

Chapter 2. Integrated Development of Inventive Thinking and Language Skills. The Thinking Approach to Language Teaching and Learning

Richards and Rodgers (Richards & Rodgers, 2001) proposed a framework for the description of language teaching methods. The framework consists of three levels: approach, design and procedure. In this chapter we will describe the Thinking Approach (TA) to language teaching and learning in the context of the given framework. We propose the TA as a pedagogical model for teaching and learning inventive thinking in the process of language learning. It is necessary to note that the term Thinking Approach is *not* a generic one to refer to any pedagogical approach for developing thinking skills. Another term, namely a thinking skills approach, is used in this meaning. The Thinking Approach stands for a specific method of language teaching and learning developed by the author and described in this chapter.

2.1. The Level of Approach

2.1.1. Introduction

Beginning a description of a language teaching method from a language theory it is based on is almost a good tradition. At the same time, it appears arguable that language theory really plays a major role in this or that language teaching method. It is quite evident that most of methods we know today were not based on a language theory, starting from what is called the Grammar Translation Method to the whole group of the so-called alternative methods such as the Total Physical Response, The Silent Way, Suggestopedia and others. Even such traditionally conceptualised theory based methods as Audiolingualism and Communicative Language Teaching do not seem to be exceptions here¹⁷. We believe that what is more important for a language teaching method is what we would call a *view of language*. This is definitely a part of a language theory, but a part is not a whole and in the context of language teaching methods it is sooner this part that presents an interest. For example, Cognitive Grammar (Langacker, 1987, 1991), Word

¹⁷ In the case of Audiolingualism it is arguable whether it is the theory of language or the theory of learning (behaviourism) which was the real basis for the method. As to the Communicative Language Teaching it is not based on the theory as such, rather a general view of language which is often an eclectic one (cf. Richards and Rogers support the eclectic nature of CA).

Grammar (R. Hudson, 1990) and Construction Grammar (Fillmore & Kay, 1996) are different theories but they share a similar view of language. What we claim here is that differences between these kinds of theories are usually not of primary importance when dealing with language teaching methods.

The situation with learning theories is similar. Authors of a number of methods often proposed something on the against premise rather than following a certain theoretical framework (e.g. “learning theory” underlying Communicative Approach is often merely anti-behaviourist rather than pro-something). At the same time, we believe that learning theory is of more interest when dealing with language teaching methods, as language learning is primarily learning and “there's nothing cognitively special about learning a second language” (R. A. Hudson, 2003a). Thus, a description of how learning occurs will be essential for a description of a method. At the same time, it is again “view of learning” rather than a theory as such that is of primary concern when dealing with the question of methods.

In the next two sections we will describe how we see language and learning in the context of TA. It is necessary to note that certain issues in relation to language and learning are so much connected that it appears better to consider them together. We will do this in section 2.1.4. In the end we will summarise the differences of TA at the level of approach (section 2.1.5.)

2.1.2. Views of Language

According to Halliday, when we use a language we always opt between a number of possible variants. “The system of available options is the “grammar” of the language, and the speaker, or writer, selects within the system: not in vacuo, but in the context of speech situations.” (Halliday, 2002b:174) Each language provides us with a “meaning potential” and the point of learning is to become as skilful as possible in realising this potential, to become a master. Unfortunately, learning a language is often aimed at acquiring routine performances¹⁸, as a result one automatically chooses to be a slave rather than a master in the field of

¹⁸ Claims to start with simple things and then move on to more complex also belong here. Learning is not a linear process and there is no need to start with “simple”, especially knowing that no-one actually knows what “simple” means.

implementing meaning potential. And one can hardly imagine a slave growing to become a master.

Halliday writes that he often invites his students to “think grammatically”, i.e. “use the unique power of the human brain to reflect on the way their experience is construed in their grammar: use grammatics to think about what grammar thinks about the world. I suggest that they might do this with problems of any kind, such as relationship with family and friends, or whether to go for the job that pays more or for the one they would more enjoy.” (Halliday, 2002a:370) Although Halliday most probably meant students of linguistics, we believe that learning to think grammatically would be a very useful aim for most language learners. We agree with Butt (Butt, 1989:7) that we learn “particular ways of thinking”. We also believe that “ways of thinking” as demonstrated (and as a result acquired) in a language classroom must be the ones of the best professionals rather than those aiming at the best packaging of a hardly worthy good. One should strive to be a master.

