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# Tertiary language didactics 2.0 A review of a multilingual didactics approach and its remodeling in the light of empirical research, translanguaging and compétence plurilingue

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#### **ABSTRACT**

The article proposes a remodeling of Tertiary Language Didactics (TLD) against the backdrop of empirical findings from German-speaking areas and the notions of translanguaging and *compétence plurilingue*.

TLD as a multilingual didactics approach for the initial stages of L3 learning developed in the 1990s in the field of "German as a foreign language after English" (*DaFnE*) as a response to the specificity of L3 learning conditions (age, intellectual development, different domains of prior knowledge in other languages). Later, the approach, with its overarching principle of cognitive learning and teaching, was generalized to other language constellations (Hufeisen & Neuner, 2003; Neuner et al., 2009).

By reviewing selected studies from the 1980s up to 2021, our remodeling highlights the importance of transfer not only in L3 reception, but also in L3 production and practice. In order to economize L3 learning, TLD 2.0 proposes to focus on cognates in reception and production (perceived and assumed cross-linguistic similarities) and streamlined grammar teaching (deduction-practice combinations, parallel exercises). Informed by the discourses of translanguaging and *compétence plurilingue*, we also discuss the



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role of less "visible" knowledge stores that bi- or plurilingual L3 learners may have and the possibility of activating skills in previously learned or acquired languages (two-language tasks) in pursuit of education goals beyond L3 learning.

#### **KEYWORDS**

second language instruction, student diversity, teaching models, multilingual didactics, tertiary language didactics, plurilingual competence

## INTRODUCTION

"Tertiary" (lat. tertius, 'occupying the third position in a series') commonly refers to the tertiary education system or to a stage in education and training that is marked by a certain maturity and awareness of one's own personality. The German-language discourse on tertiary languages research and didactics also links the quality of being tertiary with the idea of individual expertise, in this case in relation to the acquisition of a second or a further foreign language (L3). The term "tertiary" emerged in the context of institutionally determined sequences of languages taught and learned at secondary schools in Europe, where language policy since the 1990s has worked toward the achievement of multilingualism through education. While the notion initially supported the paradigmatic shift toward the recognition of L3 learners' plurilingual repertoires in L3 research, especially focusing on monolingually socialized students, we want to argue below that it continues to be productive for students with migrant backgrounds in superdiverse L3 classrooms. Thanks to its deliberately chronological frame of reference for explaining expertise, the term "tertiary" invites us to closely look at multiple kinds of prior knowledge in their emergence and development. L3 learners start their learning under specific conditions and have specific areas of potential for activating prior knowledge. Besides their procedural, meta-linguistic and meta-cognitive (i.e. learning strategy-related) prior knowledge of other languages, they also have greater world knowledge, deeper cognitive and critical analytical skills, more willingness to take risks and more creativity they can bring to bear on language:

[T]hey attribute less significance to formal correctness than L2 learners in the context of communication ... [and they] can work across languages to resolve uncertainties in communication and apply knowledge already acquired from other languages ... (Marx, 2016, p. 297).<sup>1</sup>

In the following, we first reconstruct the emergence of the discourse on tertiary languages and show how their definition as second or additional foreign languages won out over competing definitions (2). In section (3), we introduce major German-language contributions to L3 research (Hufeisen's factor model, the Bochum tertiary languages project, other empirical studies from 2000 to 2021). We then go on to delve into the original modeling of tertiary language didactics (TLD below) as "German as a foreign language after English" (*DaFnE*) from the 1990s (4.1) and to present our remodeling of a tertiary language didactics 2.0 (4.2) against the backdrop of the empirical findings discussed up to this point (4.2.1) and in discursive



<sup>&</sup>lt;sup>1</sup>All quotations from German-language texts have been newly translated for this publication.

engagement with the notions of translanguaging and *compétence plurilingue* (4.2.2). Finally, we address some possible criticisms of the tertiary language concept and balance them against the potential utility of this terminology: our view is that it unites source and target language perspectives in a way that will also prove productive into the future.

## TERTIARY LANGUAGE DIDACTICS: A CONCEPT'S ORIGINS AND EVOLUTION

#### **Tertiary languages**

The notion of tertiary languages first appeared in German-language publications in the context of education policy (Strathmann, 2019, p. 415). The Hamburg Agreement (Conference of German Ministers of Education, KMK, 1964) created space for introducing a third foreign language from the ninth grade onwards (KMK, 1964, p. 5) and the subsequent reform of upper secondary education made it possible for this third foreign language to be continued up to Abitur level (university entrance qualification) in the Gymnasium school type (KMK, 1972).<sup>2</sup> The first empirical studies of tertiary languages in this meaning of the word were conducted as part of the Bochum Tertiary Languages Project (Bahr et al., 1996; Bausch, 1984; Bausch, Kleppin, Königs, & Krings, 1986; Kleppin & Königs, 1991) and investigated the teaching and learning of Spanish and Italian as subjects taken up at a late stage in students' school careers (3.2). The results of this project and its concern with mapping out a theory of foreign languages education extending beyond "foreign languages (almost always English) acquired early" (Bausch, 1984, p. 8) also drew attention to the role of the second foreign language taught in schools. With this, the meaning of the notion of tertiary languages began to shift: "At the same time, attempts were undertaken in this research context to tease out the specific differences between the teaching and learning of a first foreign language and subsequent foreign languages" (Bausch, 1996, p. 10).

A new definition of tertiary languages resulted that already encompassed the second foreign language acquired in a formal education context. This new definition has more lastingly influenced the scholarly discourse of Germanophone countries and regions. It was disseminated during the 1990s and the first decade of the 21st century in *DaF* (*Deutsch als Fremdsprache*, German as a foreign language) didactics and in publications dedicated to TLD. It also became familiar to many people in the context of the factor model (Hufeisen, 2020, first 1998) (3.1) and proved more widely compatible with international usage:

Every language learned after L2, the first foreign language acquired (in a controlled fashion), can be described as a tertiary language. Because of this chronological logic, such a third language is often called L3 or L2<sup>2</sup>; the terms L4 (for the fourth language) and L2<sup>3</sup> etc. are less commonly encountered.

<sup>&</sup>lt;sup>3</sup>The project was sited at the first Chair of Applied Linguistics and Second Language Acquisition (*Sprachlehr-und-lernforschung*) founded in Germany, and funded by the German Research Foundation (Bausch, 1984, 8).



<sup>&</sup>lt;sup>2</sup>Subjects taken as a third foreign language are elective. Under the Hamburg Agreement, two foreign language subjects (two of English, French and Latin) are obligatory during the middle stage of *Gymnasium* education and a third foreign language can optionally be added from the ninth or eleventh grade (KMK, 1964, p. 5). Following the reforms to upper secondary education in the *Gymnasium* school type, one foreign language must be taken (from the "language, literature and the arts" subject group) (KMK, 1972, p. 11). Further foreign languages can be taken as elective subjects at a basic or advanced level (*Grundkurs/Leistungskurs*).

Tertiary language learning, L3 learning and multiple language learning are all ways of referring to this special learning situation. Tertiary languages research explores this specific situation and its effects for language learning. (Marx, 2016, p. 295)

# **Tertiary language didactics**

TLD initially emerged as an offshoot of subject-specific *DaF* didactics in the context of proposals advanced in the early 1990s that teaching and research could give greater consideration to the internationally widespread introduction of German as a second or additional foreign language after English (Bausch & Heid, 1990; Hufeisen, 1991, 1994; Neuner, 1996). Bausch and Heid (1990) published results from an international colloquium on the teaching and learning of German as a second or subsequent foreign language in a joint position paper (Bausch & Heid, 1990, pp. 11–18) that anticipated central assumptions underlying TLD including the specific conditions in which L3 learning takes place<sup>4</sup> and thus the desirability of modifying didactic-methodical components of lessons and teaching content and themes designed around the needs of L3 learners (Bausch & Heid, 1990, p. 13).

