetti's theory in some length, as it contains some original and interesting ideas.

Canetti (1905- 1994)

Elias Canetti started working on his book 'Masse und Macht' (Crowd and power) around 1940, he finished it in 1960. In these twenty years he tried to describe the workings of power in human affairs as a function of the relation between human nature and culture. He did this by applying the psychoanalytic method of interpretation and by using a conception of innate drives that resembled Freud's. Although the book has many trappings of a scientific work (mainly psychological, philosophical and anthropological), its views are so personal that it rather can be classified as an outgrown literary essay. Nevertheless it offers much food for scientific thought.
Canetti begins by postulating that every man has a *fear of being touched*. This fear can suddenly, and temporarily, turn around and become a wish for being touched and touching others, and this is what happens in the crowd. In this reversal from fear to wish we see again the approach-avoidance conflict that Schopenhauer used in his metaphor of the shivering porcupines, but now not acting simultaneously, but consecutively. Being in a crowd means getting rid of the fear of being touched and this entails a great appeasement, Canetti speaks here of a *discharge*. In a crowd the differences, or distances between people, that are always felt when single, are lessened or even disappear. This means that power differences also disappear, and with them a large part of what can be considered as the core of the culture of the group in question: differences in rank, standing and property. As the essence of crowds is doing things differently from normal, they often want this normal way of being destroyed, hence destruction and arson are quite common phenomena. As, moreover, crowds tend to be paranoid and therefore always have something or someone that they consider as an enemy, this destruction is aimed at the enemy. Examples of this are for instance the stoning of the devils at the Hadj, the yearly pilgrimage crowd in Mecca, lynchings, revolutions, but also the communal singing of 'Rain, rain, go away' at the Woodstock festival.
Canetti makes a difference between two kinds of crowds: the *closed crowd* and the *open crowd*. Closed crowds function within a narrowly delineated culture and are of a religious or folkloristic nature. Characteristic for a closed crowd is that is does not aim at permanently changing the state of things, but offers a temporary release of the restrictions that the culture offers. Therefore destruction by closed

crowds is limited and often ritual. Closed crowds are only open to members of the culture and therefore essentially show limits to their growth. Nevertheless large closed crowds exist: maybe the largest example of a closed crowd today is the Hadj. Open crowds on the contrary are open to everyone and essentially aim at getting larger and changing the state of things in a certain culture. The essence of open crowds is therefore much more modern than that of the closed kind. Revolutions, mutinies and demonstrations offer typical examples of open crowds. Closed crowds can turn into open crowds, but the reverse is very improbable.
For a crowd to arise, some beginning is needed, such as a small dedicated and stable group of people. Canetti calls this a *Mass crystal.* A mass crystal can be formed by an orchestra, a group of police officers, a group of mourning women, and similar groups that form a cohesive unity. He also dicusses another factor that can inspire crowd formation: the presence of crowd symbols, such as fire, the sea, a wood or, more generally, piles, stacks and heaps. Which mechanism is awaked by this inspiration remains unclear. Crowds, according to Canetti, have four main characteristics: 1) They want to grow, 2) Inside the crowd there is equality 3) The crowd wants to be as dense as possible, and 4) The crowd needs a direction. It is especially this common direction, or goal that makes it possible to classify crowds as to their 'carrying emotion', as we described in chapter 1. To recapitulate: there are five kinds of crowds: The Killing mass, or 'Hetzmasse' (emotion: aggression), the Fleeing mass (emotion: fear), the Prohibitive mass, or 'Verbots-masse' (emotion: refusal of obedience), the Inverting mass, or 'Umkehrmasse' (emotion: mutiny), and the Feasting mass (emotion: joy).
This summary of the first hundred pages of Canetti's work may give an impression of his line of thinking, which was probably inspired by his being witness, and almost victim in Bulgarian pogroms.
Canetti offers some lines of reasoning that could be useful for riot control. For instance, as crowds need an enemy, it is not a good strategy to attack them from the outside or to hinder them, that only would make their purpose and enmity stronger. Instead it would, according to Canetti, be wise to (partly) give in to their demands. This 'attack from within' would stop their growth, and a crowd that stops growing is doomed. Another useful feature of his work lies in the fact that in order to understand a crowd, one has to ask which emotion is dominant in it. It is thus necessary to look at things from the viewpoint of the crowd, not from without.

CONCLUSIONS

In the older theories described in this chapter we find many interesting and valid insights in the character and workings of the crowd. Almost all recent views, theories and discussions are somehow previewed in the older ones. There are however some very important shortcomings of the earlier theories, which limits their use to that of heuristic devices. The most important of these shortcomings is the idea of the crowd as a unity, and of behaviour of crowd members as uniform. Several reasons for this faulty assumption have been given: absence of empirical studies, perceptual biases, and the class position of the early mass theorists.

CHAPTER 3 PROCESSES, PARTICIPANTS AND MOTIVES

When people assemble in crowds many different processes take place at the same time. Some of these are best described by biology, others by sociology or individual psychology. Social psychology is well suited to give insight in the essentially social processes that work in crowds We will discuss these processes, the building blocks of modern theory formation, in this chapter. Moreover we will give an overview of what is known about participants in crowd behaviour and their possible motivations. Much of the research we will discuss concerns factors influencing aggression and crime in crowds. As in our present society aggression is considered a major, or perhaps even *the* major problem, this is not so surprising. We would however like to point out that this approach is somewhat one sided and narrow, as aggression is certainly not the only interesting or important aspect of crowd behaviour.

The main characteristic of crowds is *not* that they are aggressive, but that they from a rewarding, sought-after and integral part of human life. The information we get from the media almost without exception concerns the aggressive and sensational, the extravagant, in short, that which is considered by journalists to be the interesting aspect of crowd behaviour. This direction of interest, towards novelty and especially towards danger, not only in journalists, but in all humans, we share with our animal brothers, thus suggesting a rather fundamental feature of our psychological make-up. It is small wonder then, that we have the firm impression that crowds are special and dangerous, as by far the largest part of information regarding crowd behaviour reaches us through the media. Every day however, all over the world, countless occasions of crowd behaviour with a non aggressive, non sensational character abound. Of these occasions we are not informed in any way. Moreover, if we do see large scale events on television, often their crowd-aspects are not especially noticed. When we watch religious events, large scale funerals of popes or royalty, or sporting events such as Wimbledon, the Tour de France, or the Superbowl, we concentrate on the speaker, or the game, just as the crowd does. The presence of great crowds in such cases is just processed as an indication that something significant is happening. It may be that the speaker announces his surprise that not everyone starts to riot, but that is then all consideration given to the crowd aspect.

For amusement, for expressions of idealism, for travel, for vacation, for shopping and religion, and for many other purposes people seek out and create crowd-like situations. We are disappointed when we go to a party or downtown for shopping, or to a concert, to a demonstration or when we go to a funeral or on a pilgrimage, and only a few people are present. Humans definitively enjoy crowd situations (with, of course, certain exceptions), they revel in the feeling of unity they experience, they are elated and enthusiast, they talk to everyone, strangers as well as acquaintances, they laugh or mourn, they experience satisfaction and they make jokes, in short: the experience of freedom from daily worries, the newness and surprise of crowd situations, is sought after and appreciated. That a small part of this enjoyment is in a more or less aggressive vein may be true, but it remains a small part, and moreover a part that can be, for some people at least, very rewarding. This does not mean that people will always say they prefer being in large crowds, in fact the majority of people will indicate that they do not like them. It does mean however that from time to time people act and experience differently from what they indicate to be their normal preference.

