

DEFECTIVE INSTRUMENTAL MOTIVATION AS A COGNITIVE RESCUE
MECHANISM OF THE MINIMAL LEARNER

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1. Introduction

The current analysis has been inspired by the research project results obtained for the purpose of my PhD thesis. The objective of the research was, first, to draw the psycholinguistic profiles of 21 first-year students of English Philology at University of Warmia and Mazury, Olsztyn; second, to test the trichotomous 'maximal-optimal-minimal model' of the language learner against the subject group observed. In the course of the psycholinguistic investigation undertaken in the project it was suggested that the subjects realize the minimal learner profile; their cognitive-linguistic, emotional and motivational parameters were in some respects defective, suggesting borderline, or 'minimal', values. In this paper, it is the motivational parameters of the subjects that will be in the focus of attention; specifically, the defective character of the motivational drive will be detected and put to analysis. It has to be noticed at this point that, while it is the specified group of Polish students that served as a scientific reference here, one may risk a statement that the motivational profile sketched is representative for a large part of the community of Polish university students. One of the assumptions put forth in the current paper is that defective instrumental motivation belongs to the collection of psycholinguistic universals in the context of the Polish educational system; consequently, the very mechanism has to be recognized and diagnosed by psycholinguistically oriented specialists, to help both educators in their academic, glottodidactic practice and, ideally, students themselves in their life-long self-education.

2. Motivation in glottomethodological research

To begin with, a brief report will be attempted at, presenting the manifold definitions of the motivational drive that have been proposed in the specialist literature. Interestingly enough, a significant fraction of the research in the field of glottomethodology has been devoted to motives which can be characterized as conforming to the standards of normalcy; in other words, typologies and definitions of motivation that arrest scholarly attention today concentrate on the motivational drives of a functionally healthy organism. Later in this study it will be argued that any methodological counseling based on such a fragmentary empirical account, will fail to minimize the risk of a breakdown in the educational process, possible in cases of the minimal learner profile.

Researchers examining motivation in the educational process start their discussions from the dichotomy of instrumental motivation vs. integrative motivation. The former type refers to concrete, usually professional benefits consequent on the skills and qualifications one has possessed. Integrative motivation, conversely, is less egoistic, being rooted in the genuine unconditional attraction to the ability one is motivated to obtain (cf. Hahn in Kral, 1994:76, 77; Green, 1994:85). While some researchers treat these motives as the components of a dichotomy, others perceive the integrative and the instrumental motives as the extremes of the continuum. Green, on the other hand, distinguishes three distinct levels of motivation, which interact with each other continually. These levels comprise, first, holistic motivation, which is related to the process of self-realization. This approach was pioneered by Maslow, who pointed to the ego-centred self-development as the ultimate goal of an individual. Second, cultural-linguistic motivation is specified by the scholar, which refers to an individual's adaptation to a given culture, presupposing one's mediation across cultures and community boundaries. Last of all, Green discusses cognitive-linguistic motivation connected with an individual in formal language-learning situations (cf. Green, 1994:83, 84). Further, one should mention the contribution of the Polish psychologist Janusz Reykowski, who distinguishes between positive and negative motives, the former being a person's wishes and appetite for things; the later combining all the fears and displeasures that a person is motivated to avoid. In the educational context, a student is positively motivated when he/she aims to pass the examination to satisfy his/her ambitions or, simply, to know more. However, the same student may be motivated by the fear of a friend's reaction to a possible failure; or he/she may strive to avoid the negative evaluation on the part of a teacher. In this case the negative motivation comes into play (cf. Reykowski, 1977; Pfeiffer, 2001:112, 113). According to the psychologist, motivational processes are always subordinated with regard to one's consciousness system (cf. Reykowski, 1977, 21). In addition, motivation partakes in all decision-making processes as motives help to select parameters and distribute energy in an optimal way. Of importance is the fact that a vast collection of motives humans are driven by in their

lives are, in a sense, inherited from the surrounding. As one's motives co-create one's mental map, embracing the awareness of what is worth pursuing in life, what is not and why, one's personal experience constitutes but one of confounding mechanisms in the cognitive representation architecture. Apart from direct experience, the transfer of knowledge is a cognitive mechanism of pivotal importance both from the perspective of an organism's maturation, and from the perspective of the social functions an individual is to perform and partake in (cf. Puppel, 2000).