Hufeisen (1991) examined the role of prior knowledge of the L2 English as a factor explaining typical error patterns seen in learners of the L3 German whose first languages were not Indo-European. In 1993, she also made recommendations for considering English in vocabulary work with beginners learning German as a foreign language. The didactic-methodical concept "German (L3) after English (L2)" was first defined by Neuner in 1996 and the key principles established by Neuner subsequently provided a model for a TLD that was no longer bound to a particular sequence of specific languages (Neuner, 2003, 2006). The conference series "The Plurilingualism Project: Tertiary Language Learning - German after English"5 at the European Centre for Modern Languages (ECML) (Hufeisen & Neuner, 2003) and the Goethe Institut distance study unit "German as a second foreign language" (Neuner et al., 2009, first 2004, in cooperation with the Goethe Institut) can be seen as having lastingly shaped discourse in the area (4.1). The factor model (Hufeisen, 2020, first 1998), as an important German-language contribution to L3 research, also played a role in the consolidation of TLD. It postulates a new and independent complex of factors relevant only for L3 learning (in the sense of a second or additional foreign language) and can thus be drawn on to legitimize fresh teaching approaches (3.1). While interest in modeling and theoretically refining TLD declined somewhat after around 2010, empirical studies with a TLD background have continued to be undertaken (3.3).

TLD can fundamentally be characterized as an approach within multilingual didactics (Neuner et al., 2009, p. 7; Reich & Krumm, 2013, pp. 79–87) as it, too, is concerned with investigating target language learning processes that draw on learners' prior knowledge of other

<sup>&</sup>lt;sup>5</sup>The Council of Europe project encompassed five conferences from 2000 to 2003 with participants from thirty countries (Neuner, 2006, p. 135) and considered fundamental questions of modeling TLD as well as regional aspects of L3 teaching and learning (Neuner, 2003, p. 5–6).



<sup>&</sup>lt;sup>4</sup>The three factors mentioned here – the age range of the target group, prior knowledge of L2 and shortened learning time for L3 (Bausch & Heid, 1990, pp. 11–17) – had already represented the departure point for the Bochum tertiary languages project: all three were mentioned in the initial funding application (Bausch, 1984, p. 7; Bausch et al., 1986, p. 91) (3.1).

languages, as well as making methodical suggestions for eliciting such learning processes. TLD can be differentiated from the language awareness approach, as Neuner (2003, p. 24f.) proposes, since it is not only concerned with extending and transferring language (learning) awareness, but also with L3 language possession; it thus places itself more directly in the service of the acquisition of target language skills.

How can language knowledge and the experiences of language learning that school students already possess from their first language and from learning a first foreign language be made fertile and expanded in the teaching of subsequent foreign languages (tertiary languages) so that these languages can be learned more efficiently? (Neuner, 2006, p. 136)

TLD can also be differentiated from the intercomprehension approach, which likewise sets out to accelerate the development of target language skills, by the orientation of the former toward individual learner repertoires rather than the degree of interrelatedness between the specific languages involved. "A closely related concept [to intercomprehension didactics, SDG] is that of tertiary language didactics, which has drawing on previously acquired languages even when they are not related as its main guiding principle" (Reich & Krumm, 2013, p. 82). TLD thus offers more opportunities for drawing on prior knowledge. Focusing not only on linguistic knowledge, but also on language learning experiences enables intrinsically present transfer opportunities to be exploited (independently of psychological typology). And the approach is fundamentally open to draw on language(s) acquired naturally and not in an instructional setting, i.e. the students' first language(s).

# Summary

In sum, then, TLD in the German-language discourse has traditionally been associated with the learning of a foreign language added after the first foreign language learned in a formal education context, either as a second or as an additional<sup>6</sup> foreign language. The competing interpretation of a tertiary language as a language learned after the first and second languages has thus not been significant for the origins and evolution of this discourse. Languages learned earlier (including a prior foreign language) flow into the modeling of TLD as a potential basis for transfer but not as target languages. The term TLD also denotes a distinctive field with certain claims to autonomy in the spheres of educational policy (delivery of a school subject with its own independent teaching and learning objectives) and academic scholarship (constitution of an independent academic subdiscipline).

# CONTRIBUTIONS TO TERTIARY LANGUAGES RESEARCH FROM GERMANOPHONE COUNTRIES AND REGIONS

In the following, key Germanophone contributions to L3 research will be discussed. L3 research<sup>7</sup> arose from critiques of previous studies (repertoires that were not identified, uncertain

<sup>&</sup>lt;sup>7</sup>Purely attitudinal studies are not included; for a review of international contributions on L3 research since the 1970s, see Angelis (2007), Jessner (2008), or Hammarberg (2013), as well as the International Journal of Multilingualism, the publication organ of the International Association of Multilingualism founded in 2003.



<sup>&</sup>lt;sup>6</sup>Williams and Hammarberg (2009, p. 35) define the L3 as a "language that the learner is currently acquiring" independently of the number of previously acquired languages.

generalizability of findings) and the binary nature of existing models of language acquisition. It focused on the language profiles of study participants and the influence of prior foreign languages.

#### Hufeisen's factor model

Hufeisen's factor model was developed in the early 1990s as a prototypical model of formal instructional language learning. Earlier models had only examined the L1 and an L2 that was being learned, and the research community looking into multilingualism saw a need for separate models that also considered tertiary languages. In Hufeisen's model, the languages in the repertoire were designated L1 = first and second language, L2 = first foreign language, L3 = second foreign language or tertiary language, L4 and Ln = additional tertiary languages. This numerical system was intended to reflect "neither an assignment of value nor an attribution of competency" (Hufeisen, 2020, p. 75). Up to the present, numerous additional models of learning multiple languages have been advanced, although they are difficult to compare because of the multitude of variables used and differing perspectives taken. However, in their respective fields and for certain research contexts, they have long been applied effectively and with an excellent fit. The factor model was one of the first that was presented to the critical research community, and it has been used as the basis for many studies and undergone numerous revisions arising from empirical research findings as expansions or modifications were included in the factors.

In this context, only the phases 2 and 3 of the original four-part factor model will be discussed (phase 1: L1 acquisition, phase 2: L2 learning, phase 3: L3 learning, phase 4: L4 or Ln (n > 3) learning). The phases are characterized by the factors that are efficacious when learning an L2 and subsequently an L3. For learning an L2, that is, the first foreign language learned in a formal setting (two or more first languages are all counted as L1 in this model), these include the following.

In Fig. 1 it is important to consider especially the factors external to learners, as the school and environmental socialization of learners co-determine how the first foreign language is learned. Emotional or cognitive factors can also influence the language-learning process, however. Only in phase 3 does the decisive difference between this model and conventional L2 models become obvious.

Figure 2 shows a new complex of factors that does not take effect until L3 learning begins but then also plays a role in learning an L4 or Ln. The factors specific to the foreign languages include the experiences the learners gain during the process of learning an L2. These can shape attitudes positively or negatively that in turn influence the process of learning an L3. The model also addresses meta-cognitive (learning strategies, own learning style), linguistic (prior learner language(s)), and meta-linguistic knowledge as possible factors. In doing so, the factor model thus clarifies not only a quantitative difference in the number of languages learned – as standard L2 models might also achieve, but also postulates and illustrates qualitative differences between L2 and L3 learning.

#### The Bochum tertiary languages project

The Bochum tertiary languages project from the 1980s played a pioneering role in two respects: it set standards in research methodology while recognizing a fundamental complex of factors



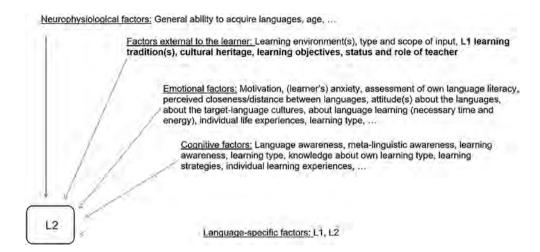


Fig. 1. Learning an L2 according to the factor model 2.2 (Hufeisen, 2020, p. 78)

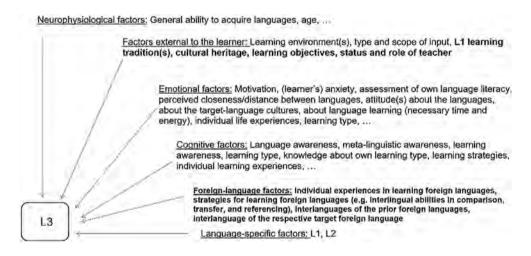


Fig. 2. Learning an L3 according to the factor model 2.2 (Hufeisen, 2020, p. 78)

(sample size, triangulation of data, methods, and researchers)<sup>8</sup> and drew attention to the particular conditions that apply to learning foreign languages after L2. At the time, experiences of teaching and researching a third foreign language were lacking, which was why a focus was placed on the teaching perspective (Bausch et al., 1986, p. 23) and the work was embedded in

<sup>&</sup>lt;sup>8</sup>The basic assumption of the complex of factors can be traced back to the DFG priority program "Applied Research in Language Teaching and Learning" in which Bausch et al. (1986, p. 92) sited their research methodology.



the qualitative research paradigm (Bahr et al., 1996, p. 24). In the project, four factors and related subjective theories of teachers were investigated that were assumed to be particularly relevant for L3 teaching (Bahr et al., 1996, pp. 19–22; Bausch et al., 1986, p. 93): occasions for enlightened monolingualism, semanticizing, cognitivization, and action sequences for oral error correction.