Halliday summarises his view of grammar or “paradigmatic orientations in grammar” as follows:

1. The paradigmatic representation frees grammar from the constraints of structure; structure, obviously, is still to be accounted for (a point sometimes overlooked when people draw networks), but structural considerations no longer determine the construal of lexicogrammatical space. The place of any feature in the grammar can be determined “from the same level”, as a function of its relationship to other features: its line-up in a system, and the interdependency between the system and others.
2. Secondly, and by the same token, there is no distinction made, in a paradigmatic representation, between describing some feature and relating it to other features: describing anything consists precisely in relating it to everything else.
3. Thirdly, the paradigmatic mode of description models language as a resource, not as an inventory; it defines the notion of “meaning potential” and provides interpretation of “the system” in the other, Saussurean sense – but without setting up a duality between a langue and a parole.
4. Fourthly, it motivates and makes sense of the probabilistic modelling in grammar. Probability can only be understood as the relative probabilities of the terms in a (closed) system.
5. Fifthly, representing grammar paradigmatically shapes it naturally into a lexicogrammar; the bricks-and-mortar model of a “lexicon” of words stuck together by grammatical cement can be abandoned as an outmoded relic of structuralist ways of thinking.

(Halliday, 2002c:403-404)

This vision of grammar is a part of functional approach. Looking at a text from different point of view, seeing how each meaning contributes to interpretation is the nature of the functional approach. “Adult languages are organised in such a way that every utterance is both this and that: has both an interpersonal and ideational component to it. It does some thing, and it is about something. This is the basis of the ‘metafunction’ theory. To be able to read a text, or listen to it, effectively and with understanding, we have to be able to interpret it in terms of all these metafunctions.” (Halliday & Hasan, 1991:45)

Halliday’s treatment of language is also referred to as a social semiotic approach. As Lemke puts it “the basic assumption of social semiotics is that meanings are *made*. This is a change in the semantics of the term meaning. It is misleading to say, as people often do, that something *has* meaning, as if meaning was somehow built in. A word, or a diagram, or a gesture does not *have meaning*. A meaning has to be *made* for it, by someone, according to some set of conventions for making sense of words, diagrams or gestures. “ (Lemke, 1990:186)

Making meaning is the process of putting things to contexts. Lemke (ibid.:192) distinguishes three kinds of contexts: traditional syntagmatic and paradigmatic ones and also indexical (contexts that bear a strong association with a person or group, e.g. evaluation – teacher, calling out – students, etc)

Another language theory which sees language in a constructive way is Langacker’s (Langacker, 1987, 1991) cognitive grammar. Although the author claims in the introduction that cognitive grammar is “fundamentally at odds with the dominant trends in current linguistic theory” (Langacker, 1987:1), we consider that Halliday’s and Langacker’s grammar can be viewed as complementary theories. In fact, Langacker himself supports this view: “if cognitive grammar provides a unified way of describing the complete spectrum of linguistic structures, functional studies allow us to determine and explain their relative prototypicality.” (Langacker, 1987:4)

As well as Halliday, Langacker claims his theory not to be a finished product (ibid.: 2) and says that a brief summary would present major difficulties. Yet, he summarises central claims of the cognitive grammar as follows:

1. Semantic structure is not universal; it is language-specific to a considerable degree. Further, semantic structure is based on conventional imagery and is characterized relative to knowledge structures.
2. Grammar (or syntax) does not constitute an autonomous formal level of representation. Instead, grammar is symbolic in nature, consisting in the conventional symbolization of semantic structure.
3. There is no meaningful distinction between grammar and lexicon. Lexicon, morphology, and syntax form a continuum of symbolic structures, which differ along various parameters but can be divided into separate components only arbitrarily.

(Langacker, 1987:2-3)

Thus, it is clear that these are rather views of generative grammar and formal tradition in linguistic studies that the Langacker's theory is "at odds with" rather than the systemic functional approach of Halliday.

