Conceptualising the dynamics of organisations: foundations for situational analysis

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Introduction

Situations have been focus for analysis in different social sciences - sociology, psychology, social psychology, anthropology, economics, politics and management. Most of these scientific disciplines look at situations from a specific perspective and almost all of the authors use the concept 'situation' in its natural language meaning without formulating precise definitions.

According to 'Chambers English Dictionary' and 'The Oxford English Dictionary', *Situation is a particular relation between the individual (his/her role, position, location, status) and the external to his/her circumstances (conditions, surrounding, relationships with the environment) at a particular time (critical point, coincidence) in reality*. According to this interpretation, situations are defined through the concepts *individuals, surroundings, relations* and *time*. The dynamic aspect of this complex relationship is introduced not only by the time dimension, but also by the involvement of other agents and institutions as mediators. For work situations these mediators are the organisation and the management system, and their dynamics is visualised in Figure 1.

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The dynamics of work situations as ever-changing organisation, management, environment and people have challenged social sciences since Taylor. However, the fragmentation of the system has led to the development of numerous theories, approaches, models and explanatory frameworks. This selective fragmentation has already proved unable to grasp the complexity of changes not only in practical but in theoretical terms as well.

Most of the organisational theories have focused on the relationship ‘individual - environment’ and the behavioural effect from the influence of ‘objective stimulus’, presented as situational factors. The reverse effect that the behaviour has upon the objective stimulus forms an under-researched area.

We approached the argument ‘determinism vs. choice’ from an alternative perspective - a synthesis of determinism and choice, of system thinking and action thinking in dealing with organised social entities.

The deterministic orientation is well represented in the Systems approach. However, the categories that are used in research are at different levels of abstraction and usually describe a diverse set of relationships. The research has evolved mainly by including new categories as more significant and replacing others - as non-relevant.

The leading theoretical models based on system thinking are: the Aston systemic model (Pugh and Hickson, 1976); the universalistic approach in management (Ritchie, 1993); the technical perspective; the critical perspective; and the technological perspective. (Reed, 1989)

The Action approach in contrast, as representing the choice perspective in organisation theory, attempts to look at the dynamic changes in the relationships between individual, organisation, management and environment. The leading models based on action thinking are: the population - ecology model; the institutional model; the resource dependence model; the political perspective. The Action approach is characterised by application of a relativistic logic. The continuous processes of adaptation, re-negotiation and institutionalisation of practices are analysed including the reverse effect of the actions of individuals, determining their surroundings. (For more detailed discussion of the theoretical perspectives, based on system and action thinking, see Todeva, 1994.)

**Theoretical model for situational analysis**

The aim of this theoretical model is to provide more detailed elaboration of the organisational system and to integrate the deterministic approaches, based on system thinking with the relativistic perspectives within the action approach.

The model for situational analysis conceptualises work organisations in two ways. First it is constructed in blocks of factors that determine the relationship between the individual and the surroundings. The blocks are organised in four groups according to the level of abstraction and generalisability - individual behaviour, management system, organisation and environment (Fig. 2.).
Second, the situational factors are described through their particular characteristics (measures, indicators) with emphasis on the process of interaction between dependent and independent variables (Fig. 3.).

All characteristics of the organisation, the management and the individual are treated as objective factors determining the social processes. Each of these factors is viewed simultaneously as an independent variable (cause), and a dependent variable (effect). This multi-variance and reversibility of the effect appears as a major characteristic of the interaction between the acting individuals and their environment, in result of which any particular situation is generated.

Figure 2. Situational model of the organisational system

The four levels of analysis represent four different ways of reviewing the problems that may occur in a situation. The organisational system itself, presented in the three circles in Fig. 1 and 2., is discussed in details in this paper. It comprises of the three levels of analysis - individual, management and organisation. The most abstract level of analysis of organisational problems is
at the level of general organisational characteristics - 1.A. structure, 1.B. strategy, 1.C. power and control, and 1.D. organisational context (Fig. 2. and 3.).

The second level of abstraction is focused on the management system as an institutionalisation of practices, technologies and outcomes. It is presented in the intermediate circle and includes Technology, Management, Personnel, Conditions of Work, Social Relations and Product of Work (blocks 2.A. - 2.G.).

