The improbability of communication

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Without communication there can be no human relations, indeed no human life. Communication theory cannot therefore be confined to examining only certain sectors of life in society. It is not enough to engage in exhaustive discussion of particular techniques of communication, even though, because of their very novelty, such techniques and their consequences are attracting special attention in contemporary society. It is equally inadequate to begin with a discussion of concepts.[1] That would serve a useful purpose only if one already knew what the concept was intended to achieve and in what theoretical field it was to be applied. But no consensus on such points can be assumed, and we shall therefore begin by distinguishing two different theoretical approaches whereby a scientific theory can be constructed.

One type of theory looks for possible ways of improving the status quo. It is guided by conceptions of perfection or health or optimum conditions in the broadest sense of the term. This was the line of thought pursued by Bacon and his followers. A scientific knowledge of natural principles and the avoidance of errors of judgement are not absolutely necessary for the preservation of the world, just as a knowledge of optics is not necessary for seeing properly. But they help to iron out flaws and gradually to improve the conditions in which people live.

The other type of theory is based on an assumption of improbability. Averse, like the first types from mere perpetuation of the status quo, it lays aside the routine expectations and certainties of everyday life and sets out to explain how relationships which are intrinsically improbable are none the less possible, and indeed can be expected to occur with a high degree of certainty. In contrast to Bacon, Hobbes based his political theory on such an assumption of improbility; and, unlike Galileo, Kant no longer relied on the possibility of an empirical knowledge of nature but cast doubt on synthetic knowledge as such and then investigated the preconditions for such knowledge. In this case, therefore, the

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major issue is not how to achieve practical improvements but how to answer a theoretical question that arises prior to any improvement, namely, how can an order be created that transforms the impossible into the possible and the improbable into the probable?

The following discussion remains strictly within the limits defined by the question just formulated, with the object of finding a suitable theoretical structure for the field of communication, as the only appropriate way of identifying the universal principles underlying all societies. But there are also practical motives making themselves felt with increasing urgency in a society geared towards growth and welfare. One can no longer proceed on the naïve assumption that improvements will always be possible on the basis of 'nature', be it physical nature or human nature.[2] If nature is understood as improbability that has been surmounted, another standard has to be applied in assessing what has been achieved and what must be improved; at least then it becomes clear that the dissolution of an existing order implies a return to the improbability of a new combination.

Communication as a problem

The type of communication theory we are trying to advise therefore starts from the premise that communication is improbable, despite the fact that we experience and practise it every day of our lives and would not exist without it. This improbability of which we have become unaware must first be understood, and to do so requires what might be described as a contra-phenomenological effort, viewing communication not as a phenomenon but as a problem; thus, instead of looking for the most appropriate concept to cover the facts, we must first ask how communication is possible at all.

Immediately, it becomes evident that a multitude of problems and obstacles have to be surmounted before communication can come about.

The first improbability is that, given the separateness and individuality of human consciousness, one person can understand what another means. Meaning can be understood only in context, and context for each individual consists primarily of what his own memory supplies.

The second improbability relates to the reaching of recipients. It is improbable that a communication should reach more persons than are present in a given situation. The problem is one of extension in space and time. The system of interaction among those present in each case assures, in practical terms, an adequate measure of attention for the purposes of communication, but the system collapses if a desire not to communicate is perceptibly communicated. Beyond the limits of this interactional system, however, the rules obtaining in that context can no longer be imposed. Hence, even if the communication finds means of conveyance that are mobile and

constant over time, it is still improbable that it will command attention. In other situations people have other things to do.

The third improbability is the improbability of success. Even if a communication is understood, there can be no assurance of its being accepted. By 'success' I mean that the recipient of the communication accepts the selective content of the communication (the information) as a premise of his own behaviour, thus joining further selections to the primary selection and reinforcing its selectivity in the process. In this context, acceptance as a premise of one's own behaviour can mean acting in accordance with corresponding directives but also processing experiences, thoughts and other perceptions on the assumption that a certain piece of information is correct.