One might claim though that a cognitive tradition is mentalist in nature and thus contradicts social construction approach to meaning which lies at the basis of Halliday's theory. In our understanding it is not really so in the case of Langacker's grammar, as conventional imagery and symbolization which lie at the heart of Langacker's approach are not properties of an individual but rather a social group, thus we no longer deal with what is traditionally referred to as a mentalist tradition. Moreover, the network view of language which is at the heart of the cognitive approach (R. A. Hudson, 2003b; Langacker, 1987, 1991) is in fact "at odds" with the modularity principle of the generative grammar view (R. A. Hudson, 2003b:5) rather than the social semiotic approach to meaning making.

Langacker believes that grammar "structures a scene in a particular way for purposes of linguistic expression, emphasizing certain facets of it at the expense of others, viewing it from a certain perspective or construing it in terms of a certain metaphor. Two roughly synonymous sentences with the same content words but different grammatical structures – including, in particular, sentences generally analyzed as being transformationally related – are claimed instead to be semantically distinct by virtue of their different grammatical organization per se". (Langacker, 1987:38-39) Langacker uses the term predication of a given meaning

of any expression (Langacker, 1991:4) He claims (ibid.) that “a predication does not reside in conceptual content alone but necessarily incorporates a particular way of construing and portraying that content.” Our ability to construe content in different ways is referred to as imagery (ibid.), thus same situation can be presented in many semantically different ways as a result of imposing different imagery on them. Langacker (ibid.) distinguishes different dimensions of imagery, one of them being the level of specificity at which a situation is described (e.g., *move vs. run vs. sprint*).

Elements of cognitive grammar are organised into a network one of the dimensions of which is saliency (likelihood of activation) of its individual nodes (ibid. :7) This view of language employing concepts as imagery and network is very important to language as treated in TA.

An interesting extension of Halliday’s concept of meaning potential is offered by Widdowson (Widdowson, 2003:172-173). Widdowson speaks of virtual language which encompasses not only those encodings of the established lexico-grammar of language but also “unrealised resource for meaning which the code provides”. Widdowson (ibid.) suggests “that the nonconformities of learner language can be understood as realizations of this virtual language, and that such exploitations of linguistic potential are comparable to those which result in dialectal variation in language spread. The difference is that they do not stabilize: learners are induced into a conformity with actual encodings. But they are evidence of a developing capability for exploiting the virtual resources of the code, and it is just such a capability that teaching should be designed to develop. Although learners will obviously adjust to conventions of actual encodings, as a course progresses, we should recognize that this process can only be partial and will have to continue after the course is over, as learners learn for themselves how to adjust to encoding conventions they encounter. Capability on this account combines two things: the ability to exploit the virtual language, and the readiness to adjust to the conventions of actual encoding as and when required.” Widdowson mentions that this will also place new requirements on tests which “instead of only measuring the degree to which learners are capable of producing encoding in conformity with convention, tests would need to give credit to nonconformist language which

showed an ability to exploit the virtual resource, and which therefore provided evidence of investment in capability for further learning.” (ibid.:173) This Widdowson’s vision of learners’ errors is very close to the TA philosophy.

2.1.3 Views of Learning

Generally speaking there are two major views of learning that could be adopted in a classroom. According to the first view, there exists an amount of knowledge which has been pre-defined and the teacher’s task is to transfer this knowledge to learners. The teacher is seen as the major source of knowledge and her task is to transfer this knowledge to learners. Thus, teaching here is seen as transmission of knowledge and learning is the intake of information. Another view holds that knowledge is personal and it is constructed by the learner. The teacher’s role is to help the learner in this process, she is more of a coach rather than the source of knowledge. In other words, learning is seen as knowledge building where the teacher is a mediator. The first tradition is associated with such names as Thorndike (Thorndike, 1906) and Skinner (Skinner & Epstein, 1982) and is usually referred to as behaviourism. The second tradition goes back to Dewey (Dewey, 1998), Piaget (Piaget, 1954, 2001; Piaget & Rosin, 1978) and Vygotsky (Vygotsky, 1982) and is referred to as constructivism.