Table 1 provides an overview of the methods used when collecting data in 1986 and 1987. With the help of problem-centered interviews (1) carried out at the beginning, all characteristics teachers considered relevant to L3 teaching were to be included as well as background information for analyzing and interpreting the data (Bahr et al., 1996, p. 29). The lesson recordings (2) and commentaries (3) were gathered to enable researchers to gain insights into the motives behind teachers' actions and into their subjective theories:

Table 1. Data collection procedure in Bochum tertiary languages project (Bahr et al., 1996, pp. 19–33; Kleppin & Königs, 1991, pp. 104–117)

	Data	Instrument	Sample			
1)	Personal and attitudinal data (teacher-related)	- Problem-centered interview (open and flexible, on various aspects relevant to lessons 10)	- 12 teachers (5 of Spanish, 7 of Italian), working at 9 <i>Gymnasium</i> schools in the Ruhr area of Germany			
2)	Video data from lessons (showing teachers and students)	- Recordings at intervals (one lesson unit in a one-week or two-week rhythm) or sequential recordings (5–6 h of the same lesson sequence) according to the two-camera principle. 11	- 187 lesson hours (97 for Spanish, 90 for Italian) from 26 classes in various grades and at differing levels (basic and advanced courses)			
3)	Data commenting on the lesson (teacher perspective)	- Retrospective thinking aloud (open and flexible); if nothing is said about the four investigative factors → elicitation	- 8 teachers (4 of Spanish and 4 of Italian) who each comment on 3 or 4 lesson units			
4)	Attitudinal data (teachers)	- Focused, standardized interview (on four investigative factors)	- 12 teachers, identical with 1)			
5)	Personal and attitudinal data (students)	- Anonymized questionnaire (learning biography, preferences around the four investi- gative factors)	- 198 students from 13 different classes			

<sup>&</sup>lt;sup>11</sup>Bausch et al. (1986, p. 92) explained the two-camera principle as follows: "In each lesson, two video cameras record at the same time, one of which is placed in the back part of the classroom focusing primarily on the teacher, while the second is close to the teacher and focused on the students."



<sup>&</sup>lt;sup>9</sup>Bahr et al. (1996, p. 19) point out "that a strict separation of individual factors is not possible in practice but is necessary both for analytical reasons and to depict the factors concisely".

<sup>&</sup>lt;sup>10</sup>These included teachers' personal approaches to the target language, biographical aspects, external conditions for L3 teaching in schools, teaching materials, conditions at the school, and the teachers' current teaching programs (Bahr et al., 1996, p. 28).

After a lesson unit, the teachers were asked to view it and instructed to pause the recording at any point they wished, in particular to comment retrospectively on their own behavior, but also on student behavior and what occurred in the lesson (Bahr et al., 1996, p. 30).

Statements on the four investigative factors were only elicited if the teachers did not comment on them (Bahr et al., 1996, p. 30). After an initial data analysis, focused interviews (4) were carried out with the goal of discussing key aspects of the study and determining the theories held by teachers on these aspects independently of specific examples (Bahr et al., 1996, p. 32). The student data (5) served to "at least be able to follow up on selected relationships between teaching and learning processes" (Bahr et al., 1996, p. 33) in the area of interest; these data had the status of background information for analyzing and interpreting the data (Bahr et al., 1996, p. 33).

For each investigative factor, either the transcribed Italian or Spanish corpus<sup>12</sup> was analyzed (Bahr et al., 1996, p. 40–41, 78–81, 118–119, 165–173) by gathering aspects relevant to the study in the attitudinal and commentary data and the video data. Table 2 summarizes the most important findings.

Despite the dominance of the communicative approach in the 1980s, the data reflect various situations in which the teachers switched into the school language: "The traditional principle of wanting to carry out the entire lesson monolingually corresponds neither to the reality we were observing nor the systematic lesson planning and commentary from the teachers included in our project" (Bahr et al., 1996, p. 67).

The documented exceptions to the principle of monolingualism, however, exhibit a "remedial, merely subjective and often extemporary character" (Bahr et al., 1996, p. 68) and a tendency toward the school language. From this, Bahr et al. derive the necessity to make and justify decisions on switching languages at the lesson-planning stage based on students' needs, including consideration of the prior foreign languages the students have learned and the components language possession, meta- and extra-linguistic knowledge, age-specific cognitive requirements, and learning and communicative experiences (Bahr et al., 1996, p. 68). Bahr et al. advocate pointing out options and alternatives to L3 teachers as part of their initial training as well as during continuing education and training:

- A) Semanticizing (Bahr et al., 1996, pp. 111-113)
  - Sensitization for dealing in a reflected manner with the teacher's own routines, for the importance of the learners' level (immersion in beginner lessons, verbal explanations with advanced students), and L3-specific aspects (additional possibilities for students to semanticize with less help or autonomously due to broader world knowledge, advanced language awareness, and prior foreign languages)
- B) Language-related cognitivization (Bahr et al., 1996, pp. 156–159)
  - Consideration of objects "in the area of discourse structures and pragmatics", "in lessons, intentional discussion of the question of which forms, functions and processes in the discourse are specific to the language and context" (Bahr et al., 1996, p. 121) (advanced

<sup>&</sup>lt;sup>12</sup>For the video data, the "verbal and paraverbal utterances [were transcribed] in line with typical written conventions; comments on non-verbal communication were added only in the course of the data analysis after another viewing" (Bahr et al., 1996, p. 27–28). For all other data, a simplified transcription system was used (Bahr et al., 1996, p. 31).



Table 2. Selected findings of the Bochum tertiary languages project (Bahr et al., 1996, pp. 42–65, 81–113, 120–155, 168–193)

120-155, 108-195)										
Attitudinal and lesson-commentary										
	data	Lesson video data								
Monolingualism (Italian)	<ul> <li>Support for relative monolingualism in favor of the school language for beginner lessons and for the purpose of creating awareness and organizing the lessons, on the part of the students for creating awareness (85%)</li> <li>Skepticism on the part of all teachers regarding systematic inclusion of other languages</li> </ul>	- Four occasions for switching into the school language:  a) language-related cognitivization, b) semanticizing, c) organizing the lesson (exam, homework, assigning tasks), d) other (group or partner work, students having difficulty expressing themselves) - Unplanned inclusion of other languages, usually a result of repeated interference - Higher degree of student participation with relative monolingualism for the purpose of creating awareness								
Semanticizing (Spanish)	- Teachers are of the opinion they have <i>no preferences</i> regarding a particular process	- Variance depends on teacher (monolingual-object-language or multilingual-cognitivizing pattern) without regard to learning progress								
Language-related cognitivization (Italian)	<ul> <li>Support for inductive methods and relative monolingualism on the part of teachers</li> <li>Unconsidered reaction to spontaneous cognitivization (student-initiated, induced by errors)</li> </ul>	<ul> <li>Objects of cognitivization only in morphology/syntax – no pragmatics, varieties, or non-verbal objects</li> <li>School language used for contrasting, foreign language used for parallelization</li> </ul>								
Oral error correction (Spanish)	<ul> <li>Consistent correction, but desired in combination with creating awareness and self-correction on the part of the students</li> <li>Teachers rejected working with references to other languages, two advocacy patterns (direct vs. self-correction)</li> </ul>	<ul> <li>Morphosyntactic and pronunciation errors are most common, tendency of teachers to only correct morphosyntactic errors</li> <li>Direct correction by teacher more common than initiation of self-correction or implicit correction</li> <li>Correlations between direct and interrupting correction, of self-correction and following cognitivization</li> </ul>								



