# A Multispectral Image of (Con)textuality

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#### **Abstract**

Despite a large body of research aimed at the exploration of major determinants that warrant the effectiveness of situation-bound utterances at the professional arena, the existing knowledge covering a vast repertoire of sociocognitive indicators, maximizing communicative competence, has proved difficult to integrate into a cohesive theoretical framework. The notion that seems germane to the proper comprehension of pragmatic intricacies and semantic nuances of communicative acts is the deep embeddedness of (con)textuality in the socially intertwined systems of idiosyncratic reasoning, cultural diversification and semiotic heterogeneity.

This paper ventures to explore the theoretical aspects of contexting that within the remit of information theory should be understood as a tripartite construct, divided into (1) an internal reality, conditioned upon one's mental representations, (idio)culture, acquired knowledge, cognitive styles of thinking, intentions and intuition; (2) external context, defining a specific situation and/or linguistic surrounding of a given textual unit, with a special emphasis placed upon cultural filters; and (3) megacontext, eventuating in the establishment of a multi-dimensional matrix of sociolinguistic parameters immersed in human discourse, nowadays dictated by a cybersociety, which is constantly being shaped by new modes of information and innovative technologies.

**Keywords:** idiocontext, horizontal context, megacontext, mental representations, professional knowledge, perceptual filters, intuitive thinking, high- and low-context cultures

#### **Abstrakt**

Pomimo licznych i szeroko zakrojonych prób zgłębienia uwarunkowań gwarantujących skuteczność wypowiedzi zdeterminowanych kontekstowo w kanale komunikacji zawodowej, wyciągnięcie konkluzywnych wniosków na temat rozległego wachlarza czynników socjokognitywnych, odpowiedzialnych za optymalizację kompetencji komunikacyjnej i efektywizację transferu informacji, sprawia wrażenie zadania z góry skazanego na niepowodzenie. Pojęciem niezbędnym do zrozumienia rozbieżności pragmatycznych i niuansów znaczeniowych w zakresie aktów mowy jest głębokie zakorzenienie (kon)tekstualności w wielowymiarowym systemie społeczno-kulturowym, uwzględniającym poznawcze mechanizmy jednostki oraz semiotyczną heterogeniczność.

Celem niniejszego artykułu jest przeanalizowanie teoretycznych aspektów kontekstowości, która w świetle teorii informacji powinna być rozumiana jako konstrukt trójwarstwowy, złożony z (1) idiokontekstu, obejmującego reprezentacje umysłowe, idiokulturę, wiedzę, style poznawcze, myślenie intuicyjne oraz intencje danego podmiotu; (2) kontekstu zewnętrznego, definiującego określoną sytuację i/lub lingwistyczne otoczenie wybranej jednostki tekstowej, ze szczególnym uwzględnieniem filtrów kulturowych; oraz (3) megakontekstu, operującego na poziomie wielowymiarowej matrycy parametrów socjolingwistycznych, determinujących zasady wiecznego dyskursu, którego standardy – w dzisiejszych czasach – w związku z permanentnym napływem nowych technologii informacyjnych wyznacza cyberspołeczeństwo.

**Słowa kluczowe:** idiokontekst, kontekst horyzontalny, megakontekst, reprezentacje umysłowe, wiedza specjalistyczna, filtry percepcyjne, myślenie intuicyjne, kultury wysokiego i niskiego kontekstu

Viewed from a sociocognitive perspective, all communicative acts necessitate the emergence of a text, embedded in a specific situational environment, since the absence of contextual surrounding hinders and obstructs the generation of meaning. Brief and cursory reflection shows that the context of a situation is the entirety of mainly external conditions in which a text unfolds (Halliday and Hassan 1989, 5). In the course of life one tends to interact with others through language, as a consequence of which bilateral inferences are being made: (1) arising from the very situation and directed towards the text, and (2) emerging from the text towards the situation. It seems that this approach concentrates

upon the immediate environment of the text within a highly simplified, and predominantly neglected, cultural frame. Nonetheless, the semantic field of *context* encompasses both the context of situation and the context of culture, i.e. the conceptual framework of the titular notion includes the beliefs and values that determine the behaviour to be interpreted (Hall 1983, 61).

There is no escaping the fact that in any communication, the speaker and listener perceive the very same context in utterly disparate ways. The more their subjective perceptions pertaining to a specific situation are shared, the more possible it will be to use them as an intellectual scaffolding for hypothesizing and predicting the content to come. Understood in terms of perception rather than reality (Sperber and Wilson 1986, 15), and viewed as a set of premises applied for the purposes of construing an utterance, context should be primarily defined as a psychological construct, composed of the listener's assumptions, conjectures, and convictions about the surrounding world. The internal premises are far from reflecting the actual image of the reality or mirroring the state of facts, but rather open ample space for available idiosyncratic interpretations of a textual unit under scrutiny.

The fuzziness of the term *concept* and its numerous interpretations over centuries are contingent upon considerable transformations in human mentality. The establishment of consecutive stages in human mental evolution does not only enable researchers to gain a fuller understanding of the psychological changes at various stages in the history of man, but also permits historical tendencies to act as catalysts for the future, thus anticipating the next stage of human development. Analogically, one may notice significant alterations in the main types of cultures over centuries: culture of hunting and collecting in the protohuman period, transfer to agricultural culture at the pre-scientific stage, urban civilisation and flourishing of trades in the proto-scientific times, and industrial culture in the scientific era. The present culture seems to be based on information (Grinev-Griniewicz et al. 2004, 126), thus making the megacontext of human discourse increase in pertinence nowadays.

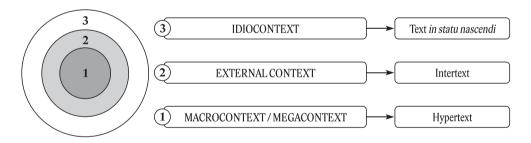
With the evolution of human consciousness and the subsequent rise in the level of professional knowledge, two opposite processes reflecting respective changes in human cognition may be seen in the vocabulary. On the one hand, there is a constant alienation of special lexis from the common word-stock, while on the other, special lexemes enter into the general vocabulary. In antiquity some fields of knowledge, such as astronomy and geometry, were incomprehensible to the general public (Kuhn 1962, 23). At the same time, with the gradual spread of literacy and increase in the general education level, as well as familiarization with domestic appliances, many special lexemes have become

part of common lexis. Astounding as it may be, all mathematical concepts of the 15<sup>th</sup> century have become everyday notions in the 21<sup>st</sup> century, while penetrating general language with intensified strength and speed (Wartofsky 1968, 284).

