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Bridging the chasm between theory and research/practice in Communication Science: a challenge in higher education

ABSTRACT

This article investigates the problems experienced by academics and higher education adult learners when required to conduct research in real-life situations, namely to find a logical link or bridge between theory and research methodology or practice. It is argued that a chasm is found to exist, due to factors such as alienation between theory and research/practice, the role of language, culture, and, the quest for objectivity. This is a reflective scrutiny addressing the utility criterion of theory- building, dialectical and relativist thinking, plus dispositions and skills that adult learners have to develop to promote creative and critical thinking. Thereafter, five generic dimensions of metatheoretical perspectives are offered as a possible means of bridging this chasm. The article concludes with specific recommendations, which future Communication curricula in higher education should address in order to facilitate bridging the divide between theory and research/practice.

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INTRODUCTION

The South African higher-education landscape is characterised by developments and trends related to globalisation, the aftermaths of mergers among 36 former universities and technikons and changing relations between employers and employees. These changes and challenges, reiterate the responsibility that higher education has to equip adult learners for increased competitiveness in their future workplaces, as well as sustaining lifelong learning. The competencies that adult learners are required to develop, have to be contextualised in the civic functions of institutions of higher education, the promotion of democratic values, transformation, sustainability, entrepreneurialism and the African Renaissance (cf. Mbeki, 1998:177–178). The requirements dictated by higher education policies (cf. Department of Education 2001; HEQC 2004), serve as additional directives to promote social and educational development, in the milieu of post-1994 political democracy. Meeting career-driven requirements (cf. Van der Westhuizen & Mahlomaholo 2001:68—76) and providing curricula that prepare adult learners as creative and critical thinkers, irrespective of the profession, serve as the contextual background to this article.

Despite the diverse issues represented by the above contexts, learners' performance appraisals and the assessment of their achievement of learning outcomes, correlate with their ability to conduct research — from undergraduate to doctoral levels. It is premised that conducting research involves the translation of theories and/or theoretical approaches towards a research problem or practical issue into scientifically reliable and valid methodological research designs. This study investigates the problems involved in this transfiguration process between theory and research, and, although the focus is mainly on Communication Science, the questions raised, arguments put forward and recommendations made also have relevance to other disciplines in the Humanities and Social Sciences.

This article is based on an extensive literature survey, as well as experiences and self-reflections of the author who has been involved as an academic in higher education for almost three decades. The aim of the article is predominantly basic or academic sector and self-reflective research to contribute to the existing body of knowledge regarding communication theory and research. It does not present empirical research findings, although research areas, being an integral part of the challenges in higher education, are identified. The objectives are fundamentally to explore and describe how the chasm between Communication Science theory and research/practice can be bridged.

A central premise of this investigation is that it is incorrect to assume that praxis arises automatically from theory. The exploration, reflections and descriptions are therefore guided by investigating three research questions:

- Why is there a perceived chasm between communication theory and research/practice?
- What can constitute a bridge between theory and research/practice?
- What should Communication Science curricula in higher education address to improve adult learners' abilities to link theory and research/practice?

1. A CHASM BETWEEN THEORY AND RESEARCH / PRACTICE

Any attempt to answer the question as to why there is a chasm between theory and research/practice, or to find reasons for the perceived existence of such a chasm, requires an analysis of an alienation expressed between theory and research, plus the role of language, culture, the quest for objectivity and different perspectives on communication and social life.

1.1 Alienation between theory and research/practice

From the outset it can argued that although a chasm between theory and practice or theory and research is based on false perceptions, it is experienced as a reality by adult learners. Misconceptions, a dissociation or even alienation expressed between communication theory and practice, often exist. Practitioners criticise theorists for not taking cognisance in their thinking of the hard realities of practice, by treating theory as being utopian. In contrast, theorists criticise practitioners for their inability or unwillingness to actualise theoretical schemes, or to implement theoretical insights. It is also argued that practitioners or researchers, who treat theory as an infallible blueprint for action, expect the impossible.

At first, this debate between ineffective theory, on the one hand, and thoughtless practice, on the other, seems to be based on senseless to-and-fro arguments. However, the debate in fact highlights the dilemma of adult learners having to bridge these two poles and come to terms with the solidarity between thinking and doing, or between consciousness and action, or between knowledge (*gnosis*) and *praxis*. This dilemma is further complicated in that Communication Science has during the past two decades been characterised by the development and application of more refined and sophisticated empirical and statistical techniques. Research studies more frequently follow a multivariate methodological focus, based on the ontological view of human communication as being a complex process involving many sets of interdependent variables. The broadening or deepening of theoretical constructs and significance has however not received the same attention.

1.2 The role of language and culture

It is argued that language serves as a barrier, rather than a mediator. Communication Science and the Humanities do not have exact quantitative symbol systems in which to theorise, such as are found in Mathematics and Chemistry. Communication theories are designated to use colloquial language as a means of thinking and medium of expressing conceptions. As a result, theoretical terms can convey different meanings, which in turn, mar their application in practical research. For example, the term *structure* can paradigmatically be defined with reference to its synonymic associations, such as the opposition between *structure* and *conjuncture*, or between *structure* and *organisation*. Syntagmatically it can be defined as an operative definition, with reference to its function as a system, for example of relationships. These examples demonstrate that the application of theoretical concepts must vary with the environments or contexts in which they are researched. Communication is not necessarily understood because of congeniality (emotion, courtesy, needs

or expectations), but is understood because the subject matter (e.g. data collected) is something shared, based on language. Furthermore, the meanings of concepts cannot necessarily be determined based on an analysis of the way they are used in their original language, such as Greek. For example, labelling a first year student as a *sophomore* would etymologically and literally mean *wise idiot*.