- language awareness, differentiated consideration of the relationship between form and function)
- Streamlined inductive process for working out rules, more opportunities for implicit approaches or deductive approaches (also applied by students) (existence of meta-linguistic concepts, transparency of meta-linguistic expressions in English and Romance languages)
- Sensitization for considered handling of unplanned, ad hoc cognitivizations and for integrating a meta-discourse on learning following the student's language-related questions (advanced language learning competence)
- More specific highlighting of possibilities for deploying intralingual and interlingual approaches (and combining them) depending on language possession, "explicitly considering linguistic knowledge from foreign languages learned previously or continued at the upper level of the *Gymnasium*" (Bahr et al., 1996, p. 159), and not just for parallelization.<sup>13</sup>
- C) Oral error correction (Bahr et al., 1996, pp. 194–197)
  - Sensitization for the significance of errors in fostering learning and communication (in some cases the existence of contradictory teaching experiences and convictions), for the necessity of making corrections informative (and also considering the previous knowledge gained in prior foreign languages, Bahr et al., 1996, p. 187)
  - More systematic use of self-correction "with a view to its envisaged added cognitive value for supporting learning" (Bahr et al., 1996, p. 196): significance of non-verbal initiation, designing complex correction sequences with student participation (advanced language awareness), integration of a meta-discourse on learning (advanced language learning competence)

#### Selected studies 2000-2021

While the teaching perspective was the focus of the Bochum tertiary languages project, the studies introduced below investigated the student perspective and the L3 learning process.

Müller-Lancé (2003) combined a broad-based study (N=174) with an in-depth one (N=21) and focused on adult L3 learners (Spanish, Italian, and in the broad-based study also Catalan) who had varying language profiles (Müller-Lancé, 2003, pp. 227–278). The broad-based study, with a focus on reception, analyzed decoding strategies and lexical performance (with word translations, vocabulary tests, and introspection questionnaires) (Müller-Lancé, 2003, pp. 229–244). The in-depth study, with a focus on production, analyzed decoding and production strategies (with text translations in the first language or lingua franca German as well as a Romance language and think-aloud protocols, Müller-Lancé, 2003, pp. 289–297) and word associations (oral association test) (Müller-Lancé, 2003, pp. 355–370). Müller-Lancé reached the following results:

<sup>&</sup>lt;sup>13</sup>The authors (Bahr et al., 1996, p. 146) reference Zapp (1983), who discusses cognates as a learning strategy and the relevance particularly of contrasting in lessons so that this learning strategy also leads to success with cognates whose semantic field is only partially equivalent or even contrary (Bahr et al., 1996, p. 196).



#### A) Broad-based study

- Decoding strategies: primarily word-based rather than contextual strategies, relevance of available productive vocabulary to be able to make inferences<sup>14</sup> (Müller-Lancé, 2003, pp. 434–435).
- Lexical performance: forgetting curve dependent on student variables, word selection (especially for low-frequency function words), vocabulary type (active vocabulary affected); interlingual decoding possibilities were stated as the most important requirement for memorization followed by intralingual decoding possibilities (Müller-Lancé, 2003, p. 435).

#### B) In-depth study

- Text translations: use of a foreign language was the most common strategy (53%), degree of competence or recent activation (stay abroad, lessons) the most important predictor for use (not typological relationship between languages); different sources of inference in production (typically target language) and reception (context, world knowledge more frequent) (Müller-Lancé, 2003, p. 436);
- Association test: as associations, a) usually first language translations were stated in response to stimuli in a foreign language (often in combination with a translation into additional foreign languages), b) usually antonyms or foreign language translations were stated in response to stimuli in the first or second language; phonetic associations for stimuli that were not semantically accessible, usually the words associated from another foreign language starting in the same way as the stimulus (Müller-Lancé, 2003, p. 438)

The data confirm models of interactive activation in language production, that is, non-selective, cross-lingual access to existing knowledge (Müller-Lancé, 2003, p. 444). Students who had broadly activated their repertoire for inferences also did so in the associations (Müller-Lancé, 2003, p. 440). From the observed differences in behavior during the association task, <sup>15</sup> the author concluded that frequency was decisive in the use of the different tracks, and that, in turn, this was linked to certain learning experiences and strategies (Müller-Lancé, 2003, p. 458).

Marx (2005) used a six-week experimental study (N = 18 students with non-Germanic L1, English as L2, and no previous knowledge in the L3 German)<sup>16</sup> to examine sensitization teaching

<sup>&</sup>lt;sup>16</sup>The participants were between 18 and 25 years old and enrolled in an English-language natural science degree program at a German university. At the start of data collection, they had only recently moved to Germany. In all, only 14 participants were included in the analysis (Marx, 2005, pp. 204–205).



<sup>&</sup>lt;sup>14</sup>Müller-Lancé concludes this based on introspective data from participants who had learned another Romance language using only receptive methods based on EUROCOM (N = 70) (Müller-Lancé, 2003, pp. 203, 435) and from how Latin vocabulary was used in the broad-based and the in-depth study. In the former, only those participants currently attending a university or school Latin course used Latin vocabulary to make inferences (N = 27) (Müller-Lancé, 2003, pp. 203, 435), while in the latter, Latin was used almost twice as frequently in reception as in production (Müller-Lancé, 2003, p. 436). Two students (one studying Latin, one with Latin as their first foreign language) used Latin for making inferences in both directions (Müller-Lancé, 2013, p. 25).

<sup>&</sup>lt;sup>15</sup>Three types of behavior were distinguished: monolinguoid participants were fixated on the first language in the association task, bilinguoid participants tended to use the first language and the foreign language they knew best or that had been activated recently, and multilinguoid participants used all the languages in their repertoires (Müller-Lancé, 2003, pp. 439, 457–459).

in lessons for German as a foreign language after English (*DaFnE*) as an independent variable. She proposed the following hypotheses (Marx, 2005, pp. 203–204):

- 1. *DaFnE*-sensitized students (the experimental group) are better aware of how to use their previous L2 knowledge in the reception of L3 listening texts that are suited to their level and include many cognates.
- 2. This also applies to the reception of L3 listening texts that are above their level and include many cognates.
- 3. As the study progresses, the differences between the control and experimental groups will grow larger.
- 4. The experimental group will be aware of the advantages arising from prior foreign languages and previous learning experiences.

Two intensive courses (16 h/week) were compared, with initial tests and questionnaires being used to match participants across groups. For the experimental group, *DaFnE*-sensitization units were conceptualized that were taught four times per week such that they made up 15–25% of the entire teaching time (Marx, 2005, pp. 127–137). For hypothesis 1, each week a test was given; for hypothesis 2, two different tests were used alternately every two weeks (radio news with many or few cognates); in addition, for hypothesis 3, data was collected again on all types of tests six weeks after the course ended. Hypotheses 1 and 2 were confirmed based on the significantly better results of the experimental group. In the first case at four points of data collection (all at the beginning of the course), in the second case only in relation to radio news with many cognates and with an increasing gap between the two groups. With this in mind, it is surprising that hypothesis 3 was not confirmed; an effect might be seen in a larger sample. Hypothesis 4 was partially confirmed, as significant differences could be observed in relation to language possession but not with regard to other aspects of prior knowledge relevant to learning (Marx, 2005, pp. 243–245). Marx was able to show

that the sensitization course had a positive effect on the actual performance of the students in many respects ... and that the learners only realize what (specific, usually lexical) assistance they can extract from English if they have taken part in such a sensitization process (Marx, 2005, p. 245).

In a class in Germany and France (N=40 students in their second year of learning the L3 French or German with English as the L2), Dietrich-Grappin (2020) examined transfer-based communication strategies, that is, production transfer (using (non-)adapted lexemes from other languages) and code-switching (changing the interaction language as a contextualization hint). As part of a qualitative experiment, half of the students carried out spontaneous conversational tasks in the L3 ("reduction" of the field, no advance activation of vocabulary or structures) while the other half first did the task in English and only then in the L3 ("adjection" of an unusual practice, two-language task) (Dietrich-Grappin, 2020, pp. 107–112). In the subsequent group discussion, retrospection data was also collected. The starting assumption that the two-language task would elicit more L2 production transfer into the L3 discussions that could then be retrospectively cognitivized by the students was not confirmed.<sup>17</sup> On the contrary, in the class in

<sup>&</sup>lt;sup>17</sup>In absolute numbers, L2 production transfer took place at almost the same frequency; however, the L3 discussions in the two-language tasks displayed a tendency to refer back to L2 instead of L1 in production transfer and to avoid constitutive L2 code-switching, that is, continuing the discussion task across several lexemes (Dietrich-Grappin, 2020, pp. 178, 183).