The third level of abstraction includes details of the individual performance and response to the overall situation (blocks 3.A. - 3.D.). The forth level summarises the general characteristics of the environment determining the contingency options of an organisation and the accumulated effect of organisational activities (blocks 4.A., 4.B. and 4.C.). Figure 3. is a detailed elaboration on the characteristics of work situation from Fig. 2.

1. Characteristics of the organisation
The general organisational characteristics usually are studied on the basis of an expert assessment. Within this model they are discussed both as independent variables (or situational factors) and dependent variables, influenced by the activities at management level and by the specific environmental conditions.

1.A. Organisational structure (Fig. 3.) is characterised by the size, specialisation, integration, configuration of positions, information flow and location.

The division of functions among the departmental sub-structures in the organisation and their specialisation characterises the way organisation's activities are structured. (Pugh & Hickson, 1976; Pugh, 1988; Organisational Behaviour and Industrial Psychology, 1979).

As a whole the organisational structure is characterised also by the configuration of positions or the degree of correspondence between the established structure and the type of production technology. (Woodward In: Pugh, 1988)

The location of various sites also determines the configuration of positions in the organisation. (Pugh & Hickson, 1976)

An additional characteristic of the structure is the stability of configuration of positions. Intensive changes lead to instability of all processes in the organisational and the management block.

In regard to the communication system, two essential characteristics are specified: information supply (i.e. the structure of information channels and the continuity of information flow - Arnold, 1988) and the nature of the information itself or the degree of formality.

1.B. Organisation's strategy (Fig. 3.) is defined as the "long-term aims and goals concerning the main trends of action and development of the organisation and the distribution of means and resources in it". (Chandler in: Pugh, 1988) Strategy is characterised not only by the defined set of objectives, but also by the actual performance of the organisation, its efficiency and flexibility for change.
The performance level, according to Dawson, is measured through the following categories: sales volume, total assets, working capital, productivity, profitability, and stock-market performance. (Dawson, 1993) For this model, the profitability is taken as an integral part of the performance level.
assessment of the organisational performance, and the sales volume is considered as an integral evaluation and a characteristic of the final product (discussed in block eight).

One of the most controversial characteristics of the organisations is their efficiency. Klein quotes eight determining indices in respect to efficiency, including both economic and social criteria, i.e. profit, growth, resource utilisation, level of flexibility, innovative capacities, productivity, satisfaction of the clients, satisfaction of the workers. (Klein & Ritti, 1984)

The nature of the organisational change is another situational characteristic of the organisation. (Chandler in: Pugh, 1988). It is a measure of the flexibility of the organisation and may vary from 'strategy driven' to 'problem driven'.

1.C. The power in an organisation itself is defined as the “right to make decisions and give instructions”. (Arnold, 1988) It has a structure of its own, which depends on the formal division of responsibilities and is characterised by concentration at certain levels and in certain groups of individuals.

The power within organisation has another feature - succession - i.e. the way in which management rights are obtained. This characteristic is directly related to the concept of ownership and may vary in time.

Within the overall organisational structure, the process of decision-making is characterised with the level of centralisation and decentralisation. (Pugh & Hickson, 1976)

Another feature of the power and authority system (as independent variable) is the degree of standardisation of operations and links. On one hand, this characteristic is determined by the size and age of the organisation, but on the other, the degree of standardisation itself determines the control system and influences the overall management process, the character and nature of work, the social relations and individual motivation and performance.

An essential variable of the organisation is its control system measured by the degree of formalisation of communications and control. It affects directly the social relations, the individuals' feelings and attitudes, and it is a manifestation of the power and authority relations.

The dependence on higher ranking institutions is another characteristic influencing all other elements on the model (Pugh, 1988).

1.D. Contextual variables are organised in a separate block, as they can only be described but not measured. These are the origin and history of the organisation, its main resources and other parent organisations influencing its performance.

The main theoretical concepts related to organisational structure, strategy, power and control can be further operationalised in a way to measure particular characteristics in a scheme of interval scales.

The elements of the Management system are presented in blocks 2-8 on Figures 2 and 3. They describe the factors that mediate the interaction of the individual with the organisational
environment and form a distinctive level of analysis. The allocation of indicators in separate blocks is indicative for the purpose of clarity.