While in theory most current approaches to language teaching will support the constructive view of learning, the real classroom situation will often be different. What is important for a specific classroom is the teacher’s tacit beliefs and these are often different from the constructive view even when the teacher claims to be working with CA. As Perkins puts it “educators don’t argue that education is about accumulating large repertoires of facts and routines. But this is overwhelmingly what happens in classrooms, where, as in other settings, actions speak louder than words.” (D. Perkins, 1995:32)

TA is based on what can be called a strong constructive view of learning. It is hardly possible that one teaches with TA and believes that he is responsible for transferring certain knowledge to students unlike in many CA classrooms where tacit beliefs of teachers can be radically different from the underlying theory of the approach they claim to be keeping to (Thornbury, 1996).

Another important issue to consider in the language classroom is how the proposed view of learning goes together with language acquisition. Littlewood (Littlewood, 2004) distinguishes between two types of theories of second language learning: cognition oriented theories and context oriented theories. The first group includes the creative construction hypothesis, the input hypothesis, the universal grammar hypothesis and the cognitive skill-learning hypothesis while the second one comprises the interaction hypothesis, the output hypothesis, the scaffolding hypothesis and the acculturation model and social identity theory (ibid.) . Although the distinction apparently goes back to an old mentalist social debate, it appears that the two types of theories do not necessarily exclude each other. Cognitive theories do not exclude the role of social interaction while social theories admit that cognitive aspects do play their role. The view of language acquisition as conceptualised within TA is based on what can be called an integrated social cognitive view. While generally adopting what Littlewood refers to as the scaffolding hypothesis, we believe that learning is not necessarily social at any moment. We consider that a cognitive aspect of a learner is extremely important in the learning process and it is the learner who builds various models of language using his/her cognitive repertoire. However, unlike mentalist tradition, we believe that the mechanisms that are “triggered” by input and scaffolding are not innate to learners. This is also a kind of knowledge, something we refer to as meta knowledge or meta models, i.e. models that allow learners to build new models. These models must be developed in the same way as language models, and it also occurs through the process of scaffolding and further internalisation. At the same time, we would like to mention that a learner can often scaffold him/herself in the sense that meta models that have already been acquired serve as scaffolding for other meta models and more specific language models. Thus, we understand Vygotsky’s zone of proximal development (ZPD) (Vygotsky, 1982) a bit differently from its traditional interpretation. First we consider that ZPD is not a static concept. As learners develop towards higher degree of professionalism in learning, the distance they are able to cope with rises to almost infinite. Thus, practically any task lies in learners’ ZPD. Moreover, the farther away it is from their present state, the more challenge it contains and the higher is its learning potential. Second, we believe that scaffolding is not necessarily a social phenomenon in the sense that it

is either the teacher or peers who provide it. The more professional a learner becomes, i.e. the more meta models have been developed and internalised, the less he/she needs social support and the more he/she can scaffold him/herself. We consider that this is essential, as at the highest level of learning, learners face problems where no social scaffolding can be available, as society has never solved such problems before.

2.1.4. Language and Learning

Central competence

Communicative competence lies at the heart of CA. Communicative competence according to Hymes (Hymes, 1974) can be defined in reference to four aspects of knowledge that a “normal member of community” can bring to bear in deciding:

- 1) whether (and to what degree) something is formally *possible*
- 2) whether (and to what degree) something is *feasible* in virtue of the means of implementation available
- 3) whether (and to what degree) something is *appropriate* (adequate, happy, successful) in relation to the context in which it is used and evaluated;
- 4) whether (and to what degree) something is in fact done, actually *performed*, and what its doing entails.

