

THE CASE FOR CULTURAL INDICATORS,
WITH VIOLENCE IN THE MASS MEDIA
AS A POINT IN CASE

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It has been said that the military is always well prepared to fight the previous war. Who isn't? Institutions often respond only after a disruption or breakdown has already focused attention on an issue. FCC Commissioner Nicholas Johnson quoted John Gardner as writing that "In a big, busy society the modern Paul Revere is not even heard in the hubbub of voices . . . Then someday an incident occurs that confirms his warnings. The citizen . . . now rushes to the window, puts his head out, nightcap and all, and cries, 'Why doesn't somebody tell me these things?'"¹

That, of course, is what political and social indicators are supposed to do. But, as other institutional innovations, they are also subject to the government by crisis they should help anticipate. Commissioner Johnson further cited Gardner as writing that "Today even the most potent innovator is unlikely to be effective unless his work coincides with a crisis or series of crises which put the people in a mood to accept innovation."²

¹Nicholas Johnson, "Television and Violence -- Perspectives and Proposals." Statement before the National Commission on the Causes and Prevention of Violence (mimeographed, December 19, 1968), p. 1.

²Ibid.

As social researchers, we are no more immune to crises than the institutions that employ or support us. Nor should we be. But, we have been deficient in using the often crisis-generated opportunities for research -- fragmented, isolated, and uncoordinated as they usually were -- to innovate frameworks and procedures in which such contributions could become more coherent, cumulative, and comparative bodies of knowledge.

"The Nation has no comprehensive set of statistics reflecting social progress or retrogression," begins the recent HEW report to the President. The report recommended a procedure for the periodic stocktaking of the social health of the nation.³ Steps in that direction include pending legislation and the growing literature on social and political accounting; the recent White House order setting up a National Goals Research Staff charged among other things with "developing and monitoring social indicators that can reflect the present and future quality of American life, and the direction and rate of its change"; and this series of panels itself.

My purpose is to develop and illustrate a framework for cultural indicators as one aspect of social accounting. Cultural indicators have been alluded to but have not yet been articulated in policy statements, legislative proposals, or the research literature. I would first like to outline the case for indicators of the mass-produced symbolic environment that I call the common culture. In the second part I shall describe a central aspect of a framework for such indicators, and, to give some focus to my examples, illustrate the framework with studies of violence as the case in point.

³U.S. Department of Health, Education and Welfare, Toward a Social Report (Washington, D.C.: U.S. Government Printing Office, 1969), p. xi.

I would like to use my own experience as investigator on several sizable grants, and examples taken mostly from my own research, to develop the case as I see it, and then to illustrate the scheme.

FROM HEALTH TO VIOLENCE

Wartime concern with mental health led to the passage of the National Mental Health Act in 1946, the establishment of the National Institute of Mental Health, and the emergence of the "mental health movement" of the 'fifties. By 1953 John R. Seeley could observe in The Annals of the AAPSS that "This concentration upon, and heightened consciousness of, the nature of mental life is now so widespread as to ensure an appreciative audience for New Yorker cartoons about psychiatrists, Hollywood films about alcoholism or amnesia, mothers-aid books about the emergent little superegos and their resurgent little ids."⁴ NIMH began sponsorship of a series of studies on popular conceptions of mental health. I became involved in research on how mental illness is presented in the press and in popular drama and fiction. We were able to trace the rise and leveling off of attention in all media by using existing indices, media records, and doing our own monitoring and analysis. We looked at the internal processes of control and decision-making that gave rise to specific content configurations in public information and entertainment. We studied the dynamics of image-cultivation on terms related to the

⁴John R. Seeley, "Social Values, the Mental Health Movement, and Mental Health," The Annals of the American Academy of Political and Social Sciences, Vol. 286 (March 1953), p. 22.

composition of the message-systems involved. The research was published by 1960⁵ and, to my knowledge, never continued.

Sputnik generated (for reasons peculiar to American culture) an orgy of educational soul-searching. A U.S. Office of Education grant enabled me to study the portrayal of schools, teachers, and students in the mass media of ten countries. Again we traced the ebb and flow of attention and the composition of factual and fictional representations that cultivated popular conceptions of education in the U.S., four countries of Western Europe, four countries of Eastern Europe, and the Soviet Union. We had a unique opportunity to study institutional and organizational influences shaping the portrayals in the different cultures. A report was completed⁶ and scattered publications appeared throughout the 'sixties but, to my knowledge, there was no follow-up or utilization for any purpose relevant to social policy.

⁵Cf. Jim C. Nunally, Jr., Popular Conceptions of Mental Health; Their Development and Change (New York: Holt, Rinehart & Winston, 1960); George Gerbner, "Psychology, Psychiatry and Mental Illness in the Mass Media: A Study of Trends, 1900-1959," Mental Hygiene 45:89-93, January, 1961; George Gerbner and Percy H. Tannenbaum, "Regulation of Mental Illness Content in Motion Pictures and Television," Gazette 6:365-385, 1961; George Gerbner, "Mental Illness on Television: A Study of Censorship," Journal of Broadcasting 3:292-303, Fall, 1959.

⁶George Gerbner, "Mass Communications and Popular Conceptions of Education: A Cross-Cultural Study." Cooperative Research Report No. 867 (U.S. Office of Education, 1964). Henceforth referred to as the "education study."

UNESCO, the International Sociological Association, and the National Science Foundation supported phases of another international "first" -- a six-nation "Cross-Cultural Study of Films and the 'Film Hero.'"⁷ One year's feature film production in the U.S., France, Italy, Yugoslavia, Poland, and Czechoslovakia provided the basis for a comparative investigation of the fictional worlds and "culture heroes" of the major body of imaginative representations shared across national boundaries. If it is also the last of such efforts, or if other studies provide no basis for comparison, it will have little value.

This brings us to the issue of violence. Many studies of mass media content focused or touched on it. They used different definitions, units, procedures and methods of sampling and analysis. We just completed the most recent study of violence in network television drama in 1967 and 1968, for the National Commission on the Causes and Prevention of Violence.⁸ But violence, or any other single social issue from illness through education to race, war, or the just distribution of resources, can best be illuminated in the context of all others and against the background of

⁷George Gerbner, "A Cross-Cultural Study of Film and the 'Film Hero.'" (Philadelphia: The Annenberg School of Communications, University of Pennsylvania, 1968), (mimeo.) Henceforth referred to as the "film hero study."

⁸George Gerbner, Marten Brouwer Cedric C. Clark and Klaus Krippendorff, "Dimensions of Violence in Television Drama," The Annenberg School of Communications, University of Pennsylvania, 1969. Henceforth referred to as the "television violence study." Findings presented in this paper are, in part, from related publications, in press.

specific cultural trends and configurations. With all our polling and surveys and experimentation we have neglected to provide a framework for cumulative and comparative information about the cultural climate that pervades all our thoughts and actions.

BASIC ASSUMPTIONS

My basic contention is that there is no area of significant social policy in which far-reaching decisions are made with as little reliable, systematic, cumulative and comparative information about the actual state of affairs as in the sphere of the mass production of the common culture. Confused by our own rhetoric of some automatic mechanisms at work in some mythical marketplace of ideas, we are only vaguely aware of the fact that decisive policy-making is going on, and that cultural politics is as much a part of the fabric of modern life as economic, welfare, or military politics. Debates about "censorship" obscure the realities of direction, constraints, and controls in the mass production of messages. Application of formal aesthetic categories derived from other times and places ignore functions, resources, and power at the heart of the cultural process.

We know next to nothing about trends in the composition and structure of mass-produced message systems that govern men's lives and inform men's minds in urbanized societies. We know little more about the institutional processes that compose and structure those message systems. Consequently, much of our high-powered research on how people

respond and behave in specific situations is unenlightened by insight into the common cultural context in which and to which they respond.

Man becomes a particular kind of human being through his use of symbols. Social regularities in human behavior cannot be understood in isolation from cultural regularities in the symbolic environment. And when the symbolic environment itself is changing, as when navigating on turbulent waters, the quality and direction of social behavior can only be assessed if we know which way the cultural wind blows and the cultural tide flows.

The "cultural revolution"

The industrial transformation created societies whose specialized parts relate to each other and to the whole less and less through personal experience and face-to-face contact and more and more through mediated information. The more complex and interrelated a system becomes the more information it needs -- and generates -- to maintain stability. More not only in amount but also in kind, speed, and reach. Self-governing systems of great specialization and complexity require social indicators about intricate interplays of qualitative and quantitative processes that signal their value-state or "well-being" as well as their being. The need for such information about the human impact of increasingly massive, rapid, and far-reaching technological change, such as the space program, spurred the movement for social indicators.⁹

⁹The National Aeronautics and Space Administration supported the studies that culminated in a volume edited by Raymond A. Bauer, Social Indicators, (Cambridge, Mass.: MIT Press, 1966).

The need for more sophisticated and sensitive indicators of social well-being has now been well established. The point that still has to be made is this: The same industrial transformation and technological intervention that created that need for information in the management of modern societies has also brought about profound changes in the management of information itself. Therefore, a comparable and related need is for information about changing patterns of information. I am using information now not only in its technical meaning but also in its broadest sense of "culture" as the shared messages that cultivate patterns of relationships in a social system. The system's ability to assess and use information depends largely upon its insight into how it generates, selects, and structures information in the first place. If this sounds circular, I can only say that such is the process of social -- and all -- self-consciousness.