Theoretical premises that guide research in effective communication in, for example, intercultural settings tend to focus on developing sensitivity towards normative similarities and differences (norms of interaction) among cultures. However, it is argued that it is more appropriate not to regard communication as following a fixed set of norms and rules, but to consider communication as a process in which social identities are negotiated. The problem with the normative focus is based specifically on the way language encodes referential meaning (what is said), and relational meaning (how it is said). Relational meanings use "socially meaningful subsets of lexical, phonological, syntactic, prosodic and other features" (Armstrong & Bauman, 1993:82).

As indicated above, linguistic features also acquire relational meaning(s) depending on the social situation of the particular speech community being researched, together with corresponding sets of rights and obligations defined by individuals' social identities or roles. Language serves as a basis for the collective attainment of culture, or in the words of Hall (1959:217), "...culture is communication and communication is culture". East African business people may, for example, change from a tribal language to Swahili to signify that the communication interaction moves from a personal to a business level.

1.3 Perspectives on the pursuit of objectivity

The quest for objectivity in communication research, based on the premise that the ideal of science is reached when communication processes are reduced to an empirical reality of laws or rules, is "meaningless" (Weber 1977:30) because

- "... the knowledge of social laws is not knowledge of social reality but is rather one of the various aids used by our minds for attaining this end", and
- "... knowledge of *cultural* events is inconceivable except on a basis of the *significance* which the concrete constellations of reality have for us in certain *individual* concrete situations" (Weber, 1977:31).

The quest for objectivity, therefore, has at least three implications for the communicologist:

- The requirement of interpersonal replicability, which means that research procedures are explicitly documented to facilitate subsequent replication by other researchers.
- The prerequisite of normative impartiality, which requires the communicologist to conform to stated normative standards or values — that is, not to deceive others regarding the value basis of judgments made.
- An imperative of personal truthfulness — not to deceive oneself as to what values are held and the honest reporting of values found. Personal truthfulness or awareness exists

when researchers are able to acknowledge the factuality of findings even though they may contradict their own anticipations, hypotheses and values.

The quest for objectivity also involves the pursuit of *truth for its own sake*, which is a tacit quest for something more than the truth. In Western culture these values include freedom (*the truth shall set one free*), power (*to know, enables one to control*) and wholeness by uniting fragments to create a *whole picture*. From an Africanist perspective, the quest for something *more than the truth* would have to be attuned to premises about egalitarian relationships, participation, inclusion and a rhetoric of social cohesion, represented by *Ubuntu* (cf. Fitch, 2003:100–123).

The views held by Max Weber (1864–1920) regarding the role of values in social scientific research draw a distinction between social science which ought to be *value-free* versus being *value-laden*. "The concept of culture is a *value-concept*. Empirical reality becomes 'culture' to us because and insofar as we relate it to value ideas. It includes those segments and only those segments of reality which have become significant to us because of this value-relevance" (Weber, 1949:76). The above distinction is based on his distinction between two kinds of knowledge, namely *existential knowledge and normative knowledge*. Existential knowledge refers to *What is? (the means)* and represents a rational, objective and empirical search for answers to causal (scientific) questions – facts. Normative knowledge refers to *What should be? (the ends)* and represents a non-objective, culturally relevant search for answers to research questions or hypotheses – ideals.

In addition to the value-free versus value-laden perspectives, the perceived chasm between theory and research is further complicated by these dilemmas:

- Micro versus macro perspectives: Communication theory rooted in the empirical tradition (e.g. the mass communication effects tradition) is based on generalising communication behaviour as aggregates, based on individualistic characteristics. In contrast, critical studies (e.g. of the mass media) focus on a macrotheoretical perspective, based largely on economism. Academics and researchers are therefore challenged to accommodate both micro and macro perspectives.
- Conflict versus consensus perspectives of social life: Conflict perspectives underestimate the power of a successive social life and the annihilation of capitalism. In contrast, consensus perspectives typically focus on social order and underestimate discontinuities. The dilemma is to develop a comparative perspective that considers both continuities and discontinuities in personal and social life.

2. WHAT CAN CONSTITUTE A BRIDGE BETWEEN THEORY AND RESEARCH / PRACTICE?

The above research question is investigated by first analysing the construct *theory* in the context of conducting communication research. Thereafter the merits of treating metatheoretical perspectives as a bridge between theory and research/practice are explored and described.

2.1 A scrutiny of "theory"

Communication Science, like any other social science, consists of three integral parts, namely facts, hypotheses and principles. Facts refer to artefacts and human behaviour, which can be counted, observed or measured. Hypotheses are postulations of possible answers, often based on scientific or educated guesses, which investigate the reasons behind or meanings of facts and the relationship between facts, whereas principles are the theoretical underpinnings or foundations of the subject.

A theory can be described as an argument, which cannot be divorced from its means of expression (language). Acourt (1987:666) describes two extremes in the range of positions that have been held as to the ultimate nature of the truth of a theory, namely that a theory is "a *structure* or pattern of points connected by logical operations, a kind of zero degree of possible truth", and a theory is "... a semantically saturated statement non-transferable from its time and place (except as 'Law') and non-translatable into other languages without the loss of its particular identity and truth-value".

It is premised that communication theories fulfil a fundamental function to promote and participate in the development and understanding of human conditions, variously conceived of as enlightened, liberated or emancipated and demystified. However, theories are not only expressions of something concrete, but are also abstractions of norms and values, that is, of ideality.