These improbabilities are not only obstacles preventing a communication from reaching its target; they also function as thresholds of discouragement and lead to abstention from communication if the prospects for it are thought to be inauspicious. The rule that it is impossible not to communicate[3] applies only among those present within interactional systems and even then it merely states that communication will take place, and not what will be communicated. There will be a tendency to abstain from communication when the prospects of reaching people and of meeting with understanding and success seem to be poor. But without communication there can be no social systems. Hence, the improbabilities of the process of communication and the way in which they can be surmounted and changed into probabilities govern the formation of social systems. The process of socio-cultural evolution can therefore be viewed as the transformation and expansion of the conditions for effective communication on which society constructs its social systems; this is clearly not just a process of growth but one of selection and of determining what kinds of social system are feasible and what kinds have to be rejected as too improbable.

The three types of improbability are mutually reinforcing. They cannot be dealt with and changed into probabilities one after another. The solution of one problem makes it that much more difficult to solve the others. The better one's understanding of a communication, the more grounds one has to reject it. When communication extends beyond the circle of those immediately present, understanding becomes more difficult and rejection again easier. The study of 'philosophy' seems to owe its origins to this law of increasing mutual impediments.[4] When writing enables communication to extend beyond the audience present, limited in time and space, the rhapsodical element of rhythmical verse can no longer be relied on, since it can only carry with it the people actually listening; the subject-matter itself must henceforth be the means of carrying conviction.[5]

This law that improbabilities mutually reinforce one another, and solutions to problems in one respect limit possibilities in other respects, implies that there is no direct way of achieving a progressive improvement in mutual understanding. Any efforts in this direction tend rather to run up against a growth problem

coupled with increasingly irreconcilable demands. In the actual operation of the modern mass-communication system, of course, people behave as though these problems have already been solved. In fact, they are no longer perceptible from the vantage point of particular offices in newspapers and broadcasting organizations. None the less, the question arises whether the structures of modern society are not essentially determined by the fact that the solutions to problems are mutually obstructive and generate a continual series of fresh problems.

The concept of the media

This theory requires a general concept covering the whole range of agencies involved in transforming improbable into probable communication in respect of all three basic problems. I propose to refer to such agencies as 'media'. Normally, we speak only of the mass media, a term applied to techniques—principally the press and broadcasting—used to extend communication to an absent public. Parsons has added the concept of symbolically generalized 'media of interchange' and developed a corresponding theory on the analogy of money.[6] Since then the concept of the media has been used in two different senses in the social sciences and can only be understood from the particular context or with the aid of additional explanations. The suggestion that the concept be related to the problem of improbability in the process of communication and thus defined in functional terms might dissipate this confusion and at the same time help to clarify the significance and scope of three different kinds of media.

The medium that extends our understanding of communications beyond basic perception is language. It uses symbolic generalizations to replace, to represent or to put together perceptions and to solve the resulting problems of mutual comprehension. In other words, language specializes in creating the impression of mutual understanding as the basis for further communication, however fragile the grounds for that impression may be.

The dissemination media are not adequately defined by the term 'mass media'. In particular, the invention of writing already fulfilled the function of transcending the bounds of immediate presence and face-to-face communication. Dissemination may be achieved through the medium of writing but also through the use of other procedures designed to preserve information in a fixed form. The selective influence of such media on culture can hardly be overestimated, since they enormously expand the store of memorized data available for additional communication, while at the same time restricting it through selectivity.

Generally speaking, communication theory has concentrated on these two types of media. But the resulting picture is seriously unbalanced. Only by endeavouring to discover which communication media are likely to be most successful can one develop a theory which really faces up to the problems of communication

in society. The third kind of media may be described as symbolically generalized communication media because they alone effectively achieve the objective of communication.[7] With reference to social systems, Parsons mentions as examples of this type of medium, money, power, influence and value commitments. To this list I would add truth in the realm of science and love in the realm of intimate relationships.[8] The various media cover the major branches of the social system which have a civilizing influence and the main subsystems of modern society. This shows the extent to which, in the course of development, an increase in the possibilities of communication has been conducive to the formation of systems and the differentiation of special systems in the fields of economics, politics, religion, science, etc.