The rise of mass communication

Historically, we are dealing with an industrial revolution in methods of message-production and distribution. The rise of mass communication is that profound change in the management of information, or, more accurately, in the creation of the common symbolic environment that gives public direction and meaning to human activity.

The mass production of messages creates new symbolic environments that reflect the structures and functions of the institutions that produce them. To go McLuhan's well-known half-truism one better: The corporation is the message. Corporate and other collective processes of message mass-production short-circuit former networks of social communication and superimpose their own forms of collective consciousness -- their own publics -- upon other social

relationships. The purpose of a scheme of cultural indicators, as I see it, is to address itself to those aspects of our system of generating bodies of broadly shared messages that are most amenable -- and most relevant -- to public policy decisions, and to take the pulse and measure the tempo of their transformations.

We need to know general trends in the cultivation of assumptions about existence, priorities, values, relationships before we can interpret relevant corporate policies and facts of individual and social response. It means little to know that "John believes in Santa Claus" until we also know in what culture, at what point in time, and in the context of what public message systems cultivating the reinforcement or inhibition of such beliefs. Interpretations of public opinion (i.e. responses to questions elicited in specific cultural contexts), and of many media and other cultural policy matters, require the knowledge of cultural indicators similar to the economic indicators compiled to guide economic decisions and to the other social indicators proposed to inform social policy-making.

An institutional approach

Selective habits of participation limit each of us to risky and usually faulty extrapolation about the cultural experience of different or heterogenous communities. The reliable observation of regularities in large message systems and their production is a specialized enterprise that requires not only methodological sophistication but also a clear conception of dimensions of analysis and of relevance to investigative

purpose. What I have called elsewhere the institutional approach to mass communications research¹⁰ is the basis of such an enterprise. It is the study of technologically-mediated message systems and processes as historically new ways of looking at life, as new forms of institutionalized public acculturation, and as the broadest common bases of social interaction and policy-formation in modern societies. Such study revolves around problems of message system theory and analysis, institutional process analysis, and the investigation of relationships between message systems, corporate forms and functions, collective image-formation, and public policy. It asks these questions:

What perspectives and relationships are expressed in message systems produced for large and diverse communities? How do these systems vary over time, across cultures, and in different societies? How do media compose and structure these message systems? How is their production and mass-distribution organized, controlled, and managed? What institutional and technological functions and what organizational decision-making processes govern the production and distribution of these message systems? What common assumptions do message systems cultivate over and above those apparent in single or selected messages or individual and selective responses? And, finally, how does the cultivation of these collective assumptions shape the conduct of public affairs (and, of course, vice versa)?

¹⁰George Gerbner, "An Institutional Approach to Mass Communications Research," in Communication: Theory and Research, edited by Lee Thayer. (Springfield: Charles C. Thomas, 1966).

The questions designate three areas of analysis. Study of the composition and structure of large bodies of mass media content is the analysis of message systems. Study of organizational forms, functions, and decision-making that compose and structure these systems is what I called institutional process analysis in mass communications. And study of the relationships between institutional processes, message systems, and the public assumptions, images, and policies they cultivate is what we may call cultivation analysis.

Social research in the "behavioral effects" of communications might be seen as having concentrated on the last area of studies. Yet the area of cultivation analysis is perhaps the least developed. The reason is that most "effects" research stemmed from theoretical perspectives and was conducted on terms that did not consider relevance to the mass-cultural process a principal criterion. So from the point of view of cultural indicators, such research will be inadequate to the task until institutional process and message-system analysis can provide the necessary framework of relevant dimensions to be investigated.

Institutional process analysis has a research base in organization theory and studies of management policy formation. It is a more focused and limited area of study. But research on the policy process in mass communications is scarce.¹¹ More importantly, such research cannot serve

¹¹Some illustrations and the beginnings of a scheme for process analysis are contained in George Gerbner, "Institutional Pressures Upon Mass Communicators," in Paul Halmos (ed.), The Sociology of Mass-Media Communicators. The Sociological Review Monograph No. 13 (University of Keele, England, 1969) pp. 205-248.

the purposes of cultural indicators until media policies can be related not only to theories of organization and decision-making but also to the specific structural characteristics of the message systems they shape.

The analysis of message systems is then the starting point of research leading to cultural indicators. It is the step that must be taken before the study of the institutional policy and public cultivation processes can proceed on coherent terms. The central dimensions of cultural analysis stem not from intentions or policies or individual cognitions but from the actually shared messages that mediate public perspectives and provide such common bases for social interaction (both dissent and consensus) as shape the course of public events.

MESSAGE SYSTEM ANALYSIS

The analysis of message systems rests on the conception of the role of communication in human life. Communication is interaction through messages. Messages are specialized events (or aspects of events) that signify other things in enormously varied and creative ways unique to man.¹² Social interaction through such symbols is the "humanizing" process of our species. The terms of this interaction define the realities and potentials

¹² A fuller development of this definition and its implications may be found in George Gerbner, "On Content Analysis and Critical Research in Mass Communication," 6 AV Communication Review, Spring 1958, pp. 85-108, reprinted in Lewis A. Dexter and David M. White, People, Society and Mass Communications (New York: The Free Press, 1969), pp. 476-501. The present discussion of message system analysis is a further development of ideas presented in George Gerbner, "Toward 'Cultural Indicators: The Analysis of Mass Mediated Public Message Systems," in George Gerbner, Ole R. Holsti, Klaus Krippendorff, William J. Paisley and Philip J. Stone, The Analysis of Communication Content (New York: Wiley & Sons, 1969) pp. 123-132.

of human existence, the order of priorities, the range of values, and the clusters of associations among all of these. Communities share systems of messages that cultivate terms of collaboration and conflict, participation and alienation, conformity and rebellion; set the agenda of public discourse; and regulate social relationships within and among groups. The mass production and rapid distribution of message systems transforms and extends the scope and reach of modern communities beyond anything possible by methods of face-to-face communication. Industries and technologies run by corporate organizations compose and structure the new common culture and its publics to the image of their own roles, interests, and functions in society. Informed policy making and the valid interpretation of social behavior require some reliable indicators of these new and changing patterns as sources of public "humanization."

What distinguishes the analysis of public, mass-mediated message systems as a social scientific enterprise from other types of observation, commentary, or criticism is the attempt to deal comprehensively, systematically, and generally rather than specifically and selectively or ad hoc with the facts of collective cultural life. This approach makes no prior assumptions about such conventionally demarcated functions as "news" vs. "entertainment," "non-fiction" vs. "fiction," or "high culture" vs. "low culture." Qualities of individual experience associated with selective exposure to and participation in mass-cultural activity are not the critical variables for our purpose. What is informative, entertaining (or both), good, bad, or indifferent by any standard of quality are selective judgments applied to messages quite independently from the social functions they may actually perform in large message systems touching the collective life of a whole community.

The terms of analysis, therefore, stem from and relate to the dimensions of common consciousness that all kinds of mass-produced message systems may cultivate in large and heterogeneous publics. We have identified these dimensions as message-mediated assumptions about existence, priorities, values, and relationships. Figure 1 summarizes the questions, terms, and measures of analysis relevant to each dimension.

FIGURE 1 ABOUT HERE

The dimension of assumptions about existence deals with the question "What is?" i.e. what is available (referred to) in public message systems at all, how frequently, and in what proportions. The availability of shared messages defines the scope of public attention. The measure of attention, therefore, indicates the presence, prevalence, rate, complexity, and varying distributions of items, topics, themes, etc. represented in message systems.

The dimension of priorities raises the question "What is important?" We use the measure of emphasis to study the context of relative prominence and the order or degrees of centrality or importance. Measures of attention and emphasis combine to indicate not only the allocation but also the channeling attention in a message system.

The dimensions of values asks "What is right or wrong, good or bad, etc.?" It notes in what light and from what point of view or with what evaluative or other qualities are different things presented. We study what characteristics, traits, or connotations are attached to different items of reference and emphasis. Measures of tendency are used to assess the direction and intensity of value judgments observed in messages.

The dimensions of relationships focuses on the more complex networks of associations within and among all measures. When we deal with patterns of attention, emphasis, or tendency instead of only simple distributions, or when we relate the clustering of measures to one another, we illuminate the underlying structure of assumptions about existence, priorities, and values represented in message systems.

The four dimensions, then, yield measures of attention, emphasis, tendency, and structure. These measures provide a framework for research that stems from the basic functions of communication in culture. Research conducted in some such framework can have a specific and timely focus, and can still be comprehensive, coherent, cumulative, and comparative.

In the balance of this paper I would like to spell out the terms and measures of each dimension, and illustrate types of research that might serve the tasks of indicators of the role of cultural production in image cultivation and policy formation.

Measures of attention

A mass produced message system is the result of institutional processes selecting some things to be brought to public attention and ignoring or rejecting others. Measures of attention indicate the presence and distribution of subjects, topics, themes, etc. selected to compose the system. Knowing something about the distribution of attention over time and across cultures is an elementary measure of the most commonly available fund of raw materials out of which each age and place weaves its own patterns of public imagination and imagery.