The fact that theories are formulated in novel linguistic constructions raises two additional issues:

- There is some confusion between a theory as a framework and theory as performance. Terms used in theory-construction that refer to human behaviour ought to be formulated in such a manner that the construction is reasonable and understandable by both the researcher and the human actor (cf. Acourt, 1987:669). Ultimately, the idea of 'adequacy' of theory therefore has to be assessed in terms of the epistemological strength of its linguistic inventiveness.
- The so-called Popper-Adorno controversy, which represents a continuum between the logical-structural and the semantic views of theorising. Popper (1976: 298) views a theory as a logical structure, independent of the language used – "words do not matter". In contrast, according to Adorno (1973), the answer to the question *What is a theory?* is found in the analysis of the precise linguistic details of theorising. Accordingly, theory expresses in language the invisible relations behind a tangible reality.

Given the diverse focus and scope of communication theories, for example in the domains of organisational or mass communication, the question arises: *What do theories have in common?* According to Reinard (2001:56), all theories must have three components or characteristics, namely "an abstract calculus, theoretic constructs, and rules of correspondence".

An abstract calculus refers to the logical, deductive structure of relationships in which conclusions are drawn from premises. The conditional syllogism is a logical form of reasoning which is often used by communication researchers. A statement is made (major premise), followed by a second

statement (minor premise) and the two together lead to a third statement (conclusion). For example: Major premise: All women are mortal. Minor premise: The Queen of England is a woman. Conclusion: (Therefore) The Queen of England is mortal.

A construct is a theoretical definition of a concept that is not necessarily directly observable (e.g. self-esteem). Theoretical constructs are abstract generalisations about that which can be observed or measured, linked together by the sharing of a common characteristic. These constructs, or terms, are incorporated into the abstract calculus of the theory. As theoretical constructs are generalisations that represent relationships among empirically verifiable events or processes, they are not the events or processes themselves.

A theory contains two messages, the argument (content) and the particular linguistic means employed (form). This view is supported by the Russian analyst of language and literature, Bakhtin (1981:259) who argues that

> ... the study of verbal art can and must overcome the divorce between an abstract 'formal' approach and an equally abstract 'ideological' approach. Form and content in discourse are one, once we understand that verbal discourse is a social phenomenon — social throughout its entire range and in each and every of its factors, from the sound image to the furthest reaches of abstract meaning.

Rules of correspondence are useful in demonstrating how well a theory's abstract calculus and constructs can be applied in practice and actual research. A rule of correspondence is crucial when applied in measurement scales, because it serves as a guideline for mapping or assigning one set of (empirical) indicators of variables onto another set (e.g. of numerals). A practical example of applying the rule of correspondence when measuring a continuous variable, such as *persuasiveness* of communicators on a 5-point scale, is where *very persuasive* is assigned a 5, and *very unpersuasive* is assigned a 1. The extent to which a theory's abstract calculus and constructs can be applied to real-life experiences and research therefore depends on its rules of correspondence.

In a discussion of the role of theory in research, Keyton (2006:30–32) distinguishes these six steps as being basic in theory development:

1. Describing the event (or observation) (*what?*)
2. Creating explanations for the event (or observation) (*why?*)
3. Reformulating specific explanations in a more generalised form (*how* do these explanations apply to a class of similar events [or observations]?)
4. Deriving predictions from the generalised explanations. These propositions question *What else would be true if the explanations were correct?*
5. Developing a plan and collecting data to test the predictions
6. Interpreting the data to confirm, adjust, generalise or abandon the propositions

As scholars often refer back to a previous step and at this point the process of theory building is not final, these steps are not in chronological order. Propositions presented by a theory are tested

(confirmed) over a period by different scholars who use different research methods. According to Lustig (1986:457), the extent to which communication scholars agree on the theoretical propositions that research findings confirm, has to be evaluated in terms of the propositions' utility, in order to

> ... suggest new questions that are worth answering, develop more accurate theories about human communication, communicate more effectively, teach others to communicate more effectively, create better human relationships, and improve the cultures and the environments within which we all live (Lustig 1986:457).

The utility criterion of theory-building highlights the fact that the relationship between theory and research is reciprocal and that theory is rooted in practical human communication issues. Geertz (1973:4) coined the phrase "intellectual armoury", meaning that analysts' successful choice of *weapons* to *attack* the issue of meaning, is directly dependent on their knowledge of the utility (or otherwise) of each. Yet, the utility criterion cannot be considered separate from the requirement of the verification of theories. The level of verification realised by a theory depends upon a number of criteria, such as the criterion of comprehensiveness, the criterion of generality and Popper's criterion of falsification.

The comprehensiveness of a theory is determined by whether or not interrelated constructs and relations between variables are specified and whether the theory can be utilised as an instrument to explain or predict communication phenomena or events. Apart from the requirements of statistical and empirical generalisations in Communication Studies, the generality of a theory deals more specifically with the verification of its predictions and premises through processes of deductive reasoning. Generality is therefore determined by whether or not a theory can explain the empirical phenomena its purports to explain, and, the extent to which such findings can be generalised to a target population.

In terms of Popper's (1959) thesis, scientific research is primarily aimed at proving the falsity of a theory. The criterion of *verification* is replaced by that of *falsification*, based on the argument that it is possible to demonstrate that a theory is false, but that there are no criteria to demonstrate that a theory is true. The advantage of defining a scientific theory as one that can be falsified means that certain consequences of the theory must either fit in or contradict predetermined facts (reality). The criterion of falsification can be based on the following logic: If proposition A implies proposition B; and if proposition B is false, then proposition A is false.

Popper's term *falsification* is based on an evolutionary (trial-and error) view of theory. That is, if a new theory (or hypothesis) is rejected (not supported by evidence), it does not become part of the body of knowledge. However, a crucial question is whether anyone has ever been able to formulate methodological rules for the construction of accurate theories, or the construction of genuine criteria for falsification — a question that remains unanswered. According to Reinard (2001: 57), "*[t]he requirement of falsification* holds that any theory must deal with statements that could be falsified by data and information if the theories were untrue". Put differently; instead of scholars aiming to prove the truth of a theory, it would be more appropriate to attempt to falsify alternative theories.