A stance similar to the foregoing lines, is elaborately described by Canetti (1970), whose theory was discussed in chapter 2. Most other authors on mass behaviour however, with the exception of McPhail

(1992), mainly have eyes for the nastier side of crowds. This is a very old prejudice, Seneca in the year 50 AD wrote to a friend who asked him what he should fear the most: The Crowd! But Seneca came to his end not by the workings of the crowd, but by those of a nasty man, his former student the emperor Nero.

CROWD PROCESSES AND TIME

An interesting question is whether crowd phenomena are in some way coupled to time. Indeed they do seem to be so, and that in several different ways. As we saw in chapter 1 there seems to be a certain diachronical regularity, periods of relative calm alternated by periods of unrest. Moreover many crowd phenomena, especially religious ones like pilgrimages, or occasions like New Years eve, happen quite regularly. We will see in this chapter that there is a regular pattern over the seasons of the year. Another manner in which mass phenomena are coupled to time is that they show a diurnal development: they do not start as soon as people awake, but develop gradually during the day, and in the course of the day can change drastically in characteristics. Of course not all crowd phenomena constrict themselves to one day, there are many instances of them lasting several days, for instance the giant assemblies at the Haj in Mekka, the Olympic games, riots, such as those in 1992 Los Angeles, or in France in 2005, or music or dance festivals. There seem to be some regularities in this aspect as well.

When taking time in account, it is quite simple, but very useful, to place crowd phenomena on the dimension *sudden-gradual development*, as we saw in the first chapter. Some kinds of crowd phenomena, like fads or crazes, revolts and periods of civil unrest seem to develop gradually. Many crowd phenomena, such as festivals, sports and games, demonstrations, meetings et cetera, are even planned in advance, although the occasion itself mostly takes only a day. There are however also many crowd processes that develop very quickly, and thus can come up as a surprise. Examples are found in some kinds of riots, in panics or in lynchings.

DEVELOPMENT OF CROWD PROCESSES

We will begin by discussing the diurnal regularities. There seems to be no research that confirms the commonplace idea that crowd phenomena tend to happen later in the day. The idea is perhaps so obvious that no one cared to investigate it. It is however not without its interest, as it may shed some light on the development on crowd action. By far the larger part of crowd occurrences do not materialise out of the clear air, but develop gradually, as for instance Smelser (1963) illustrates in his Value added theory. It is therefore possible to discern phases in crowd phenomena. Several different stage or phase models have been proposed, the most simple of them being the proposal of van de Sande & Wortel (1985). They essentially proposed a three stage model: *Planning*, *Mobilization* and *Action*.

The whole period, several days, weeks, or even months preceding the day that the crowd phenomenon takes place is denoted as the *Planning phase.* In this stage the participants act mostly singly or in small groups, they try to prepare themselves in a more or less rational way for what is going to come, they make plans, varying from very loose intentions, to elaborate scenario's, like the police or the organizers tend to produce. Things that are decided on vary widely: plans about what to do, appointments about where to meet whom, preparations in clothing, provisions, apparatus, tickets, or means of travel, financial preparations, warnings et cetera. Since cell phones have come to be in general use, this planning process has become much more flexible and quick, thus generating more surprise for police and organisers. Generally these plans are made in the own group, so that other groupings are quite often unaware of the quality and extent of these preparations. Part of the planning process is therefore also trying to get to know the plans of the others, through rumour, hearsay or intelligence work. This last aspect is of course very important for agencies involved with keeping order, but it is quite often neglected, not in the least place due to its inherent difficulties, especially in situations where opposing or even hostile parties are involved.

The second phase, *the Mobilization phase,* begins when the day in question starts. People have to get up and dress in appropriate ways, travel to the place where the venue will happen, get in the right mood, seek and meet up with friends, acquaintances or colleagues, and make arrangements for the further happenings that day. In this phase the later happenings already take their shape.

The main part of the crowd phenomenon in question, the concert, the demonstration, the parade, forms the third phase. This phase normally offers no great problem, but tension can rise to the point when some form of problems arise within the crowd. These problems come in three varieties. Firstly there is a

heightened chance of accidents in crowds. People get aroused, tend to drink, and generally are prone to do unwise things. This heightens the chance of accidents, like fires, or collapses. A second danger is that of fights. Mostly the escalation towards aggression begins by some incident taking place and the organisation or the police taking measures that are not liked by the public. There are however also many instances of parts of the public challenging and pestering the police forces. The third, and the most dangerous problem is that of problems in the locomotion of crowds. These happenings, often designated as panics or crushes mostly follow some kind of accident and can be responsible for great numbers of victims.

If problems, like aggressive behaviour, looting, flight, or other forms of behaviour that are commonly thought of as antisocial, begin to emerge, we can speak of the Violence phase. In this phase the problems can quickly escalate, not in the least because of the fact that a new party, mostly the riot police, begins to act in an often most decided and decisive manner, causing all kinds of sudden emotional upheavals in those present (hostility, anger, sadness, fear, panic, elation, etc). It should be kept in mind that the violence phase is only very seldom reached, the Action phase mostly takes place as planned and expected.

In some cases it can be useful to add, and study, a fourth phase: the *dissolution phase*, as sometimes considerable difficulties arise in leaving the situation where the action took place, for instance through breakdowns of the transportation system.

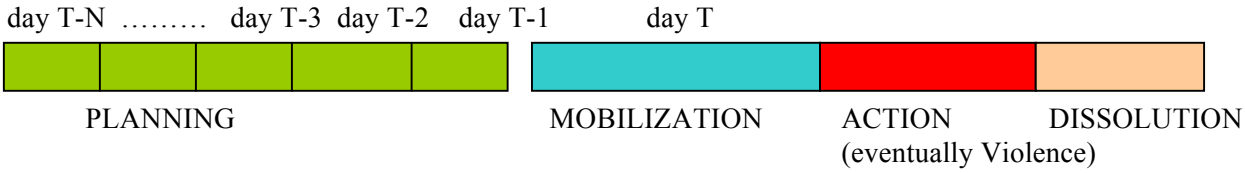

Figure 1. Phases in crowd phenomena (van de Sande & Wortel, 1985)

It is not so surprising that as the day goes on, the tendency towards violent crowd action gets stronger, for there are many preliminaries, such as the gathering of a large enough crowd, or the development of mood or of strife which must be satisfied for massive violence to ensue. Some crowd processes stretch over several days. This is sometimes the case in organised happenings, such as festivals, but it can also be found in unorganised occasions, such as riots. Although most riots have a duration of one day, it is not seldom that riots last for several days (such as the Los Angeles Riots) or even several weeks or months (such as found in the Israel Intifadah). In such cases many of the preliminaries, like mood and strife or the presence of police forces, are existent, once the first day is passed, and consequently these riots tend to begin earlier in the day than the one-day affairs.

Some special cases seem, for obvious reasons, to concentrate on certain times of the day, such as parties and dance hall panics, which mostly happen at night. Many crowd phenomena develop around some organized or traditional happening, with a specified time, for instance hooliganism, which concentrates mostly around football matches, or riots during new years eve, carnivals, or comparable events. Another factor contributing to a gradual development is that, except during weekends, many people are only free from the end of the afternoon onward, being occupied with work or school.