The development of theoretical reflexive thinking has contributed to the emergence of formal-logical operations, introduction of heuristic methodology, and creation of a hypothesizing ability, thus leading to speculative formulations serving as a guide in the investigation or solution to a problem. A further intellectualization of perception, specialization of memory and advancement of productive imagination cannot evade scientific ascertainment. These abilities are conducive to the advancement of science and, in their turn, are perfected in the process of creative and practical activities (Grinev-Griniewicz et al. 2004, 125).

The intensification of scientific activity and, as a result, proliferation of terminology have optimized the generation of specialist texts, which will be addressed more extensively in a further section of the present paper.

The origins of (con)textuality can be traced back to three strands of theorizing about the effectiveness of communicative acts (cf. Łompieś 2012). The process of communication in the professional discourse involves, in fact, three types of contexts, implying different sets of textuality (Figure 1):



**Figure 1.** (Con)textuality and its conceptual dimensions.

As suggested above, the semantic field of the notion *context* operates with respect to three complementary dimensions: (1) verticality, (2) horizontality and (3) megacontextuality.

(1) Indefinite and non-transparent as it may transpire, verticality indicates the overall commonsense knowledge arising from everyday experience and encompassing the cognitive awareness of the surrounding reality, as well as professional knowledge, acting as an inherent property of the human mind and existing in the form of scientific/expert

concepts (Burkhanov 1998, 41). The vertical context encompasses also a panoply of mental processes of perception, memory, judgment, reasoning, and emotional and volitional mechanisms. Hence, a vertical/internal context transpires (i) to include any background knowledge assumed to be shared by senders and recipients, and thus contributing to the listener's interpretation of an utterance, as well as (ii) to form an idiosyncratic, hypothetical module of the human mind posited to affect the reception, processing and generation of messages, therefore acquiring the status of an 'idiocontext'. Generated at an idiocontextual level, texts *in statu nascendi* are preverbal units produced via conversion of a deep structure into a surface structure. For the purpose of the present article, the following components of the idiocontext will be explained:

- Mental representations;
- Professional knowledge;
- Cognitive mechanisms / perceptual filters;
- Intuitive thinking;
- Intentions and illocutionary potential.

(2) With its well-established pragmatic status, horizontality is defined as an external context denoting a particular situation and/or linguistic environment of a given linguistic unit, including co-text, i.e. its immediately preceding or following linguistic items. The concept of horizontal context is based upon the linear and sequential order of textual elements arising from specific circumstances, thus encompassing the facts observable in the text and external parameters of a communicative situation. Perceived externally, an utterance produced at a horizontal level is contingent upon intertextuality, where each textual unit functions as an intertext bound in a net of relations to other utterances, from which it draws its meaning, value and function. The intertextual markers may take welldefined forms, such as quotations, allusions, symbols, and parodies. But the intertextual tissue may be woven in a more subtle, implicit, and generalized fashion, such that a speech act can be said to call upon previous patterns of linguistic use and a literary work can be viewed to refer to previous works written in the same genre. While epitomizing an attempt at combining Saussurean semiotics, examining the meaning of signs derived from the structure of a text, with Bakhtinian dialogicality, marked by a perpetual interaction of textual units with other literary works and other authors, intertextuality presupposes the existence of a linguistic, literary, or cultural tradition, a continuity of pre-existing forms and practices (cf. Kristeva 1980, 69). For the purposes of the present article, the dimension of horizontality will be funnelled into a cultural background, in which the issue of contextuality is mostly conspicuous in high- and low-context cultures.

(3) The third dimension is deeply rooted in the depth of megacontextuality, thus conferring upon utterances the legitimacy of ethnic and evolutionary markers. The contexts of professional activities undertaken by specialists are subject to instantaneous technological breakthroughs and scientific turnarounds. The ideas that only a year ago appeared to verge on science fiction, today transpire to be easily and smoothly implementable and in several months will presumably get officially standardized. Therefore, stimulated by the unrestrained influx of information and communications technologies, today's hot topics revolve around the Internet, online communities, virtual relations, the 'information superhighway' and cybersociety. Consequently, major determinants of megacontextuality are hypertext documents which lay foundations for e-societies and can either be static (prepared and stored in advance) or dynamic (continually changing in response to user input, such as dynamic web pages). For the sake of strengthened connectivity, hypertexts can develop very complex and dynamic systems of linking and cross-referencing (Webster 2006, 3).

### **Specialist vs literary contexts**

One of the distinguishing features constituting a major pillar of a specialist text is its professional properties, with the following features acting as constitutive determinants: (1) terminological saturation, understood as the presence of terminological units deemed as the semantic nodes of a textual tissue; (2) esotericity, defined as a quality of forming 'recondite' knowledge intended only for a hermetic circle of specialists; (3) stylistic and phonetic neutrality, marked by the absence of connotations and non-arbitrary mapping between speech sounds and the visual form of objects; (4) exactness of meaning, conceived as a precise delimitation of semantic fields attributable to particular terms in a specific professional reality; (5) conventionality, described as the appearance of terms conforming to established practice or accepted standards in a given professional environment; (6) hypotaxis, determined as the subordination of one syntactic unit to another in a complex sentence (cf. Lukszyn and Zmarzer 2006; Grinev-Griniewicz 2011).

<sup>&</sup>lt;sup>1</sup> Due to capacity restrictions imposed upon this article, the notion of *megacontextuality* will not be discussed in great detail; therefore the main emphasis will be placed upon vertical and horizontal dimensions of a contextual matter.

The professional attributes of specialist texts may be split into: (1) purely linguistic functions at the level of terminology, as well as into (2) referential and informative features, which may be classified as a cognitive magnitude and which are strictly entangled with the notions of professional knowledge and a specialist informational unit. The generation and reception of each specialist utterance requires (1) an insufficiently examined realm of an idiocontext, i.e. internal context of a particular language user, and (2) external context, construed as a specific situation in which the text is created. As an exteriorization of a mental system of highly advanced idiosyncratic knowledge, a specialist text should be construed as a material substitute for an idiolectal conceptual grid taking the form of human-specific semiotic signs (usually representing a verbal code), forming a complexly designed semantic structure. Consequently, a specialist text may be defined as a representation of a particular technolect within a professional communication channel, where a terminological lexicon is linearly introduced into a syntagmatic sequence in compliance with syntactic rules.

The scope of professional knowledge is (i) relatively temporal, i.e. the configuration of mental elements is subject to permanent modification, reorganization, amplification or attrition, and (ii) gradual, i.e. the internal reality of the human mind is exposed to an incremental development or deterioration. The extent of professional knowledge may be evaluated exclusively on the basis of its material representations, taking the form of linguistic products, i.e. utterances, or non-linguistic results of human activity, i.e. appliances, devices, projects, etc.

