

5. In January 1981 an NSF-funded committee of the American Council on Education recommended that editors of science journals review scientific papers on cryptography to identify those that may be candidates for censorship. Opposition to any restriction on such publications continues. See for example articles in the *Washington Post*, 8 Jan. 1981; *Los Angeles Times*, 1 Feb. 1981; *New York Times*, 10 Feb. 1981; *Chicago Tribune*, 21 Feb. 1981.
6. A 1978 estimate placed the NSA's budget at \$1.2 billion. It employs 24,000 people. *Time*, 6 Feb. 1978.
7. *Signal* (March 1979). *Signal* is the official journal of the US Armed Services Communications and Electronic Association.
8. *Newsweek*, 16 Feb. 1981.
9. Paul Wilkinson, *Terrorism and the Liberal State* (London, 1977), p. 114.
10. Peter Janke, "Ulster: a Decade of Violence", *Conflict Studies*, no. 108 (1979), p. 17; Vittorio-franco S. Pisano, "The Red Brigades' a Challenge to Italian Democracy", *Conflict Studies*, no. 120 (1980), p. 10; *Newsweek*, 28 Apr. 1980.
11. Computer crime — such as unauthorized access to bank accounts — being a case in point. See Donn B. Parker, "How People Get Computers to Steal Money", in *Leaders*, vol. 4, no. 2 (1981).

INFRASTRUCTURES OF TERRORIST ORGANIZATIONS¹

by

J.K. Zawodny

The purpose of this article is to answer three questions: first, what is the main characteristic of terrorist organizations that affects their infrastructure? Second, what does the infrastructure look like? Third, how does this infrastructure affect the behavior of terrorists? The analytical level of concern here is that of group dynamics.² "Infrastructure," for the purpose of the article, means an *internal organization structure, including formal and informal networks within that structure*. It is this writer's thesis that this structure affects the behaviour and activities of terrorists.

The data comes from nonclassified, open sources (in five languages), dealing with active terrorist movements in the USA and abroad. Since it is quite impossible, for security reasons, to acquire reliable information from first hand interviews with terrorists, this article by necessity relies on scattered data that in many instances defies verification. Nonetheless, in the view of this writer, who had five years of combat service as an urban guerrilla during World War II, the data provides sufficient basis for conclusions to be drawn from uniformly present characteristics across several cultures.

Main Organizational Characteristics Affecting Infrastructure

The principal characteristic is the relatively small size of the organizations. It might be useful for comparative purposes to realize that the European under-

ground movements, so well developed during World War II, and so efficient in their systematic terrorist activities, were by any standards huge organizations. For example, the Polish Underground Movement (*Armia Krajowa*) in 1944 had over 380,000 "front line" troops plus at least an equal number of "support" members totalling 760,000 people. The total membership of the Italian Resistance was somewhere between 150,000-200,000; the French Resistance (FFI) for the Northern and Southern zone, about 425,000. Effective management of the flow of communications (orders from top down, reports from lower ranks upward) and safeguarding the security for such masses of those involved, demanded establishment of a rigid ladder-like organizational structure patterned on military models. The writer knew it from experience. That is, the smallest unit was a section (three to six persons), the members of which knew each other by pseudonyms. In addition to his men, the leader of a section knew only four to six other section leaders of his platoon and his platoon commander. A platoon commander (usually a noncommissioned officer or a cadet) knew, ideally, the section leaders of his platoon, the other platoon commanders, and his company commander. The company commander (usually a second or first lieutenant) knew only his platoon leaders, other company commanders, and his battalion commander, and so on "up the ladder". The purpose of limiting the contacts and the circle within which each person interacted, was to provide maximum security for those involved. However, the process of communication was slow. For an order from central headquarters to reach a private in a section, it was necessary for the order to go through all the channels of the "ladder-like" structure, literally cascading down all the "rungs."

In an urban setting, it took at least two to three days for an order from the Commander-in-Chief to reach a private in a section: an example was the order for mobilization to start the Uprising of Warsaw, 1944. This "ladder-like" organization framework, cumbersome as it was, seemed to be the best under the circumstances when membership amounted to hundreds of thousands.