CROWD BEHAVIOUR AND PLACE

A crowd is only a crowd when it is assembled in a certain space, according to our definition there has to be co-presence. Are there special places where crowd-like assemblies preferably occur? In its most fundamental form assemblies can be said to exist because there is some attractive force working on individuals. Lewin (1951) called this ‘valence of a certain region in the lifespace’. This means that people have to be aware of something attractive happening, and thus that it either has to happen in their immediate surroundings or it has to be made known by some medium as the press, television or hearsay. Canetti (1960, see Ch 3) devised the term Mass-crystals (Massenkristalle) for things or occurrences that showed such an attractive power. The metaphor of course is that the forming of a crowd can be compared to the forming of crystals in a saturated solution. The attracting force can either be stationary (e.g. a free concert, an accident, a landmark) or mobile (e.g. a marching band, a chase). Some examples of places with a high valence, of mass crystals, are football stadiums, places of pilgrimage, city squares where a

statue with a symbolical meaning is placed, or places where regularly manifestations, concerts or parties are organized.
These kinds of attracting forces are much more common in metropolitan areas than in the country. Within metropolitan areas it is mostly the centre of a town or neighbourhood, and occasionally parks, that form the stage for crowd action. Even if there is an attracting force in a rural area normally there are not enough people in the vicinity to form a crowd before its attraction has waned. Thus in rural areas we mainly find crowd action that has in some way been planned ahead, such as music or dance festivals, Disney-like parks or similar happenings. Only in very special circumstances we find unexpected crowd formation outside of cities. Of course this is only possible when sufficient means of transportation exist.
Individuals and small groups in an assembly have, unless seated, the tendency to roam around within the limits of the crowd area. This has been designated as milling (Turner & Killian, 1987). When people notice something of interest within the crowd perimeter, they tend to approach it until they are held up by some repelling factor (e.g. fear, barriers or repulsion). This is known as the approach-avoidance conflict. The presence of multiple points of interest tends to spread the action over a wider area, as does the use of force by law enforcing agencies ('dispersing the mob'). At the same time however aggression and fights are among the most powerful attracting forces for crowd formation.
Space can also be seen as a delimiter of crowds. The shape of the space available determines the shape of the crowd once it becomes filled with people. If there is some point of interest, people will group around it, thus becoming polarized (see next paragraph). If a crowd moves, the surroundings determine to a large degree the possibilities of movement, such as in demonstrations or panics. Especially barriers or narrow thoroughfares can have a significant influence.

STRUCTURE OF CROWDS

Spatial structure

Although the shapes that crowds can take vary enormously, some general rules can be laid down. But before we discuss these it should be pointed out that the general stereotype of crowds: large masses of individuals, rather tightly packed together, is only realised in special cases. Much more often we find many larger or smaller groups, dispersed over the available area. Sometimes at the perimeter of for instance a square we find more dense throngs, consisting of onlookers, who have no intention at all to participate in the action. Between these onlookers and the central mass of people there is often some space to circulate.
When looking at the spatial structure of crowds two general regularities stand out. The first is that the form that a crowd can take is strongly determined by the possibilities of the environment. So when crowds gather in cities, one seldom sees a crowd formation that is 'natural', like swarms, herds or shoals in the animal world. Buildings and other layout factors quite naturally offer a kind of mould. The moving crowd will have a narrow form in a street, but broadens itself when a square is reached. When a crowd moves people will keep at some distance from walls and obstacles, in stationary crowds they use these often to lean or hang on.
A second set of rules is formed by the many implicit norms about the use of public space such as for instance described by Goffman (1985). During crowd action many of these norms cease to work. For instance normally people are respectful towards all kind of territories (see Altmann, 1988, Newman, 1972), but when in a crowd people seem to loose this respect. Normally people try to keep a free zone around their bodies especially in respect to strangers, the so called personal space (Hall, 1966), but in crowd situations people sometimes stand or walk very close to total strangers. Normally people try not to attract attention, and are busy keeping up a 'normal appearance' (Goffman, 1985),but in many crowd situations e.g. at Mardi Gras, at parades or parties, they appear to love being at the centre of attention. It is unclear why norms such as these lose their power, but obviously it is felt as some kind of a relief. When in chapter 3 we discuss Canetti's theory we will come back to this. Besides these two factors, built environment and norms, shaping the crowd and the behaviour in it, there are some other factors that are worth noting. They are best described by making use of some of the dimensions noted in chapter 1.
Many crowds are gathered to attend some performance, these crowds are designated by Milgram and Toch (1969) as *polarised*. Because there is something special to be seen, such as a band, a speaker, a funeral, an important person, an accident, a fire, a juggler or whatever, most people are directed towards the focus.

There is a centre of attention, and the further from this centre, the more people get distracted by other aspects of the situation. These kinds of crowds will, when space permits, form arc- or ring-formed assemblies. *Non-polarized* crowds may be gathered for some purpose, but they are without a common centre of attention. We find here often conversations in groups of two to ten people, or persons or couples wandering seemingly aimless and lonely through the crowd, often in search of friends, or of something entertaining or otherwise worthwhile. In these types of crowds insignificant happenings, such as small fires, brawls, conversations with police officers, or even someone plucking daffodils, can draw a large polarized public, just because there is nothing else to do. Being bored and waiting for the fun to start is more common in crowds than one would think.
When crowds move there is a natural polarization, as long as they move in the same direction. As soon as something interesting happens however, that part of the column which is nearest, tends to stop moving and polarize around the interesting occurrence. Factors that promote such breaks in the flow of people can be aggression or hostility, for instance against police forces placed along the route, accidents, narrow passages, or humorous and otherwise engaging occurrences.
In polarized crowds such as those of spectators for a performance, and in demonstrations and parades, the people who have some official or ceremonial function often are placed in front. People who have plans for instigating trouble quite often tend to hide somewhat in the crowd, looking for occasions in which they can show action. It is of course very important for organisers and police officers to be aware of their presence, but this is not always easy, unless these persons have some peculiarities of clothing (e.g. Balaclava's, Palestine shawls) or other gear through which they can be recognised, or unless they are personally known.
There is a marked difference between crowds that are peaceful and those in which some larger scale form of aggression or violence takes place. In peaceful crowds all kinds of people are mixed and not recognizable as innocent or dangerous. Of course the more violence prone individuals are often assembled in small groups of friends, but these are not easily spotted. In violent crowd situations there tends to evolve a separation of the sheep and the wolves, the sheep moving to the sides, to watch the goings on, the wolves seeking confrontation with what they see as the opponent. Moreover the two parties tend to be separated. The group of 'wolves' often begins quite small, but can rapidly grow by means of friends getting involved. The sheep tend to form larger and more stationary groupings than the wolves, these last showing more movement and action. Processes like these have been reported by Adang (1998, 1999).
The structure of crowds thus can change drastically once some form of action, such as fighting or flight, begins. Endeavours by police forces to spread out a crowd often result in the temporary disintegration of the crowd in surrounding small streets and alleys, only to reform itself again once the attacking forces have passed or regrouped. These changes in structure of course are quite unplanned, everyone tries to save himself and as soon as the danger has passed everyone is very curious how it all will end and returns to the place of action. This results in a great elasticity, but also a great tenacity of acting crowds.