A communicative act proves successful upon satisfaction of the ensuing conditions:

(1) the congruity, concurrence and convergence of idiolects possessed by communicative partners, (2) the ability of formulating texts by a sender (both at the level of phonology and semantics), (3) the ability to construe texts by a recipient, (4) the ability to apply knowledge for the purposes of its multiplication in the recipients' brains (Grucza 2006, 210–220).

As far as literary and artistic texts are concerned, one should pay attention to the dialectical structure of reading. The need to decipher the sense gives the reader the opportunity to formulate his own deciphering capacity, i.e. to bring to the fore an element of their own being of which they are not directly conscious. The production of the meaning of literary passages, i.e. forming the 'gestalt' of the textual unit, does not merely entail the discovery of the unformulated, which can then be taken over by the active imagination of the recipients, but also implies the possibility that the readers may formulate themselves and so discover what had previously appeared to elude their consciousness. Thus reading literature gives one the opportunity to formulate the unformulated (Iser 1980, 68).

Via the interplay of illusion-forming and illusion-breaking as well as by means of consistency-building the reader becomes entangled in the 'text-gestalt' that he himself has produced. Therefore the reader is bound to open himself up to the new workings and construals of the text and so leave behind his own preconceptions. Following the lead of George Bernard Shaw who equated the process of learning with the initial feeling of losing pre-conceived and pre-established mental structures and intentions (1964, 316), reading, by the same token, reflects the architectonics of experience so that the recipient must suspend their own ideas and attitudes, shaping their own personality prior to experiencing the otherness of the literary text (Iser 1980, 64).

Reading is the oscillation, to a greater or lesser extent, between the building and the breaking of illusions. In an infinite loop of trial and error, the reader (re)organizes the various data supplied by the text. These are the major pillars of the textual architectonics on which the interpretation is based. The text's interpretability is very often equated with its coherence, viewed as the realization(s) of the text's semantic potential (Edmondson 1981).

## **Mental representations**

It has been stated that (idio)contexts are devoid of objectivity, and heavily contingent upon the subjective processing of information. They utterly refuse to comply with the view of truth or reality which is free of any individual's influence. The above observation is perfectly compatible with the notion of relevance, as the context is what is defined to be relevant in the social situation by the participants themselves. Therefore the deep embeddedness of context in the cognitively intertwined system of subjectivity and perception proves irrefutable and unquestionable (cf. Van Dijk 1977, 1980, 2009).

The fundamental theoretical and empirical advantage of the above approach is that participants' subjective definitions of the situation manifest themselves as cognitive objects, for instance mental representations. It is this representation, and not the objective social situation, that influences the cognitive process of discourse production and comprehension. That is, traditional conceptions of context fail to account for a crucial missing link: the way participants understand and represent the social situation. Nonmentalist or even antimentalist conceptions of interaction, discourse and context should be marginalized and superseded by the assertion that social situations are able to impact discursive environment only indirectly, i.e. through their subjective interpretations made by the participants (Van Dijk 2009, 4).

The above thread of reasoning brings the reader to the diversification of mental representations, which may take any of three forms: (1) propositions, (2) images, or (3) mental models (Johnson-Laird 1983, 1999; Johnson-Laird and Goldvarg 1997). It is difficult to resist the conclusion that propositions are fully abstracted representations of meaning that are verbally expressible.

Mental models are knowledge structures that individuals construct to comprehend and explain their personal experiences, judgments and perceptions (Tversky 2000; Johnson-Laird 2001; Brewer 2003; Goodwin and Johnson-Laird 2010). With this subjectivity in mind, the above models are constrained by the individuals' implicit, more or less accurate, theories about their experiences (Sternberg 2014, 301), a good illustration being a mental script, explaining the mechanisms of flying planes. It may be surmised that physical or other laws prove completely secondary to what falls within the scope of prejudices, beliefs, or volition. The same would apply to the creation of mental models from text or symbolic reasoning problems as from accounts of planes flying in the air (Byrne 1996; Ehrlich 1996; Garnham and Oakhill 1996).

The comprehension of what is read depends on several factors; the first of them being the lexical access to the meanings attributable to individual words, either from memory or on the basis of context. The second determinant resides in the derivation of senses from the key ideas presented in a textual framework. The third ability is heavily reliant upon the extraction of the pivotal information constituting the core of the text, based on the contexts surrounding a given textual unit. The fourth factor leads the reader to the formation of mental models that simulate the situations depicting the content, internalized while reading (Sternberg 2014, 397–398).

The conclusion seems inescapable that it is not the social situation that influences (or is influenced by) discourse, but the way the participants define such a situation. Contexts may thus not be credited as objective conditions or direct causes, but rather (inter)subjective constructs designed and permanently updated in interaction by participants as members of groups and communities (Van Dijk 2008, ix; Van Dijk and Kintsch 1983).

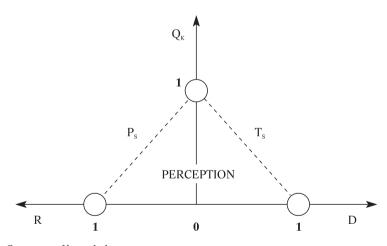
#### Professional knowledge

Each type of text represents and corresponds to a different type of knowledge. Educational texts serve as an exponent of academic knowledge, religious texts replace spiritual

knowledge, whereas proverbs, as the main markers of paremiology, exteriorize ethnic and cultural knowledge.

Human knowledge about the external environment is a *sine qua non condition* for the preservation of human species, while maintaining its central position in the realm of culture, which is understood as harmony or agreement between a human being and the surrounding world (Lukszyn and Zmarzer 2008, 10). The acquisition of knowledge enables one to strike a balance between the human race and the environment or, in other words, to 'tame', domesticate or control the so far uncontrollable or uncultivated conditions. Pragmatically perceived, the construction of knowledge, arising from cognitive processes, consists in the internalization of specific behavioural and mental algorithms. The reality is ordered and arranged by human beings in accordance with the moral imperative of survival, genetically transmitted knowledge and the principles of pragmatic evaluation of ethnic experiences (ibidem: 13).

In the professional communication channel, the knowledge under transfer should, on the one hand, be adapted and adjusted to the cognitive requirements, preferences and stereotypical patterns of the receiver. On the other hand, it is to reflect a duly selected fragment of reality, i.e. a *denotatum*, designating the entity in the real world, such as an object, substance, state of affairs, etc., which is referred to by a lexical item or a linguistic



 $Q_{\kappa}$  – Quantum of knowledge

R - Recipient

D - Designatum

P<sub>s</sub> – Practical Systematization of Knowledge

 $T_s$  – Theoretical Systematization of Knowledge

**Figure 2.** Systematization of knowledge.

sign of another type. The interdependencies between the knowledge, sender and receiver have been illustrated in the following coordinate system, where the x-axis represents the infinite reality, which is to be conquered and harnessed by the recipient, and the variable of created knowledge is plotted on the y-axis (Figure 2).