2. Characteristics of management systems
This level of analysis comprises of a complex set of indicators that give information about the management practices (as dependent variables) and the key factors which determine the working of the organisation (independent variables with direct impact on management).

2.A. Characteristics of technology
The technology in this study is interpreted as a "totality of skills, knowledge, methods of operation and technological equipment", that transform the object of labour into a product. (Flippo, 1978) In this sense technology appears as an outcome of its use by individuals, with their skills and knowledge; a product of the style of management in terms of the organisational infrastructure and decision making; and a state of the equipment.

On the other hand, as independent variable, technology with its particular features - complexity, automation and others, influences the entire production process and all the other elements of the specific work situation - nature and content of work, working conditions, final product, management style, organisational structure and strategy, social relations, work satisfaction, individual motivation, behaviour and performance (Figure 3.).

The characteristics of technology, as well as the characteristics of all blocks in the intermediate circle of the model may refer both to the organisation as a whole or to any sub-structure like department, branch or sector.

The main characteristics of technology within this model include: degree of automation; complexity of the operations; variability of the technological operations; interdependence of the individual places in the technological process; standardisation; stability/predictability of the results; workflow. (Buchanan, 1985; Klein, 1984; Dawson, 1993) (block 2.A., Fig. 3.)

The integral assessment of organisational technology aims to describe the actual processes and operations in their dynamics.

2.B. Characteristics of management structures and processes
At the management level of analysis there is a separate block of general characteristics of the management system itself, including the administrative procedures, policies and practices. The set of indicators included in this block differ from the organisational characteristics as being more specific and related to the main mechanisms for change.

The management system is described through two groups of characteristics. The first group focuses upon management structure, including the following characteristics: administrative hierarchy; correspondence between the formal structure of subordination (structure of tasks and responsibilities) and the informal structure of relationships; character of employment, or the character of the individual labour contracts; involvement of the trade unions in decision making.
The second group of characteristics refers to the process of establishing the necessary conditions and prerequisites for production and business activities, which includes all management functions and roles. Some of the key characteristics of the management process are: the balance between planned and achieved; definition of rules, procedures, norms and methods of work, i.e. the entire formal structure of production tasks, which is based on job description and work regulation; co-ordination of activities through precise direction of the obligations and responsibilities - to achieve unambiguity of professional roles and norms. (Kotze, 1980)

More complex characteristics of the outcomes of management activities are: the degree of co-ordination of procedures, rules and standards, and the congruence between formal and real requirements (Munsinger, 1978).

The characteristics of the management process include also the system of control (both administrative and public) with its most essential feature - the intensity of control.

The system of remuneration is another essential feature of the management system, which is portrayed by the following characteristics: evaluation of the criteria for assessment of the labour input (on the basis of comparability of operations and functions); and evaluation of the reverse control that the assessed people have over the assessment criteria. (Arnold, H., Feldman, D., 1988)

Management is also characterised by management style, i.e. the balance between management of tasks and management of people, between the autocratic and the democratic approach. (Munsinger, 1978; Fayol, In: Kakabadse, 1988)

2.C. Characteristics of the personnel

This block includes two types of indicators. The first type consist of variables which characterise the whole personnel, while the second type focuses upon individually specific characteristics. Both types of personnel characteristics influence directly social relations at work and are classified by many authors under the framework of group relations. However, we believe they should be studied separately as the personnel constitute one of the main resources in an organisation.

The first group of indicators evolves from the joint labour activity, from the process of social and professional adaptation of individuals and from the specific management decisions. These characteristics are: size of the working group; homogeneity of professional composition; homogeneity of social attitudes and similarity of views; commonness of goals, including personal objectives and internalisation of corporate objectives; shared values; similar ideas of fairness, prescribed code of ethics and standards of behaviour; symbols, stories, rituals. (Dawson, 1993)

The second group of characteristics does not reveal the commonness of the individuals but the differentiation between them, dividing them into sub-groups. These are the following variables: age; education, training, and commitment to a body of knowledge; occupational skill and professionally significant qualities; social, professional and work experience; social origin and relation to external grouping; degree of adaptation. (Dawson, 1993)
The assessment of the personnel on these indicators allows to identify potential conflict, opportunity networks and need analysis for organisational development.