Indicators of the distribution of attention are measures of prevalence, rate, complexity, and variation. Focusing on an issue such as violence, we can ask how prevalent is its representation, at what rate per natural context unit such as story or play, and how does its frequency vary by different categories of context units within systems and across systems.

The evidence, of course, is scattered, fragmentary, and rarely comparable. In one of the first studies, Edgar Dale found that "crime" prevailed in 84 percent of the movies of the early 'thirties, (an average of 3.9 per picture), and violent death in 39 percent.¹³ Our own research noted violence in 66 percent of some 3,000 Hollywood movies produced between 1950 and 1961.¹⁴ In our education study, the prevalence of violence in feature films in which schools, teachers, and students played a significant part was 34 percent for the period 1931 to 1950 and 44 percent for the period 1950 to 1961.

In the film hero study we found violence portrayed in 82 U.S. movies out of the first 100 produced in 1962-63. Similar levels prevailed in the other countries, with only films made in Czechoslovakia substantially lower (6 out of 10). But individualized or private violence such as violent crime and murder was twice or more as prevalent in U.S., French, and Italian films as in those of Yugoslavia, Poland, and Czechoslovakia where violence was more frequently related to war and resistance.

¹³Edgar Dale, The Content of Motion Pictures (New York: Macmillan, 1935) pp. 133-134.

¹⁴Unpublished research data.

In the all-media popular fiction and drama samples of the education study, violence ranked 5th in frequency of attention out of 21 themes noted in the U.S. sample, 7th in Western Europe, and 10th in Eastern Europe.

Studies of television drama in the early 'fifties found that "in over three-quarters of the plays, acts of violence, crime, or aggression occurred,"¹⁵ that violent acts "predominated" in 56 percent or 3.7 per play,¹⁶ and that the hourly rate doubled between 1952 and 1954.¹⁷

Our recent television violence study analyzed plays, cartoons, and feature films telecast nationally during study periods representative of 1967 and 1968 network programming. We defined violence strictly as physical force or hurt, and applied rigorous standards of coder reliability. The study found violence portrayed in 8 out of every 10 plays for both years. The rate of violent episodes declined slightly from 5.0 per play in 1967 to 4.5 in 1968. The prevalence of violent characterizations also declined from 56 percent of all leading characters in 1967 to 50 percent in 1968. All in all, drama without violence was rare. An average dramatic program hour had 7 and a cartoon hour 22 violent episodes. Half of all leading characters committed, and 6 out of 10 suffered, some violence. One in 10 turned a killer. One in 20 was killed.

¹⁵Sidney W. Head, "Television and Social Norms: An Analysis of the Social Content of Television Drama" (Doctoral dissertation, New York University, 1953), p.2.

¹⁶Sidney W. Head, "Content Analysis of Television Drama Programs," 9 Quarterly of Film, Radio, and Television, 1954, pp. 184-185.

¹⁷H. H. Remmers, Four Years of New York Television (Urbana, Ill.: National Association of Educational Broadcasters, 1954), pp. 37-38.

Variation, by type of program also revealed that while nearly all crime, western, action-adventure, and cartoon programs contained violence, so did two-thirds of all comedies. Of all violent episodes analyzed, 87 percent were in the crime-western, adventure category, 36 percent were in cartoons, and 29 percent were in comedies. (The total exceeds 100 percent because some programs fell in more than one category.)

Patterns of life

Variations of attention by social factors begin to form patterns of life manifest in the world of TV drama. The following highlights from the findings of the TV violence study come from measures of attention across such variables as personal and demographic aspects, social environment, place and time.

*Violence stuns, maims, and kills without much visible "hurt." Suffering was difficult to detect, making violence appear painless, despite the "body count" of about 400 casualties per week or an average of five per violent play.

*When witnesses appear on a scene of violence, they are passive in 7 out of 10 such episodes. When they are not passive, they are as likely to assist or encourage as to try to prevent violence.

*The "generation gap" looms with a vengeance. One young adult gets killed for every five young killers. One middle aged character gets killed for every 2 middle-aged killers. Old people rarely appear in TV plays (6 percent of all characters), and even more seldom kill (2 percent of all killers); but 2 old men were killed for 1 who was a killer. To look at only killers and their fate; 1 young killer out of 14 is himself the fatal victim of violence; 1 middle-aged killer out of 5 gets killed; the old man who kills is killed in return.

*Social class, too, makes a difference. Half of all upper and middle class characters, but three-quarters of lower class characters commit violence. Six out of 10 upper and middle class characters, but 9 out of 10 lower class characters fall victim of violence. Almost one-third of upper and middle class characters escape both violence and victimization; none of the lower class characters does. When it comes to fatal violence, upper class killers number 11 percent, middle class killers 12 percent, and lower class killers 16 percent of all characters in their class. Middle class killers outnumber killed 3 to 1, but for every upper and lower class killer there is an upper and lower class character killed.

*Ethnic and race distinctions are related and equally striking. The violent comprise half of all white American characters, 6 out of every 10 white foreigners, and two-thirds of all nonwhites. The same groups suffer from violence in the same order, with nearly 6 out of 10 whites but 8 out of 10 nonwhites falling victim of some violence. Both inflicting and suffering violence themselves were 39 percent of white Americans, 46 percent of white nonAmericans, and 60 percent of nonwhites. Escaping both violence and victimization were 35 percent of white Americans, 32 percent of white nonAmericans, and only 13 percent of nonwhites. However, the proportion of killers was 1 out of every 5 white foreigners, 1 out of every 8 white Americans, and 1 out of every 15 nonwhites. There seems to be something like "violent efficiency" at work here too: one-third of all violent foreign whites and nearly one-fourth of all violent white Americans, but only one-tenth of all violent nonwhites succeed in killing an opponent. Nonwhites were more violent than the others, but, like the old people, and unlike those of the lower class, nonwhites were less lethal. The pattern of fatal victimization also shows that

while white American killers outnumbered killed 4 to 1, and white foreigners 3 to 2, for every nonwhite killer there was a nonwhite killed.

*Time and place also affect the patterns of violence and justice implicit in the way things work out in the composite world of TV drama. Violence was involved in three-fourths of all plays in a contemporary or domestic setting. But it was featured in 98 percent of plays set in the past, every single play set in the future, and 92 percent of all plays depicting foreign lands or people. We can look at it another way by comparing all plays that feature violence (the "world of violence") with those that contain no violence (the "world of nonviolence"). The past is 9 times as likely to be depicted in the world of violence as in the world of nonviolence. The future is always violent. The outside world is three times as likely to be violent as nonviolent. And, as we have seen, the world of violence extracts a higher price -- a tooth for a tooth -- from its predominantly violent strangers than it does from its native whites.

Crude as they are, these patterns begin to lay bare the underlying structure of assumptions cultivated in these message systems. They also begin to give substance to the contention that without a more specific knowledge of these assumptions about the role of violence, research on "effects" may be shallow and misdirected.

Prevalence and distribution tell little about the context of relative intensity or centrality that can direct, channel, or even force attention, rather than only make it possible. For that we turn to the measure of emphasis.

Measures of emphasis

Emphasis is that aspect of the composition of message systems which establishes a context of priorities of importance or relevance. The distribution of emphases sets up a field of differential appeal in which certain things stand out. Emphasis shapes the agenda of public conceptions and discourse cultivated in message systems. Measures of emphasis may be based on indications of size, intensity, or stress, or on the featuring of certain topics or themes as the major points of stories.

Measures of emphasis weighted by measures of attention can indicate the overall "values" (such as what is a "good story" by the way things actually work out in a message system) that govern the allocation as well as the availability of items for public attention.¹⁸ When independently computed, measures of emphasis can reveal whether stress is directly or inversely or not at all related to the frequency of attention. Is "man bites dog" always a "good story," only when unusual, or -- as in certain times and places -- never?

¹⁸Such an index was developed in the education study for the measurement of overall "news value" of topics in the press of different countries where differences in newspaper size and format precluded space and page measures. The formula was
$$NVI = \frac{E\%}{A\%} + (E\%)(A\%)$$
 where NVI (news value index) is the sum of E% (percent of items featuring a topic in headline, lead, or as other central point of emphasis) out of A% (attention percent, i.e. percent of items making any reference to the topic) and the product of the emphasis and attention percentages. Another formula for fiction obtains an index of "story value" by multiplying attention percent by mean emphasis computed for a topic. (See George Gerbner, "Popular Conceptions of Education," *op. cit.* App. pp. II-D-4 and IV-B-2.)

Measures of emphasis are most generally useful in showing the relative importance of discrete subjects, themes, and topics, and their relationships or ranks. For example, in the international study of education-related news, out of a list of 34 topic groups, violence in the U.S. press sample ranked 19th in attention and 14th in emphasis. In the British press sample violence ranked 16th in attention and 11th in emphasis. In the West German press sample it ranked 20th in attention and 13.5 in emphasis. (It is interesting to note that West German press emphasis on violence tied ranks with emphasis on "aims and values of education" which ranked first in attention.) The Eastern European newspapers studied did not carry news of violence frequently enough to meet minimum criteria for computing either attention or emphasis.

Measures of emphasis in fiction and drama show different dynamics at work. In the film hero study, for example, we found that the ratios of films in which violence was "essential to the plot" to those in which violence was "secondary" was higher in Polish films (2.5) than in U.S. films (1.3) despite the fact that the prevalence of violent portrayals was slightly higher in the U.S. Yugoslav films with a very high prevalence and Czechoslovak films with a very low prevalence of violence both yielded the lowest emphasis ratios of the six countries (0.8).