The segregation of knowledge tailored to the receiver's cognitive capacity, which is typical of artistic, aesthetic and educational texts, may be defined as *the practical systematization*. For the sake of adjusting the materials under processing to the needs of recipients, the methods of knowledge systematization should include the notion of context understood in a broad sense (Bugajski 2006, 459). Usually accompanied by its attributive modifier, the word 'context' is frequently specified as *linguistic*, *extralinguistic*, *cultural*, *pragmatic*, *situational*, etc. However, with an eye to inspecting the cognitive properties of textual comprehension, one should not ignore the relevance of vertical contextuality, composed of the internal 'equipment', or metaphorically speaking, 'mental software' generated via activation of the human mental capacity pre-wired into the human brain. This internal software is required for the comprehension, stimulation and update of the supposedly innovatory senses which the lexical units may assume in a given target environment. Therefore, not only linguistic, but also para- and pragmalinguistic characteristics of communicative partners should be subject to the researchers' scrutiny.

The text, in its entirety, should be treated as an excerpt or an imperfect snapshot of the creator's mentality, theoretical background, intentions and other properties, which altogether form a linear sequence within the textual layer. Experienced holistically, the creator's knowledge is nothing but a mere fraction of a multispectral and multilateral conglomerate of the overall human knowledge. In this paradigm, the aggregate of people's thoughts, ideas, feelings, and experiences, stored collectively in human consciousness – acting as a universal field – lay foundations for the generation of numerous texts, more or less ephemeral, fleeting or momentary, produced since time immemorial in the context of human discourse.

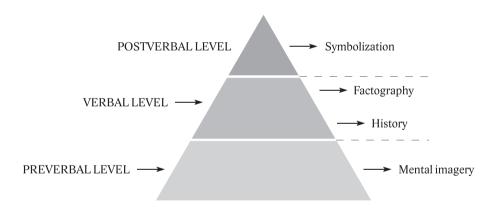
Paradoxically, an external context purportedly existing as an objective situational framework should be interpreted as the representation of the reality, projected upon the recipient's perceptual filters, thus conditioned upon human senses, cognitive apparatus and mental capacities of receivers. Therefore, it is tempting to suggest that the reality in the human mind is reconstructed on highly subjective and judgmental premises.

The image-based concept of the world is shared in a similar form by the overarching majority of humans, where there is a remarkable consistency in the constructions different individuals make of the essential aspects of the environment, such as textures,

sounds, shapes, colours, space. Nothing impedes the notion that 'absolute' reality seems indefinable, inexpressible and incalculable by means of unconditional, final and ultimate values. These intricate mental constructions appear to be created by a complex neural machinery of perception, memory, and reasoning (Damasio 2005, 97).

The creation/reconstruction of knowledge is a multi-tier process, conducted at a preverbal, verbal and postverbal level (Figure 3) – compare analogical deliberations on a dual-code reasoning in Paivio 1969, 1971, and Sternberg 2014.

(1) At a preverbal level, concepts, understood as tools to think with and as such aiding to organize ways of perception, occur as amorphous mental images, too distanced from their verbal coating. (2) A verbal level necessitates the presence of words, positioning a given notion on the map of human cognition. (3) The postverbal layer entails the application of a symbolic code, where the form of knowledge representation has been arbitrarily selected to stand for a *denotatum* that does not perceptually resemble what is being represented. Analogically to a digital watch, using arbitrary symbols to represent the passage of time, human minds employ arbitrary semiotic codes to represent a wide repertoire of ideas (Berezin 1975, 80; 1977, 180).



**Figure 3.** A pyramid illustrating the functioning of conceptual units.

The above stages demonstrating the functioning of a concept may be compared to perceptual filters which select the stimuli from the environment. The preverbal storey of the triangular construction indicates the absorbtion/construction of pictorial knowledge. Historic and factographic knowledge is internalized at a verbal level, whereas the most abstract way of reasoning, involving postverbality, implies the symbolization of thinking.

A cognitive transition from the lower levels of codification to the higher and more complex stages is defined as self-communication (autocommunication), characterized by code-switching, i.e. the expression of cognitive content by means of new semiotic codes. With this in mind, the very same person acts as a sender and an addressee at the same time. The process of autocommunication proves successful whenever the message formulated in, for example, a natural language, has been received in a different code (e.g. geometry-based), or converted into another code immediately upon reception. All the analyses speak for the assumption that the message may be both produced and received at the mental level, without exteriorization. In other words, a given quantum of knowledge need not be externalized, which means that the processing of data may be retained in statu nascendi, i.e. at the stage of formation, while preserving a preverbal form (Lukszyn and Zmarzer 2009, 124). In the domain of scientific activity, autocommunication should not be disrespected, as it enables researchers to 'capture' a particular quantum of knowledge from an entirely novel perspective, through the intellectual optics of semiotic integrity, which brings out a completely new quality of analysed knowledge. It may be conjectured that at the highest level a conceptual unit is disguised in a highly symbolic coating, whose semantic scope encompasses a wider set of terminological units from the lower strata. Closer observation suggests that a symbolic unit operating within the higher stratum may exhibit a stronger semantic potential than the units functioning at the lower floor of the pyramid, i.e. it may absorb several senses which at the lower strata are expressed by numerous concepts. The foregoing testifies to a condensing/compressing capacity of the higher-ranking symbols, thus making them semantically saturated. The above stratification of knowledge implies several research questions which may be synopsized to the following:

- What are the differences between the conceptual units operating upon each level of the pyramid illustrating the stratification of knowledge?
- Which semiotic code would faithfully reflect the structure of knowledge at each stage?
- Would it be possible to adequately express knowledge by means of a natural language at each stratum of knowledge?

Nevertheless, the paucity of proper research methodology leaves the above questions and other potential queries unanswered and open to further hypotheses.

The topic of professional knowledge, discussed extensively in this section, is strongly correlated with mental operations, conditioned upon a cognitive apparatus which will be addressed in the following part of the present paper.

#### Cognitive mechanisms / perceptual filters

Apart from different, individual and culture-bound ways of perceiving, human perception itself distorts and deletes much of what objectively exists in the outside world. Having consolidated and reiterated a large body of research data, one may conceive the notion of perception as involving four levels of uniqueness in human programming: (1) physiology, (2) culture, otherwise known as social engineering, (3) personality, and (4) language (cf. Hofstede 1991, 6).