In comparison with extralegal violent organizations during the second World War, those of contemporary terrorists are relatively small. For example: in the United States we have 12-16 groups aspiring to revolutionary change by violent means. Membership in each of them does not exceed 40-50 people.³ The Red Brigades in Italy are estimated by their own membership to be from four hundred to ten thousand, depending on who is counting and whether the sympathizers, who do not handle weapons, are included. The Baader-Meinhof gang was composed of approximately 100 members. The Japanese Red Army, which, incidentally, is "for hire," fluctuates between 30 and 40 members; *El Ansar* (Palestinians) less than 200; Action Organization for the Liberation of Palestine, less than 300.

The Appearance of the Infrastructure

As in every human organization, a division of labour takes place among terrorists, and some structure is needed to channel communication and to coordinate activities. The small size of these groups imposes on them an infrastructure quite different from those of World War II underground movements. On the basis of this writer's thirty years of studies of extralegal violent organizations

he would like to describe the contemporary terrorists' infrastructures as *centrifugal*.

The centrifugal infrastructure resembles that of a solar system in which the leader is the sun in the centre and the members are like planets around, usually within the range of his direct impact. *Thus, in the ladder system the leader is on the top, in the centrifugal system the leader is, so to speak, in the centre.* This arrangement has great consequences on the behaviour of terrorists.

We have come to the third aspect — the infrastructure's effect on behaviour — which is the essence of this article.

The Effect of Centrifugal Infrastructure on the Behaviour of Terrorists

Eleven patterns which are the direct results of centrifugal infrastructures are submitted here: ten are distinctly different from behaviour of ladder organizations, and one points to similarity.

1. The leaders of terrorist movements, by virtue of being in the centre of their organizations, *not only* act as the vortex and direct catalysts of actions, because they plan and give orders (as is also the case in the ladder system), but they are also the observable *doers*. This is extremely important to the rank and file. In such a scenario leaders have a high degree of visibility. They suffer all the consequences of action equally with their fellow members; are exposed directly to wounds and death. They share psychological stress before actions and periods of decompression after action, with all its misery, floating anxieties and tensions. They eat the same food. These kinds of experiences build intensely personalized loyalties of rank and file toward the leaders, far beyond the depersonalized and symbolic loyalty given to "the people upstairs" of ladder organizations.
2. The centrifugal system secures more direct and faster communication, often cutting across or dispensing entirely with intermediaries. This increases flexibility of action and success in combat operations. The latter is related to the fact that before any action the leader himself can reassess its feasibility on the basis of the most updated and personally ascertained information. This also provides opportunities for immediate flexible response. Moreover, it removes a common anxiety-producing dilemma among low-ranking leaders of "ladder" organizations: being caught between an order to perform an action, and changes in the combat scenario that have taken place from the time the order was given to the time it can be implemented (often several days). Under these conditions, such leaders, as a rule, go ahead with the action, fearful of charges of disobeying orders or of what to them is a worse punishment — criticism and ostracism by their peers.

Probably the most important evidence of the flexibility resulting from shortened lines of communications in centrifugal infrastructures, is the intensity, frequency and facility with which many terrorist organizations interact and cooperate among themselves. For example, it is safe to say that in the past decade a majority of German terrorists were trained in Palestinian camps in Jordan, South Yemen, Syria, Iraq, and Lebanon.