Another classification of motivational drives encompasses eight basic motives that can be singled out in the learning process of the foreign language education. Namely, researchers point to the cognitive motive, related to a student's curiosity and adaptational mechanisms; the applicability motive, related to both the integrative and instrumental variants of motivation; the communicative motive, which indicates a certain readiness and effort towards linguistic and informational exchange in the target language; the experience-related motive that can be incited by emotionally-marked classroom context; the motive of a teacher, which is related to the teacher – student communication dyad; the motive of the parents, that is related to the parents – student communication dyad; the social motive, which raises the issue of a social status and respect consequent on one's educational background; and the motive of prestige, being the personal impulse towards raising one's own value as a person (cf. Pfeiffer, 2001:112, 113) (translation mine – M. B-T).

One has to admit a limited applicability of the above summarized theoretical proposals. The precept of the autonomy of a student, which has become a central concept in the recent glottomethodological research, allows a student to develop his/her own mental states and attitudes, optimal with regard to his/her ontogenic maturation, and to his/her educational success. In other words, a multitude of motives and motivational drives that can be traced down in the community of Polish university students explains the psychological/strategic individuality and the uniqueness of each organism; however, it can hardly account for psycholinguistic snags or, in extreme cases, the overall obstruction of the educational process. When the educational process becomes inhibited, there have to be some underlying pathogenic mechanisms which have retarded it. These processes can be either of the intrapersonal or the interpersonal character. However, one can safely assume at this point that the above typologies of motivation in education do not provide any cognitively grounded speculations concerning these defective mechanisms. In the subsequent sections of this paper, the motivational profile of the minimal learner will be sketched, in which such pathogenic motivational processes are explored and given the label defective instrumental motivation. As the psycholinguistic perspective equates exploring the almost unexplorable, in terms of the traditional empirical instruments, object which is the human mind, the considerations presented in this paper are hypothetical and will not escape future supplementation and/or verification.

3. The minimal motivational profile of the subjects

Another feature of the above summarized approaches to motivational force in education is a far-going isolation of the motivational process from the rest of the human mental dynamics. It seems that the analysis of motivation as an isolated mechanism, irrespective of the human ontogenic biography as well as of the dynamically changing intraorganism and external contexts, contributes to the reductionist character of this glottodidactic research. In order to account for any mental/psychological mechanism in humans one needs the information about the overall architecture of the human behavior and its determinants. The precision and accurateness of the research into the human mind can be achieved when there is an agreement on the central psycholinguistic precept that the human organism is an integrated psycho-physiological whole, where certain features result from other features, where biological, psychological and environmental repertoire of constituents permeate every aspect of the student's reaction and mental base, understood both as a container and as a processor (cf. Puppel, 2003). The below presented considerations attempt to propose such a multidimensional and dynamic approach to the question of motivation in education. The main assumption in this paper is that defective instrumental motivation becomes a real challenge to be confronted with in the psycholinguistic considerations over the educational process of the minimal student.

3.1 The psycholinguistic diagnosis

In order to discuss the minimal motivational profile of the students in the experimental group, it is essential to start from presenting three categories of educational problems that were identified by the academic teacher/experimenter in the initial stage of the project realization. The problems noticed fall into:

- the category of cognitive-linguistic problems, which refer to the initial, low competence of the students, with regard to both the linguistic and metalinguistic knowledge;
- the category of motivational problems, referring to the negative instrumental type of motivation;
- the category of emotive problems, which refer to alexithymic symptoms, denoting both lowered emotional competence, and defective cognitive processing in general (cf. Maruszewski and Ścigała, 1998);

These three types of problems of the subjects finally resulted in, first, the general, growing in intensity cognitive/emotional noise the subjects experienced; second, in the deformation of the motivational drive that controlled the students' procedure; the very process of deformation can be traced down in the psycholinguistic analysis of the way the students under discussion dealt with the creativity-demanding tasks.