If the above six steps were accepted as generic to the development of theory, it could be argued that the same steps can be integrated in an analytical scheme to analyse a metatheoretical perspective critically, and in so doing create a bridge between theory and research. Such an analysis would require reflective thinking that includes thinking about thought (propositional logic) and reconsidering the relations between what is real and what is possible. Therefore, although these progressive steps are nothing new to communication scholars, they are listed above as part of the proposed answers to the question: *How can adults' learners' capacity to link theory with practice/research be increased?*

2.2 Metatheoretical perspectives

A metatheory represents generalisations that offer a particular explanation of a phenomenon and offer a basis on which meanings can be identified, compared, organised and applied. Metatheories, in this article, are operationally defined as systems of propositions used to discuss other propositions, especially as they relate to Communication Science. In brief, a metatheory means *talking about theories*.

Communication metatheory can therefore be treated as a collective or shorthand term for activities that in this article are coined third-order (*tertiary*) activities, which would have to include epistemology, ontology and methodology. Second-order activities would then be the act of theorising or presenting theories. Whereas Communication Science – the topic of the second-order activities – is treated as the first order. According to above three orders of activities, researchers and academics pursue third-order activities the moment they discuss the activities, problems and criteria of second-order activities (theories).

Although Marais (1994:87) does not use the term *metatheory*, the following scenario serves as a practical illustration thereof:

> Two men are fishing. Then they talk about fishing. After their fishing trip, they meet again, and then talk about their talk about fishing. It is this continually stepping back from something, away from the initial event, towards discussing the event, and *still further back towards a discussion of the discussion*, that leads to theory building (own emphasis).

According to Reinard (2001:55), metatheories "indicate notions 'beyond the theories' themselves ... [which] influence issues to explore, definitions, and designs in research". According to the same author "[s]ome prominent metatheories include positivist/atomist views, phenomenology, general systems theory, and constructivism", to which Africanism can be added. (Reinard, 2001:55). Mouton (1998:10) distinguishes these philosophical approaches in the world of metascience: "positivism, critical theory, realism, phenomenology, hermeneutics and post-modernism". Higgs (1998:193) refers to these metatheoretical perspectives as "sites of knowledge production", which influence how scholars think about and approach communication as a science. Babbie and Mouton (2001:20) regard positivism, phenomenology and critical theory as the most influential metatheoretical perspectives, because "they are linked ... to three methodological approaches in the social sciences, namely quantitative research, qualitative research, and participatory action approaches".

According to Smith (1988:311–314), two metatheoretical approaches to theory construction, appropriate to human communication research, are based on the *laws* and the *rules* perspectives. According to the laws approach human behaviour is explained with reference to (external) causes. This theoretical perspective is based on an epistemology which is empirical and which views the world as a structured, objective reality. The natural necessity of laws is based on a simple presumption, namely *If X ... then Y.* For example, *If an attractive model is used, then the advertisement will be more effective*. Whereas, logical positivist laws identify co-relationships (positive or negative covariance) between or among empirical phenomena and take the form of If X, ... then Y, under conditions Z_1 ... Z_n. For example, *The male gender of subscribers (X) is positively related to support for the introduction of isiZulu television programmes (Y), providing that they belong to high-income groups (Z_1)*. These logical positivist laws are inductive laws, theoretical propositions that are derived from observations and are expressed as a statistical probability. For example, *there is a 99% probability that X will cause (or covary) with Y.*

Criticism of these deterministic laws of human behaviour is based mainly on the argument that these laws ignore the needs, aims, motivations and/or goals of human communication, which are addressed by the rules perspective. The rules perspective refers to reasons why people communicate, and is based on a constructivist or constructivist realist epistemology. They are based on the premise that the meanings, behaviours and goals in human communication are socially constructed and the rules that apply would be determined by the social contexts. From a metatheoretical point of view, a rules perspective would read as follows: *If X (a particular objective or goal is to be achieved), in the context Z_1, ..., Z_n, then Y (appropriate behaviour to maximise the achievement of the objective or goal)*.

3. REVISITING COMMUNICATION SCIENCE CURRICULA

Against the background of the above discussion, the question arises as to how future subject content and teaching/learning practices in higher education can benefit from metatheoretical perspectives as a bridge between theory and research/practice. This question is answered by first investigating how dialectical and relativist thinking, as two forms of reasoning, can be integrated in Communication Science curricula as an epistemology concerned with the processes by means of which adult learners acquire knowledge. Secondly, guidelines for the promotion of creative and critical thinking skills are proposed. Thirdly, an analysis is undertaken to determine what common generic elements or dimensions different metatheoretical perspectives have that could serve as a conceptual framework to teach/learn how these perspectives offer a possible bridge between theory and research/practice.

3.1 Knowledge acquisition

It is not uncommon to find undergraduate adult learners approaching *knowledge* from a dualistic perspective. These learners assume that there is one correct answer to a particular (research or ethical) problem and that it is the lecturers' (authority's) role to guide them in identifying the one

correct answer from the possible alternatives. This highlights the dilemma that faces education (not only at the tertiary level) in that learners must be guided to realise that experience is inherently subjective, and that knowledge and value systems, based on principles of standards of worth, need to be conceptualised as relative and contextual.

Learning is not an additive process of piling new information or newly learnt behaviour onto other information or behaviour. Instead, learning presupposes a continual refocusing of a perspective that takes place simultaneously in social relations and thought processes. According to Asmal (2003:24), higher education curricula have to "respond to the dual challenges of equity and development … to overcome the fragmentation, inequality of the past and to meet current and future development challenges, especially in the context of an increasingly globalising environment". A core argument being put forward in this discussion is that curricula should be designed as a consciousness-raising process not merely aimed at the acquisition of knowledge.