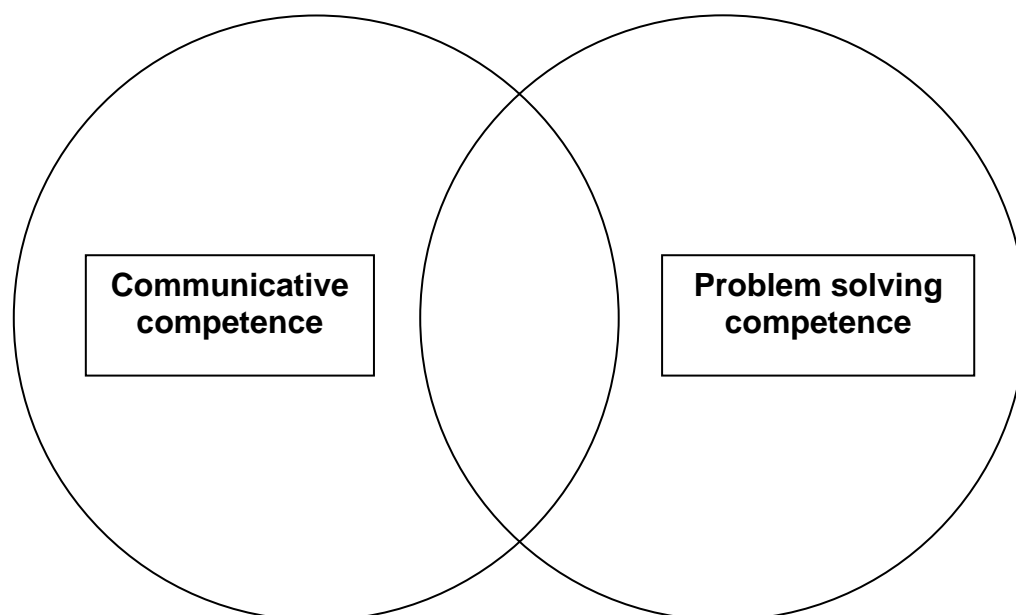
(Widdowson, 2003:78)

Problem solving competence lies at the heart of TA. We define problem solving competence as an ability and disposition to solve linguistic, sociolinguistic, pragmatic and other kinds of problems when no typical solution is available.

Please note that this definition is radically different from how problem solving is traditionally conceptualised in language teaching. (2001:Part 7.1; Littlewood, 1981:34; Prabhu, 1988:46-47; Richards & Schmidt, 2002; Willis, 1990:63) Thus, what is often called as a problem solving task in ELT has nothing to do with the development of problem solving competence as defined in TA.

Is it possible to say that a problem solving competence is a part of a communicative competence? In our view, the relationship between the two could be best presented in Figure 2.1.1. below.

Fig.2.1.1. Relationship between communicative and problem solving competencies.



As we mentioned above, the largest part of communication includes conventional or routine uses of language. This is the area that has nothing to do with problem solving competence as we have defined it. In fact, when one just employs his/her knowledge of what is formally possible, feasible, appropriate and actually performed to reach some communicative purpose and this purpose is easily reached as a result of this utilization of knowledge, we consider that no problem solving competence is required. When, on the other hand, our communicative purposes are not reached as a result of a mere utilization of knowledge, i.e. there is some obstacle on our way and we face a contradiction between our wishes and peculiarities of a specific situation, problem solving competence is called for.

In general, both communicative and problem solving competencies are complex phenomena and there is always a danger of treating them in a narrow way. Widdowson (Widdowson, 2003:169-170) says that “the essential problem with different models of communicative competence is that they analyse a complex process into a static set of components, and as such cannot account for the dynamic interrelationships which are engaged in communication itself. As a consequence, in trying to make such models operational in language teaching and testing, one finds that one can only deal with the separate parts as discrete features, since the essential interrelationships that make the whole are missing. “

Another problem common for both competencies is measurement. Widdowson (ibid. :171) mentions that our current tests do not elicit communicative behaviour and thus what they measure is not communicative competence while methods which can elicit communicative behaviour cannot measure it. He quotes David (1990) that "... no test can ever be wholly valid or wholly reliable. Indeed, a completely reliable test would measure nothing; and a completely valid test would not measure. (ibid.) This seems to be similar to problem solving where tests do not normally elicit real problem solving behaviour but model the situation on some of its properties only. Widdowson believes that "communicative competence will always be elusive" (ibid.) and cannot be measured by proposed models for its measurement. Thus, he says, "the question to consider is not how many different components or features do we have to specify to provide as comprehensive an account as possible of what constitutes communicative competence to be taught and tested, but which component can be taken as the most salient, and as primary in the sense that it can serve as the nexus to which the others can be related. That is to say, instead of trying to juggle with a number of different competencies, you fix on one and consider how the others impinge upon it." (Widdowson, 2003:171)

In our view, it is this nexus where TA and CA, or at least its most offsprings, differ. The question is not so much whether and to what extent communicative competence is different from problem solving competence, but that the central competencies highlighted in most communicative classrooms are very far from what we refer to as problem solving competence.