social structure
The structural factors we discussed up till here were mostly spatial of character. Structure can also be conceived as group dynamic structure: as power and role relations, as attraction or as communication structure. These views on structure do however imply some form of communication and organisation, and these quite often are very restricted in crowds. In empirical studies of aggressive crowds consistently a differential activity of crowd members is found, belying the assumption that the crowd is a psychological unity (e.g. Adang, 1998, 1999). Often some subdivision is made between participants on the basis of their differential activity and involvement, which is especially marked in aggressive behaviour. Several authors on football hooliganism and similar activities have come to the conclusion that some 90% or more of those present are not involved in any aggressive action. They can be designated as 'onlookers', and correspond to the 'sheep' mentioned above. Some 10% at most really get involved in aggressive or otherwise obnoxious behaviour, and most of these only if others have started some form of violence. These can be named the 'followers', or 'hangers-on'. Only some 1% of those present is generally believed to actively arrange for and solicit aggressive behaviour, often called the 'hard core' or '1%ers' (see Granovetter, 1978, Adang, 1998, 1999). Some small subdivisions of crowds may consist of groupings of people that regularly interact outside the crowd situation. In such cases we can find more classical group

dynamic structural aspects, such as power or prestige orderings, forms of cohesion such as affective ties and communication structures.
The assumption that crowds consist of a homogenous array of single individuals is quite besides the truth. People have a strong tendency in crowds to stay in the neighbourhood of friends, acquaintances or family members (Aveni, 1977, Neal, 1994), and if they did not arrive with them, they will eagerly search for people they know, in order to form small groups (e.g. Adang, 1998, 1999). Crowds thus are seldom homogenous in their consistency, they more resemble something heavily clotted. This means that if you accost one person in a crowd, chances are that his companions will also be interested in the interaction, and possibly intervene.
A possible exception to this differentiated structure seems to be formed by panics and crushes. The flight for a threatening danger is imagined to be quite general, although precise data are scarce and difficult to obtain. What little research there is points however in the direction of differentiation (see Canter, 1970, Abe, 1976). For instance in the Heizel panic, in which 30 people were crushed to death, a whole section of the stadium seemed to flee for the approaching and attacking English hooligans. From interviews with people present at the location however it appears that many of those present in that specific section of the stands were not even aware that something terrible was happening. This leads us to a very important point in handling crowds: people in a crowd have only faint ideas of how the crowd is structured, how large it is, and they have no way of knowing what is happening more than 3 metres away. As managers of crowd happenings seldom realise that this is the case, unrealistic expectations can easily be held, and are often encountered in policy decisions about the self organising capacity of the crowd. At the same time it is surprising how efficient large masses of people are in adapting to all kinds of situations and happenings and how scarce really grave crushing incidents are.
Another important structural characteristic of crowds is the extent of different parties being present. Crowds can be arranged on a dimension we named *categorisation*. No categorisation exists when all present have a strong '*We feeling*', when they all consider themselves as belonging to the same category. Maximal categorisation exists when two or more parties have extreme hostile feelings regarding each other, and thus a strong '*Us-Them feeling'* exists. The position of a certain gathering on this hostility dimension is not fixed and stable, but can change drastically in the course of the event. The great majority of these changes is in the direction of more categorisation. As we noted earlier, especially the degree of hostility between (parts of) the crowd and police is liable to change as the situation escalates.
A final characteristic of social structure can be found in norms. Above we discussed norms regarding the use of space, but in crowds we also find norms regarding social interaction. For instance: normally we do not accost strangers on the street, but crowd members tend to interact easily with strangers. Generally there is less restraint in crowds, people behave more spontaneously. Applauding, cheering, singing, laughing all seem to be much easier and more frequent in crowd situations. The same seems to apply for more unwanted behaviours like jeering, insulting, fighting et cetera. Although there is a greater freedom of restraint, there still are many implicit norms that are generally respected, like being friendly and polite, helping others, monitoring the surroundings, not making too much of a fool of yourself, being concerned with your status, and all these things sometimes in the midst of turmoil. As an illustration a quote from an interview with a survivor of the 'Who' concert panic: '*People were hitting other people, and a girl fell down in front of me. I helped her up finally'*. Instances of norm systems in can be found in those crowd situations where the same groups of people regularly assemble, such as in traditional riots, in football hooliganism (see Marsh et al. 1978), or in music festivals. Besides norm systems we can also find role systems in those situations, e.g. some people attending to logistic tasks, others being specialists in chanting, in making jokes, or in leadership.

GENERAL FACTORS INFLUENCING CROWD PROCESSES

ambient temperature

The long hot summer has become a stereotype. Beginning its life as the title of a story by William Faulkner, it was first used as a description for a period of turmoil in the 1967 race riots in the USA. We can ask ourselves if this stereotype is true. It is a well-documented fact indeed that riots, crime and disorderly behaviour happen more during summer than in winter. The reason for this regularity has been shown by Anderson (1989) and other researchers (see Anderson & Anderson, 1998 for a review) to lie

mainly in the direct and indirect effects of temperature. This influence is found for seasons as well as for regions, in this last case keeping demographic and socio political factors constant (van de Vliert e.a., 1999). In the van de Vliert et al. study a curvilinear relation was found, hot countries (M=30 ºC) showing a bit less domestic political violence than warm countries (M= 24ºC), but both much more than cold ones (M=17 ºC). In the Anderson studies the relation is typical rectilinear.
Several explanations seem to exist for this finding. The first, the 'opportunity' explanation, is that people tend to go out more when temperatures are high, and of course going out is one of the conditions that facilitates crowd behaviour, interaction between strangers and, more indirectly, aggression. This explanation tallies with the criminological Routine Activities theory of Cohen & Felson (1979). It has also been shown that higher temperatures have influence on physiology, resulting in a greater irritability and a more aggressive mood. Indeed evidence has been found for more negative affect during uncomfortably high temperatures, in vivo as well as in the laboratory (Anderson, Bushman & Groom, 1997). According to the Excitation Transfer model (Zillmann, 1979) it would then be quite natural to attribute the cause of this negative affect to some unrelated frustration, thus causing a motive for aggression. Another explanation can be found in Modernisation theory (see Moaddel, 1994), which assumes that traditional and modernized countries are relatively stable, but that developing countries tend to be unstable. Van de Vliert et al (1999) point out that a country being modernized, developing or traditional rather neatly corresponds to the climate being respectively cold, warm and hot.
A historic approach corroborates the findings as to ambient temperature: The analysis of riots in Holland described in the first chapter, shows the same regularities as studies of more recent happenings (fig 2)