Below, I will present a psycholinguistic scenario as realized by the students in one of the experiments implemented in the regular course work. As the students were observed and tested during the two semester-course of academic writing, this type of classes constituted a genuine opportunity to assess the students' potential for creative behavior which would manifest itself in individual, original and, above all, effective task completion. In brief, the task had a form of home-written portfolios containing eight 180-words formal paragraphs on the topics provided by the teacher/experimenter. The students received a task description, two-months period to handle the task, and the teacher's hints how to start the process of writing. One of the conditions upon which the experimental success depended, in terms of the experimental setting, was the teacher's conscious effort to create a generally harmonious atmosphere contextualising the moment of providing the details of the task. What is vital, the straightforwardly expressed assumption behind the task was that, after a considerable amount of classroom instruction and guided writing, the students were to present their competence with regard to the craft of the academic writing practice; what was to be marked by the teacher was their linguistic and metalinguistic knowledge, the originality of reflection being of secondary if not of no importance. The paragraph topics were deliberately chosen not to repeat perennial issues, reoccurring in the secondary and university foreign language education. However, having received the topic list, three out of twenty one subjects came to the teacher asking for help with regard to the interpretation of some of the topics. They received the ideas how to approach the topics. The rest of the experimental group made an impression of being in control of the paragraph writing process. As it was revealed later on, the task requiring creative behavior and a certain cognitive flexibility intensified a cognitive/emotional chaos in the students. The scenario observed developed as follows:

1. The subjects receive the description of the task and, in a sense automatically, they presuppose proper, in their opinion, and safe solutions. Depending on what stimulates them – the top-down vision/perspective or the bottom-up material – they stay within this code suggested to them while approaching the task. In this experiment, motivation* to do the task makes them adjust the bottom-up data to their purpose. This is the conventional way they would approach any of such tasks. When the subjects are confronted with the linguistic material – the paragraph topics – but the task requires the change of the code and individual creative effort to mediate between the bottom-up material (topics) and the top-down perspective (visual images, abstract considerations, novel interpretations of the topics) the mental processes get stuck; the cognitive system makes conscious the information about the failure.

* The initial negative instrumental motivation, as observed in the subjects' psycholinguistic profiles is characterised by, first, the fear of a potential failure, second, by the practical benefits coming from the university diploma which they strive to obtain.

2. The subjects realize the growing cognitive difficulties to do the task. The motivation is strong to have the work behind them. When the system experiences obstruction in cognitive processing, emotional arousal comes into play, to accelerate and support energetically the problem-solving programs of the organism.
3. The students are not skilled emotion-readers, so they find it problematic to grasp and comprehend their own emotional states. So far within the norm, the emotive mechanisms in the subjects start to disorganise the educational process, developing pathogenic patterns and, probably, following the mental routes of the defectively constructed mental representations of the emotive reactions.
4. Having realised the emotional alert, the cognitive systems of the students activate the mental scene of the teacher being an enemy and a primary stressor in the educational process; this is the first and the most vivid explanation that the cognitive-interpretive systems provide the students with. In brief, the students associate their nervousness with the teacher and her expectations, in other words, the cognitive systems of the students employ external attribution.
5. Growing frustration, goal-oriented since the moment of the stressor identification, turns into anger and objection. The students understood the source of their problems – the teacher and his/her expectations – as a result, they group together and collectively decide to voice their objection – several of them pay the visit to their academic supervisor, complaining of the ‘too sophisticated topics’ they received from the writing course teacher.
6. The students receive some clues from their peers (who consulted the teacher/experimenter), and manage to produce the interpretations of the topics. The cognitive systems, with the help of emotional and motivational involvement, managed to discover and provide the solution to the cognitive and the emotional problems.