Germany, this task led to the students actualizing a monolingual or monolingual-exolingual profile<sup>18</sup> of their plurilingual competence (Fig. 3), while with the more authentic spontaneous conversational tasks, all but four students actualized one of the other two profiles. In combination with a subsequent cognitivization, the plurilingual-exolingual profile (Fig. 3) can be considered particularly conducive to learning (modified output, maintaining L3 as the interaction language, L3 texts of above-average length). In the language production data at the beginner level, the L1 had a meta-communicative function while the L2 acted as a *supplier* (Dietrich-Grappin, 2020, pp. 163, 172). Here, bottom-up processes could be observed that were mostly based on phonetic-semantic similarities but partly also on phonetic-orthographic similarities of lexemes (Dietrich-Grappin, 2020, p. 167–168).

The collaborative research project "Multiple Language Acquisition at Schools in the Transition from Primary to Early Secondary Levels", funded by the Swiss National Fund, took a closer look at textual competence in school and foreign languages. Besides texts (reading, writing, speaking), questionnaires were used to determine individual learning conditions and beliefs (perceived efficacy of learning strategies, intended vs. perceived design of language

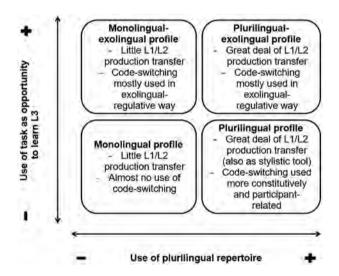


Fig. 3. Typology of profiles of plurilingual competence actualized by students (Dietrich-Grappin, 2020, p. 192)

<sup>&</sup>lt;sup>19</sup>The study therefore provides evidence for the role-function model (Williams & Hammarberg, 2009) and the revised hierarchical model (Kroll, van Hell, Tokowicz, & Green, 2010) in relation to adolescent learners of guided L3 acquisition.



<sup>&</sup>lt;sup>18</sup>While the students exhibiting a monolingual profile used neither production transfer nor code-switching and produced the shortest L3 texts in the corpus, the monolingual-exolingual profile at least distinguished itself by language-related (exolingual) code-switching. Another conspicuous difference here was the extremely negative self-assessment of these students in the retrospective phase, which can be explained by them using the native speaker ideal as the reference point for judging their conversations.

lessons) (Brühwiler, Gebhardt, Manno, Egli Cuenat, & Le Pape Racine, 2020, pp. 30–31). The data was collected between 2014 and 2015 from Swiss students at the end of 6th (N = 609) and 7th (N = 723) grades, and data on both points of data collection exist for 316 students. Selected findings are summarized below:

- Evidence for increasing textual competence across languages and modalities: cognate recognition at both data collection points and in both foreign languages was a predictor for reading or detail comprehension (Manno, 2020, p. 67); use of text-structuring resources (text length, subordinate clause construction, connector types and tokens) in part across languages, e.g., text length when writing, text length and connector tokens when speaking, and close connections between both foreign languages when speaking in 7th grade (Egli Cuenat & Brühwiler, 2020, p. 98); strong interlingual connections within a modality and across modalities between noun diversity in French production and reading or detail comprehension in the other two languages (Egli Cuenat & Manno, 2020, p. 201), good textual competence overall in students with high degree of intrinsic motivation for French (Gebhardt, Brühwiler, Manno, & Egli Cuenat, 2020, p. 222)
- Perceived design of language lessons: teachers were more convinced of the efficacy of language comparisons than students, but still used them only rarely according to statements by learners (Le Pape Racine & Brühwiler, 2020a, p. 247); from the teachers' perspective, a lack of coordination when transitioning to the next grade (Le Pape Racine & Brühwiler, 2020b, p. 278)

For the L3, the group of authors concluded that applying approaches from TLD to create awareness of existing resources is all the more important because the observed traces of transversal use did not occur automatically for all students (Egli Cuenat, Manno, Brühwiler, & Le Pape Racine, 2020, p. 327).

As part of the FRANZIMO<sup>20</sup> study (quasi-experimental control group study with pre-post measurements) in 2021, Göbel et al. looked at the efficacy of multi-stage tasks designed to activate interlingual lexical transfer bases; the data were collected from 20 French classes in 7<sup>th</sup> grade (N = 394 students)<sup>21</sup> in 12 *Gymnasium*-type schools in northwest Germany (Göbel et al., 2021, p. 8). The set of tasks was integrated into the regular textbook-based lessons of the experimental group for 10–15 min per week over 10–12 weeks. The tasks were developed together with teachers and subject didactics experts, piloted (N = 140), and revised in another workshop with teachers (Göbel et al., 2021, pp. 9–12, 15).<sup>22</sup> In the main study, the following dependent variables were to be investigated:

<sup>&</sup>lt;sup>22</sup>The set of tasks aimed primarily at interlingual receptive transfer in the lexical field by working "with multilingual vocabulary tables, text excerpts with unknown lexemes and authentic documents" (Schmelter, Göbel, Buret, & Frede, 2019, p. 22). For the further development, feedback from all students and teachers participating in the pilot study was considered (unclear objectives, time-intensive, lack of reference to textbook), and the teachers participating in the main study were given more extensive preparation for delivering the tasks (Göbel et al., 2021, p. 15).



<sup>&</sup>lt;sup>20</sup>Französischunterricht interkulturell und mehrsprachigkeitsorientiert (Intercultural French instruction oriented toward multilingualism)

<sup>&</sup>lt;sup>21</sup>For the pre-post design, extensive covariables were collected in advance: gender, migration background, socioeconomic background, cognitive starting point (measured with an ability test), language skills in English and French (C-test), self-assessment of skill in native language(s), academic self-image and self-appraisal in the subject of French, and language learning strategies (Göbel et al., 2021, pp. 8, 13).

- a) Language competence in French (C-test)
- b) Language awareness (LAT)
- c) Appreciation of multilingualism (items from various instruments)
- d) Intercultural competence (items from various instruments)
- e) Motivation in French (items from various instruments) (Göbel et al., 2021, pp. 13-14)

In addition, a questionnaire was used to ask all students in the experimental group about their experiences and impressions in dealing with the tasks and their implementation. Guided interviews were also conducted with 37 students and all the teachers in the experimental group. Initial findings indicate that the delivery of the tasks in lessons was received positively, greater willingness to use interlingual learning strategies was seen in students whose environment was multilingual (Göbel et al., 2021, p. 16), and students who had been raised monolingually gained a greater appreciation of multilingualism. However, the tasks were not always used in their entirety and the statistical analyses on the conditions and efficacy of using the tasks, which have not yet been performed, will differentiate between the classes in the experimental groups who worked through fewer than ten tasks or at least ten tasks (Göbel et al., 2021, p. 17) to facilitate accurate comparisons with developments in the control group.

#### Summary

The factor model and the Bochum tertiary languages project suggest that it makes sense to work with specific methodical focus areas in L3 teaching: for example, it can be beneficial to add more learner-centered methods for semanticizing and more implicit and deductive approaches to teaching rules. Cognitivization methods should make complete use of students' existing language possession with both the parallels and contrasts it supplies, incorporate pragmatics, and take up error corrections and language-related student questions more systematically (integrating a 'meta-discourse on learning'). Marx (2005) and initial findings from Göbel et al. (2021) show how important it is to sensitize students for lexical transfer as a decoding strategy to facilitate its effective deployment or its deployment at all. Both Müller-Lancé (2003) and Dietrich-Grappin (2020) postulate the same connection for inferences in production as well. Both studies provide evidence for a 'foreign language mode' deployed when using the mental lexicon in L3 production and show inter-individual differences in how repertoires are accessed as well as the necessity of forming a multilinguoid or plurilingualexolingual habitus by language practice and subsequent cognitivization. Manno, Egli Cuenat, Le Pape Racine, and Brühwiler (2020) clarify that traces of transversal use found in relation to textual competence do not arise automatically across all languages learned in school but must be fostered in lessons, and this opens up broad scope for action in TLD in the area of pragmatics.