2.D. Characteristics of content of work
The content of work is significant for the formation of the individual's perceptions of his / her psychological situation. David Buchanan (1979) presents an extensive scheme of the relationship between human needs and requirements from one's profession and the particular work content that meets these basic needs.

However, the research in this area has concentrated mainly upon the negative factors that develop dissatisfaction and build up physical fatigue and distress. (Locke, 1984)

The most recent analysis in this field suggests the following characteristics: variety and complexity of operations; clarity of tasks; significance of tasks; responsibility and activities required; independence; degree of control over the processes; feedback information about the results from the efforts; possibilities for creativity; workload; frequency of extreme situations. (Arnold and Feldman, 1988; Locke, In: Gruneberg, 1984; Dawson, 1993)

Locke's findings show that employees value and prefer work that corresponds with their personal interests, which is important, give them an opportunity to use their skills and abilities, chance to grow, variety of tasks, responsibilities with autonomy in making decisions; which involves a whole piece of work with definite and visible outcome, which is conceptualised as giving sense of purpose, and on which feedback is received. (Locke, 1984)

For more precise characteristic of jobs and classification of different professions, corresponding to variations in their content, Spenner suggests a modification of the classification system based on the Dictionary of Occupational Titles of 1970. (Spenner, 1980) According to his view, there are three major components relevant to the content of professions: relationship to data; relationship to people; relationship to objects.

All these characteristics are measurable through interval scales for a more detailed audit of the content of work in organisations.

2.E. Characteristics of conditions at work
For some authors the concept of 'working conditions' includes not only the physical environment, but also the organisational and technological environment as well as the specific production process and the economic relations. Such a broad interpretation of the working conditions is inappropriate as it would embrace almost all factors in this model into one block. For that reason 'working conditions' are interpreted only as the conditions of the physical environment. They are characterised by the following: micro-climate, ergonomic characteristics, communications, factors distracting attention, specific restrictions - including communication barriers, sensor and muscles deprivation, safety - as an integral assessment of the risk factors, health and sanitary conditions of work.
The assessment of the conditions is significant in relation to problems of managing the physical resources in a company and the implications on quality of the product and the social relations and organisational culture.

2.F. Characteristics of social relations
This area of social research is dominated by contradictory results and methods. In the theory of organisational behaviour social relations are subdivided into two major groups - relations concerning tasks fulfilment, and interpersonal relations, arising in the course of joint work. Both groups of relations have formal and informal aspects. The formal aspects are characterised by the following indicators: definition of the role and status, uniformity / ambiguity of roles, interdependence within the work team, supervisor's strategy, conflicts of the employees with the management staff (Pugh, 1988; Etzioni, 1980; Dawson, 1993).

The informal aspects of interpersonal relations according to Kotze are based on two major group processes - a process of social comparison and a process of social control.

The social comparison is a psychological mechanism used for comparison of abilities, social status, efforts and rewards, through which the individuals establish their level of demands and the corresponding expectations in order to meet them within the working process. (Kotze, 1980) It is characterised by: dependency and dominance in goal-setting between different groups; and changes in goals. (Dawson, 1993)

The process of social control is carried out by the group (team) through the requirement for individual conformity and the mechanism of group cohesion. A review of subsequent studies have shown that the relationship between group performance and cohesion is a complex one and depends on the group goal, the task structure and the dispersion of abilities within the group. (Lott and Lott, 1965)

According to the theory of social exchange of Homans, the interaction between the individual and the group is conducted through a system of 'payments' and 'rewards'. (Homans, 1961) On the basis of this 'exchange', processes of competition and co-operation arise within the team and 'referent groups' are formed for any individual.

Some additional characteristics of group relations are: internal group control, run through group's expectations and norms; psychological compatibility; social support among the members of the group; informal communication and activities; emotional contacts (agreement / disagreement, trust / mistrust, mutual understanding, sense of belonging and cohesion).

In the course of joint work certain stereotypes of work are set up, which affect both the process of work and the interpersonal relations and interactions.

A review of the social relations at work following the indicators in the model is important to highlight the adaptability of the social system to change.

2.G. Characteristics of product of work
Each business activity is characterised with a certain final outputs. For a manufacturing organisation the final product of work is characterised by range; degree of product completion;
quantity (compared to planned amount); quality; stability of production results. Evaluation of the final output gives a clear indication of the overall efficiency of management and organisational performance.