Symbolically generalized communication media can come into existence only when dissemination techniques enable the boundaries of face-to-face inter-action to be transcended, and information to be stored up for an absent public of unknown proportions and for situations not yet exactly determined. In other words, they depend on the prior invention of a generally available form of writing.[9] In the face of such vastly expanded possibilities of communication, the guarantees of success provided by interactional systems, dependent as they are on physical presence, break down. They must be replaced or at least supplemented by more abstract and at the same time more specific means. Thus, in the Greek classical world, new code words (*nómos, alétheia, philia*) and correspondingly differentiated systems of standards were developed, denoting the conditions in which a prob-ability of acceptance could still be assumed even though communication had become that much more improbable. Since then nobody has ever succeeded in combining all the conditions for successful communication in a unified system of semantics applicable to all situations and, since the invention of printing, the differences between these communication media are becoming so pronounced that they ultimately break down even the premises of a unified natural, moral and legal foundation to life: reasons of state and passionate love, methodically discovered scientific truth, money and law all follow their different paths by specializing in different improbabilities of successful communication. They use different channels of communication—the state, for instance, uses the armed forces and the administrative hierarchy, passionate love uses the salon, the (publishable) letter and the novel—and this leads to the differentiation of distinct functional systems, which ultimately make it possible to abandon an order of society based on fixed classes and allow modern society to take its place.

This brief sketch brings out the dual aspect of our theoretical concept. Order is created by virtue of the fact that communication, though improbable, is none the less made possible and becomes the normal situation in social systems. But the improbability of dissemination, once it has been surmounted by techno-logical means, increases the improbability of success. New demands are made on culture as a result of changes in the field of communication technology. The

established order of its media of persuasion comes under pressure from changed standards of plausibility, so that some elements become superfluous—for instance the cult of the past—and others are encouraged—for instance the cult of the 'new'. All in all, a pronounced trend towards greater differentiation and specialization is discernible and hence also a need to institutionalize the arbitrary to an ever-increasing extent. At the same time, the pace of change is gradually accelerating, as generally happens in the course of human development,[10] so that means of overcoming increasing improbabilities in ever faster succession have to be developed out of what is already available, a task which becomes increasingly unrealistic if only on account of the time factor and leads to selection by the criterion of speed.

Modern communication facilities

Current discussions of the impact of the new mass media are restricted by their unduly narrow approach to the problem. Taking the concept of the 'masses' as their starting-point, they investigate the influence of the media on individual behaviour. Viewed in this light, the social repercussions are due to the wholesale deformation of individual behaviour by the popular press, films and radio. Even changes only just taking shape in this sector, such as increased access to broadcast material, or indeed to communication in general within one's own home, are anticipated by reference to this point of view. I do not wish to deny the validity of this method of research. But when such a narrow approach is adopted certain important changes are entirely overlooked. For society must always be seen as a heterogeneous system; it does not consist merely of a large number of individual actions but is composed of subsystems and subsystems within subsystems, and it is only through association which such subsystems—for instance, the family, politics, economics, law, the health system, education—that actions can assume social relevance in the sense of repercussions being felt beyond the initial situation.

A much more comprehensive approach must therefore be adopted in order to gain a general picture of the changes being brought about in modern society because of the structure of its communication facilities. The problem of the improbability of communication in general and the idea of society as a heterogeneous system converge, since any system represents the transformation of the improbability of communication into the probable. Account must therefore be taken both of the changes in communication technology and of the different and changing prospects for successful communication as well as of the mutual repercussions of the two problem areas. In addition to all this, there is the question whether, independently of the medium, there may be, through the differentiation of systems, further direct effects on individual attitudes and motivation which, in the light of systems theory, appertain to the environment of the social system

of society as a whole and react on it for this very reason. This problem of a latent, so to speak demographic, effect has recently made its way into analyses of the educational system as well, being reflected for instance in the catchphrase 'hidden curriculum'.[11] Similarly, it can be assumed (and in this context there are grounds for a comparison between the mass media and mass education in schools) that the organized mass media also operate selective restrictions on the repertoire of attitudes and motivations to which other subsystems of society can have recourse.

Of course, the scope of this article does not allow even an approximate description of such a wide-ranging programme. We shall have to confine ourselves to a number of examples which may serve to illustrate some of the possible problems to be investigated.