Applying a metatheoretical perspective to theories represents a paradigm shift in emphasis from ontology to epistemology. Ontology is concerned with the nature of reality (independent from it being observed). By insisting on replicability and that objectivity be established in scientific methods, observers are required to be *detached* from what they observe. In the most familiar (behavioural) theories of communication and the methods used to collect data that support these theories, ontological committal predominates to discover the rules (or laws) that regulate human behaviour (independent of the researcher who does the analysis or observation). The same ontological preoccupation and independence of the observer applies in the analysis of symbols and messages that mediate between two or more people.

Epistemology is not concerned with what exists, but rather with knowledge, and especially the processes by means of which adults learners come to know. An important consequence of viewing communication as a two-way process, means that learners become part of the domain of that which they investigate or learn to know. Epistemology is not merely a question of selecting certain research methods or of the operationalisation of abstract constructs. It requires an analysis that challenges certain presuppositions (e.g. political, economic and cultural) of the relation between theory and communication research practices. Put differently: the epistemological problem is one of the status of information — the problem of what it means to know something. A curriculum that deals with epistemology should therefore be aimed at enabling learners to gain an understanding of knowledge as processes and products in varied forms. In fact it may require a shift of emphasis from knowledge simply as a product to the processes involved in knowledge acquisition.

Accordingly it is argued that adult learners need to become conscious of the propositions, processes and rules that underlie metatheoretical perspectives and of research procedures to enable them to perform more competently as researchers. This argument is based on the premise that the Consciousness of knowledge schemata and forms of reasoning can contribute to the solution of highly complex communication problems, which nullifies any intuitive approach to problem solving.

Formal operational thinking is a necessary precondition for the development of two distinct forms of reasoning based on dialectical and relativistic thinking. Dialectical thinking accepts and integrates contradiction into a more all-inclusive whole. Logical thinking abilities can be developed and assessed. For example, concrete operational skills can be assessed by means of multiple classification; and formal operational skills, by isolating variables. The following four schemata can be distinguished and each captures an aspect of dialectical thinking:

- motion-oriented schemata that focus on processes, such as decision-making processes and address the dialectic roots of change (e.g. thesis — antithesis — synthesis);
- form-oriented schemata that address the primacy of wholes, which are conceptualised as forms or systems;
- relationship-oriented schemata that focus on the interactive and constitutive nature of relationships; and
- metaformal schemata, which integrate notions of the above three schemata in a meaningful manner.

It is premised (yet to be tested) that adult learners use more than one of the above schemata simultaneously. It is therefore argued that a learner who recognises reality as a number of systems, will also recognise that any form of development incorporates movement and change, because of the interactive nature of relationships. The converse may also be true: for example, if adult learners fail to understand the interactive nature of relationships, or do not view development as a process of change, they will treat reality as a number of closed, stable systems.
It is posited that an adult learner who enters the realm of metatheory is in fact analysing, inferring distinctions, finding similarities and drawing conclusions from theories or theoretical models, which may be unrelated to each other.

Relativistic thinking can be summarised as *a shift from absolutism to contextualism*. It can best be illustrated in the domain of interpersonal communication, characterised by intersubjectivity, which in real-life consists of mutual (often contradictory) frames of reference. In terms of relativistic thinking, communication is regarded a being contextually relative.

Relativistic thinking about the nature of knowledge and reality can be treated as either intersystemic or metasystemic. According to Labouvie-Vief (1982:182), intersystemic thinking "... reveals the basic duality of logical truth. This realization initiates a movement from logical absolutism to logical relativism... . The erosion of logical certainty throws the self explicitly back on its own resources".

The above view is based on the argument that knowledge and reality (truth) is relativistic; consequently one's thinking must be particularised. In order to *take a step back* and analyse different metatheoretical perspectives, would require learners to develop techniques or skills that are linguistic, logical, empirical, methodological and observational. Language is acknowledged as a barrier to understanding such an analysis, and one has to avoid the use of emotive language, vague and exaggerated terms and phrases (such as *many, some, we, they, often, immensely,*

terribly, appallingly, vast, or *extremely*, as well as clichés and invalid generalisations. It is a general error of reasoning to use plurality in order to support or prove a singular or exclusive issue. The particular, or specific (idiosyncratic) must — where applicable — be distinguished from the universal or general.

Commons, Richards and Kuhn (1982:1059) describe metasystemic reasoning as

> ... cognitions about systems...[which] are required in the formation of a framework (or 'metasystem') for comparing and contrasting systems with one another. The relationship between one system to another such system is expressed as a metatheory and is found by comparing axioms, theorems, or other limiting conditions of systems within the framework of a 'super-system' that contains all the variant systems.

No phenomenon can be reasoned on an intellectual basis unless agreement is reached on the meanings of terminology, including abstract constructs. The difference between literal versus figural types of speech needs to be recognised. For example, metaphors, personifications and allegories are often used in Communication Science to explain an issue. Although these may be valid forms of illustration, they must be interpreted as such, and not in a literal sense.

The above discussion points to an important distinction that ought to be made between explicit knowledge (knowledge that is encoded and stored in memory) and tacit knowledge (knowledge that is embedded in experience). Explicit knowledge can be acquired from many sources, and learners need to communicate with people in order to externalise and share tacit knowledge. The strongest forms of experiential knowledge are found in experiential ways of knowing and in personal experiences, resulting from or affecting one's innermost feelings. In addition, the experiences that learners share with others, such as when participating in field research, are also a valuable source of experiential knowledge.

It is argued that different contexts require different forms of reasoning and that different forms of knowledge can be distinguished because of

- the type of concepts (constructs) on which Communication as a discipline is based;
- the networks of relationships among concepts (conceptual schemes); and
- the different tests that can be applied to determine the truth, validity or falsity of inferences, premises and/or findings (such as deductive, inductive, empirical, mathematical, philosophic, semantic, syntactic, based on evidence or consensus.)