In films portraying schools, teachers, and students analyzed in the education study, the U.S. violence emphasis score was again 1.3, the Polish score was the same and the Czechoslovak score was 1.4 (Yugoslavia was not included in that study.) Yet if we relate emphasis to attention, we can note relative differences. Rank order comparisons of attention and emphasis scores on a list of 21 themes show that the prevalence of violence in the U.S. school-related film sample ranked 3rd and its emphasis score ranked 8th. The prevalence of violence in the comparable Polish film sample

ranked 5th, and its emphasis score ranked 13th. In other words, violence was widespread, and much of it routine in both. In Czechoslovak films the relationship was reversed. The prevalence of violence in the Czechoslovak school-related film sample ranked 13th, but its emphasis 3rd. As in the general run of Czech films, violence was presented rarely, but, unlike in general films, it was important whenever presented.

Some evidence of trends in emphasis over time comes from television studies. The 1952 research found violent acts "predominating" in 56 percent of plays analyzed.¹⁹ We found violence integral to the plot (essential for a brief plot description) featured in 66 percent of the plays in 1967 and 56 percent in 1968. The ratio of "essential" to "secondary" violence, which was at least 2.9 in 1952, thus rose to 3.7 by 1967 but fell to 2.2 in 1968. A somewhat less dramatic perspective on these trends is that when television drama portrayed violence, it emphasized it as an essential plot element in from 7 to 8 out of every 10 plays in both the early 'fifties and the late 'sixties. The proportion was 7.5 out of 10 in 1952, 8 out of 10 in 1967, and 7 out of 10 in 1968. Thus the prominence or dominance of violence in violent programs was somewhat tempered from 1967 to 1968, while its prevalence remained the same.

Measures of the intensity of more qualitative aspects of the portrayals bring us to the dimension of values, traits, points of view. These will be discussed next as indicators of tendency.

¹⁹ Sidney W. Head, op. cit.

Measures of tendency

The position of an institution (as of an individual) in time, space, and in the overall structure of social relations enters into the approach, point of view, or direction from which it deals with aspects of existence. In the education study, for example, we were able to investigate how the relationships between mass media and other institutions, including schools, and the position of the media in society vis-a-vis that of the schools, shaped the representation of schools and education in the media of several countries.²⁰ The investigation of tendency deals with the explicit or contextual value judgments and other qualities that such vantage points might impart to message systems.

The broadest overall dimension of judgment is a summary evaluation of the goodness or badness, rightness or wrongness of things. A measure of the favorable-unfavorable associations expressed in message systems may be called "critical tendency." It is based primarily on whether a subject or topic appears in a supportive or critical context. But value judgment is, of course, multidimensional. Measures of "differential tendency" can be used indicating directionality of judgment in many different dimensions.

²⁰ See e.g. George Gerbner, "Newsmen and Schoolmen; The State and Problems of Education Reporting," 44 Journalism Quarterly, Summer, 1967, pp. 211-224; "The Press and the Dialogue in Education; A Case Study of a National Educational Convention and Its Depiction in America's Daily Newspapers," Journalism Monograph No. 5, 1967; "Images Across Cultures: Teachers in Mass Media Fiction and Drama," 74 The School Review, Summer, 1966, pp. 212-229.

Tendency, then, is a measure of the direction and intensity of attributions or other expressions that indicate evaluative, ideological, moral, and other value-oriented points of view. The expressions may be explicit as in adjectives and adverbs or other characterizations, or they may be implicit in consequences causally related to actions.

An analysis that related emphasis to tendency was the comparative investigation of the coverage of a U.N. General Assembly by the New York Times and a European Communist party paper. Four dimensions of analysis traced relative emphases upon the procedural vs. substantive aspects of the sessions, and conflict-oriented vs. agreement-oriented tendencies in reporting the issues. We found that styles of reporting and ideological vantage points imparted a relatively more procedural and conflict-oriented structure to the Times' coverage.²¹

In fiction and drama, tendency is implicit in justifications for action, consequences of action, and the characterization of persons assigned different roles and fates. The film hero study found that principal characters in all six countries' films resort to violence for defense, protection, and other sanctioned or legal ends from over 2 to more than 4 times as frequently as for illegal or immoral ends. But, just as the attention on private violence, illegal and immoral reasons for violence were portrayed twice or more as frequently in the West as in Eastern Europe. The ratio of the tendency to commit "socially sanctioned" violence vs. anti-social violence was 2.5 in French films, 2.6 in U.S. films,

²¹George Gerbner, "Press Perspectives in World Communications: A Pilot Study," 38 Journalism Quarterly, Summer, 1961, pp. 313-322.

3.5 in Italian films, 3.8 in Czechoslovak films, 4.1 in Yugoslav films, and 4.4 in Polish films. (The higher the ratio, the lower the proportion of anti-social violence.)

The proportion of "unjustified" vs. "justified" violence in television drama is even higher than in U.S. films. Although TV heroes outnumber villains 3 to 1, and violence by heroes is nearly always "justified," villains are, on the whole, a little more violent than heroes. This gives "justified" violence a 2-to-1 edge on U.S. television compared to the 2.6-to-1 margin found in U.S. films.

The television study also traced the tendency to present violence as serious or as slapstick or "just for fun." Four-fifths of all violent episodes (including those in comedy programs) were judged "serious." Some softening of the portrayals is reflected in the fact that the proportion of "serious" episodes declined from 87 percent of all violent scenes in 1967 to 74 percent in 1968.

The more complex structure of judgments imbedded in the world of dramatic violence on television can be illuminated by combining dimensions again to weave a fuller pattern of life. Summary findings based on measures of attention, emphasis, and tendency inherent in characterizations, roles, and consequences suggest the following conclusions.

*Most violence is interpersonal and at close range but relatively impersonal. Strangers assault each other for reasons of private gain, power, or duty. In a world of specialized relationships, violence is one more specialty that rarely involves intimates and seldom stems from great emotion or from fighting for a noble cause.

*Happy are the good guys and unhappy the bad (at least in the end). Good guys initiate as much violence as bad guys, but hurt less and kill less. Good guys suffer more from violence but heroes never die. Bad

guys get hurt less than good guys, but, of course, they lose out in the end.

*Half of all killers are good guys who reach a happy end in the stories.

We can infer from these conclusions that in a violent world virtue suffers more than evil. Therefore, the ultimately happy hero must be more decisive and efficient to triumph in the end.

Indicators of tendency using "personality differential" scales to measure the intensity of selected character traits support that inference, and add more dimensions to the structure of judgments.

Personality profiles

Figure 2 charts the mean scores of all violent characters, all killers, and all those who commit no violence, on scales found to be

FIGURE 2 ABOUT HERE

reliably used by analysts on the television violence study. Aside from the sex difference due in part to the larger proportion of women among nonviolents, the traits that distinguish nonviolents, violent, and killers are "usualness," efficiency, attractiveness, emotionality, and logic. Nonviolents are more ordinary, less efficient, more emotional and less logical than violent. Killers are the most efficient and the least emotional. (We shall come to "attractiveness" later.)

Now let us see how a happy fate -- practically identical with virtue -- affects the portrayals. Figure 3 compares violent and nonviolent by fate.

FIGURE 3 ABOUT HERE

The greatest difference, aside from violence itself, is that happy fate is

attractive and unhappy fate is repulsive. (That is why we call the "happies" heroes and the "unhappies" villains.) Happy heroes are attractive whether violent or not. The "unhappies" are most repulsive when violent.

In other words, violence does not mar, nor nonviolence improve, the image of the happy hero. But nonviolence does make a difference for the unhappy. The few unhappy nonviolents, many of them victims of violence, are less attractive than the violent "happies" but less repulsive than the violent "unhappies." Violence and an unhappy end is the fate of the real heavies.

The key to violence is not goodness but logic. The key to happiness is efficiency.

Violent characters may or may not be attractive but they are cool. Nonviolents -- whether happy or unhappy -- are more emotional and intuitive than violents. Unhappy nonviolents are also more irrational. Cool logic is all on the side of violence.

Violence with a happy ending, on the other hand, is a matter of efficiency. Superior efficiency separates happy violents from all others. Efficient cool logic is the unbeatable combination that makes for the happy violent hero. Characters can remain happy and lack efficiency only if nonviolent. Violent heroes must be efficient to win, while nonviolent heroes may, and all villains (a little older than the rest) must bungle the job.

Further confirmation comes from a comparison of happy and unhappy killers, and their naturally unhappy victims, the killed. (See Figure 4.)

FIGURE 4 ABOUT HERE

Unhappy killers and killed present similar profiles because their numbers

overlap; half of the unhappy killers are themselves killed.

The happy killers stand out in manliness and attractiveness; they are heroes. The happy killers are "first among equals" in rational and unemotional logic, for they, too, are killers. But the happy killers are the most distinguished in the quality they must possess to win, even more than all violent heroes: efficiency.

Unhappy killers and victims present, by comparison, an image of repulsive bunglers. The victims of fatal violence, half killers but part innocents themselves, are the oldest and least masculine. Otherwise they are almost as repulsive and bungling as are the killers that come to an unhappy end.