A psychological approach focuses upon the preferable cognitive styles, which may be summarized to the ensuing four dimensions: (1) reflexiveness – impulsiveness, (2) field dependence – field independence, (3) generality – specificity and (4) verbal vs pictorial style for codification of knowledge (cf. Kogan 1973, 1980; Goldstein and Blackman 1978; Matczak 1982; Bocheński 1992; Nosal 1992). Each dimension is determined by a continuum, the extremes of which are indicated by two opposite poles. The cognitive preferences are usually oriented towards one of the vertices; however, a full attainment of an extreme, i.e. liminal value proves infeasible. This line of argument need not be pursued further. Suffice it to point to the fact that the projection of a respondent's traits upon any of the above metaprograms is of a relative and hypothetical nature, as a result of which the gradation of the presented dimensions should not be ignored. Cognitive styles, as perceptual indicators, should be considered in the addressee-oriented systematization of scientific data, which allows one to tailor a specific *quantum* of information to the recipient's expectations and needs, and thus optimizes the acquisition of knowledge (cf. Wallas 1926; Dewey 1960; Kozielecki 1968; Anderson 1983; Chlewiński 1997).

The human mind is imprisoned not only in its cognitive frames, but also restricted by cultural boundaries, including such determinants as the attitude of a given ethnicity towards its history, political system, nationality, which enables one to define predominant behavioural patterns and formulaic categories shared by a particular community in it perception of the reality (cf. Lukszyn 2010, 101).

Next to the practical categorization of data, knowledge may be also systematized through the prism of a philosophical or speculative interpretation of the reality, which may be described as *a theoretical systematization*, playing a preponderate role in scientific texts (cf. Figure 2). The state of facts, objects or phenomena are objectively reconstructed with the use of various semiotic codes in compliance with the rudimentary rules of logic. Assuming that the systematized knowledge aims at an unbiased and unprejudiced reflection of the reality, the addressee plays a supporting or ancillary role. In other

words, the stronger the relations between a given *quantum* of knowledge and a *designatum*, the less meaningful the interdependencies between the selected fragment of knowledge and the recipient (the shorter the section  $Q_x$ –D, the longer the vector  $Q_x$ –R). Conversely, provided that the scientific data are presented subjectively, taking into account the perceptual filters of the addressee, the *designatum* is automatically moved to the background, which leads to specific distortions, deletions or simplifications of a carefully selected sample of knowledge. The axis Recipient – Designatum depicts a wide array of perceptual processes, focused on all the observable objects, detectable within consciousness as a thought, intuition, or deduction.

## Intuitive thinking as a creativity enhancer

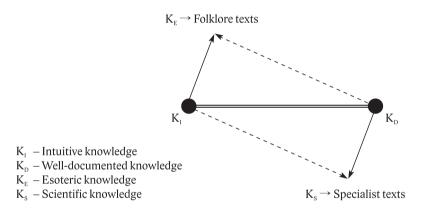
As shown in academic articles, knowledge may be classified in terms of its scientific verifiability. Ascertained and justified by means of proper research methodology, a selected scientific reality deserves the status of documented knowledge arising from a logical way of reasoning. Based upon causality and analytic elaboration, rational computation of information is a linear process, leading to indisputable conclusions drawn upon substantiable premises. A rational approach maximizes the levels of self-control and intensifies other defensive mechanisms consisting in comparison of operational effects with the external standards.

Information arising from one's inner feelings, sensations, predictions, assumptions and extrasensory messages is defined as intuitive knowledge, which results from instinct-based mental operations. Clarified as unconscious cognition, inner sensing, uncontrollable insight to subliminal pattern-recognition, without the need for conscious reasoning, the variable of intuition is believed to be significantly correlated to creativity (Weisberg 1986, 1988; Kolańczyk 1991, 1995; Kolańczyk and Świerzyński 1995; Policastro 1995).

Depending upon the intensity of combined concepts, the juxtaposition of well-documented and intuitive knowledge may yield either scientific or esoteric knowledge (Figure 4). Whenever the balance point is moved towards a well-documented pole and intuition serves a marginal function (however relevant in each intellectual activity), then professional, scientific knowledge is created, subsequently exposed in specialist texts. When intuition constitutes a prevailing component and verifiable data are of peripheral importance, the final product is esoteric knowledge reflected in folklore (or primary) texts, such as legends, fairy tales and proverbs. In other words, esoteric knowledge eventuates

from a hypertrophic multiplication of intuitive messages. Projected upon the field of linguoculturology, ethnicities may be divided into communities exhibiting an intutive or scientific perceptual style. The above deliberations have been summarized in a figure, whose extremes are determined by Intuitive Knowledge and Well-Documented Knowledge (Figure 4).

Due to the fact that two types of knowledge form the opposite extremities of the same magnitude, the strength of relations between them has been intensified by a double line. The length and width of arrows (vectors) indicate the potential of relations between derivatives. A short, solid line demonstrates a common platform and similarities between (1) esoteric and intuitive knowledge as well as (2) scientific and well-documented knowledge, whereas a longer, dashed section illustrates significant differences, i.e. conceptual and structural discrepancies.



**Figure 4.** Intuitive knowledge vs documented knowledge.

#### **Intentions and illocutionary potential**

The importance of sharing mutual intentions and assumptions is a key to successful communication between interlocutors (Widdowson 1979, 138). Irrespective of the occasion, the action performed while producing an utterance will consist of three related acts:

 Locutionary act, construed as a basic act of utterance, i.e. conveying the ostensible meaning, comprising phonetic, phatic and rhetic acts, as well as consisting in the production of a meaningful linguistic expression;

- Illocutionary act, defined as intended significance of a socially valid verbal action, thus making well-formed utterances purposeful, meaningful and systemically functional;
- 3. Perlocutionary act, understood as an actual effect, such as persuading, convincing, scaring, enlightening, inspiring, or serving a conative function (Yule 1996, 48–49). Refined and advanced on several occasions (cf. Austin 1962; Searle 1969; Searle and Vanderveken 1985), the above division of speech acts may be generally interpreted quite narrowly to denote only the illocutionary force of an utterance, which means that the very same text may count as a promise, prediction, warning, threat, depending upon the circumstances. The interpretation of meaning heavily relies upon the deployment of acts and objects which function as signs in relation to other signifiers. Signs are deployed in space and time to produce texts, whose meanings are construed by the mutually contextualizing relations of the conceptual constellations.