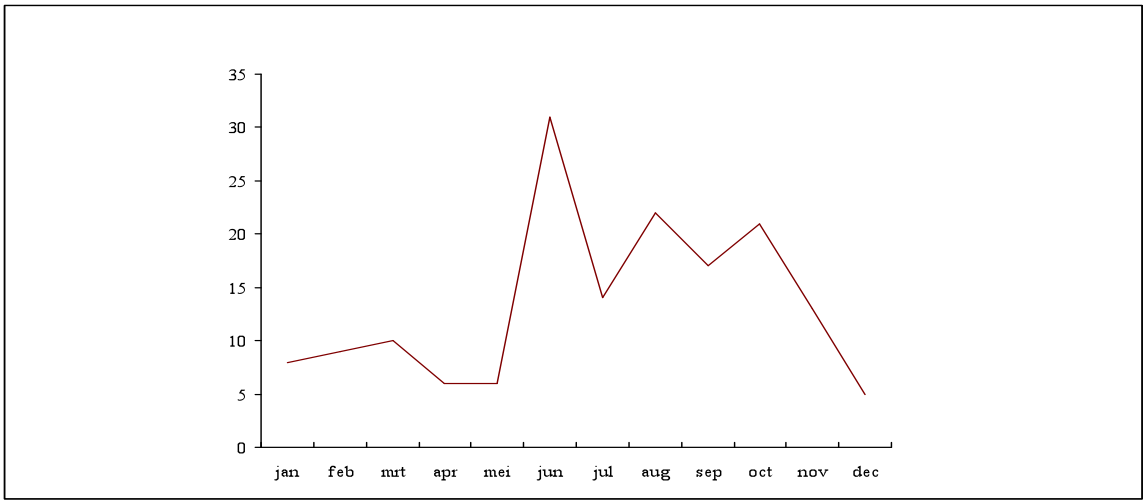

Figure 2: Riots in Holland 1600-1790, total number per month

We see that there are more riots in the summer months than in the colder season. Over the whole period of 190 years we find in the months May-October an average number per month of 18,5, while in the months November-April the average is 8,5.

atmospheric electricity
Not only temperature has been found to influence human behaviour in public settings, several other general factors also have been found to be at work. One of these is the presence of static electricity, notably positive ions in the atmosphere (Charry & Hawkinshire, 1981). *Atmospheric electricity* seems to have the same influence on psychological functioning as heat: it heightens negative affect and irritability. Although this finding conforms well to several stereotypes about human behaviour during weather types associated with positive ions, such as the Sirocco, the Fohn or the Mistral, recent research raises some doubts about the direct influence of positive ionisation. However that may be, police officers and bartenders often voice strong opinions about the influence of threatening thunderstorms. As many of these practical experts are equally sure that unrest corresponds with the phases of the moon (a full moon

spelling turmoil), but research mostly fails to corroborate this (see Simon, 1998), we could best await further scientific developments before we take this too seriously.

other weather conditions
Rainy weather, or other aversive weather conditions like strong wind, sleet or fog, appear to have a dampening influence on aggression in crowds. It seems very likely that this effect, if any (only some very inconclusive findings regarding criminality are known to the author) depends on two factors: a lower number of participants and a shift of attention to problems like cold feet, insufficient clothing, finding a sheltered place et cetera. We will elaborate on this last explanation in our discussion of Self Awareness theory, in chapter 5. It should be noted that aversive weather conditions apparently do not lead to higher levels of aggression, although we may safely assume that bad weather engenders negative affect. This small enigma is as yet not solved by science.

crowding
A general factor that has received much publicity is that of *crowding*, by which is meant the perception that the number of persons is too great for the available space. Crowding is thus defined as a negative experience, and since negative affect is related to aggression, crowding could be a factor promoting aggressive crowd behaviour. According to several authors crowding per se would raise arousal levels and thus be a contributing factor to problems in crowds (see Geen, 1990), the crowd being the situation par excellence where crowding could be expected to manifest itself. The often-cited investigations by Calhoun (1962) on the effects of crowding on rats, suggest however that the effect of crowding is mainly due to the impossibility to maintain a satisfying territory. Territories are defined as a fixed space with clear boundaries, that is considered to be private, be it permanent or temporary, and that is defended against intruders. In crowds, and especially in moving crowds, it is rather difficult to form or maintain a territory. A phenomenon that somewhat resembles territories is called 'personal space' (Hall, 1969). Personal space can be seen as some kind of moving territory, with rather vague boundaries. Intrusion in this space is commonly resented and thus may contribute to the effect of crowding. On the other hand it is frequently seen that people in dense queues or throngs, seem to enjoy the experience, rather that becoming irritated or aggressive.

noise
Another factor that could contribute to crowd problems is noise levels. Several investigations show that noise levels increase aggressive behaviour, but only if the person is in some sense frustrated, and cannot control the amount of noise (Donnerstein & Wilson, 1976, Geen & McCown, 1984). Thus it seems unwise to cause extra noise (for instance by loud music, horns or sirens, bellowing police dogs, helicopters etc) during crowd manifestations that involve some frustration on the side of the public. Nevertheless this generation of noise is a common side effect of crowds, and especially of crowd management, which may unwittingly contribute much to the level of arousal and tension.

alcohol and other drugs
As a factor in the development of violent crowd behaviour alcohol use is often named. The most relevant effect of alcohol seems to be the influence on affective state, but also narrowing of attention, or problems with memory may contribute to the effects we will discuss here. Research on the behavioural effects of alcohol is surprisingly not so numerous as other types of alcohol research, and moreover often inconclusive, due to the difficulties inherent to it (e.g. ethical problems or getting a satisfactory control group). Moreover in well-controlled studies the effect of alcohol is investigated as pure as possible, while in real life alcohol intake is invariably coupled with all kinds of circumstances that could well interact with alcohol, such as hot weather, sports games, and an atmosphere of bragging and conflict. However that may be, alcohol is seen as an important factor and moreover it is a factor that can, to a certain degree, be influenced by measures of control.
Everyone knows that the use of alcohol can raise many problems, but everyone also knows that on some people alcohol has a negative effect (bad drink), while others seem to become mellower and more friendly. It has been suggested that this is not so much an effect of personality, but rather of social context,

especially that of conflict. (Steele, 1986, Steele & Josephs, 1990). But, negative or positive, a clear effect of alcohol is that the user becomes more socially involved, possibly due to a marked *behavioural disinhibition* (Bond, 1998). Moreover, research suggests that alcohol is related to crime and aggression, in such a way that in crowd situations perpetrators of violence have been found to be frequently under its influence (see Ahlberg, 1986, Russel, 1993, Graham & Wells, 2003, Swahn, 2004). Of course this is no proof of a direct causal relation between alcohol and aggression. The evidence that there is points to indirect factors, such as a lowering of inhibitions against aggression (Ito, Miller & Pollock, 1996), or a lowering of frustration thresholds (Bushman, 1997).
Research shows that the effect of alcohol is mainly due to its physiological effects, not to suggestion or expectation (Hull & Bond, 1986), and that these effects are stronger, the greater the dose (Ito et al., 1996). The effects issue more from the 'social myopia' it causes (also called the 'funnel effect'), then from the activation of specific behavioural mechanisms (Steele & Josephs, 1990, Monahan & Lannutti, 2000). According to this view alcohol makes social behaviours more extreme and inflates self-evaluations by blocking a form of response conflict, namely that of motivation and inhibition. The social effects of alcohol, including heightened aggression, thus could rely for a large part on narrowing of attention, through a lessening of inhibitions.
In a study of football hooligans Salewski & Herbertz (1985) reported an inverse U effect between alcohol and aggression, with very large doses alcohol reducing aggressive tendencies. This may be indicative for not only a loss of inhibition, but for a total loss of attention to the outside world. As the producer of a well-known German bitter sponsored this research, one should however look at their conclusions with some restraint.
Other drugs than alcohol as well are reputed to influence human behaviour during crowd activities considerably. If the effects of alcohol are already difficult to ascertain in real life, this is even more so with other drugs. One of the problems is that while it is relatively easy to ascertain alcohol use, it is much more difficult to decide on the use of other drugs, the symptoms being much less clear. Some examples: A sleeping pill, called Rohypnol, did not calm down the young
football fans that took it, but appeared to give a pleasurable 'high'. Unhappily in some cases it also heightened the tendency to aggress, often in nasty ways. 'Party drugs', like ecstasy are widely used at dance parties, because they are reputed to make one 'mellow' and sociable. Marihuana and hashish were once considered to be a powerful stimulant for aggressive behaviour (see the French word 'assassin'), but nowadays are (frequently in crowd situations) used mainly as a relaxant. It is thus possible that the effects of a certain drug depend heavily on the circumstance in which it is used (Schachter, 1964, Benson & Archer, 2002)
Especially at festive occasions, such as parties, dances, parades, pop festivals, concerts or sports games, a wide array of stimulants like amphetamines and cocaine, and relaxants, like marihuana, XTC and other party drugs, is used, often in combination, but this seems not to cause any appreciable disorderly behaviour (Hammersley, Ditton, Smith, & Short, 1999). The mechanisms of multiple drug use are not clear as yet, but interactive effects of alcohol and several other psychoactive drugs are reported (Bond, 1998). Although party-drug use clearly has a disinhibitory influence on behaviour of users, it seems relatively seldom that serious problems ensue. For instance at house parties, or at the Berlin Love Parade, a gigantic open air dance festival, reputedly most of the participants did use multiple drugs, alcohol being one of them. One of the reasons for this surprising innocuosity may be that drug users (excepting alcohol use!), tend to become much more individualistic than non users and thus do not become so frequently and intensely involved in group processes.