However one defines the functional prerequisites for the preservation or development of a society, it cannot be assumed that the improvement in the prospects for successful communication will be equally advantageous to all functional spheres. The type of modern society that has its roots in Europe has hitherto been largely supported by a limited number of symbolically generalized communication media which have proved highly effective, more particularly by theoretically and methodically guaranteed scientific truth, by money and by political power shared in accordance with the law. This reflects the prominence of science, economics and politics in the general consciousness of this type of society. Even Parsons' theory of the general action system is based on the assumption that all functional domains can rely equally on a communication medium as a logical corollary of their differentiation. This is wishful thinking.[12] In any case, it will have to be accepted that there are neither natural nor theoretical guarantees for such a convergence of functional needs and communication prospects.

It is particularly noteworthy in this connection that no symbolically generalized communication medium has been developed to support the manifold activities designed to bring about change in individuals, ranging from education to therapeutic treatment and rehabilitation, although this is functional domain totally dependent on communication. In this field, personal interaction remains the only way of convincing people of the desirability of change. Strictly speaking, there is as yet no scientifically reliable technology for this purpose.[13] Truth, money, law, power, love none of these can offer adequate resources with sure prospects of success. An increasing amount of personal and interactional energy is being invested in this problem area without any real idea of whether or how technological inefficiency can be offset by such investment.

The above example shows that the problem of unbalanced development undoubtedly exists. In some fields the transformation of the improbable into what may be routinely expected is so successful that complex systems can be technologically controlled even though, in their basic processes, they depend on free decision-making. In other fields development is at a standstill because, as

performance demands increase, discouraging thresholds of improbability are reached even within simple interactional systems.

Our next examples are drawn from investigation of the repercussions of dissemination techniques on the functional divisions of society and on its communication media. The invention of printing clearly resulted in a very rapid transformation of the conditions in which important functions of the social system are fulfilled. Much of the development of religious radicalism which ultimately led to the splitting up of the various denominations was attributable to printing, because it publicly crystallized positions, making it difficult for their authors to retract once they had been identified with them.[14] In the realm of politics, printing opened up opportunities for exerting political influence and making a political career outside court circles; renunciation of court office no longer necessarily implied renunciation of political influence,[15] and politics had to adapt itself to this new state of affairs. In the sphere of social life and intimate relationships, printing led on the one hand to increased educational opportunities and on the other to misguided aspirations; it was an incitement to imitation but at the same time exaggerated the possibilities of imitation.[16] It recommended rules but left their observance to the individual's discretion.[17] Generally speaking, therefore, printing changes the repertoires from which functional systems select their operations; it can broaden the range of possibilities but also complicate the process of selection.

This continues to apply when the mass media have become independent of education and have appreciably expanded their possibilities. But are there any identifiable guidelines? We can only resort to conjecture. A kind of media-based culture may develop whose sole justification lies in the fact that it is presupposed by the media programmes themselves. But does this mean that morals corrupt power, as suggested by Arnold Gehlen with reference to the United States?[18] And are there not equally good grounds for the contrary assumption, namely that power can quite easily corrupt morals by changing the basic assumptions of the programmes?

But there is less evidence to confirm such theories regarding mass-media modification of basic political assumptions than to support the existence of more formal effects. Above all, the time structure of political action changes when it is constantly being reflected in the mass media. It tends to accelerate because politicians have to react from one moment to the next to the fact that, and the way in which, their actions are reported. The manœuvring that this entails effectively precludes consistent adherence to a political theory and the conditions for participating in political life, though in one respect enormously expanded in democracies, are none the less restricted by the fact that it is necessary to keep constantly abreast of the latest developments.

However realistic such analyses may be, their starting-point is the general assumption of the selectivity of all achievements in transforming the improbable

into the probable. At each new and higher level of improbably probable communication achieved through improved technology, balance must be restored through new institutional expedients. And again, how can we be sure that satisfactory solutions will always be possible for each functional domain?

The problems discussed above with regard to the immediate repercussions of communication technology on functional systems must be differentiated from the question whether the organized mass media system changes the personal attitudes and motivations to which society can refer for the purpose of encouraging socially acceptable behaviour on a selective basis.[19] This, of course, has further indirect repercussions on the possibilities open to politics, science, the family, religion, etc. But these functional systems already exert a direct influence on the mass media without being pressurized by the motivations of their members. Take, for instance, the problems of church policy posed by the Küng case, in which provocation and reaction, courage and hesitation, reforming tendencies and conservative adherence to principles were all brought forward for the benefit of the mass media.