Cool efficiency, and, to a lesser extent manliness and youth, appear to be the chief correlates of success and virtue in an impersonal, selfish, and specialized system of violence.

These are some clusters of associations with measures of tendency that suggests the structure of assumptions cultivated in television drama. Further examples of research more specifically focused on structure analysis come from other studies.

Measures of structure

More precise and systematic measurement of patterns of relationships requires the specific analysis of correlations or clusters among measures. Such methods of analysis require sophisticated and flexible computer programs that can reveal complex interrelations of different types of data. I am limited to a few relatively simple examples

available to illustrate some possibilities.

One method for probing the implicit structure of factual or narrative discourse, or comparing such structures in different message systems, consists of the following steps. (1) Derive all simple assertions contained in messages produced by each source. (2) Sort all different propositions into categories that describe different aspects of or indicate different tendencies toward general areas of attention. (3) Arrange the propositions in each category into passages and find a descriptive phrase that characterizes the aspect or tendency represented in them. (4) Measure the proportion of representation of each passage in the message system. (5) Use the proportions of representations contained in each system out of all propositions advanced in each passage as the basis for computing correlations between systems.

Such a "proposition analysis" included in the education study attempted to discover different political and ideological perspectives in the reporting of an act of criminal violence and of the trial that followed.²² The French press was used in the analysis because it represents a relatively wide range of partisan orientations. The essential facts of the case: An overwrought teacher fires his gun into the night to scare pranksters harrassing him and his sick wife. A boy falls to the ground, fatally wounded. The teacher rushes him to the hospital, then calls the police.

²²George Gerbner, "Ideological Perspectives and Political Tendencies in News Reporting," 41 Journalism Quarterly, Autumn, 1964, pp. 495-509.

The top part of Figure 5 illustrates the shifting structure of associations in organs of the political Left, the commercial press, and the political Right. The lower part of Figure 5 is a diagram

FIGURE 5 ABOUT HERE

showing the two highest correlations for each newspaper with the other papers.

Each phrase on the upper left characterizes passages composed of propositions describing a different aspect of or tendency toward the event. The corresponding chart shows the percentages of representation in each of the three press systems.

The Left press led with claiming that "politics has much to do" with the case; that it is "a heart-rending affair" reflecting the "unjust conditions" under which the teachers of France work; that a man of "modest means," carrying "heavy burdens" was provoked; that it was a tragic accident. With each of these groups of propositions the proportion of representations shifts toward the center. The Commercial press leads in the proportion of propositions stressing the "defective personality" of the teacher. The pendulum swings swiftly to the Right with the claim that the man was a monster, a "contemptible wretch," committing his crime of violence despite a "happy childhood and easy life"; that this is "not a political case" but it is above politics, an invitation to anarchy, a "national disgrace."

The analysis suggests a structure of associations between ideological perspectives, political tendencies and socio-political vs. moral-military approaches to violent crime. The bottom diagram of Figure 5 shows the two highest positive correlations between pairs of papers, with the distances representing approximate magnitudes of the correlations. It can

be seen that the Commercial press interlocks with the press of the Right, while the Left press forms a fairly tight group of its own with Provencal, and (the also provincial) L'Indépendant forming the links between them.

Another method of structure analysis in nonfiction such as news (if that still qualifies for nonfiction!) is to correlate the contexts (topic groups) in a message system, indicating what subject areas tend to occur most frequently in association with what other subject areas in the same stories. Such an analysis was conducted in the education study, and violence was one of the topic groups correlated with the others.

Figures 6, 7, and 8 compare the topic groups structures of press coverage of schools and education in the U.S., Great Britain, and West

FIGURES 6, 7, 8 ABOUT HERE

Germany. The size of the circles indicates the relative amounts of attention given to each topic group in each press system. The arrows again denote the two highest positive correlations, but this time between topic groups in the same stories.

Violence in the U.S. education-related news sample (Figure 6) was presented primarily in the context of school-community (mostly race) relations and of related political news. The British press (Figure 7) devoted more attention to teachers and teaching than to administrative and political matters; news of school-related violence appeared mostly in the context of health (injury) and of the teachers who were affected. The West German press coverage (Figure 8), was dominated by attention devoted to the aims and values of education (in a period of school reform); violence was noted mostly in a private context of student life and personal or family affairs.

The need is for complex but coherent patterns to provide more sensitive indicators of the structure of assumptions cultivated in public message systems than we have yet been able to develop. What should they encompass? What will they show? I would like to conclude with some suggestions about the potentials and limitations of such development.

POTENTIALS AND LIMITATIONS

Understanding the structure of cultivation is especially necessary when the focus of attention is a complex issue of life or policy. Violence, for example, is not a single or simple dimension of behavior. Much of it is not a problem of behavior at all in the sense of violent action. It is equally a question of public assumptions about the role of force and the distribution of justice. It is also a problem of shared expectations of the kinds and effects of violence "we" expect from different types of "others." Violence involves resistance to or acquiescence in its private and public uses; support for or opposition to policies related to its uses; and other responses to its distant as well as nearby manifestations. These are culturally learned assumptions and expectations. Indicators of public message systems give us a basis for judging the role of cultural production in their cultivation.

Such indicators can also help place the cultural policy aspects of the problem in perspective. "How much violence should there be on television?" is a shallow question, useful mainly for administrative purposes. If used alone, it can only lead to a new rating game in which networks compete for the lowest score, regardless of its meaning. "What kind of violence, what for and in what context?" are the key issues. Violent action is a symptom of irreconciled conflict,

and an instrument of destruction, hurt, and waste. It is, in a sense, the opposite of communication. It negates the most uniquely human capacity of our species, the capacity to interact and even collide creatively through symbols and messages. Symbolic representation of violence is, therefore, a vital function of information and art in their illumination of its real-life manifestations and consequences.

Institutional compulsions to present life in saleable packages can exploit as well as illuminate assumptions about violence. Cultural policies can expose the role of violence or can use its images as instruments of that very negation of humanity that it represents. Indicators of the structure of assumptions imbedded in our message systems can help us make the necessary distinctions. They can also reveal trends and proportions, prevalence and persistence, and relevance to cultural policy.

I have used the issue of violence to illustrate central aspects of the case, and of a scheme, for cultural indicators. But I have also noted that the cultural representations of any aspect of life can best be seen in the context of others, across conventional distinctions of media or modes of representation, and against the background of changes in time and place. Sources of information should range from existing indices and guides (often compiled for reference but useable as trend-indicators) to regular monitoring of the massive flow of messages and images. The accounting should begin with the message systems most broadly shared by the most heterogeneous publics. Cutting across all these sources, media, modes and forms should be the common terms and categories of analysis. These should include categories as

comparable as possible to those already studied before and in other cultures, as in the studies I have noted, but also sensitive to new and changing issues of public policy. They should survey the history, geography, and demography of the symbolic worlds produced for common vicarious experience and learning. Interpersonal and group relationships portrayed in these message systems should be studied. Themes of nature, science, politics, law, crime, business, education, art, illness and health, peace and war, and sex, love, and friendship, as well as conflict and violence should be analyzed. Roles, traits, goals, values, and fates of characters engaged in dramatic action should be related to the symbolic worlds and issues in which they act.

The analysis of message systems can then provide a framework in which comprehensive, coherent, cumulative, and comparative information can be systematically assembled and periodically reported. Indicators relevant to specific problems or policies can then be seen in the context of the entire structure of assumptions cultivated at a particular time and place.

These indicators will not necessarily tell us what people think or do. But they will tell us what most people think or do something about and in common, and suggest reasons why. They will tell us much about the shared representations of life, the issues, the prevailing points of view that capture public attention, occupy people's time, and animate their imagination. They will help understand, judge, and shape more intelligently the changing symbolic climate that affects all we think and do. We can then inquire into who thinks and does what, how, and why in sharper awareness of the currents that tug and pull us all.

<u>Dimensions:</u>	EXISTENCE	PRIORITIES	VALUES	RELATIONSHIPS
<u>Assumptions about:</u>	WHAT IS?	WHAT IS IMPORTANT?	WHAT IS RIGHT OR WRONG, GOOD OR BAD, ETC.?	WHAT IS RELATED TO WHAT, AND HOW?
<u>Questions:</u>	What is available for public attention? How much and how frequently?	In what context or order of importance?	In what light, from what point of view, with what associated judgments?	In what overall proximal, logical or causal structure?
	ATTENTION	EMPHASIS	TENDENCY	STRUCTURE
<u>Terms and measures of analysis:</u>	Prevalence, rate, complexity, variations	Ordering, ranking, scaling for prominence, centrality, or intensity	Measures of critical and differential tendency; qualities, traits	Correlations, clustering; structure of dramatic action