weapons effect
In research on factors promoting aggression much evidence is gathered on the influence of aggressive cues, such as the visible presence of weapons, or other symbols of violence. The general outcome of this research on the '*weapons effect'* is that the presence of aggressive cues in the environment heightens the tendency to aggress, provided the person is in a state of frustration or negative arousal (Carlson et al. 1990). For riot situations, in which police or other peacekeepers, but also sometimes elements of the public, often present a wide array of weaponry, this could well be a powerful contributing factor. One

could however remark that in the United Kingdom, where the police are reluctant in showing and carrying weapons, the level of aggression in crowd manifestations is not appreciably lower than elsewhere.

Self organisation

Crowds distinguish themselves by a low degree of organisation, but in different kinds of crowds there certainly are found aspects of organisation. They depend quite often on rules that normally do not apply, but that everyone knows to be relevant in specific crowd situations. So, for instance in rallies or concerts, in demonstrations, or at parties people generally have an idea of how they should behave themselves. They spontaneously form queues or circles, they take or give precedence or take turns, they keep a certain distance from points of interest and between themselves, in short, they maintain some form of 'natural' order. As we will see in chapter 13 the secret of crowd management rests in respecting this natural tendency and, wherever necessary, to help it by giving clear hints.

An important means by which self-management is attained is, as McPhail (1991) argues, some general factor, working equally on all present, and thus engendering comparable reactions by all present. He calls this 'behaviour-in-common. In the foregoing parts we already encountered many of these general factors. The other kind of self-management distinguished by McPhail is 'behaviour-in-concert', meaning attunement or adjustment to others present, such as during interaction.

Organisation from outside

Most crowd situations do not spontaneously emerge, but are the consequence of some more or less organised initiative. Demonstrations or rallies, concerts or parties, revivals or sports meetings, all are to a certain degree organised. The more experience the organisers have with large-scale gatherings, the more sensible will be their organisation from the point of adaptation to the demands of crowd behaviour. In countries with dictatorial regimes mass demonstrations of all kinds are quite common happenings, and almost without exception these are organised. Large scale demonstrations still are quite common in countries like China, Cuba, or Iran but their number has dwindled with the dwindling of despotic forms of government. But also in democratic countries organised demonstrations, as for instance by trade unions, are quite common. Quite recently the management of crowds and its logistical and communicational aspects are more and more becoming a branch of knowledge of its own: Crowd management (c.f. Still, 2000). Between sensible crowd management ideas and their execution however, many difficulties may arise, such as financial, juridical, political or ethical ones.

cell phones and internet

The composition of crowds is, as we will see, an important factor in determining the outcome of the process. Until quite recently this composition did not change much during the process, as potential participants who were not present at the place where things happened, were not likely to discover until afterwards what was going on. In the last decade the use of cell phones has become almost universal, especially by young people. This implies that as soon as somewhere something interesting is going on (a hot party, a fight, or whatever may be of interest) the tidings of what happens immediately begin to spread. As Geser (2004) puts it: *When fully used within a social collectivity, the cell phone effects a transformation of social systems from the "solid" state of rigid scheduling to a "liquid" state of permanently ongoing processes of dynamic coordination and renegotiations*.

This means that for instance in fights or tensions between members of different groups, it has become quite normal that both parties phone for assistance and that amazingly quick large groups are assembled. For discussions of these and more general changes connected with the use of cell phones see Plant (2000) and Geser (2004).

Modern communication technology not only influences crowd behaviour in this direct fashion. In a more indirect way there are important changes going on as well. Through the internet it becomes possible to directly spread one's views, that is to say, without the filtering influence of journalists, editors et cetera. Not only views, beliefs and facts, true or untrue, are spread, it is also possible to use the internet as a mobilising force, by giving dates and places for occasions like protest rallies, by propagating activities and attitudes, and by creating a sense of community. We see that all groupings that have a tendency for crowd action are represented on the internet. We find an enormous amount of sites with political aims,

parliamentary as well as extra-parliamentary, of the left and of the right, nationalistic as well as internationalistic, inspired by religion as well as world view, and all these sites appear to be mainly visited by sympathisers. But also groupings with non-political aims have quickly seen the enormous possibilities of the internet. Thus the same functions we enumerated for political sites apply as well to sites of sports fans and hooligans, for music fans and for followers of religions and life styles.
Although as yet it is too early to analyse these influences in all their ramifications, we can safely conclude that the influence of modern means of communication will be of great and growing importance on the organisation of crowds, albeit only as long as electricity is available. As soon as this central modern commodity stops flowing, we will probably be thrown back to a level of communication more primitive than say 300 years ago, as our modern technology has effectively deleted almost all means of mass communication, technical or otherwise, that are independent of electricity.

PARTICIPANTS

As we remarked earlier different kinds of occurrences will attract a different sort of public. This *convergence hypothesis* of course is stronger as people better know what to expect. Therefore the composition of crowds will be more uniform as the expectations are clearer. More knowledge about what to expect is promoted by the media and hearsay, and occurs especially when the crowd occurrence is traditional, well publicized or has a longer duration. So, for example, football riots or New Years riots thrive by expectations, having a traditional character. So for instance, in the Paris 1968 riots in the month that they lasted more and more non-students got involved. The kinds of people that are interested in crowd occasions differ of course according to the occasion. As many crowd happenings, due to their inherent uncertainty, have in common that they present something new, and often sensational, we can expect that amateurs of novelty and sensation will be attracted. Corresponding effects are to be expected from the promise of fun, of aggression (quite often riots beginning as protest attract people mainly interested in aggression, like the French 'casseurs'), of loot (many poor people profit from the sudden availability of certain products), of viewing some kinds of heroes (e.g. the Beatles or Back street boys), or of showing oneself off somewhere (e.g. 'Tout Paris will be present')

Effects of personality

Generally it is found that people who participated in unruly behaviour, or rather who indicated themselves that they participated, or were willing to participate, scored higher than others on several different measures of aggression (van den Brug, 1986, Russel & Arms, 1995), anger (Russell & Arms, 1995), impulsivity (Arms & Russel, 1997), risk orientation (Wilson & Daly, 1985) and sensation seeking (Pilkington, Richardson & Utley, 1988, Mustonen, Arms, & Russell, 1996). It is also quite regularly found that people involved in aggressive behaviour during riots or sports events have a history of convictions for assault or related kinds of misdemeanours (van den Brug, 1986, Ahlberg, 1986). We could thus expect a double effect of personality: on the one hand it influences, and under certain conditions strengthens the convergence process, on the other hand it influences, once a certain kind of personality is over represented, the outcomes of crowd processes. In groups of hooligans there is a differentiation as to aggression proneness. It seems probable that the most aggressive prone individuals, designated by their comrades as 'Nutters' (Marsh et al., 1978), do have some form of personality pathology.