#### A cultural link in the cognitive chain

An external context manifests its reality in a chain of consecutive information units, linearly and sequentially arranged, whose content, structure, illocutionary force, relevance and other markers of textuality (cf. Beaugrande and Dressler 1981), even to an insignificant extent, affect the minds of the readers and fuel their various interpretations. Information units, caught in an infinite loop of creation and reception, are preceded by prior textual fragments and followed by the sequence of further content, thus creating their right- and left-handed linguistic surrounding, otherwise known as co-text.

Further reflection shows that the external context is subject to cultural and ideological restrictions imposed upon members of a given ethnicity (cf. Chamberlain 2000, 320).

Any attempt at dispelling the doubts over the notion of 'culture factor' enables researchers to arrive at the inescapable conclusion that culture, by its very nature, is not a factor, but the framework (the context) within which all communication takes place.

The cultural mediator, be s/he translator, interpreter or lexicographer, is to understand the cultural *modus operandi* and is to frame a particular communication within its context of culture. Then, as mediator, he or she will need to dissociate from that frame and mind-shift or chunk to a virtual text which will justify the choice when creating a target text for the addressee.

The cultural orientations are filters, sometimes viewed as idiocontextual factors, determining the functioning of individuals, helping them orient themselves in society. They furnish individuals with methodology for interpreting the environment and guide visible behaviour that is congruent with other members of the same culture. A failure to adhere to subconscious cultural orientations may eventuate in misperceptions, misinterpretations and mistranslations. The map of the world made by representatives of a given culture is limited to a local area, therefore fails to supply proper instructions regarding the understanding of texts produced by other cultures. Hence, the cornerstone of the mediator's task is not to translate texts, but to translate cultures, and help strangers give new texts a warm welcome (Katan 1999, 241).

#### External context: LCC vs HCC

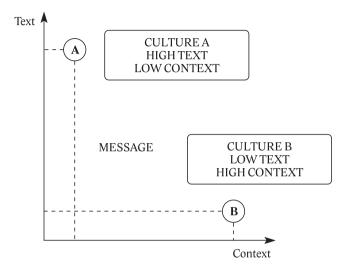
One of the guiding orientations (or meta-orientations), strictly related to the external nature of perception, is cultural contexting (Hall 1983, 59–77; 1989, 85–128). The basic concept is that individuals, groups and cultures exhibit differing priorities with regard to how much information (text) needs to be made explicit for communication to prove effective.

In the instant case the lexemes 'text' and 'context' yield particular meanings. The former is defined as transmitted information, whereas the latter should be equated with 'stored information,' and as such is very close to Halliday's non-verbal environment of a text which is made up of both situational conditions as well as cultural circumstances (Halliday and Hassan 1989, 47). In terms of communication context is the *quantum* of information the other person can be expected to possess on a given subject (Hall 1983, 61).

There are two aspects of communication (text and context), represented by a vertical and horizontal axis in the following coordinate system (Figure 5).

At one theoretical extreme, all the conveyed information is made visible, or explicit. At the other extreme, no text is necessary, as all information is implicit, i.e. contained in the 'context' area.

The diagram above (cf. Hall 1983, 61) depicts how both dimensions operate together to form the message. Assuming a context is lost, additional information must be added to bridge an 'informational gap' and to preserve the transparency and clarity of the message.



**Figure 5.** Contexting the message (cf. Katan 1999, 183).

Contexting transpires to be a fundamental aspect of culture, as all members of a given community tend to share a biased orientation towards communication through the text, where the area of reasoning may be limited without detriment (1) to the overall message, as everything has been explicitly stated and formulated within the utterance (Low-Context Communication, abbreviated to LCC), or (2) to the context, where the text itself seems to be superfluous and redundant (High-Context Communication, abbreviated to HCC).

All cultural orientations depend on a bipolar division into a 'loosely woven' fabric, easily adaptable to versatile conditions and a 'tightly knit' tissue, i.e. a dense, interwoven, more solid texture, resistant to change and modification. This metaphor may be juxtaposed with the uncertainty avoidance orientation: either towards flexibility or structure.

How much written information is available for a foreign visitor and how much will be needed to obtain from a local informer is a possible indicator of how high or low context a culture is. In New York, there are helpful signs indicating the best time and angle from which a photograph should be taken at every tourist site. In Cairo there are no signs instructing tourists which pyramid is which.

The LCC vs HCC bifurcation can be corroborated by the information policy of universities whose programmes of entertaining and introducing new students to the academic community differ depending on the tendency to use high-context messages over low-context messages in routine communication. In the UK, administrative, academic

and student organizations battle for time to supply newcomers with formal and technical instructions in a highly conventionalized and meticulously designed way. In Italy and other Mediterranean countries, on the other hand, the explanations and entertainment are provided in a more informal and unplanned manner, which means that students are notified of the bare essentials through the grapevine.

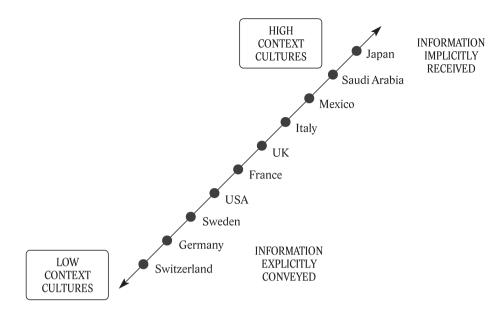
All the above deliberations may be summarized in a tabular form (cf. Victor 1992; Simons et al. 1993):

Low-Context Cultures	High-Context Cultures
More loosely knit	More tightly woven
Shallow rooted	Deep rooted
Text-oriented	Context-directed
Facts-oriented	Relationship-oriented / Emotions-driven
Direct	Indirect
Consistent	Flexible (in meaning)
Rules-governed	Circumstances-determined
Monochronic	Polychronic

**Table 1.** Comparison of low- and high-context cultures.

When analysing two different cultures, such as Britain and Italy, through the prism of the above matrix, it is self-evident that Italy would tend to operate on a more tightly woven, high-context bias, while the British would function on a more loosely-knit, low-context basis. When examining the attitude of the British and the Italians towards fashion, food and furniture, it is easily discernible that British are more inclined to lower context, attaching more value to functionality, whereas Italy places a higher value on design, taste and aesthetics.

The following cline shows the hypothetical position of countries on the map of cultural (con)textualization.



**Figure 6.** Positioning of countries on a cultural contexting map (cf. Katan 1999, 183).

Japanese people represent the highest context communication style, which fits the stereotype of their inscrutable nature, where silence is more valued than a word. Conversely, Swiss culture is located at the other end of the cline, where the stereotype of exacting precision and detailed information corresponds to their LCC position.