FIGURE 1: DIMENSIONS, QUESTIONS, TERMS, AND MEASURES OF MESSAGE SYSTEM ANALYSIS

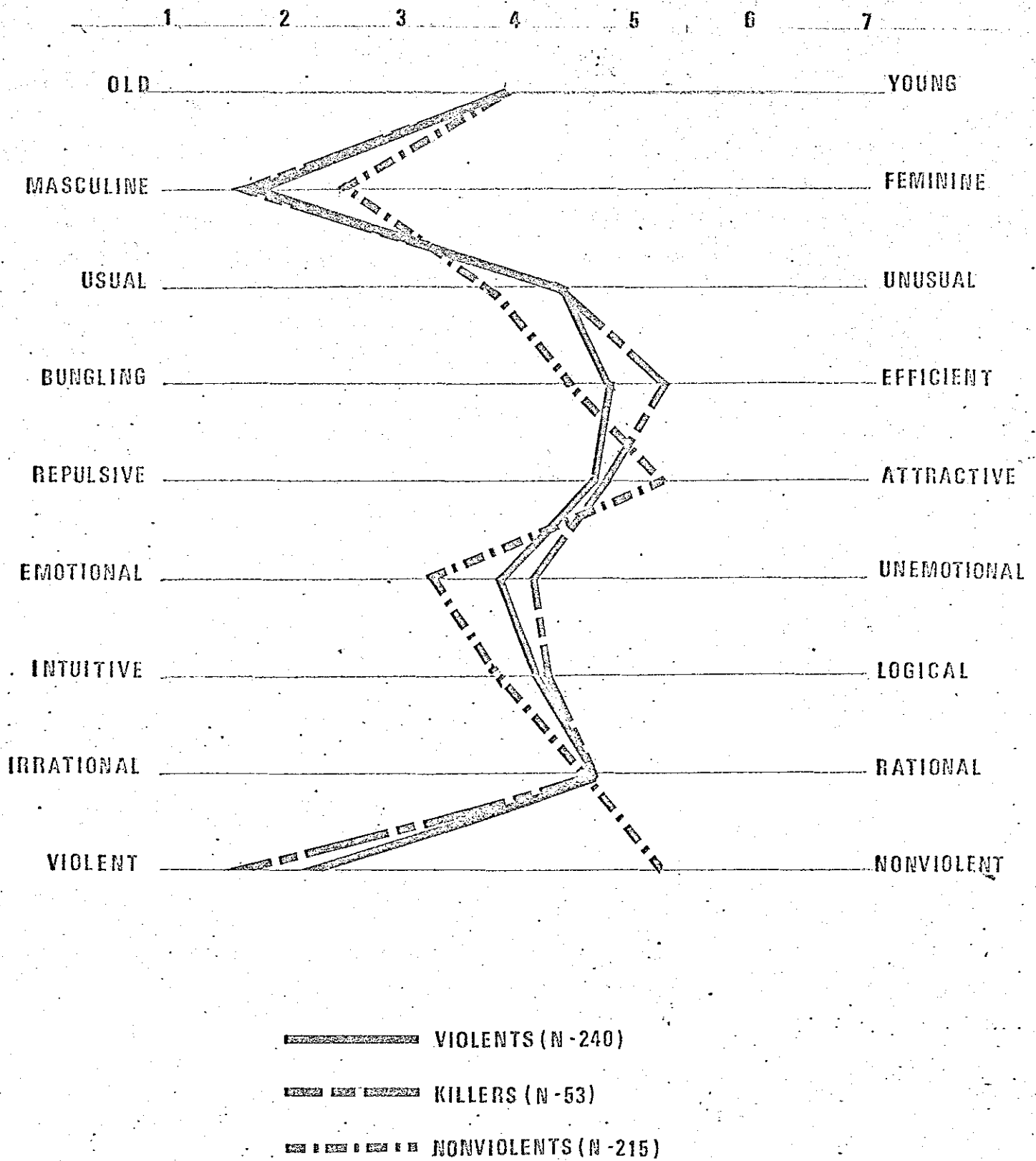


FIGURE 2: PERSONALITY PROFILES OF CHARACTERS BY VIOLENCE-RELATED ROLES IN TELEVISION DRAMA

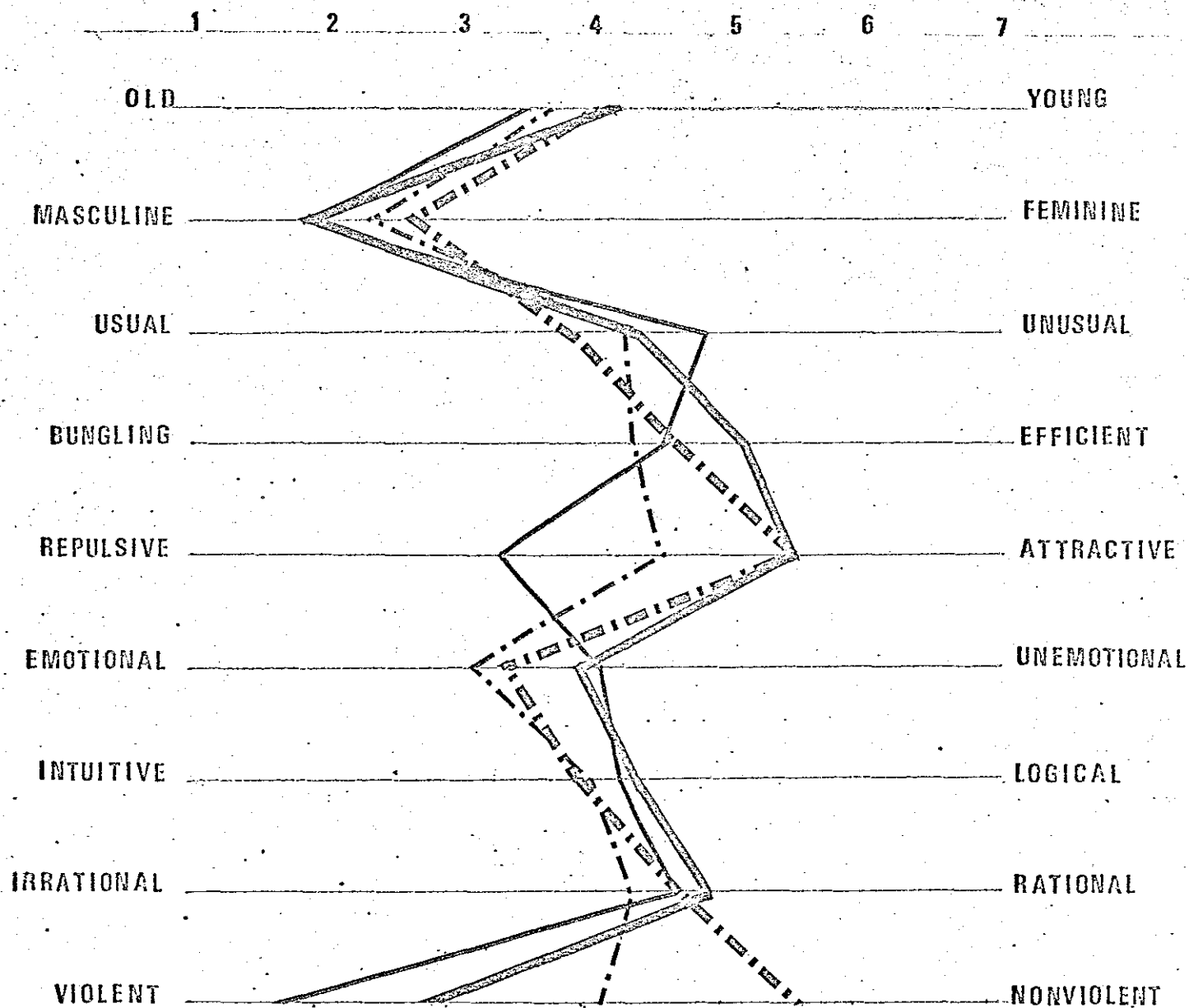


FIGURE 3: PERSONALITY PROFILES OF CHARACTERS BY FINAL OUTCOME

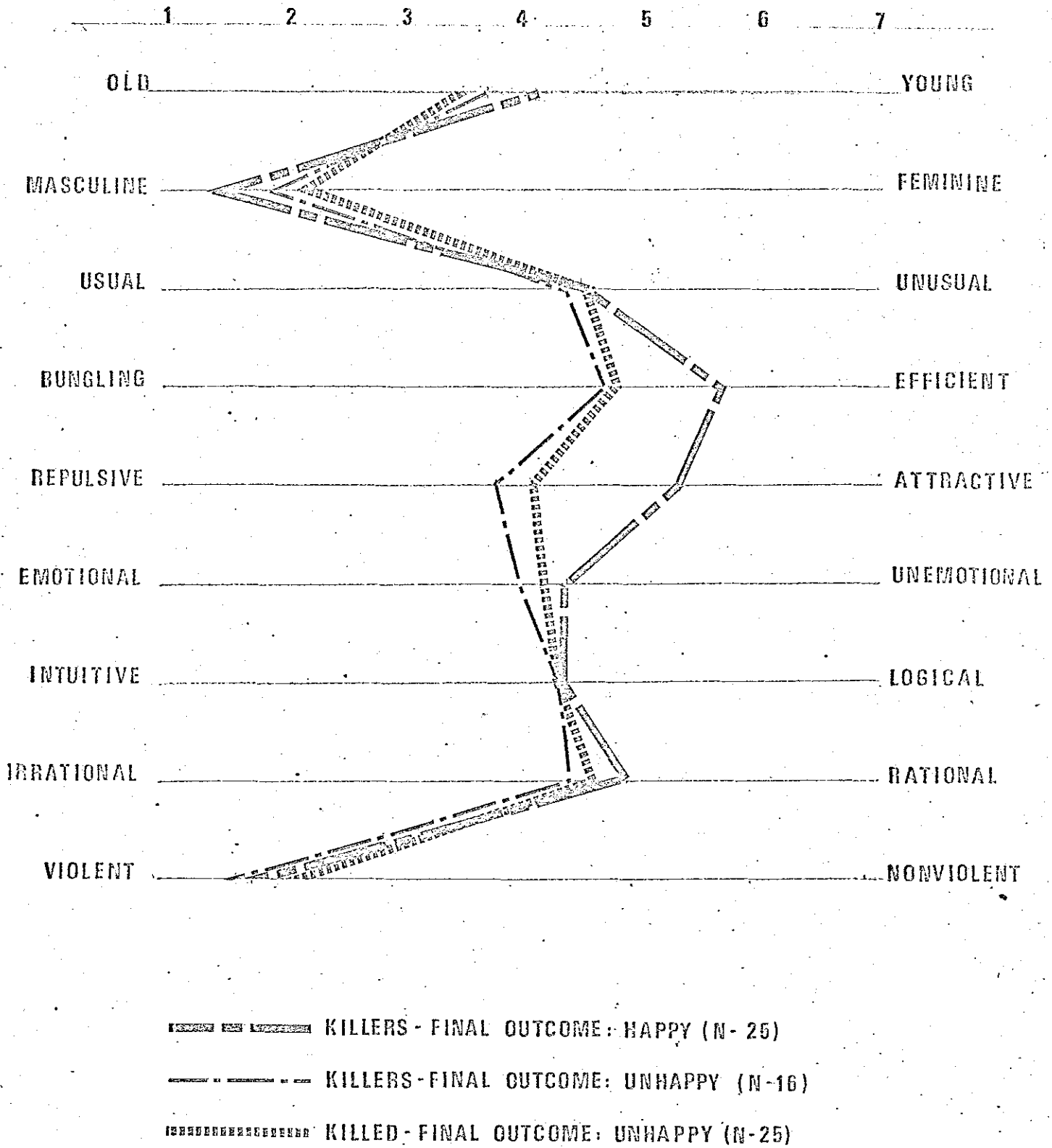


FIGURE 4: PERSONALITY PROFILES OF "KILLERS" AND "KILLED"

Passages in order of percentage of representation in