Realms of meaning are not limited to one subject or discipline. For example, symbolism includes verbal language, rituals, nonverbal gestures and visual images which are structures created to express and communicate meanings. All forms of thought therefore presuppose communication because thoughts can only be recognised if subjected to intersubjectively agreed (abstract) laws or rules. Underlying these rules is a principle that is fundamental to communication, namely

contradiction versus *non-contradiction*. When considering the networks among concepts, one defines something by comparing it with other things to determine similarities (non-contradiction), as well to describe the characteristics distinguishing it from other things (contradiction). Furthermore, in Communication Science, reasoning requires adherence to another important principle, namely the requirement of the verification of claims. Adult learners need to be able to distinguish between premises and conclusions and need to know and be able to apply the rules (laws) which validate deductions and conclusions (e.g. if *X*, ... then *Y*, under conditions Z_1 ... Z_n). An important point in this regard is that critical thought should not be measured or labelled by the results it produces, but rather the *way* in which results are pursued. The challenge is that adult learners need to learn (be taught) not to regurgitate general rules or theories in a prescriptive manner, but to be able to judge and decide which rules apply to the life-world situations they research.

3.2 Curriculum and socio-constructivism

During the past decade the development of curricula for higher education has seen calls being made to democratise the process by involving everyone concerned – academics, didactic and media specialists, tutors, vocational practitioners and learners (cf. Ensor, 2004:339–359; Muller, 2005:497–511). Such involvement emphasises the contextualisation of a curriculum in relation to the issues and problems experienced in Southern Africa and Africa and represents an outcome of negotiation (cf. Wiechers, 1998:227–233). According to Van Niekerk (1998:107), such an approach is entitled "the socio-constructivist perspective ... [and] ... curricula that are developed in this way will serve the needs and aspirations of particular communities". Theories of human cognition all have some foundation in constructivist thinking, as seen by the work of Piaget (1972), which implies that knowledge structures are not simply direct copies of an external reality, but are created by individual learners.

A curriculum constructed according to above perspective will reflect several characteristics (cf. Spector, 1993:9–19), of which three are highlighted for the purpose of this article, namely:

- As a science, Communication must be portrayed as a dynamic area of academic study that challenges established or authoritative *truths*, instead of as an accumulation of abstract theories that define or describe reality.
- The selection and construction of subject content should not be compartmentalised into substructures of the discipline, but should instead be problem-based and systematised around current issues and themes, and real-life problems.
- In order to accommodate the South African society's paradigm shift, the communication subject content should epitomise lines of inductive reasoning to build theories, instead of merely concentrating on the rhetoric of conclusions, based on deductions and inference.

3.3 Curriculum and teaching aims

No curriculum can be considered devoid of the teaching aims that drive its construction (cf. Barnett & Coate, 2005). Given the call for transformation in the Southern African context, the primary aim of Communication Science is sustained economical empowerment and the development of

entrepreneurship. The curriculum aims guided by economic empowerment are expedient, i.e. based on practical, and vocational competence, rather than on moral grounds. These aims are also agents or catalysts instrumental to performance. Accordingly, the efficiency of communication skills that are applicable in contexts such as interpersonal relations or leadership and small-group communication in organisational contexts, will have to be measured in terms of how they contribute to successful performance in commerce, industry and international relations.

Secondly, progressive-rational aims of a Communication curriculum serve to offset the one-sided economical value system, which the above aims promote. They are progressive or liberal in the sense that knowledge is not treated as literal, technical, prejudiced, strict or rigorous interpretations. Instead, knowledge is linked to free trade, individual liberty and democratic political and social reforms. These aims focus on the development of cognitive, scientific, philosophical forms of reasoning, which include ethical, aesthetic, empathic and moral values. Although progressive, these aims are simultaneously rational in that scientific research and cognition are the foundations of learners' understanding of humans' reasoning. The latter also implies that during the process of acquiring knowledge, the subject content will ideally enable learners to become aware of and take responsibility for their own learning processes.

Thirdly, transformation is not only limited to achieving economic empowerment. Transformation requires that the value of being human and especially the question of identity be revisited. The latter requires a close investigation of how cultural identity and traditions should be incorporated into curricula to contribute to the intellectual development of learners as members of a heterogeneous society (cf. Le Grange, 2006:189–194).

Against the background of above teaching/learning aims, three epistemological and methodological implications transpire. The first implication is the redefinition of the *units of analysis*. This redefinition represents a move away from the (positivist) units of analysis formalised and legitimated through generalisation, to one or more metatheoretical perspectives as paradigm. This means that theoretical choices and adaptations must take cognisance of the supporting metascientific domains that serve as holistic foundations. The second implication is that of perspectivism. In other words, becoming acutely aware of the thematic component, or the underlying or subjacent suppositions that a metatheoretical perspective accords a theory. A third implication is that of relativism, or the epistemological and methodological diversity of pluralism which implies that meaningful theoretical growth in Communication Science should no longer be dependent on scientific or paradigmatic consensus. Instead, the emphasis should be on intensified reflexivity, including soul-searching activities.

3.4 The promotion of creative and critical thinking

Creative thinking refers to the formulation of potential solutions to communication problems or the clarification of phenomena, whereas critical thinking is the testing and evaluation of those solutions, arguments, clarifications or explanations. These operational definitions are not only valid at the

level of scientific argumentation, but also in every day problem situations. The methods of Communication Science are both creative and critical. These processes include the collection of relevant data, description thereof, hypothesis formulation and lastly, verification and evaluation.