It needs to be highlighted at this point that these considerations are not aimed against instrumental motivation as such; as has already been stated in this paper, any motivation in education may be accepted which fosters the learning process and reflects the organism-specific cognitive problem-solving programs. However, in order to benefit from a given skill one has to strive to obtain this skill. The motivation which pushes towards certificates and positive marks, but neglects or ridicules the skill/competence itself, becomes a defective form of instrumental motivation. While distancing the student from educational goals, such motivation cannot be accepted by otherwise tolerant and oriented towards the individual psycholinguistic perspective in the glottodidactic research.

Coming back to the above outline of the defective educational process, this sequence of mechanisms, both conscious and going on below the consciousness threshold of the subjects, illustrates a certain strategic shortcut the systems undertook, being not equipped to carry on effectively mental/emotional/motivational programs. This defective instrumental motivation seems to be a

heuristic the subjects resorted to while experiencing cognitive and emotional bafflement. As a result, quite literally, a newly born defective motivation became their cognitive rescue mechanism, ultimately offering some form of the cognitive-emotional-motivational homeostasis. The question, however, remains whether the very final state of the problem-solving programs just reported offers any chance of an educational success. It may be suspected that it is the minimal success only that is achievable here.

As far as the psychological and psycholinguistic foundation of the educational process breakdown is regarded, one has to investigate the emotional mechanisms, which seem to finally distort the portfolios completing process. There are two aspects of ‘the emotive noise’ that dominated the cognitive processing of the subjects, the first of them being related to the alexithymic symptoms, while the second being connected with the group psychology forces, which will be discussed in the next section of this paper. The alexithymic profile features, as observed in the subject group, can be traced in the decelerated dynamics of the subjects’ mental/cognitive coding, recoding and decoding processes. The inadequate cognitive flexibility, encompassing not only emotional mechanisms but also declarative/procedural mental recourses, is characteristic of the psychological disorder labelled alexithymia, a relatively fresh concept in modern psychology and psychiatry (cf. Maruszewski and Ścigala, 1998). Going deeper into the very issue, alexithymia affects the creative potential of an individual; and, as creativity involves both the declarative mind and the emotional mind, the emotive defects in the cognitive system bring about the immediate defects in the creative behaviour. Furthermore, those people who are creative seem to have a profound factual and procedural emotional competence, as a part of their mental bases. Their intrapersonal communicational skills, that is, their self-awareness and self-monitoring, depend on their emotional competence. Novel, non-standard solutions to problems require good emotional management, as humans can affect their creative behaviours through the emotions (ibid.). What needs to be stressed here, alexithymia does not exclude passing through emotional states, however, in case of alexithymics this process is unconscious and uncontrolled. In the case of a non-alexithymic person, it is the recreative rather than creative behaviour, which organises the thought pathways and steers the behavioural models (ibid.). In the subsequent section, the disruptive effects of emotions will be discussed in the context of the group psychology forces, as observed in the student group under test.

3.2 Ecological perspective in the studies of psychological-mental retardation

The second aspect of the cognitive chaos experienced by the subjects in the project is related to the group psychology forces, thus, the ecological perspective needs to be implemented into this analysis. The recent advance within the interdisciplinary studies over mental retardation has coincided with the advent of ecological perspective in science. Ecosystems, functioning as self-sustaining, internally

organised units in nature, owe its proper performance to the balance between the composing elements. An ecosystem is always oriented towards balance; however idealistic it seems to be to achieve perfect ecological harmony, any defect that puts the normal functioning of ecosystem at risk is labelled 'dysfunction' (cf. Urban, 2000:120). From the methodological point of view, ecological approach is realized in the assumption that the classroom is an ecosystem, thus is subject to this natural law (cf. Urban, 2000:120). The ecological theory implemented in the pedagogical research on mental dysfunctions has resulted in the formulation of new prevention possibilities. Urban (2000:119) in his monograph on deviations of the youth writes: 'according to the general assumptions of the ecological theory, a dysfunction does not reduce itself to the deficiently functioning organism and his/her inside; nor can it be sought only in the surrounding; a dysfunction refers to the interaction between the organism and the surrounding' (translation mine – M.B-T). In other words, to work out a dysfunction, one has to propose a therapeutic program embracing both the individual and the environment (ibid.). The following aspects of the ecology of the classroom are to be taken into account in the respective research:

- the student-student dyad;
- the teacher-student dyad;

The student-student dyad studies concretise and empirically prove the importance of proper internal structure of the student group; moreover, they provide methodological advice how to affect positively peer relations (cf. Urban, 2000:120-123). This dyad will be explored below. The second relation may and should refer to, first, the teacher's psycholinguistic awareness, second, to the teacher's conscious, goal-oriented educational effort aimed to reduce the minimal profile features in his/her students. The psycholinguistic suggestions concerning the teacher-student dyad will be presented in the conclusions to this study.

While investigating the student – student dyad, it has to be noted that the group psychology radiation is a significant factor in the classroom ecosystem. While observing the subjects throughout the two-semester course I had no doubts that the cognitive-emotional scenario realised in the group and, subsequently, investigated in this study was possible because of this peculiar potential for composing a unified, discord front against the educational offer. In a number of aspects the students in this experimentation display the features of a minimal learner. While analysing the individual psycholinguistic profiles of the subjects one notices both the parental/early education negligence and the students' ontogenic minimal capacities; however, even these factors are not decisive and condemning them to an educational failure. Their emotional mechanisms and their cognitive/declarative systems, when facing a complex, disruptive taskwork (in the experimental sessions it were complex and novel exercises) with all their limitations and blind alley movements are still potent to refocus themselves to optimal, successful solutions. The human cognitive-emotive-motivational programs are, in

nature, capable of self-correcting and self-directing measures. The only constraint on the way to the self-refocusing of the organism is the time span necessary to come to these optimal solutions. The organism needs time to process all the cognitive and emotional material that made a mess in the mental system. However, as the organism does not operate in the limbo, it is always subject to external stimulation; any external influence that brings an illusion of a safe solution to the problem-solving operation, may lead the cognitive system astray. In the case of the subjects it was the group psychology forces that led them towards negation, anger and defective instrumental motivation. It is a perplexing question why the whole group of the subjects realised the minimal learner profile. In fact, it is only several students in the group under investigation that could be defined as minimal learners. I think that the group mind influence can constitute a grounded, psycholinguistic explanation here; the group initially functioning as a collection of individuals, next to no time started to compose 'a group mind', fulfilling the minimal profile.

4. Conclusions

This paper is orchestrated around the psycholinguistic mechanism of defective instrumental motivation among Polish university students of English. A group of students from University of Warmia and Mazury served as a point of reference in the analysis. However preliminary and inferential these considerations are, on the basis of the data collected and summarized above one can conclude that traditional glottodidactic research does not account for the minimal motivational profile of the university student. In the meantime, an appropriate, functionally effective methodology needs to be adopted in the predidactic stage of the educational process, in order to help academic teachers soothe or eliminate the psychological and psycholinguistic defects of students, defective motivation included. This intervention, in turn, seems inevitable, otherwise the scenario of the educational process getting disrupted or blocked, as it happened in the experiment description, will be more than occasional in the Polish higher education context. As concerns the new methodology, the psycholinguistic paradigm while incorporating the ecological perspective creates a promising scientific base on which the didactic phase of the minimal learner educational process can be designed; the postulate of the ecological validity requires an account of all student profiles and all psycholinguistic mechanisms involved in a given educational process, borderline or 'minimal' profile realizations included. Psycholinguistic deficits are to be identified and put to analysis, if educators are to rehabilitate not isolate the minimal student. In this sense, the teacher-student dyad becomes one of the decisive relations as far as the minimal learner education is concerned.

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