Politics has much to do
 A heart-rending affair
 Unjust conditions
 Modest means, heavy burdens
 "Knight with sad face"
 Good man, terrible accident
 A defective personality
 A contemptible wretch
 Happy childhood, easy life
 Not a political case
 National disgrace

Left Press	Commercial Press	Right Press
%	%	%
68		20
64		24
58		27
57		28
50		22
38	31	31
21	46	33
24	34	42
10	35	55
6	38	56
3	34	63

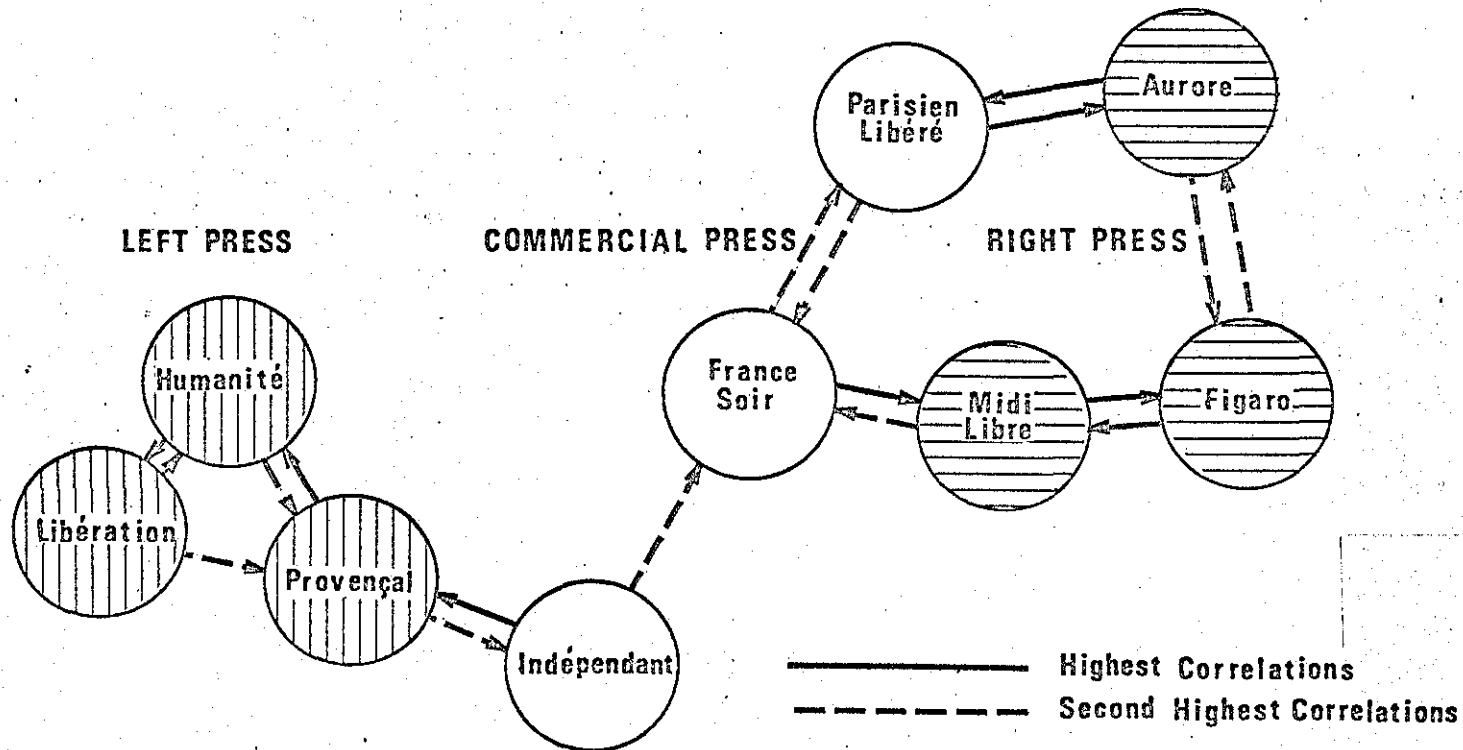
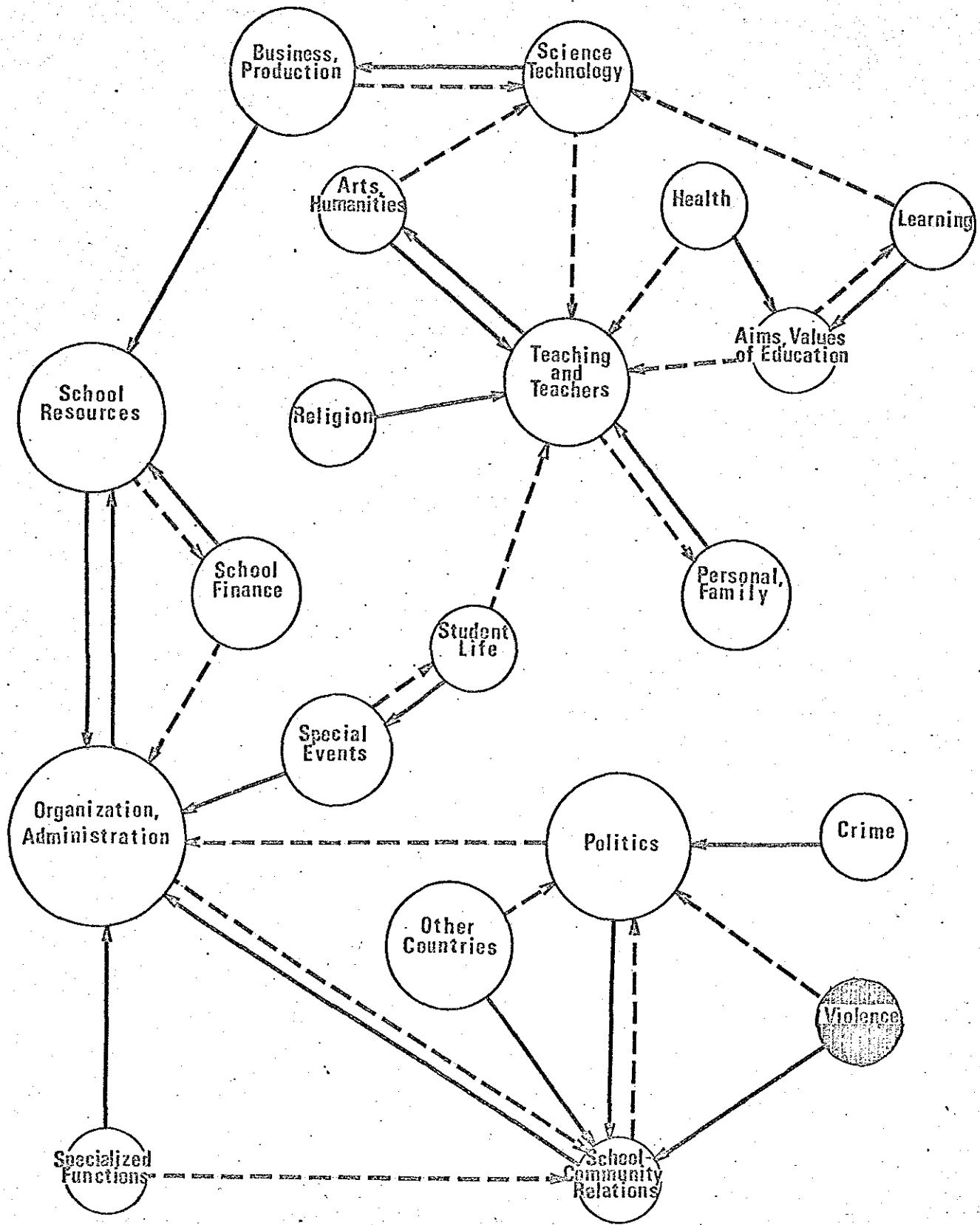