African terrorists have recently been trained in Angola. The Red Brigades also “went abroad for early training”, their leader Renato Curcio has said, but not to the Middle East. Alberto Franceschini, a long-time Communist Party militant before he joined Curcio in the Brigades, spent almost a year in Czechoslovakia in 1974 and at least three other “classic” Brigade leaders received shorter training stints. Although the Italians did not go to the Middle East, the Middle East, as it were, came to them. In 1972 a Palestinian called Mohammed Boudia came via Paris to help the Red Brigades blow up four oil tanks in Trieste.⁴ After the 1972 Japanese Red Army attack on Lod airport in Israel, investigations revealed that the three terrorists involved had received training in Lebanon under the auspices of the Popular Front for the Liberation of Palestine. Weapons of Czech origin were given to them in Rome; they received forged papers in Frankfurt; and they came to Lod in a French plane.⁵

A look at the worldwide interconnections can be dizzying. One experienced analyst has written:

“In 1973, it was a mixed team of Palestinians and Venezuelans who hijacked a Japanese jumbojet between Paris and Tokyo. In 1974, the Japanese Red Army seized the French embassy in Holland under the supervision of Carlos in the Palestinian’s Paris office, using grenades stolen by the Baader-Meinhof Gang from a U.S. Army depot in West Germany. The same year, Carlos threw a grenade from a stolen batch into Le Drugstore in Paris, killing two. The next year, the Baader-Meinhof gang raided the West German Embassy in Stockholm using weapons provided by a naturalized Italian who had stolen them from a Swiss national armory. Other weapons from *her* stolen batch have turned up in terrorist hideouts from Frankfurt and Hamburg to Barcelona and Rome, the major part of them divided between the Baader-Meinhof gang and the Red Brigades, police say.”⁶

In 1974 several representatives from terrorist organizations which included Basques, Irish, Croatians, Bretons, Welsh, and Catalans gathered together to discuss their mutual needs. Also in 1974 there was a meeting in Buenos Aires, Argentina, specially designated for Latin American terrorist groups. They came from Uruguay, Bolivia and Chile to set up a junta for revolutionary coordination. This followed up a meeting in Lisbon, Portugal. Later on, Paraguayans, Dominicans, Columbians and Venezuelans joined this body. Mutual exchanges of trained personnel, weapons, and assistance in money followed.⁷ According to at least one source which is willing to go on the record, it is reported that Libya, Iraq and South Yemen provide money, weapons and sanctuary for terrorist groups.⁸

3. Creativity and inventiveness generated at a grass roots level of centrifugal organizations can be directly tapped by the leaders and speedily implemented. This writer remembers from his service with the

Polish underground when in one instance a message suggesting a plan to damage German production of a vital part for their submarines was forwarded to a decision-making level by a private. It took eleven days to get a reply. By that time the decision was useless; it was too late to implement the action.

Direct accessibility enables the leader to react immediately to the most ingenious schemes conceived by the rank and file and to attack targets of opportunity recognized by juniors. Examples are the poisoning of Israeli oranges which were subsequently to be distributed in Western Europe, the sprinkling of deadly chemical agents in a train in West Germany, and the bombing of 25 computer centres in Italy during the past three years.¹⁰

4. Another important feature of the centrifugal infrastructure is its independence from society's support. The ladder organization simply cannot exist without society's backing because this structure is rooted in it. Moreover, it takes one to two years to develop such a ladder-like network. In contrast, the centrifugal system is so small that it can exist independently from society. It is also so mobile that, if necessary, all members can be settled in one community. But, above all, it can be created and mobilized instantaneously. Such a system has no files, no records, and no bureaucracy hindering its activities. An organization that is so independent from society that it has no fear of society's response presents a dangerous situation — the terrorists operate under *no* constraints.

In a ladder system, a public which is hostile can withdraw its sons and daughters from under the "ladder" — causing its collapse. In a centrifugal system the leader does not need public sentiment; he needs the loyalty of his immediate followers only, hence his relative freedom from responsibility and freedom from the values of society. In fact, even progressive annihilation of the immediate environment will not affect the physical integrity of a centrifugal unit — it will move to another area. During the five years of World War II, Polish society lost, on the average, about 3000 people daily, murdered by the German war machinery occupying central and western Poland (eastern Poland was occupied by the Soviet Army). This bloodletting had an immense effect upon the ladder structure of the Polish Underground, a topic which is beyond our concern here. Under these circumstances, centrifugal organizations would remain relatively unaffected.