# **MODELING TERTIARY LANGUAGE DIDACTICS 2.0**

TLD as it was originally modeled in the 1990s is introduced below before suggestions for its further development are advanced. These draw on evidence-based results from Germanophone L3 research (3.2, 3.3) and a discussion of the *compétence plurilingue* and translanguaging concepts.



# Tertiary language didactics as "German as a foreign language after English" (DaFnE)

Neuner (1996) laid down the foundations of *DaFnE*, defining its target group as adolescent learners advanced in their intellectual and cognitive development (critical engagement with the wider environment and society, experiences of otherness, interested in the "exploitability" of knowledge and skills) (Neuner, 1996, p. 213) and starting to learn an L3 at beginner level (Neuner, 1999). *DaFnE* was conceived of as a language didactics or multilingual didactics approach targeting the acquisition of "pragmatic-communicative [...] competence (German for everyday purposes) and drawing on students' prior knowledge of English" (Neuner, 1996, p. 213) to enable steeper progression (Neuner, 1996, p. 213); in later publications, this aim was differentiated further into "extending language knowledge and language awareness" and "cultivating language learning awareness" (Neuner et al., 2009, p. 24; cf. Neuner, 2003, p. 28; Neuner, 2006, pp. 137–141).<sup>23</sup> The ten principles Neuner proposed in 1996 were consolidated in subsequent publications to five principles delineating what was now called TLD (Fig. 4). While the four principles on the left in Fig. 4 relate to didactic-methodical suggestions for planning and delivering teaching, the principle of **economizing the learning process** chiefly serves to justify and legitimize a TLD with the features described.<sup>24</sup>

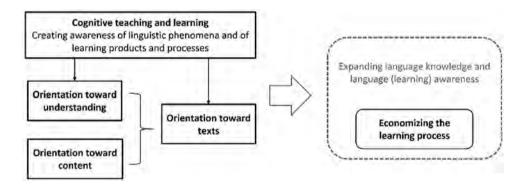


Fig. 4. Principles of tertiary language didactics as "German as a foreign language after English" (Neuner, 2003, pp. 28–32; Neuner, 2006, pp. 141–145; Neuner et al., 2009, pp. 39–45; Graphic: SDG)

<sup>&</sup>lt;sup>24</sup>This principle addresses especially "time-saving and efficient teaching and learning processes" (Neuner et al., 2009, p. 44). The didactic-methodical suggestions advanced (deploying bilingual or trilingual picture dictionaries for parallel vocabulary; explicitly comparing and contrasting grammar topics; intensive practice with "structures prone to interference"; experimenting with and discussing learning techniques and strategies, Neuner et al., 2009, p. 44; Neuner, 2006, pp. 144–145) do not extend beyond what has already been set out in the other principles.



<sup>&</sup>lt;sup>23</sup>TLD in Neuner (1996) was also conceived of as a cultural education approach drawing on the "mediation world" of the Anglosphere to foster "intersociocultural competence" (Neuner, 1996, p. 43) but this aim was not retained or developed in subsequent publications. Neuner et al. (2009), for instance, saw language systems and skills as reference points for the principle of orientation toward understanding; regional culture aspects were only mentioned in passing (Neuner et al., 2009, pp. 42–43).

The overarching principle of **cognitive teaching and learning** encompasses the comparison and discussion

- of the linguistic phenomena of L1/L2/L3 by "conscious activation of their common linguistic basis" (Neuner et al., 2009, p. 41), but also the "perception and discussion of differences to avoid interference" (Neuner et al., 2009, p. 42)
- "of learning results and learning experiences" (Neuner et al., 2009, p. 42) and learning products and the learning process (Neuner, 2006, p. 142)

With reference to the target group, this principle can be seen as the core principle supporting "conscious 'learning to learn' in a sustained fashion and preparing students to learn languages autonomously after their time in school" (Neuner et al., 2009, p. 42). The principle of **orientation toward understanding** relates to language systems and linguistic phenomena (the level of meta-linguistic knowledge) and skills (prioritization of receptive skills). Objectives include:

- "activating existing linguistic knowledge, recognizing, categorizing and evaluating analogous or divergent phenomena, and anchoring new linguistic elements, units and structures in one's memory" (Neuner, 2009, p. 42f.)
- focusing on receptive skills at the beginning of the learning process, that is, "dealing intensively and often with texts and especially with reading texts" (Neuner, 2009, p. 43)

A correspondingly high significance is attributed to a culture of thinking aloud and discursively talking over subjects such as "a linguistic or regional culture feature investigated using texts" (Neuner et al., 2009, p. 43); in beginner lessons, this should take place mainly in the school language (Neuner et al., 2009, p. 29). The principle of orientation toward content addresses the need to choose topics that are appropriate for the specific target group. Neuner (1996) recommends a content-oriented rather than a linguistic progression. Challenging topics should be chosen, topics young people have "experience of from their own world" (Neuner, 2003, p. 30) and should "explore in the foreign world" (Neuner, 2003, p. 30). The principle of orientation toward texts flows from the two principles that have already been described, as the suggested skills-based progression "from understanding to utterances" (Neuner et al., 2009, p. 43) and the principle of orientation toward content make media such as "reading and listening texts, pictures, and videos" (Neuner et al., 2009, p. 43) significant: "Working with texts, and above all with reading texts, has an important place in tertiary language teaching right from the outset" (Neuner, 2006, p. 143). Working with texts is understood as reading comprehension targeting information retrieval (activating and cognitivizing "bridges to understanding", Neuner, 2003, p. 29) and fostering strategies for autonomous semanticizing (e.g., intelligent guessing, cf. Neuner, 1996, p. 213) and reading (Neuner, 2009, p. 44). Authentic texts and "synthetic parallel texts" (L1/L2/L3) are differentiated; the latter are produced to display specific linguistic phenomena and allow learners working through them inductively and comparatively to discover more about their languages (Neuner, 2003, p. 31).

Taken together, the principles clarify that students can be expected to activate their prior knowledge of previously acquired languages (L1, L2) in the presentation and cognitivization phase described in Zimmermann's modeling of grammar teaching phases (Zimmermann, 1988). The prior knowledge activated by means of receptive processes in L3 encompasses procedural lexical knowledge (recognition of cognates), meta-linguistic and learning strategies knowledge (reading and autonomous semanticizing strategies); with regard to the cognitivization of



learning processes and products, it remains unclear what types of prior knowledge are activated and when (Fig. 5).

*DaFnE* is rooted in cognitive learning theory and assumes that meta-linguistic knowledge is, in principle, transformable into implicit knowledge and can enable skill-building in the target language (strong interface hypothesis).

# Tertiary language didactics 2.0

TLD 2.0 considers the same target group and proceeds from the same aim as Neuner (1996): adolescents and young adults starting an L3 at beginner level and enhancing their communicative-pragmatic competence by drawing on prior language knowledge. With this aim in mind and with regard to the empirical studies introduced above, we have modified and supplemented the original modeling (4.2.1). TLD 2.0 is open to and compatible with the premise of heterogeneous student repertoires and with additional learning and education goals (4.2.2).

Developing TLD further in light of current empirical evidence. The model introduced in the following (Fig. 6) envisages the stimulation of learners to activate their prior knowledge of previously acquired languages as they deal with L3 in an experiential way. The prior knowledge activated in this way encompasses more procedural (lexical and structural) knowledge and, as before, meta-linguistic knowledge and knowledge of learning strategies. We link more strongly to social cognitivist and constructivist learning theory, according to which different learning paths (world knowledge, explicit and implicit knowledge, weak interface hypothesis) and individual noticing lead to building competence in the target language.