3. Psychological situation

The eight blocks at management level of analysis comprise those organisational characteristics (or factors) of the work situation that are perceived by the individuals as external to them. However, they modify the psychological situation of the individuals. Each individual perceives the situation in a different way which constitutes a specific psychological situation.

All four elements of the psychological situation - personality, motives, actions (or behaviour) and satisfaction - form the behavioural level of analysis in this model. The variables at this level can be studied through specialised tests. An evaluation of the way the individuals perceive the overall situation at work is significant for every organisational intervention.

3.A. Characteristics of motivation

The motivation in this model is conceptualised as a dynamic force, determining the individual performance and behaviour through personal decisions.

According to the expectations theory, the motives are a result of individual's comparison between the requirements of the work situation and one’s own needs in it; between probable rewards and probable losses.

The individual does not only make a decision on a particular act, but also defines the volume of efforts worth making. This choice is conditioned by the following factors: expected failures or losses; expected rewards; interest to work; drive for professional development; significance of the social results; self-confidence.

The significance and meaningfulness of the activity is measured by the personal meaning attributed by the individual to the elements of the actual situation in the process of their psychological perception and reflection.

O’ Brien defines two groups of indicators for the volume of individual effort, action and performance: individual characteristics (task perception, level of aspiration, individual abilities, personality) and group characteristics (learning, autonomy, social support and recognition, group co-operation, desirable future). (O’ Brien, 1984)

These two sets of variables determine the attitudes to work. Two additional elements have also an impact on work attitude: the way the individuals divide the rewards into external and internal rewards; the proportion between reversible and irreversible losses.

In the process of motivation the individual's life strategy holds a central place. Its power is expressed by the self-confidence and self-determination that each individual articulates.

The numerous quantitative research on motivation failed to deliver the expected outcomes and the issue of motivation became unpopular in the last few years. However, an understanding of
the individual response to change and organisational transformation is limited without assessing these characteristics of the work situation.

3.B. Characteristics of satisfaction
Job satisfaction is an emotional response. It is a feeling which may, or may not, cause action. The action itself is a choice from a range of alternative options. (Locke, 1984)

Modern studies in social psychology divide satisfaction into personal and general. According to the definition of Naumova, personal satisfaction is measured through the "equivalent exchange of values between the individual on one hand, and the team / organisation on the other" and general satisfaction is formed by exchange, based upon group status and group norm. (Naumova, 1988)

According to the theory of equivalent exchange the individual gives the organisation his/her time, efforts, education, experience, skills, abilities and ideas and receives in return material remuneration, promotion, recognition, security, fulfilment, personal gains and possibilities for social contacts and friendship. (Arnold and Feldman, 1988)

Lawler argues that satisfaction comes as a result of comparison between what is being received in the form of rewards and the individual's idea of what he/she should have received for his/her efforts. (Lawler, in: Pugh, 1988) Arnold adds that the rewards received are divided into 'external' and 'internal', and individual's idea of what he/she should have received is determined by his/her system of values, professional status and concepts of equality and justice. (Arnold and Feldman, 1988, p. 93)

External or extrinsic rewards for the individual could be: material remuneration; social recognition; additional incentives. (Arnold and Feldman, 1988)

The internal, or intrinsic rewards are connected with the conditions for creativity and for exercising and enlarging personal abilities. This, for example, is Vroom's sense of competence.

In management theory there are also a number of operationalised definitions of the basic factors which determine professional satisfaction of the workers: job security; content of work, (provides intrinsic motivation); amount of remuneration (provides extrinsic motivation); possibilities for promotion (do not provide motivation for everyone); competent and fair guidance; adequate professional requirements; recognition of the work done; comfortable, safe and pleasant working conditions; psychological compatibility with fellow colleagues. (Flippo and Munsinger, 1978; Arnold and Feldman, 1988; Locke, 1984; Dawson, 1993)

As already mentioned, the emotional response to all elements of the work situation influence individual performance and behaviour.