The development and application of the following dispositions and skills are argued to be essential in order to promote both creative and critical thinking:

Firstly, intellectual honesty and scepticism are important characteristics and dispositions of a critical thinker. The latter disposition is especially important where sufficient evidence is found that adapts or rejects a long-established opinion or view. An open attitude, which is unbiased, is indispensable for both creative and critical thinking. It implies a willingness to consider a wide spectrum of possible solutions to a problem or an issue and an aversion to any form of distortion. The usefulness of knowledge therefore stems from the questioning and investigating manner of dealing with reality. Learners should accordingly be encouraged to ask: why?, what?, who?, when? and where? in order to stimulate intellectual curiosity and honesty. Intellectual scepticism involves a thorough investigation and analysis of what is being described, explained or predicted. The quality of such thinking, therefore, lies in using a research design that is open to questions and that acknowledges doubts.

Pliancy presumes the ability of a learner to adapt opinions, ideas and approaches to a problem and methods when the necessity of such is evident. As pre-scientific experiences tend to be unsystematic and unstructured, a second disposition and related skills necessitate dedication and systematic modus operandi. Accordingly, critical scientific thinking has to give order and structure to the mass of impressions, intuitions, assumptions and experiences, so that they can be managed, structured, schematised and relations can be drawn. Dedication presumes a positive will to continue with the research of a study, despite setbacks or conflicts. Such perseverance also presumes that a critical thinker will not be satisfied with vague generalisations or unanswered questions. Dedication therefore encompasses resoluteness not to hesitate to draw conclusions when evidence justifies the action. However, resoluteness also means that hasty or invalid conclusions should not be reached, nor should arguments be drawn out at length. Objectivity never exists independently from human subjectivity, such as personal bias. Dedication, systematic modus operandi, combined with objective thinking, therefore imply that learners have to rely on empirical evidence wherever possible. Although subjectivity in a philosophical sense is acknowledged, it is argued that the development of intellectual reasoning can be promoted, provided that the thinking and attitudes are expressed in ways that are reasonable, rational, logical and defendable.

For a curriculum to promote the above dispositions, to develop such creative and critical skills, and to enable learners to identify with and gradually acquire the same intellectual capacities, requires that lecturers, as academics, themselves have to represent and demonstrate the above paradigm of attitudes. The latter not only involves providing guidance in being critical of others' argument, but also the ability and willingness to discuss and reason their own arguments. Respect for *the other* and others' points of view is equally important. Being open to dialogue and to differences

of opinion contributes to collaborative decisionmaking, which is an ingredient of creative and critical thinking.

In the context of the globalisation of the economy and of governance, and at the same time the challenge of the devolution of power to citizens, the empowerment of adult learners is undeniably linked to the development of their critical competencies.

3.5 Generic dimensions of metatheoretical perspectives

Adult education is often reduced to a common denominator of the transmission of information and skills and the development of cognitive processes. Nobody questions the premise that teaching is about imparting knowledge and habits of thinking. However, without question, these reductions somehow hold unacknowledged premises of metaphysics. For this reason one has to procure some form of conceptual judgment concerning the groundedness of various Communication metatheoretical perspectives. This judgment would involve one or more criteria of groundedness external to and independent of the theories involved. It is the aim of any science to accomplish three things concerning its subject content: description, explanation and prediction. Yet, neither explanation, nor prediction can take place effectively if the description of a particular metatheoretical perspective's propositions and commitments are inadequate.

In order to use a metatheoretical perspective as a framework that structures, gives direction and serves as a link between theory and research/practice, it is proposed that Communication Science curricula should deal with the criteria of groundedness. Such criteria address the elements or dimensions that are generic to the different metatheoretical perspectives of communication as a phenomenon. Based on almost three decades of experience and self-reflection as a lecturer, supervisor and promoter at both the undergraduate and the postgraduate levels, five elements or dimensions of a metatheoretical perspective are distinguished below. Each dimension is briefly illustrated with reference to phenomenology as an example of a perspective that represents a *break* from positivism.

The first dimension consists of conceptual elements, found in the theoretical propositions that provide a focus for research. Such elements guide the search for answers to the question: *Of what is reality composed?* Although substantive conceptual elements are required to have one or more empirical referent, these may not necessarily be directly observable in the reality, they represent or which is identified by them. The second characteristic of conceptual elements is that an arbitrariness is present in their development. In other words, in the development or application of theories about communication experiences, conceptual elements are justified by demonstrating their utility in empirical research, and not necessarily by asking whether they are true or false. In Communication Science, arguments based on the assumptions of either right or wrong are not always valid. Very often the truth is found in the grey area in between. This dimension therefore involves most of the six steps identified above by Keyton (2006:30–32) with reference to the role of theory in research.

In reply to the question: *Of what is reality composed?* phenomenology distinguishes among sub-worlds, sub-universes or orders of realities, such as the world of nature, of science, of religion, or of everyday life. However, the underlying conceptual elements of phenomenology are based on the proposition that people construct and interpret these realities and give meaning to their life-worlds as a continual process. It is a conscious process in which social behaviour is interpreted, defined, justified and rationalised.

The second dimension consists of theoretical elements. As indicated above, the term *theory* has different applications and meanings in the social sciences. Therefore, for the purpose of describing this dimension, the term *theory* is defined as a set of propositions, which are deductively connected, either as axioms or theorems. Axioms of a theory are independent and consistent propositions that are universally accepted as being true. Theorems are deduced from axioms and can be verified by determining whether what is predicted by the theorems is true or false. Generally formulated propositions (axioms) are usually judged based on their implications – what they entail and what they make more likely.