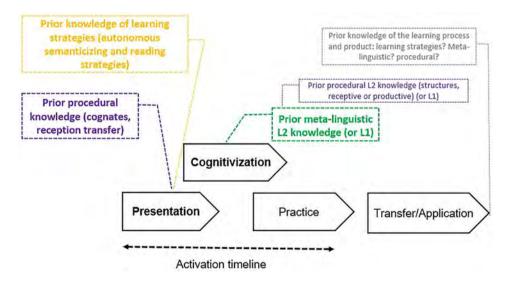


Fig. 5. Type of prior knowledge (procedural knowledge in violet, meta-linguistic knowledge in green, meta-cognitive knowledge in orange) and timing of activation in tertiary language didactics as "German as a foreign language after English" (Graphic: SDG)



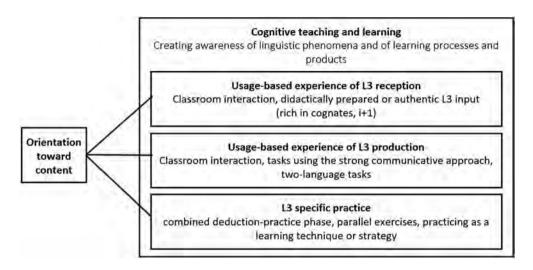


Fig. 6. Didactic-methodical principles of tertiary language didactics 2.0 (Graphic: SDG)

We understand the principle of **orientation toward content** as requiring a learner-oriented selection of topics and material that enables L3 learners to experience authentic language. This entails selecting input in interest-driven and needs-driven ways and setting tasks that allow learners to realize their own communicative intentions (primacy of content) and to recall and expand their world knowledge in the process. 'Authentic' practice in an L3 context, to our understanding, addresses learners as plurilingual people and competent language learners by activating their procedural, meta-linguistic, or learning strategies knowledge related to other languages.

The original principles of orientation toward understanding and toward texts flow into the principle of **a usage-based experience of L3 reception**. This principle applies in classroom interactions and to the reception of texts and media. Working from early on with didactically prepared or authentic L3 input that exceeds (i+1) the current competence level of learners and is rich in cognates (L1, L2) seems advisable (Marx, 2005; Göbel et al., 2021); L3 teachers should sensitize L3 learners for their extended opportunities for autonomous semanticizing (Bahr et al., 1996). The principle of a **usage-based experience of L3 production**<sup>25</sup> can be pursued in classroom interaction, which means taking up errors in their significance for fostering learning and communication and correcting them in informative ways (integration of a meta-learning discourse) (Bahr et al., 1996). The principle can also be pursued by deploying tasks in the strong communicative approach and a communication phase preceding the L3 input. In contrast to tasks using the weak communicative approach that have had some difficulty removed by preteaching, errors rooted in production transfer or an assumed similarity between languages are

<sup>&</sup>lt;sup>25</sup>Neuner's original (1996) conception also incorporated two principles connected to production processes in the weak communicative approach: the "specification of meaningful tasks ... covering individual skills areas" (Neuner, 1996, p. 215) and the "development of the ability to communicate orally and in writing in the foreign language of German on the basis of a broad contextual understanding" (Neuner, 1996, p. 215).



elicited here. We consider this principle important as a route to making L3 learners aware of the language acquisition potential of the plurilingual-exolingual profile of their plurilingual competence (Dietrich-Grappin, 2020) and fostering their awareness of textual competence resources which they already possess and can draw on transversally (Egli Cuenat et al., 2020). Particularly for beginner levels, the cognitivization of lexical transfer and bottom-up processes in reception (Göbel et al., 2021; Marx, 2005) and production (Dietrich-Grappin, 2020; Egli Cuenat et al., 2020; Müller-Lancé, 2003) can promote learning effectively; lexical information is also a decisive prerequisite for the retrieval and long-term retention of information about morphology and syntax.<sup>26</sup> It is clear from the current state of research that interactive (non-selective or crosslingual) activation processes in the mental lexicon are only natural: "Learners will naturally always strive to connect their knowledge of different languages for neurobiological and cognitive reasons and teachers should not attempt to prevent this" (Müller-Lancé, 2013, p. 31). One aspect of L3-specific practice is its combination with deduction and interlingual scaffolding by essentially drawing on meta-linguistic knowledge in prior languages. Highlighting a similar rule in L1 or L2 could, in the case of a contrasting school language, support downward differentiation, while upward differentiation could explore parallels and differences between the target and the school language, the L2 and other L1s. A second aspect is that parallel exercises (Leitzke-Ungerer, 2005) can be used to compare vocabulary or grammar. Cognates in two languages can be matched (closed-receptive tasks) or completed in a previously acquired language and/or in the target language (semi-open tasks) and shifts in meaning and false friends can also be dealt with in this context. Productive parallel tasks in L2 (or L1) and L3 can also be recommended for grammar work when parallels between linguistic phenomena exist (in relation to form and/or function) between L2 or a second language, but not to the school language. Thirdly, L3 exercises can be cognitivized in lessons as learning techniques and strategies, inviting students to activate prior practice experience and to better determine their own learning style.

We hold fast to the overarching principle of **cognitive teaching and learning**, that should essentially proceed from specific pragmatic usage contexts (Bahr et al., 1996). In addition to the initial modeling (Fig. 5), our modeling (Fig. 7) also focuses on a prior communication phase (strong communicative approach) and the practice phase as such. The communication experience without any pre-teaching activity supplies a reference point for cognitive engagement (cognates in production, text and communication strategies) to support the interplay between conscious and unconscious language processing (Müller-Lancé, 2013, p. 20). During the practice phase, the focus is on conscious interlingual language processing.

In addition to Neuner's focus on an explicit inductive cognitivization phase, we suggest two other ways of integrated cognitivization during practice, and of more compact L3 grammar teaching (Bahr et al., 1996): the activation of prior meta-linguistic knowledge in a combined deduction-practice phase or parallel exercises where students activate procedural structural knowledge. The principle of cognitive teaching and learning is eminently compatible with the principle of enlightened monolingualism or multilingualism (Reimann, 2016). This means that

<sup>&</sup>lt;sup>26</sup>Neuner considered orientation toward understanding important in order to avoid linguistic interference phenomena in syntax, pronunciation, or spelling from becoming fossilized (Neuner, 2003, p. 26). The current state of research lends weight, however, to the relevance of lexical transfer at beginner level, for which L2 is more significant, while the areas specified by Neuner (and pragmatic action more generally) are areas in which L1 is intrinsically more influential (Marx, 2016, p. 296).



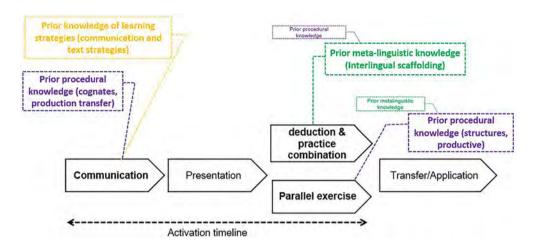


Fig. 7. Type of prior knowledge (procedural knowledge in violet, meta-linguistic knowledge in green, meta-cognitive knowledge in orange) and timing of activation in tertiary language didactics 2.0 (Graphic: SDG)

the verbalization of prior meta-linguistic and learning strategies knowledge generally occurs in the school language, while procedural prior knowledge may be verbalized in a second or foreign language.

Developing TLD further in light of neighboring discourses: translanguaging and compétence plurilingue. As is typical for European multilingual teaching approaches and L3 research more generally, the original conception of TLD proceeded from the idea of the monolingually socialized learner: "A large proportion of this research originated in Western countries with substantially monolingual traditions, and this was reflected in the strong interest shown in school-acquired plurilingualism" (Ballweg, 2019, p. 269). Considerations from psycholinguistics and an orientation toward efficient and accelerated L3 learning processes were especially relevant for the development of DaFnE. The translanguaging and compétence plurilingue discourses were not characterized by the same pressure to legitimize accelerated development of linguistic competence, as they have their origins in traditionally multilingual societies (diglossia in Wales in the case of translanguaging) or have at least been strongly influenced by such societies (multilingualism in Switzerland and the bilingualism research of the Neuchâtel school as influence in the case of compétence plurilingue). Both discourses connect language acquisition and language learning closely with language use and rest on the sociocultural learning theory. They are, in other words, more strongly influenced by sociolinguistics and oriented toward communication and identity formation.