#### **Conclusions**

The consolidated conclusions to be drawn from the above analyses are as follows:

- In terms of their functions, contextual examinations should be described along a scale anchored between two extremes: (1) external, relatively absolute and allegedly objective conditions on the one hand and (2) pure idiosyncrasies on the other. Between these two poles lies a vast middle-ground occupied by intersubjective factors which should become a focal point of not only semanticists, pragmaticians or discourse analysts, but also linguoculturologists and psychologists.
- The degree to which the idiocontexts of communicative partners differ or share a limited common platform may inevitably occasion numerous misunderstandings, misinterpretations and distortions of the original message.

 The process by which language speakers may be said to gain recognition in their idiocontextual capacity has hardly been studied so far. Therefore, the centrality of research should be directed towards their mental environment and cognitive determinants.

- Defined as an internal 'software' featured by the multilaterality of its interconceptual relations, idiocontextal capacity proves to be heavily entangled with the evolution of human mind and human cognition understood in an anthropological sense.
- Introspectively perceived, the advancement of idiolectal specialist knowledge entails significant changes in both everyday vocabulary and expert lexis, with terminological data being in the linguistic spotlight.
- Due to the heterogeneity of semiotic codification, a conceptual unit may be processed at various levels of human cognition, with the inclusion of a preverbal, verbal and postverbal stage.
- As there appears to be a statistical correlation between intuitive thinking and creativity, the relevance of one's own intuitions, preponderantly based on knowledge or previous experience and used as keys for hitting upon ideas, should not escape scientific vigilance.
- In the light of cultural diversification, the interlingual transfer of knowledge aims at perceiving contextuality as a relativistic prism through which the depth of cultural complexities should be penetrated.

With the foregoing articulations outlined and solidified, one may with equal justice claim that wide divergences obtain among scholars investigating the realm of (con)textuality. More benefits will accrue from practical analyses in these territories, where the specific empirical data projected upon the metaphrastic and ethnic typologies of languages will optimize the processes of cultural mediation at both everyday and professional levels.

#### **Works Cited**

Anderson, John R. 1983. *The Architecture of Cognition*. Harvard: Harvard University Press.

Austin, John, L. 1962. *How to Do Things with Words*. Oxford: Oxford University Press. Berezin, Felix M. 1975. *Istorija lingvisticheskikh uchenij*. Moskva: Vysshaja shkola.

- Berezin, Felix M. 1977. *Khrestomatija po istorii russkogo jazykoznanija*. Moskva: Vysshaja shkola.
- Bocheński, Józef M. 1992. Współczesne metody myślenia. Poznań: W drodze.
- Brewer, William F. 2003. "Mental models". In *Encyclopedia of Cognitive Science* (Vol. 3), edited by Lynn Nadel, 1–6. London: Nature Publishing Group.
- Bugajski, Marian. 2006. *Język w komunikowaniu*. Warszawa: Państwowe Wydawnictwo Naukowe.
- Burkhanov, Igor. 1998. *Lexicography. A Dictionary of Basic Terminology*. Rzeszów: Wydawnictwo Wyższej Szkoły Pedagogicznej.
- Byrne, Ruth M. J. 1996. "A Model Theory of Imaginary Thinking". In *Mental models in cognitive science*, edited by Jane Oakhill and Alan Garnham, 155–174. Hove, UK: Taylor & Francis.
- Chamberlain, Lori. 2000. "Gender and the Metaphorics of Translation". In *The Translation Studies Reader*, edited by Lawrence Venuti, 314–329. London and New York: Routledge.
- Chlewiński, Zdzisław. 1997. "Podstawowe problemy teoretyczno-metodologiczne w badaniach nad wyobraźnią". *Kolokwia Psychologiczne* 6: 27–56.
- Damasio, Anthony. 2005. *Descartes' Error: Emotion, Reason, and the Human Brain*. New York: Avon Books.
- De Beaugrande, Robert, and Wolfgang Dressler. 1981. *Introduction to Text Linguistics*. London and New York: Longman.
- Dewey, John. 1960. The Quest for Certainty: Gifford Lectures 1929. New York: Capricorn.
- Edmondson, Willis. 1981. Spoken Discourse: A Model for Analysis. London: Longman.
- Ehrlich, Kate. 1996. "Applied Mental Models in Human-Computer Interaction". In *Mental Models in Cognitive Science*, edited by Jane Oakhill and Alan Garnham, 313–339. Hillsdale, NJ: Erlbaum.
- Garnham, Alan, and Jane V. Oakhill. 1996. "The Mental Models Theory of Language Comprehension". In *Models of Understanding Text*, edited by Bruce K. Britton and Arthur C. Graesser, 313–339. Hillsdale, NJ: Erlbaum.
- Goldstein, Kenneth M., and Sheldon Blackman. 1978. *Cognitive Style: Five Approaches and Relevant Research*. New York: Wiley.
- Goodwin, Geoffrey P., and Philip N. Johnson-Laird. 2010. "Conceptual Illusions". *Cognition* 114: 253–265.
- Grinev-Griniewicz, Sergei, Patricia Thomas, and Elvira Sorokina. 2004. *Foundations of Anthropolinguistics*. Saarbrücken: LAP LAMBERT Academic Publishing.

Grinev-Griniewicz, Sergiusz. 2011. "Terminological Methods in the History of Terminology science". *Terminologija* 18: 27–42.

- Grucza, Sambor. 2006. "Komunikacja specjalistyczna a idiokontekst specjalistyczny i konsytuacja specjalistyczna". In *Glottodydaktyka i jej konteksty interkulturowe*, edited by Alicja Wołodźko-Budkiewicz and Wanda Zmarzer, 209–223. Warszawa: Wydawnictwo Uniwersytetu Warszawskiego.
- Hall, Edward T. 1983. The Dance of Life. New York: Doubleday.
- Hall, Edward T. 1989. Beyond Culture. New York: Doubleday.
- Halliday, Michael, and Ruqaiya Hasan. 1989. *Language, Context and Text: Aspects of Language in a Social Semiotic Perspective*. Oxford: Oxford University Press.
- Hofstede, Geert. 1991. *Cultures and Organizations: Software of the Mind*. London: McGraw-Hill.
- Iser, Wolfgang. 1980. "The Reading Process: A Phenomenological Approach". In *Reader-Response Criticism*, edited by Jane P. Tompkins, 50–69. Baltimore and London: The Johns Hopkins University Press.
- Johnson-Laird, Philip N. 1983. *Mental Models: Towards a Cognitive Science of Language, Inference, and Consciousness*. Cambridge, MA: Harvard University Press.
- Johnson-Laird, Philip N. 1999. "Mental Models". In *The MIT Encyclopedia of the Cognitive Sciences*, edited by Robert A. Wilson and Frank C. Keil, 525–527. Cambridge, MA: MIT Press.
- Johnson-Laird, Philip N. 2001. "Mental Models and Deduction". *Trends in Cognitive Sciences* 5: 434–442.
- Johnson-Laird, Philip N., and Yevgeniya Goldvarg. 1997. "How to Make the Impossible Seem Possible". In *Proceedings of the Nineteenth Annual Conference of the Cognitive Science Society*, 354–357. Stanford, CA. Hillsdale, NJ: Erlbaum.
- Katan, David. 1999. *Translating Cultures*. *An Introduction for Translators, Interpreters and Mediators*. Manchester: St Jerome Publishing.
- Kogan, Nathan. 1980. "A Cognitive-Style Approach to Metaphoric Thinking". In *Aptitude, Learning and Instruction; Cognitive Process Analyses of Aptitude*, Vol. 1, edited by Richard E. Snow, Pat-Anthony Federico and William E. Montague, 247–281. Hillsade: Erlbaum.
- Kolańczyk, Alina, and Robert Świerzyński. 1995. "Emocjonalne wyznaczniki stylu i plastyczności myślenia". *Przegląd Psychologiczny* 38: 279–304.
- Kolańczyk, Alina. 1991. *Intuicyjność procesów przetwarzania informacji*. Gdańsk: Wydawnictwo Uniwersytetu Gdańskiego.