From a phenomenological perspective, three theoretical propositions can be distinguished. People's communication behaviour is determined by the meanings that their social environment have for them. These meanings arise from social interactions (not from people's initial dispositions or attitudes) and are modified through a process of interpretation. Meanings are therefore not permanent or fixed. These propositions are theses based on an idealist theory and epistemology of knowledge, because human communication is researched based on ideas, values, opinions, and the meanings, which people hold and which can not be directly observed or measured. Hermeneutics is an example of a metatheory that is related to phenomenology and has been defined as "an interpretative approach that acknowledges the potential differences between literal and intended meaning" (Howells, 2003:115). Accordingly, the concept *interpretation* is a key issue because hermeneutics is based on a set of propositions that acknowledges layers of meaning and ambiguity, beyond the literal meaning of communication. From a phenomenological perspective, it would therefore be appropriate to study hermeneutics to enable learners to develop skills of perspicacity – discerning meaning(s), for example, in visual communication.

The third dimension consists of rules of interpretation – those observations, projective techniques and measuring instruments that enable the researcher to determine whether the predictions made by a particular theory are true or false (in real life). The rules of interpretation, together with conceptual and theoretical elements will therefore directly influence how reality is perceived and how it should be researched.

In terms of phenomenology such rules would not be based on explaining communication behaviour in terms of universally valid laws. Instead the focus would be on understanding communication behaviours by relating them to the cognitive ideas, opinions, values and purposes that give rise to them. The objective of understanding people from their point of view, requires the rules of interpretation to be applied according to the procedural rules of qualitative data-collection methods, such as participant observations and in-depth interviewing.

The fourth dimension can be referred to as the conundrums (research problems, issues or questions) which academics and researchers regard worthy of investigating and resolving. Based on the confidence that practitioners have in the conceptual and theoretical elements of a metatheory, conundrums are based on the premise that solutions and answers can be found. An integral part of resolving conundrums are the criteria demarcated by the deductive elaboration of the theory and from the rules of interpretation. Such criteria will determine the truth-value of answers and the admissibility of solutions or findings.

From a phenomenological perspective the object of research in the Social Sciences differs from the object of research in the Natural Sciences. People are therefore not treated as biological organisms, but as "conscious, self-directing, symbolic human beings" (Babbie & Mouton, 2001:28). Conundrums would therefore be formulated with the aim of understanding, rather than explaining, people's interpretations of reality and the meanings they ascribe to social practices in society.

The fifth dimension can be described as consisting of ontological and predictive elements. This dimension can be treated as an integration of the above four dimensions because it describes what the conceptual and theoretical elements as a possible set of laws or rules would look like if a particular metatheory were applied. The conundrums are therefore worth solving because the explanations or solutions will simultaneously contribute to this dimension by providing confirmation (evidence, validation and articulation) of the metatheoretical perspective. The different elements of scientific knowledge, namely "propositions, axioms, values and metatheoretical commitments, are inextricably connected" (Mouton, 1998:16). Thus, in order to understand a particular metatheoretical perspective would require an understanding of the nature of the interconnections.

4. CONCLUSIONS AND INTERPRETATIVE DIRECTIONS

The promotion of relativistic and dialectical thinking, and also the integration of metatheoretical perspectives in Communication Science curricula in higher education are proposed as ways in which adult learners can take ownership of bridging the divide between theory and practice in Communication Science.

Revisiting Communication Science curricula would therefore require a purposive move away from a Communication Science — which subsumes mainly factually-based research methods – to a Communication Science encompassing human, value-based theories and methods. Such a purposive repositioning would have a direct impact on how adult learners view the nature of social entities (individuals, organisational structures or systems), as well as their identities and communication relationships. The latter undertaking would also reopen the debate around micro- versus macro levels of analysis, subjectivity versus objectivity and even voluntarism versus determinism. The advantage of this reconstructive exercise is not limited to those scholars who philosophise about Communication as a science, but it is also intended for practitioners and researchers to rethink their perspective and points of departure.

Based on the reflections recorded in this article, it is recommended that a Communication curriculum should address a number of core issues, namely:

- Placing a greater emphasis on developing a scholarship in relativistic and dialectical thinking
- Enabling learners to evaluate the course of their actions and decisions when conducting communication research by developing insights into social responsibility and the ethics of citizenship
- Making provision for cognitive activities, such as understanding, application and critical evaluation
- Developing the emotional, intellectual and moral qualities of creative and critical thinkers in the knowledge environment
- Demystifying the complex epistemological commitments that underlie and link the different metatheoretical perspectives of Communication as a science
- Adopting a paradigm of problem-based learning, such as determining what conceptual elements, theoretical elements, rules of interpretation, conundrums and ontological-predictive elements a particular metatheoretical perspective provides.

Current Communication Science curricula, especially at undergraduate level, concentrate mainly on the first-order activities, communication as it takes place in reality; as well as the second-order activities, theories about the nature and functions of communication. The latter are often presented in a historical or chronological order and contextualised in terms of different settings. The argument put forward is that there is a need for the inclusion of problems related to metatheoretical perspectives in Communication Science, as third-order (*tertiary*) activities. Learners, as researches, have to take a step *back* from their first-order and second-order or levels of involvement, to what in this article is coined a *tertiary* level of involvement and reflection. In other words, there is a need for a more systematically metatheoretical- directed application of current communication theories, especially to determine their relevance to research conducted in the *new* South Africa.

Despite the ethical principles of universalism, commonality, organised scepticism and honesty that are basic tenets of scientific communication, research reports often do not spell out the metatheoretical assumptions underlying the theories (theoretical models or paradigms) that contextualise a research study. It is argued that this "tacit dimension of scientific practice" (Mouton 1998:174) should not only be made explicit in reported research, but that the metatheoretical dimension should be incorporated in the teaching/learning of communication theory and methodology. Such curricula in higher education should, therefore address the question: *What are the metatheoretical assumptions, commitments and preconceptions of (different) perspectives of human communication?*

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