3.C. Characteristics of individual performance and behaviour
The relation between individual's behaviour and his/her psychological situation is reversible. Key determinants of individual’s behaviour are: motivation, abilities, perception, personality and the organisational systems and resources. (Arnold and Feldman, 1988)
In practical terms individual behaviour at work is manifested by the conscious actions, reactions, thoughts, assessments and opinions of the individuals. Three basic orientations of behaviour are revealed in the analysis: task-oriented behaviour; people-oriented behaviour; behaviour oriented to oneself. (Kakabadse, Ludlow, and Vinnicombe, 1988)

The major mechanisms operating in the formation of the psychological situation and the regulation of individual's behaviour are his/her perceptions and evaluations. As a form of adaptation individuals may correct their assessments of their own behaviour. They may correct the 'value' of perceived efforts, or the perception of the results (rewards and losses). Thus, the individuals can change subjectively their psychological situation. (Arnold and Feldman, 1988)

The individual's behaviour has also its objective dimensions (as independent variables). These characteristics include: working capacity; professional involvement; conformity of behaviour; direction of efforts (from initiative and constructive involvement to destructive conduct and aggression); adequacy of one's behaviour (as an estimate of the degree of adaptation to particular professional and personal roles).

3.D. Personality characteristics
An evaluation of personality characteristics is possible only through some specialised methods. In situational analysis of work organisation they could be used only to explain the psychological situation and the behaviour of individuals.

Some of the main studied variables of personality are the following: inherited nervous and psychological features, or unique genetic structure; living resources, including health; age; sex and all individual characteristics from block 4; orientation of the personality - as a system of demands, interests, beliefs, values; level of aspirations - as expectations, attitudes; role and status in the group. (Kotze, 1980; Naumova, 1988; Dawson, 1993)

While the status depends more on the objective characteristics of the individual's position, the role is being determined primarily by the subjective prescriptions of the other members of the team.

4. Characteristics of the environment
Different authors give different definitions of the environment. According to Hofer, the environmental variables are: market and customer behaviour; industrial structure; competitors; suppliers; organisation's characteristics and resources. (Hofer, 1975)

For Dawson, the organisational environment consist of: inputs (people, skills, knowledge, raw materials, components); outputs (goods and services, opportunities, constraints); regulations (law, customs, rules, procedures, networks); other organisations, individuals and groups (education, government, professional institutions, trade unions, competitors, customers, parent organisations). (Dawson, 1993)

For Anderson and Paine the main environmental variables determining strategic decision are: corporate size; market share; long-run industry growth; short-run market growth. (Anderson and Paine, 1975)
According to Ritchie's model for strategic decisions, the external environment consist of: economic, social, technological, legal, financial, organisation's markets, central and local government, interest groups or agencies within the community. (Ritchie, 1993)

In this wide diversity of approaches we made an attempt to integrate the elements of the environment in the following blocks:

4.A. **Economic and Market Conditions** (ownership, financial market, investments, labour market, industrial structure and growth, market structure and dynamics, competitors, suppliers, customers etc.).

4.B. **Social System** (including education and training, customer and market behaviour, social attitudes, values, expectations, co-operation, living conditions, professional networks, perceived environmental uncertainty).

4.C. **Political and Legal System** (including political organisation and relations, structure of power, local and central government, activities of the trade unions and other social and political organisations, interest groups, agencies, regulations and procedures).

The characteristics of the environment operate as determinants of the structure, strategy, power and context of the organisation, and exert a direct impact on all other elements of the labour situation.

**Conclusions**

The model as a whole reveals how complex is organisational research. If the propositions of the model are accepted, such a research will require an interdisciplinary approach and profound understanding of the cause-and-effect relationship of different factors and elements of the labour situation.

One of the barriers in organisational development practices is the inappropriate interference with complex relationships in business organisations. The organisational transformation approach in management consultancy attempts to address this complexity and the proposed model for situational analysis could be used as a framework and a reference point in evaluating organisational problems.

All levels of analysis in the proposed model contribute to the development of a deep understanding of the problems and opportunities in organisations which assist directly the process of planning and evaluating organisational change. The detailed evaluation and analysis of the factors in different blocks enables practitioners to avoid mistakes of failed collaboration and co-operation of employees, and prevents them from neglecting the environmental pressures in organisational development intervention.

This new approach also enables one to define relationships in new fluid structures and cluster organisations. Its application will improve the efficiency of consultancy efforts to identify the roots of organisational problems by following the cause and effect line of analysis, and to design more adequate, complex and integrated frameworks for organisational change and transformation.
References