Leaving this aside, we may also have to consider the above-mentioned 'demographic' impact of the mass media which consists in the formation of collective mentalities that subsequently give rise to conditions capable of affecting all social systems. But this certainly does not warrant the conclusion that uniform, mass attitudes are generated among the population in this fashion, for instance by television. It is more realistic to assume that certain principles followed in determining whether something should be printed or broadcast are passed on to the public; and it is in fact such principles which define what shall appear as information.[20] Perhaps the most important principle of this kind is that a thing should seem new or out of the ordinary in order to be worth reporting. This does not rule out, but rather includes, monotonous repetition (football, accidents, government communiqués, crime). Another similar principle of selection is conflict.[21] It must be assumed that such principles, which constantly stress discontinuity as opposed to continuity, tend to undermine confidence. It is quite conceivable that they stimulate simultaneous demands for protection against and participation in change, thus generating both fears and claims. Society's political and economic system, whether it is held together by a private-capitalist or state-capitalist order, may thus find it increasingly difficult to meet the expectations of the population.

'Are we asking the right questions?' was a concern voiced at a Unesco conference on the mass media.[22] And even at the end of our outline of problems we still cannot be sure whether the questions being asked are the 'right' ones, while a philosopher will be inclined to ask whether the 'right' questions exist at all. None the less, it should be possible to develop a more radical and systematic approach to the study and solution of problems in the field of communications research than has hitherto been the rule. The connection between improbability

and the formation of systems is one of the concepts that systems theory has to offer in this context. If the problem of improbability is taken as the starting-point, there is an automatic tendency to ask if not the right questions at least more fundamental ones which recognize that the issue of the connection between communication and society is not confined to the field of communications research but is in fact central to all social theory.

[Translated from German]

Notes

1 In *Kommunikation: Eine Begriffs- und Prozess-analyse*, Opladen, 1977, Klaus Merten attempted to analyse such discussions with a view to identifying common characteristics.

2 For statements of this kind see, for example, Joseph Glanvill, *The Vanity of Dogmatizing*, London, 1661; Francis Hutcheson, Preface to *An Essay on the Nature and Conduct of the Passions and Affections*, London, 1728.

3 Paul Watzlawick, Janet H. Beavin and Don D. Jackson, *Pragmatics of Human Communication: A Study of Interactional Patterns, Pathologies and Paradoxes*, pp. 48, 72 et seq., New York, 1967.

4 Cf. Eric A. Havelock, Preface to *Plato*, Cambridge, Mass., 1963.

5 On the development of non-verse literary art forms, see also Rudolf Kassel, 'Dichtkunst und Versifikation bei den Griechen', lecture to the Rheinisch-Westfälischen Akademie der Wissenschaften, 1980.

6 The most important essays on this subject have been recently reprinted in Talcott Parsons, *Politics and Social Structure*, New York, 1969. See also Talcott Parsons, 'Social Structure and the Symbolic Media of Interchange', in Peter M. Blau (ed.), *Approaches to the Study of Social Structure*, pp. 94–120, New York, 1975. Noteworthy among the numerous secondary commentaries are: David A. Baldwin, 'Money and Power', *The Journal of Politics*, No. 33, 1971, pp. 578–614; Rainer C. Baum, 'On Societal Media Dynamics', in Jan J. Loubser et al. (eds.), *Explorations in General Theory in Social Science: Essays in Honor of Talcott Parsons*, Vol. II, pp. 579–608, New York, 1976; Jürgen Habermas, 'Handlung und System—Bemerkungen zu Parsons' Medientheorie,' in Wolfgang Schluchter (ed.), *Verhalten, Handeln und System—Talcott Parsons' Beitrag zur Entwicklung der Sozialwissenschaften*, pp. 68–105, Frankfurt, 1980;

Stefan Jensen, Jens Naumann, 'Commitments—'Medienkomponente einer ökonomischen Kulturtheorie?', *Zeitschrift für Soziologie*, No. 9, 1980, pp. 79–99; and Stefan Jensen's Introduction to his edition of Talcott Parsons', *Zur Theorie der sozialen Interaktionsmedien*, Opladen, 1980.