Types of Approaches

Is TA a structural or a task based approach? We believe that any categorisation should be done for some purpose, so let us see what belonging to one or the second group actually changes about the nature of language learning.

According to Widdowson (Widdowson, 2003:128), the difference between the two lies in the fact that structural approaches "devise contexts to let learners internalise semantic meaning on the assumption that its pragmatic use could be left for the learners to work out for themselves, whereas with TBI (task based instruction – A.S.) contexts are devised to get learners involved in pragmatic use, on the assumption that this will activate the acquisition of semantic encoding.

Generally speaking, the belief underlying the SOS (structural – oral – situational approaches – A.S) approaches is that competence is primary, and performance will emerge as a by-product. The TBI belief is the reverse: get performance right and competence will, with some prompting, take care of itself. “

If we accept this difference, then TA will belong to neither group. On the one hand, TA is performance based and one may think that the underlying belief is that “competence will take care of itself.” However, one of the vectors of TA is work with language as an object of learning (reflected in Creative Grammar Technology) where students actually build their competence. The approach, however, is different from the structural one – contexts are not devised to “let learners internalise semantic meaning” but learners are expected to internalise semantic meaning in the process of building their competence and then developing it during performances (for details see description of technologies below). Thus, TA approach implies that competence and performance are interconnected and performance is essential for the development of competence. At the same time, competence requires a specific focus in the learning process. This focus however is different from how it is normally understood in structural approaches.

2.1.5. TA – Level of Approach. Summary

Below we will try to summarise those features that make the TA different from other approaches to language teaching. There are two things that need to be mentioned, though. First, this list is not supposed to be comprehensive. Its purpose is to show that TA is different from other approaches to language teaching and therefore it is best to look at it as a separate approach rather than a part of CA. Second, the features below should be seen as a system rather than discretely as it is at the level of a system where TA is different.

- Most uses of language are conventional or routine ones, i.e. people do not have to solve any non-standard or creative problems (e.g. shopping, enquiring, etc). These uses of language do not require meaning making in the real sense of it - this use of language is more about reproducing well-known meaning rather than making new ones. Routine part of language competence should not be the focus of learning – necessary skills will

develop within practice centred on the development of non-routine competencies.

- TA is primarily concerned with the development of problem solving competence which includes a non-routine or creative part of language competence. Development of problem solving competence lies at the heart of learning an interdisciplinary language of problem solving which is seen as the main aim of education.
- Problem solving in TA context is understood in a fundamentally different way from its traditional interpretation in language teaching. Tasks connected with routine uses of language are not considered problem solving ones and traditional “problem solving” tasks as known in the field of language teaching have nothing to do with the development of problem solving competence as defined in TA.
- TA students are expected to learn “to think grammatically” and to strive to become masters in the field of “meaning potential”. Learning a language includes learning particular “ways of construing and portraying” world.
- TA is based on the idea of a non-linear nature of learning and thus non-linear organisation of learning / teaching process. Instead of a linear curriculum model TA offers a modular course based on a number of learning technologies. Technologies serve as bases for the three vectors of TA: (1) language as the object of study (Creative Grammar Technology); (2) communication as the object of study – language used as one of the means for solving problems (interpretation) and using language as one of the means for solving problems (Text and Film Technologies); learning as the object of learning (Self-Study Technology and Research Technology)
- The invention method promoted in TA may be seen as an integration of what is referred to as discovery and social construction method. We believe that students “discover” models rather than facts. With time, these models are integrated in students’ networks (internalised). However, for this to happen, models have to be tested and validated in the process of learning (and life) and this is seen as an essentially social process.
- Learning must be natural and as close to life as possible. Agreeing that classroom brings about many constraints and purposes of learning can be very different, we believe that learning is essentially about doing real things

and thus one should not make a distinction between “ways of thinking” when learning a foreign language and “ways of thinking” when being a linguist. Another consequence of the “natural” principle is that questions to which answers are already known should be avoided in the classroom communication by both the teacher and students.

- The ultimate learning aim for a TA learner is to become one’s own mediator and thus to be able to scaffold him/herself in any kind of learning.