- Kolańczyk, Alina. 1995. "Why is intuition creative sometimes?" In *Creative Information Processing: Cognitive Models*, edited by Tomasz Maruszewski and Czesław S. Nosal, 53–72. Delft: Eburon Publishers.
- Kozielecki, Józef. 1968. Zagadnienia psychologii myślenia. Warszawa: Państwowe Wydawnictwo naukowe.
- Kristeva, Julia. 1980. *Desire in Language: A Semiotic Approach to Literature and Art.* New York: Columbia University Press.
- Kuhn, Thomas S. 1962. *The Structure of Scientific Revolutions*. Chicago: University of Chicago Press.
- Lukszyn, Jurij, and Wanda Zmarzer (eds.). 2009. *Dydaktyczny słownik terminologii lingwistycznej*. Warszawa: Katedra Języków Specjalistycznych.
- Lukszyn, Jurij, and Wanda Zmarzer. 2006. *Teoretyczne podstawy terminologii*. Warszawa: Katedra Języków Specjalistycznych.
- Lukszyn, Jurij, and Wanda Zmarzer. 2008. "Polsko-rosyjski tezaurus konstant kulturowych". In *Kulturowy i leksykograficzny obraz języków specjalistycznych. Języki Specjalistyczne 8*, edited by Łukasz Karpiński, 9–15. Warszawa: Katedra Języków Specjalistycznych.
- Lukszyn, Jurij. 2010. "Typologia metafrastyczna języków". In *Słowo i tekst w opisie porównawczym*, edited by Alina Czapiga and Zofia Czapiga, 96–102. Rzeszów: Wydawnictwo Uniwersytetu Rzeszowskiego.
- Łompieś, Jan. 2012. "Jednostka informacyjna i jej konteksty". In *Struktura jednostek informacyjnych*, edited by Wanda Zmarzer, 109–131. Warszawa: Instytut Rusycystyki Uniwersytetu Warszawskiego.
- Matczak, Anna. 1982. "Indywidualne wyznaczniki funkcjonowania poznawczego jako wyznaczniki twórczości". *Psychologia Wychowawcza* 25: 1–14.
- Nosal, Czesław S. 1992. *Diagnoza typów umysłu: rozwinięcie i zastosowanie teorii Junga*. Warszawa: Wydawnictwo Naukowe PWN.
- Paivio, Allan. 1969. *Mental Imagery in Associative Learning and Memory*. "Psychological Review" 76: 241–263.
- Paivio, Allan. 1971. *Imagery and Verbal Processes*. New York: Holt, Rinehart and Winston.
- Policastro, Emma. 1995. "Creative intuition: An integrative review". *Creativity Research Journal* 9: 99–113.
- Searle, John R. 1969. *Speech Acts: An Essay in the Philosophy of Language*. Cambridge: Cambridge University Press.

Searle, John R., and Daniel Vanderveken. 1985. *Foundations of Illocutionary Logic*. Cambridge: Cambridge University Press.

- Shaw, George B. 1964. Major Barbara. London: Penguin.
- Simons, George F., Carmen Vazques, and Philip Harris. 1993. *Empowering the Diverse Workforce*. Houston: Gulf Publishing.
- Sperber, Dan, and Deirde Wilson. 1986. *Relevance. Communication and Cognition*. Oxford: Blackwell.
- Sternberg, Robert. 2014. Cognitive Psychology. Wadsworth: Cengage Learning.
- Tversky, Barbara. 2000. "Mental models". In *Encyclopedia of Psychology* (Vol. 5), edited by Alan E. Kazdin, 191–193. Washington: DC American Psychological Association.
- Van Dijk, Teun A. 1977. Text and context. Explorations in the Semantics and Pragmatics of Discourse. London: Longman.
- Van Dijk, Teun A. 1980. *Macrostructures*. *An Interdisciplinary Study of Global Structures in Discourse, Interaction, and Cognition*. Hillsdale, NJ: Erlbaum.
- Van Dijk, Teun A. 2008. *Discourse and Context. A sociocognitive Approach*. Cambridge: Cambridge University Press.
- Van Dijk, Teun A. 2009. *Society and Discourse. How social contexts control text and talk.* Cambridge: Cambridge University Press.
- Van Dijk, Teun A. 2009. *Society and Discourse: How Social Contexts Influence Text and Talk*. Cambridge: Cambridge University Press.
- Van Dijk, Teun A., and Walter Kintsch. 1983. *Strategies of Discourse Comprehension*. New York: Academic Press.
- Victor, David A. 1992. International Business Communication. London: HarperCollins.
- Wallas, Graham. 1926. The Art of Thought. New York: Harcourt.
- Wartofsky, Marx W. 1968. *Conceptual Foundations of Scientific Thought. An Introduction to the Philosophy of Science*. New York: Collier Macmillan Ltd.
- Webster, Frank. 2006. Theories of the Information Society. London: Routledge.
- Weisberg, Robert W. 1986. Creativity. Genius and Other Myths. New York: Freeman.
- Weisberg, Robert W. 1988. "Problem solving and creativity". In *The Nature of Creativity. Contemporary Psychological Perspectives*, edited by Robert J. Sternberg, 148–176. Cambridge: Cambridge University Press.
- Widdowson, Henry G. 1990. *Aspects of Language Teaching*. Oxford: Oxford University Press.
- Yule, George. 1996. *Pragmatics*. Oxford: Oxford University Press.