5. Direct access to the leader by the rank and file adds to the power of mythical and magical qualities usually attributed to him, by facilitating identification with the leader's strength. It provides symbolic power-sharing by seeing and touching the leader. The father figure image, so eagerly instilled by leaders among the members, is reinforced. Moreover, leaders have the opportunity to give direct moral dispensation for deeds which might otherwise be repudiated by certain standards of society or by the previous upbringing of members. All these factors are helpful in freeing the members of internal dilemmas and in giving them self-images of heroes with a unity of purpose.

During Castro's early revolutionary activity there was a ditty sung by Cuban followers: "Eisenhower, ha, ha, ha, Fidel Castro your papa!" This writer knows also from personal experience how, under stress, human beings are apt to ascribe magical qualities to their leaders. He remembers one incident from his experience as a second lieutenant and platoon leader of Polish insurgents in the Uprising of Warsaw, 1944, which illustrates the point. When women-soldiers of his platoon had to leave, for biological need, shelters of ruined buildings during the night, they would invariably ask him to escort them out to "protect them against artillery". It was true that the German artillery and mortars were pounding insurgents day and night, but it was also true that his presence against artillery explosions was absolutely useless. Yet, night after night, his sleep was interrupted several times. He left the protection of the basement, to stand discretely aside, waiting for the women to come back, meanwhile readying himself for death under these rather "peculiar" circumstances. The handling of his own fears was equally irrational. Whenever he was called to "go out", he would take along his machine pistol — mere psychological reassurance in that situation.

6. The leader is also directly involved in the selection and recruitment of new members to the group. The leader's personal role in recruitment is usually so magnetic and ego-gratifying to incoming members that such recruitment to the centrifugal organization *is not* related to the prospects of success of the organization. There is also some evidence that motivation behind joining a centrifugal organization is much less related to perception of threat than was the case with underground organizations in the war. For example, Jews represented only one percent of the population of metropolitan France in 1940; yet, presumably because of the intensity of their persecutions, they provided at least 20 percent of the membership to the French underground movement.¹¹
7. Centrifugal groups tend to seek primary cooperation and allies *not* with stronger groups but with those whom they can easily manipulate. Consequently they coalesce on the peer level and are extremely wary of any involvements with groups or governments which may be powerful enough to impose demands on them and thus curb freedom of their activities. The major powers perceive this tendency and consequently have assisted terrorists *indirectly*, through smaller states, e.g., Czechoslovakia, North Korea, Cuba, Bulgaria, East Germany, Hungary, Iraq and Syria. Also Algeria, Yemen, Libya, Uganda, Saudi Arabia and Cyprus have been involved, in many instances providing cover for the major or original sources of support.
8. Comparing the centrifugal infrastructure with the ladder extralegal violent organization, this writer attempted also to ascertain to what degree the members of the centrifugal organization are able to maintain their anonymity. Presumably, this should be difficult in view of their direct accessibility to the leader. Anonymity is an important determining factor of terrorists' behavior, because the less identity a terrorist has within the group, the less he feels personally responsible towards out-

siders. However, it was not possible to find sufficiently reliable data to submit to the reader any sound generalization.

9. There seems to be in all types of human organization (open or clandestine) a necessity for the establishment of a working network within which, in time, a certain “bureaucratic bloat” takes place. Comparative study of French, Italian, Polish, Soviet and Vietnamese ladder clandestine organizations indicates that over time their structures experience these two bureaucratic phenomena: first, increase in numbers of “bureaucrats” referred to as “bureaucratic bloating”; second, “The Peter Principle” — movement upward on the administrative ladder to the point where an individual reaches the level of his own incompetence.

After the Second World War, the bureaucracy of the British Admiralty had grown from 2000 to 3569 officials, during which time the Royal Navy’s uniformed manpower decreased by one-third and the number of ships decreased by two-thirds. A New York Police Department study in 1974 indicated that the force had grown by 55 percent over 20 years, but the number of policemen on the beat or cruising in cars remained the same. In 1974 the Italian Navy had more admirals than ships and one general per 5000 troops. In the same year each French general or admiral statistically commanded 1700 men. (In 1974 a US general statistically commanded 20,000 soldiers.)¹²

The ladder clandestine organizations are also subject to considerable bloating: secretaries, messengers, bodyguards, etc. In centrifugal organizations there is no bloating — the leader prevents it because such bloating would hamper his exercise of power. The result is enhanced efficiency.