Translanguaging and TLD have a common origin as a pedagogical conception, although their roots are in different subjects (bilingual subject teaching versus foreign languages teaching). While the TLD discourse has been concerned with the teaching perspective since its beginnings, the translanguaging discourse has proven more adaptable in also taking up learner perspectives. García's new definition was, indeed, prompted by her examination of the language practices of negotiating meaning in her bilingual (Spanish/English) learner groups (García, 2009). This focus on the observable language practice behavior of students and the adoption of their internal



perspective was enthusiastically taken up by applied educational linguistics before the concept of translanguaging was also embraced to describe phenomena beyond the classroom. It can now also supply momentum for advancing the development of TLD 2.0 further in the direction of internal differentiation in superdiverse classrooms (Duarte & Gogolin, 2013), as potentials beyond L2 are coming more sharply into focus (Table 3).

Thus, students for whom the school language is a second language who have schooled knowledge in their first language and knowledge of a foreign language would score best with regards to areas of prior knowledge that could be activated for L3 learning. While the activation of meta-linguistic and meta-cognitive knowledge are less subject to restrictions, before activating procedural prior knowledge, L3 teachers should consider psycholinguistic transfer factors such as perceived and assumed similarities between languages (psychotypology) and L2 threshold competence, as well as sociolinguistic factors prompting the adoption of a plurilingual-exolingual language mode (collaborative work with a person with whom one shares a previously acquired language in one's repertoire, spontaneous writing and speaking in tasks without preteaching, changing the subject, activating a previously acquired language through parallel tasks). The translanguaging discourse can also inspire TLD 2.0 to pay closer attention to the interplay between the negotiation of meaning and the acquisition of the target language. This includes using tasks in the transfer and application phase (Fig. 8) that give L3 learners opportunities to generate new world knowledge, modify their opinions, or form opinions in the first place (engagement with demanding and also multilingual inputs on societally relevant topics, collective constructions of meaning, personal development) (Küster, 2009, p. 63).<sup>27</sup> Two-language tasks can also be used for this purpose (Bailly & Ciekanski, 2003; Leitzke-Ungerer, 2012); these include outputs that are by definition multilingual, and their production by students prompts activation of skills-based prior knowledge (co-activating or consecutive language use).

If TLD desires to underscore the legitimacy of activating skills-based prior knowledge, it can do so not (only) with reference to economizing the L3 learning process (or to the transversal goal of language awareness and language learning competence): empirically demonstrating the efficacy of task formats that activate considerable procedural prior knowledge in other languages for fostering L3 learning seems likely to pose considerable difficulties. TLD and the Francophone compétence plurilingue discourse are linked by their origins in education policy and their proximity to European concepts of plurilingualism that attribute considerable significance, within monolingual societies, to adding a third and further languages to one's repertoire. Coste et al. leaned on Hymes' concept of "competence for use" in his coining of the concept and used the attribute plurilingue to describe the overarching communicative competence of plurilingual individuals with a view to both their language practices as such and the manifestations of identity-forming processes (Coste, Moore, & Zarate, 2009). The dimensions of language and culture have always been seen in parallel and the new CEFR Companion Volume (Council of Europe, 2018, p. 29) also pursues this route with its inclusion of descriptors for plurilingual and pluricultural competence and its inclusion of mediation in this category. By integrating pluricultural aspects, TLD 2.0 reaches back to its origins (Neuner, 1996) and expands its scope to shape the transfer and application phase as well as gaining a new legitimatory principle (Fig. 8).

<sup>&</sup>lt;sup>27</sup>For the prior communication phase (Fig. 7), tasks imitating everyday communication or activating world knowledge are more suitable; these allow L3 learners to express opinions they have already formed (Küster, 2009, p. 63).



Table 3. Transfer potential for L3 learning structured by prior knowledge type, activation phase and language (dark shading indicating higher transfer potential than low shading; procedural knowledge in violet, meta-linguistic knowledge in green, meta-cognitive knowledge in orange) (Graphic: SDG)

Activated languages  Type of prior knowledge (timing of activation)	Foreign language(s)	First language (schooled) #	Second language = school language	First language = school language	Second language (not schooled)
Procedural (communication phase)					
Procedural (presentation phase)					
Procedural (practice phase, if structurally closer to L3)					
Meta-linguistic (all phases)					
Learning strategies (communication and presentation					
phase)					
Learning strategies (practice phase)					



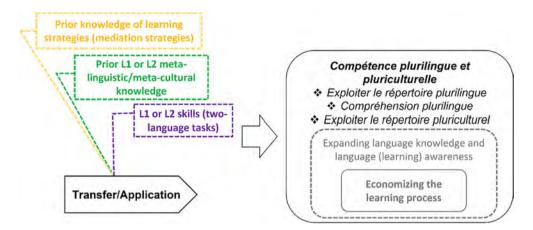


Fig. 8. Type of prior knowledge in the transfer and application phase (procedural knowledge in violet, meta-linguistic or meta-cultural knowledge in green, meta-cognitive knowledge in orange) and possible legitimatory principles of tertiary language didactics 2.0 (Graphic SDG, cf. Council of Europe, 2018, pp. 164–170)

# TERMINOLOGICAL PROBLEMS, BENEFITS AND RESEARCH PERSPECTIVES IN THE FIELD OF TERTIARY LANGUAGES

It can be noted critically that counting L1, L2 and L3 in a seemingly chronological sequence occludes the facts that languages are often learned in parallel rather than sequentially (L3 learners with migration backgrounds growing up bilingually or plurilingually, curricular anchoring of L2 and L3 in the same learning years) and that the mental interaction processes between languages are simultaneous; the chronology also suggests a defined hierarchy of competence levels while the real language biographies in superdiverse settings are by far more complex (a first or second language as L1 may only have been mastered as a spoken language, for example, while L2 competences exist across all skill domains). But this very linearity also has the advantage of stressing the fact that a learner's repertoire evolves over time, reminding us to look at the conditions of its emergence and the resultant domains of prior knowledge with relevance for learning. Can it be ascertained whether a threshold competence level enabling transfer has been reached, apart from the question of psychotypology, and whether it is fully formed across all skill domains? Do L3 learners with the school language as a second language possibly have stores of prior meta-linguistic knowledge in the school language that are more relevant for L3 learning than those of monolingually socialized learners? Do differences in students' prior meta-cognitive knowledge specific to foreign language learning exist within learning groups with heterogeneous language backgrounds?

At the levels of both teaching practice and research methodology, the L3 concept supplies an invitation to differentiate internally. From as early as Bahr et al., 1996 onward, making information available that connects with prior knowledge has been recommended:

The logic of this information provision should, however, be explained to the students, especially to clarify that not everybody needs to process every piece of information in the same way,



but that it is fine to filter the information provided and absorb only what appears useful for one's own learning process and appropriate at one's current learning stage (Bahr et al., 1996, p. 187).

Our new modeling represents a proposal for how such provision can be integrated into various – cooperative or individualized – phases of textbook-based L3 teaching. Up to now, the potential of prior knowledge from L2 learning in the areas of procedural knowledge (reception transfer) and meta-linguistic and learning strategies knowledge has been foregrounded. Our proposed remodeling sets out to bring further stores of procedural prior knowledge from L2 into view (cognates and structures in production) and analogous areas of potential in L1 (the school language as a first or second language or any additional second language, possibly with different degrees of mastery in the skill domains). Our model needs further empirical verification in the context of transfer research that merges research approaches from psycholinguistics and sociolinguistics and never loses sight of prior knowledge in other languages as an impact factor for target language learning.

With regards to future prospects in the field of TLD, it appears advisable to retain a focus on its practical application in schools and on learning objectives around culture, and to open up scope for a normative discussion of learning and educational goals. In pursuit of plurilingual and pluricultural competence, we recommend activating very broad stores of prior knowledge in the transfer and application phase (skills-based L1 or L2 prior knowledge, meta-linguistic and meta-cultural reflection, mediation strategies), not justifying TLD exclusively (or even at all?) in terms of a streamlined L3 learning process. The notion of tertiary languages proves to be productive in opening up new objectives (see the integration of language learning competence as a legimatory principle) by suggesting a clearly anchored curricular "location" (the second and further foreign language subjects) for multilingual teaching

- that allows an entire learning group to gain usage-based and practice-oriented experiences of dealing with at least three languages and to cognitivize these experiences;
- that allows monolingually socialized L3 learners to tap into their L2 procedural knowledge and thus move decisively toward perceiving and shaping their own plurilingual competence;
- that allows bilingually or plurilingually socialized L3 learners to experience their procedural and meta-linguistic (meta-cultural) competences (including their plurilingual competence) in a system largely oriented toward achievement in the school language.

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