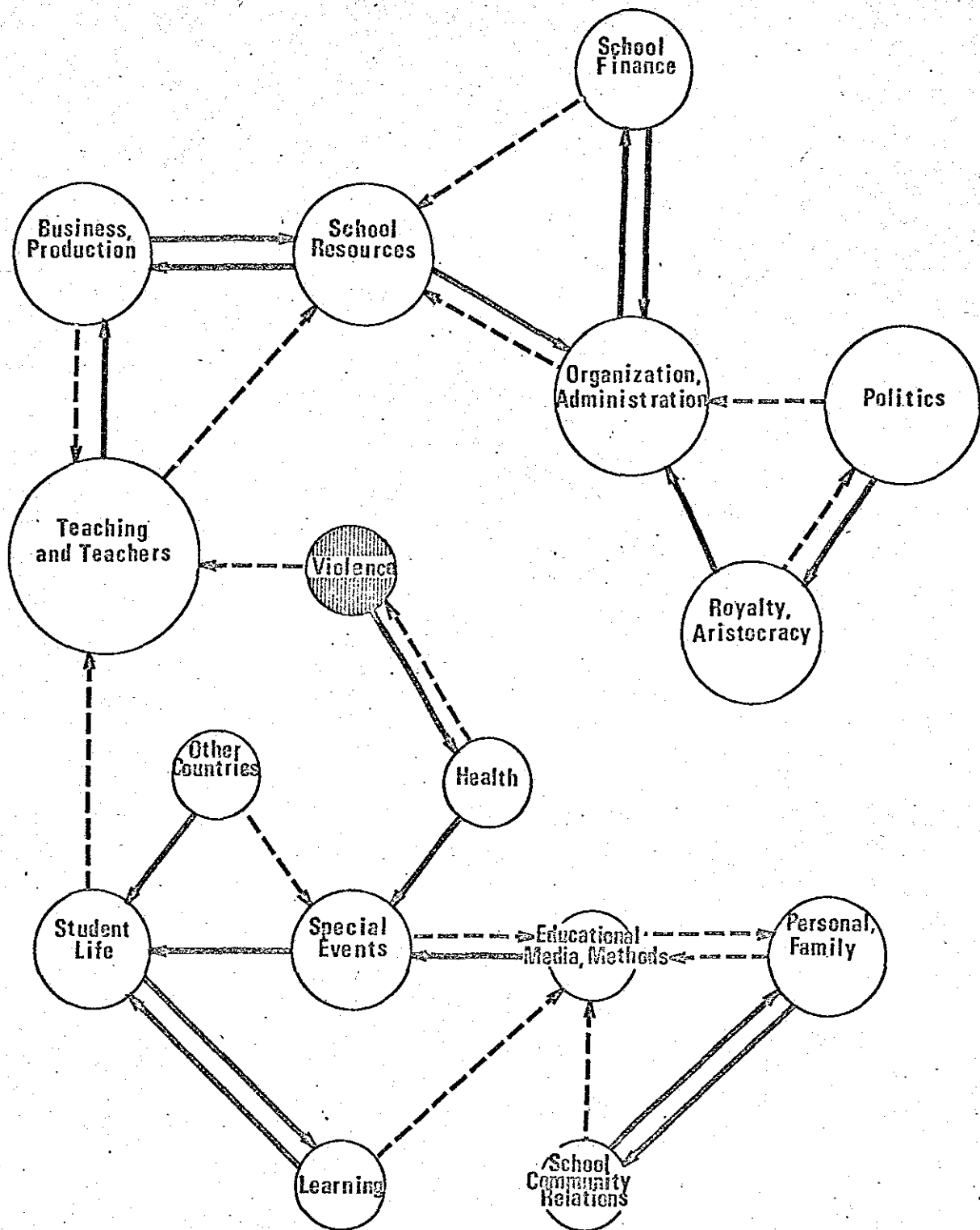
FIGURE 5: IDEOLOGICAL PERSPECTIVES AND CORRELATIONS AMONG NEWSPAPERS IN THE REPORTING OF A CASE OF CRIMINAL VIOLENCE IN THE FRENCH PRESS



————— HIGHEST CORRELATION

- - - - - SECOND HIGHEST CORRELATION

FIGURE 6: VIOLENCE IN THE STRUCTURE OF EDUCATIONAL PRESS COVERAGE IN U.S. NEWSPAPERS



————— HIGHEST CORRELATION
 - - - - - SECOND HIGHEST CORRELATION

FIGURE 7: VIOLENCE IN THE STRUCTURE OF EDUCATIONAL PRESS COVERAGE IN BRITISH NEWSPAPERS

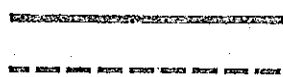
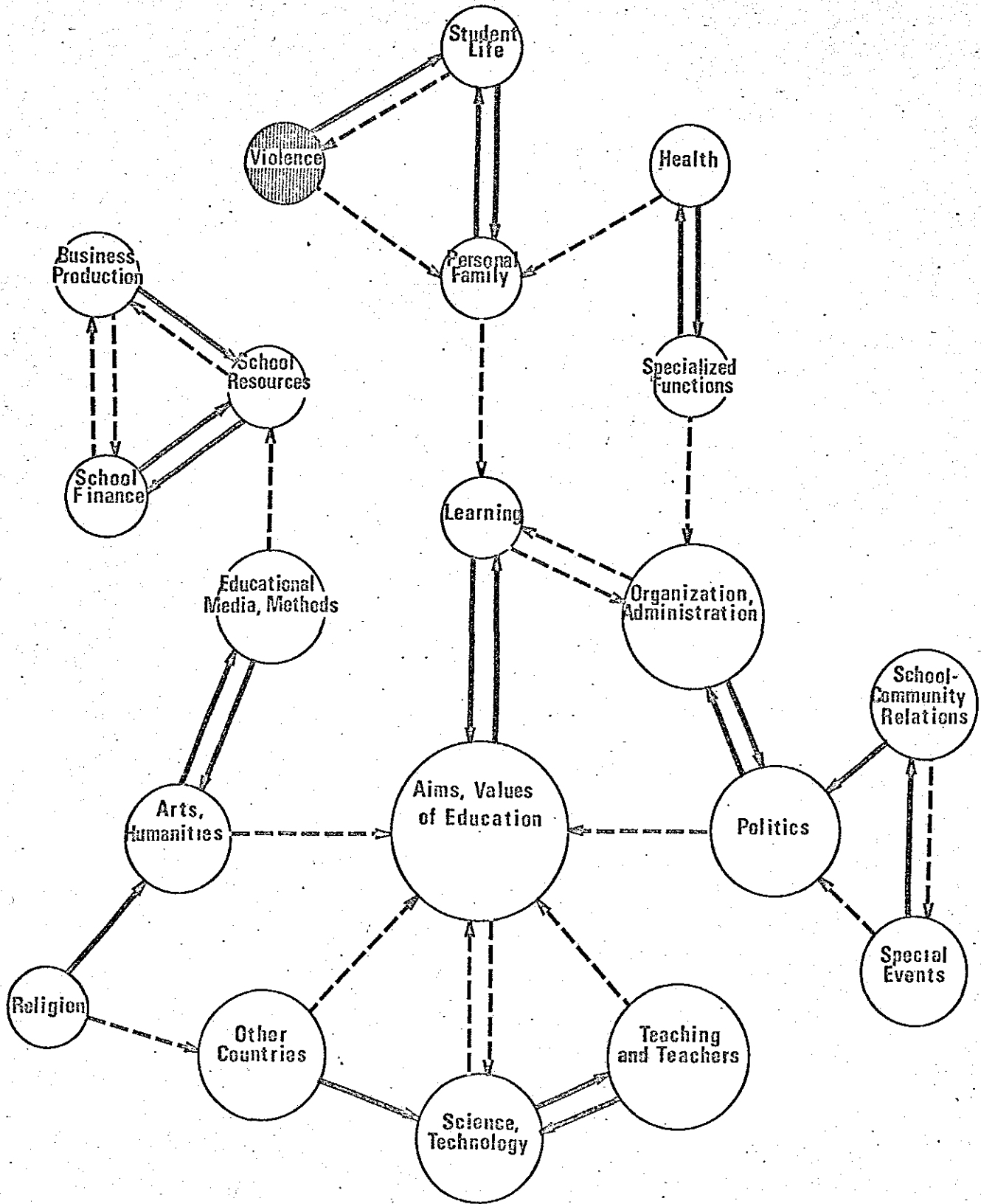


FIGURE 8: VIOLENCE IN THE STRUCTURE OF EDUCATIONAL PRESS COVERAGE IN WEST GERMAN NEWSPAPERS