Effects of age

Many kinds of crowd occurrences are mainly of interest for young people, such as pop festivals, dance parties, many sporting events, and many different forms of protest. So in many forms of protest 'students' are said to be the main participants, such as in the 1968 riots in France, in the Talibaan revolution in Afghanistan, in the Tien an Min riots in Peking et cetera. Research on the age distribution of participants is mainly done in occurrences of sporting riots, such as football hooliganism, and it points to an overwhelming majority of younger people, the mean age being reported as somewhere in the vicinity of 18 years (e.g. Marsh et al., 1978), till 22 years (Ahlberg, 1986).
Several explanations for this overrepresentation of the young are possible, roughly corresponding to the main theoretical approaches sketched in part 2. Many of these explanations do not aim specifically to the wish to attend to the crowd gathering, but are more general, aiming at related characteristics of youth, like

aggression or need for sensation. These characteristics lead to a special, sometimes conflict ridden, social context in gatherings of young people, especially males (Benson & Archer, 2002). Biological explanations seem possible, such as hormone levels combined with gender (see Loeber & Hay, 1997), or higher energy levels (Lorenz, 1974) but probably not very strong,. Psychological explanations abound, as the study of human development is a central topic in psychology. Age related changes have been noted in almost any terrain that psychologists studied. For our purposes an interesting difference is that in interests. In young people a greater interest in new things and experiences, in daring and physical skill is consistently found (Strong, 1970). At the same time young people do not have vested interests, on so may be said to have nothing to loose. We also find differences in attitudes, activity levels, in criminal behaviour, in cognitive functioning and in a host of other characteristics. As causes for these changes commonly maturation is held responsible, with the addition that maturation is only normal when the situation in which the child matures is normal (see Kagan, 2003, and Steinberg & Morris, 2001, for state-of-the-art reviews). For instance averse circumstances during maturation, such as abuse and neglect, especially emotional neglect, have aversive consequences, such as lesser social skills and higher aggression tendencies.

Social class effects

Sociological explanations for the age effect may be found in social position of the participants, which may engender protest against marginality, or in their incomplete socialisation. The concomitant feelings of being disrespected may have important consequences (Miller, 2001). The results of empirical studies on riots, although finding a strong age effect, do not confirm the social class hypothesis, however. In many studies of hooliganism (e.g. Marsh et al, 1978, van der Brug, 1986) the class distribution of the aggressive group corresponds with the population distribution. Neither was it found by these authors that unemployment or financial position predicted participation in riots.

Some authors, mostly sociologists, report on the basis of case studies that football hooliganism fits in lower class culture (e.g. O'Brien, 1986, Armstrong & Harris, 1991) or that race riots are an effect of poverty (NACCD, 1968), or even that being deprived gives a right to riot (Jan-Khan, 2003). It is however not always clear which processes lead from being underprivileged to hooliganism and rioting. That different socio-economical or ethnic groupings in society have different norms is a quite natural phenomenon, but it also seems rather clear that in crowd situations normal rules and norms tend to get lost or transformed.

Professionalisation effects

Quite often, in the press, in sensational reports (e.g. Buford, 1991) or by politicians, it is stated that 'professional rioteers', 'urban guerillero's', or semi professional sadists are involved in riots, and thus they are proffered as the main culprits. This thesis has been subjected to several empirical tests (e.g. Ahlberg, 1986, Armstrong & Harris, 1991). The outcome of these studies clearly shows that persons arrested for violence overwhelmingly (60%, Ahlberg, 1986) had criminal records, of whom a large part for violent crimes, but signs of professionalisation were not found. On the other hand there certainly are groups who plan trouble, in the context of football, in students or squatters riots or in the more recent series of riots around 'globalisation'. It is quite difficult to get a clear view on the processes and persons involved, as secrecy is very much valued in those circles, and police seldom succeed in getting a case 'round'. An exception formed the sentencing of five adult Chelsea hooligans in May 1987 for 'conspiring to cause affray at football matches'. They were reputed to have been members of the legendary 'Chelsea head hunters'. We should however be very careful to vent conspiracy theories, as biased perceptions abound in this field (see introduction). The work of the anthropologists Armstrong & Harris (1991) illustrates nicely the game that is played by the hooligan sides in keeping up these appearances. Professionalisation implies some form of organisation, and although there is little evidence for conspirations, secret societies or armies et cetera, we do certainly find differences between crowds in the degree of organisation. We will distinguish two kinds of organisation: self-organisation and organisation through external agencies.

MOTIVES OF PARTICIPANTS.

Motivation is a very handy, but at the same time a problematic concept. If we were able to pinpoint what motivation is, and how it can be measured, we would have fulfilled an important step in predicting human behaviour. Motivation nicely fills the gap between personality factors and purely situational factors as determinants of behaviour and therefore it could be a very useful construct. There is however much debate about what motivation consists of, on which processes it rests and about the utility of the concept itself. In the present chapter we will not enter this discussion, but assume that it can be useful to discuss factors that contribute to the formation of behaviour. Motivation therefore is used here more as a descriptive construct than as a causal one. As the concept is rather tautological (the individual does something because he is motivated to do it, and from the fact that he does it we derive that he is motivated) it is reluctantly used in modern psychology. An exception to this observation forms Apters reversal theory (Apter, 2001), that is presented as a metamotivational theory. We will more fully discuss it in chapter 5. The psychological factors supposedly motivating people have been named as *Needs*, *Goals*, *Drives*, or *Instincts*. These concepts have in common that they suggest a more temporary and fleeting influence on behaviour than for instance personality traits. We thus can look at behaviour as caused by needs and enumerate many different needs, such as for instance Murray (1938) did, who named an amazing number of 42 human needs. We can also see behaviour as caused by goals and enumerate different goals (Miller et al. 1986). The same has also been done with drives (Hull, 1943) or with instincts (McDougall, 1908). In sociology a similar ruse was undertaken by Thomas & Znaniecki (1927) who discerned four wishes, namely: New experience (or Bohemian), security (or Philistine), response (or mastery) and recognition (or status). Not only can qualitatively different needs, instincts et cetera be identified, such as need for sensation, achievement goals, hunger drive, wish for security or sex instinct, they can also be differed according to *strength*. If strength is indeed a factor of importance, this would mean that all needs, instincts et cetera are continuously active, but that some of them tend to be temporarily dominated by others. The question then becomes what factors make a need or a goal dominant. The classical answer to this question is deprivation, but in the light of recent research this answer seems to be much too simple.