7 Although the issue is adequately understood from the point of view of content, the question of terminology is still wide open. Following Parsons, some use the term 'media exchange', some 'interactional media' and some 'communication media'. None of these is quite satisfactory. As is often found in the case of new theoretical discoveries, our existing vocabulary provides no exactly suitable term.

8 Cf. Niklas Luhmann, 'Einführende Bemerkungen zu einer Theorie symbolisch generalisierter Kommunikationsmedien', *Soziologische Aufklärung*, Vol. 2, pp. 170–92, Opladen, 1975; and, on Parsons' theories, Niklas Luhmann, 'Generalized Media and the Problem of Contingency', in Jan J. Loubser et al., op. cit., pp. 507–32.

9 For developments in the Greek *polis* which are of decisive importance in this context, see Jack Goody and Ian Watt, 'The Consequences of Literacy', *Comparative Studies in Society and History*, No. 5, 1963, pp. 304–45.

10 Cf. Gerard Piel, *The Acceleration of History*, New York, 1972.

11 See, in particular, Robert Dreeben, *On What is Learned in School*, Reading, Mass., 1968, and its probably, on the whole unduly optimistic assessment.

12 Thus, critics have noted the inherent limitations of an analogy between money and other communication media. For a recent discussion of this subject see, in particular, Habermas, op. cit.

13 Cf. Robert Dreeben, *The Nature of Teaching: Schools and the Work of Teachers*, Glenview,

Notes (*continued*)

Ill., 1970, in particular pp. 26, 81, 82 et seq.; Niklas Luhmann, Karl Eberhard Schorr, 'Das Technologiedefizit der Erziehung und die Pädagogik', *Zeitschrift fur Pädagogik*, No. 25, 1979, pp. 345–65.

[14] Cf. Elisabeth L. Eisenstein, 'L'avènement de l'imprimerie et la Réforme: une nouvelle approche au problème du démembrement de la chrétienté occidentale', *Annales ESC*, No. 26, 1971, pp. 1355–82.

[15] On this topic I would recommend J. H. Hexter's *The Vision of Politics on the Eve of the Reformation: More, Machiavelli and Seyssel*, London, 1973.

[16] 'An issue that has been much debated since the seventeenth century, especially with reference to women. See, for example, Jacques du Bosq, *L'honneste femme*, new edition, Rouen, 1639, especially pp. 17 et seq.; Pierre Daniel Huet, *Traité de l'origine des romans*, pp. 92 et seq., Paris, 1670, reprinted Stuttgart, 1966. For a modern view, see also Georg Jäger, *Empfindsamkeit und Roman*, pp. 57 et seq., Stuttgart, 1969.

[17] Cf. Erich Kohler, 'Je ne sais quoi: Ein Kapitel aus der Begriffsgeschichte des Unbegreiflichen', *Esprit und arkadische Freiheit: Aufsätze aus der Romania*, pp. 230–86, Frankfurt, 1966; Christoph Strosetzki, *Konversation: Ein Kapitel gesellschaftlicher und literarischer Pragmatik im Frankreich des 18. Jahrhunderts*, Frankfurt, 1978, especially pp. 125 et seq.

[18] Cf. Arnold Gehlen, 'Die gewaltlose Lenkung', in Oskar Schaty (ed.), *Die elektronische Revolution: Wie gefährlich sind die Massenmedien?*, pp. 49–64, Graz, 1975.

[19] On the underlying theoretical concept see Niklas Luhmann, 'Interpenetration: Zum Verhältnis personaler und sozialer Systeme', *Zeitschrift fur Soziologie*, No. 6, 1977, pp. 62–76.

[20] Here we are assuming an information concept whereby something can be regarded as information only if it is selected according to the criterion of difference. This means in turn that a comparative model is assumed for the purposes of identifying information, but this is not simultaneously conveyed to the public and thus cannot (or can only with difficulty) be controlled by or elicit a communicative reaction from the recipients.

[21] On this subject, see, in particular, Hans Mathias Kepplinger, *Realkultur und Medienkultur: Literarische Karrieren in der Bundesrepublik*, Freiburg, 1975.

[22] *Mass Media in Society: The Need of Research*, Paris, Unesco, 1970. (Reports and Papers on Mass Communication, 59.)