10. The leader’s direct control over membership is tremendously enhanced in centrifugal organizations. The wartime commander of the resistance in Milano, when asked about the membership of his units and his control over them said: “Six hundred if things are difficult, six thousand if things are not so difficult and of course sixty thousand if things are easy.”¹³ This is not the case within the centrifugal system. Here members are within the direct range of the leader’s vision. Control is exercised speedily and without mercy. Parenthetically, it is much easier to join a terrorist organization than to withdraw from it.
11. Finally, one important similarity should be mentioned. Differences between ladder and centrifugal organizations notwithstanding, they share one extremely prominent feature. When either type of organization is threatened by stresses from within, their respective leaders will use external violence as a means of keeping the membership together. In other words, *internal* problems of the organization often serve as catalysts of *external* violence.¹⁴ There are examples of this phenomenon, but for understandable reasons, they are very difficult to prove and never officially admitted. Many actions have been ordered when there was no tactical, strategic or political reason for using violence, except to fulfill the need perceived by a leader: either to distract the membership from

internal problems, to restore cohesion, or for the leader's personal reasons known only to him. These actions are always carried out under the label of the "great cause."

From this eleven point analysis, the considerable strength of the centrifugal organization for small size terrorist groups is apparent. It explains why many modern groups have adopted this infrastructure, and why, in the mid-1970s, the Provisional IRA turned to it.¹⁵ The centrifugal system promises to make terrorism more durable, because it is so difficult to penetrate and because it does not depend upon society's support.

Footnotes

1. This is an edited version of a paper delivered at the Conference on Psychopathology and Political Violence, Terrorism and Assassination, November 16-17, 1979, sponsored by the University of Chicago, Department of Psychiatry, and the Institute of Social and Behavioral Pathology. It is reproduced by kind permission of the author and the Conference sponsors.
2. Those interested in motivational factors of an individual in regard to violence may refer to works by Bandura, Berkovitz, Ebbensen, Lawrence Z. Freedman, Freud, Hacker, Hokanson, Lorenz, Rutherford and Walters.
3. Quoted, The Honorable William H. Webster, Director of Federal Bureau of Investigation, *Speech*, Los Angeles World Affairs Council, 27 Nov. 1979.
4. See Claire Sterling, *The Terror Network* (New York, 1981), p. 118.
5. D. Anable, "Terrorism — Loose Net Links, Diverse Groups, No Central Plot", in John D. Elliot and Leslie K. Gibson, eds., *Contemporary Terrorism* (Gaithersburg, 1978), *passim*.
6. Claire Sterling, "The Terrorist Network", in *The Atlantic*, Nov. 1978, p. 42.
7. Anable, *op. cit.*, *passim*.
8. *Ibid.*
9. Robert Kupperman and Darrell Trent, *Terrorism: Threat, Reality, Response* (Stanford, 1979), *passim*.
10. *Industry Week*, 29 Nov. 1979, p. 11.
11. David Knout, *Contribution a l'Histoire de la Resistance Juive en France, 1940-1944* [Historical Contribution of the Jewish Resistance in France, 1940-1944] (Paris, 1947), pp. 85-88.
12. Rafael Steinberg, *Man and the Organization* (Alexandria, 1975), p. 77.
13. Massimo Salvatori-Paleotti, "The Patriot Movement in Italy", *Foreign Affairs*, April, 1946, p. 545.
14. See J.K. Zawodny, "Internal Organizational Problems and the Sources of Tensions of Terrorist Movements as Catalysts of Violence" in *Terrorism: An International Journal*, vol I, no 3 & 4, (1978) pp. 277-285.
15. See David Charters, "The Changing Forms of Conflict in Northern Ireland", in *Conflict Quarterly*, vol I, no 2 (1980).