An interesting and relevant aspect of motivation is that some motivating factors clearly seem conscious, but others seem to act in more unconscious ways. In modern psychology the importance of unconscious, or automated information processing is more and more seen as a very important determinant of our ideas and preferences, and thus of our motivation. A consequence of this point of view is that it becomes more understandable that actors usually present a very different account of their motives than observers do. While the proverbial member of the silent majority has a tendency to think that people involved in a riot are motivated by senseless, and thus unconscious nihilistic or destructive motives, most participants in riots present a view of themselves as people having chosen to defend their rights, to do something about some form of deprivation.

When a motivation, such as a need or goal, is thwarted we generally speak of *frustration*, and this frustration can in its turn again work as a motivator. It is remarkable that neither frustration, nor its brother *revenge* figure in the classic motivational theories summed up by Madsen (1968, p.317-318). Admittedly Madsen's is not a very recent overview of the field, but since then the views of psychologists on motivation have not changed much, the subject being a bit out of fashion. However that may be: people in crowds always feel that they have certain interests, either of a very personal kind (such as caused by thirst, crowding, personal hygiene, respect, and so on) or of a more communal kind (such as wanting reform, retribution, acknowledgement, et cetera). If the motivation caused by these interests is thwarted an extra motivational factor, frustration, may heighten levels of arousal, and facilitate aggressive behaviour.

When talking about crowds the behaviour of crowd members is mostly considered as motivated behaviour: people want to experience fun at a party or concert, they want safety in panic situations, they want entrance tickets while waiting in a queue, they want revenge when fighting another party or the police or they want information when exchanging rumours. Not only their behaviour during the height of action can be seen as motivated, maybe more important even is their motivation for the choice whether or not they will attend to some gathering that possibly will get a crowd-like character.

When we discussed convergence, we saw that crowd phenomena draw different kinds of people, and these people will differ from the general population not only in general characteristics, but even stronger so in motives, as these are in a greater degree dependent on situational and deprivational factors. People

who seek out crowd situations may be said to have some need, some drive, some goal or some instinct, but in all cases they have the conscious or unconscious experience of missing something, and of being willing to do something about it. What is being missed can be very diverse: rights, food, equity, recognition, prestige, safety, money, fun, sensation, all these things can be seen as lying at the root of crowd phenomena once the lack of them gets salient. It would be very unwise not to take account of these subjective feelings, when dealing with crowds. We therefore will go a bit deeper in this matter, by treating two main kinds of motives, stemming from subjective deprivation. One could say that the things missed fall in two large categories: those of *power or control* and of *sensation*.

Control motives

Motives that have to do with power or control form a general class that is also designated as Mastery motives. They can be directed towards gaining control over other people (dominance motives, such as in attacking police forces), over circumstances (control motives, such as in breaking down barriers), over confusion (ideological motives, such as in rallying a group), over government (revolutionary motives, such as in revolts) or over one-self (self motives, such as in New Year's swims).

If we look at a normal population we see that the power of an average citizen depends on two partly related main factors: his position in society and his age. The young thus are especially powerless, and, having no position of power, they also have nothing to loose. At the same time most young people have high aspirations and this is, coupled with low status, not always easy to handle. Some social scientists prefer to call this rather normal phenomenon 'frustration'. Not only the young have high aspirations coupled with low fulfilment, this state of affairs also exists, and often to a greater degree, in large parts of populations. The poor, minority groups, the less educated, such categories are also often designated as frustrated, often by people not belonging to them.

The source of frustration, which is seen here as a misfit between aspirations and possibilities, can also be seen as a more one sided business, that of interests. This is a much more traditional view. The idea that resurrection and rioting were explicable as a form of advocacy of interests, was for the first time formulated in the 17th century (see Hischmann, 1977), at first from the side of the state (*Interest will not lie*, Needham, 1659), but later also from the side of the people (e.g. Smith: *The wealth of nations*, 1776). It also lies at the heart of ideologies like socialism, in which the part of aspirations is quite summarily treated (compare the sentence from the socialist hymn 'the international: '*Nous ne sommes rien, soyons tout*!' Trans.: We are nothing, let us be everything.), while the interests, on the other hand, are quite elaborately summed up.

Generally the factor of powerlessness and concomitant deprivation is seen as one of the main sources of societal unrest. The most obvious example of course, can be found in revolutions, aiming at a reversal of power relations. Instances of this (see table 1 chapter 1) can be found throughout history, whether it be a revolt of slaves against masters (e.g. Rome 73 bC), of farmers against aristocracy (e.g. France, 1358), of citizens against their King (e.g. the Dutch, American, English, French or Russian revolutions), of workers against capital (e.g. England, 1815, or Europe, 1892), or of religious or tribal groups against each other (e.g. France, 1572, London, 1780, the present controversies between Muslims and Christians, or the countless instances of tribal or racial troubles). While Marx held that it was absolute deprivation that would motivate people to revolutionary activity (see chapter 3), modern students of collective action hold that it is always relative deprivation (e.g. Tilly & Tilly, 1981, Gurney & Tierney, 1982, Walker & Smith, 2002). This points in the direction of justice and equity playing an important role in some forms of crowd action. We described these forms in Chapter 1 as being *externally motivated*.

sensation motives

Crowd behaviour is not always serious. Many examples of crowd happenings have more to do with the wish for amusement and new experiences than with the wish for power. We called this *internal motivation,* signifying that these people do not strive after some external goal, but have goals that could be called egocentric. Even in situations that are, objectively taken, very serious, such as riots, or even lynchings, it has been noted that the people involved seem to be very much elated, and amused by the sometimes gruesome happenings (e.g. Brown, 1954). In other less sinister circumstances it seems clear

that the aim of those present is to have a good time. This is especially clear in festivals, parties, sports games and similar events. At most of these occasions one finds many crowd phenomena like clapping, yelling, 'doing the wave', et cetera, but aggression, especially on a larger scale is relatively scarce. There are however a number of conditions that may make these events hazardous. The most important without doubt is the *presence of opposing and hostile parties*, but at most festival-like happenings these are seldom found. The next in importance are *boredom* and *alcohol*. Other risk factors are *expectations* (based on tradition or on stories in the media), and a too lax or too strict *order enforcement.*

If many people have gathered at a certain place with the intention to amuse themselves and to experience agreeable sensations, but nothing happens, it is not unusual that they will try to find ways to amuse themselves. As this kind of amusement (making fires, throwing and demolishing things, or just being obnoxious) is not welcomed by organisers and police, their tendency is to try to calm the mischief makers down by forceful means. As this often is not well received by larger parts of the public, especially when they have drunk a lot, escalation towards large scale fighting easily ensues, because through their policy the agents of order have created hostility, and thus two hostile parties arise.

CONCLUSIONS

In this chapter we discussed the general characteristics of crowds, that influence the processes taking place. We saw that time seems to be an important factor in several ways. Firstly most crowd processes develop gradually, and have their roots in happenings and ideas that occur long before the actual crowd gathers. Moreover we found that many crowd happenings seem to be sensitive for factors as time of the day and of season. We also discussed the relations between space and crowds, such as special places attracting crowds and the influence of the form of space on the form of the crowd. This aspect is important for crowd management. We then gave attention to the structure of crowds and discussed spatial as well as social aspects of structure.

Then we discussed what is known about general factors that are commonly believed to influence crowd processes, such as ambient temperature, alcohol and other drugs, crowding, or modern communication devices such as cell phones and the internet. We finally discussed characteristics and motives of participants.

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