

Language That Stays

Language acquisition with film, song and community — the pedagogical concept behind Pontivo

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Translated from the German original; in case of doubt the German version governs.

Language is not acquired by drilling rules but through comprehensible, anchored, communally experienced input — film delivers it, song anchors it, community makes it possible; and whatever remains a bet is named here, with a measurement plan.

Summary

This book sets out the pedagogical concept of Pontivo, a platform for language acquisition with film, song and community. Its starting point: despite enormous effort, rule-centred language teaching reliably produces knowledge about a language, but too rarely ability in it. For four decades research has named the conditions under which people actually acquire languages: large quantities of comprehensible input at low anxiety.

From these conditions the book develops the test grid "Comprehensible? Anchored? Connected?" and walks it along the platform — film with a bilingual subtitle track, song as a form of memory, choir and classroom as fear-lowering spaces. In the translated song from home all strands converge; the final chapter names limits and the measuring list. Throughout, evidenced principles and unmeasured design bets are kept apart. Verifiable rather than asserted.

The idea was born of the plight of refugees; it is built for everyone who needs a new language in order to belong — the international professional and her family as much as the multilingual mainstream classroom. And it aims beyond vocabulary: where a group translates its members' songs into the shared language and sings them, integration becomes audible in both directions for the first time. What holds, this book documents; what remains a bet, it names — and it invites education, media and the arts to run the experiment together.

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Part I — The Problem

„... a gifted person ought to learn English (barring spelling and pronouncing), in 30 hours, French in 30 days, and German in 30 years.”

— Mark Twain, *A Tramp Abroad*, App. D (1880)

Chapter 1 · Six Hundred Hours — and Not a Word

1.1 Two Scenes

Amal is thirty-four; she came to Germany from Syria three years ago. She has done what was asked of her, and more: she attended the general integration course — six hundred teaching hours of language instruction plus a hundred hours of orientation — filled vocabulary notebooks, worked through worksheets, practised mock tests. In the end she passed the "Deutsch-Test für Zuwanderer" with a B1 result. That puts her in the better half of her cohort. The certificate sits at home in a plastic sleeve.

At the supermarket checkout the cashier asks, quickly and over her shoulder: "Sammeln Sie Punkte?" — collecting points? Amal does not understand the words. She does not even understand that it was a question. She feels the queue behind her, the waiting, the eyes. She smiles, nods, pays and says — nothing. On the way home she translates for herself the sentence she did not say. At home she could explain, without a single mistake, when German requires the dative.

The second scene takes place a thousand kilometres to the south, in an upper-secondary classroom in Bologna. English has been on the timetable here since primary school; most people in this room have more than ten years of instruction behind them — grammar programmes, vocabulary tests, written exams. The teacher starts a documentary in the English original. After two minutes someone raises a hand and asks whether the Italian version is available. It is not a provocation. It is honest information: the sound is not reaching them.

Both scenes are invented. The numbers behind them are not.

1.2 What the Numbers Say

The German integration course is not a side offer but the country's central instrument of language policy: seven hundred teaching hours, regulated by law, with the declared goal of bringing participants to level B1 in the final test.¹ In 2024, of those who took the final test after a general integration course, 58.6 per cent reached that B1; 31.8 per cent stayed at A2, 9.6 per cent below.² You have to read that figure twice. It counts only those who made it to the test at all — and even among them, four in ten miss the course goal.

And the figure says a second, quieter thing. For B1 is not a high level. The European reference scale describes it as a threshold: someone at B1 can talk about familiar matters in simple, con-

¹ § 10(1) sentence 1 of the German Integration Course Ordinance (IntV): "Der Integrationskurs umfasst 700 Unterrichtsstunden" — the integration course comprises 700 teaching hours ([gesetzte-im-internet.de/intv/_10.html](https://www.gesetze-im-internet.de/intv/_10.html), retrieved 2026-07-24); of these, 600 hours fall to the language course, § 11(1) sentence 1 IntV ([gesetzte-im-internet.de/intv/_11.html](https://www.gesetze-im-internet.de/intv/_11.html)). The B1 course goal is stated expressly by the Federal Office for Migration and Refugees (BAMF) in its official statistics: the goal is "that participants reach level B1 of the Common European Framework of Reference for Languages (CEFR) in the final test (DTZ)" (Report on integration course statistics for 2024, notes to the DTZ tables, p. 17 ff.; our translation).

² BAMF, *Bericht zur Integrationskursgeschäftsstatistik für das Jahr 2024*, p. 19 (table "Sprachniveau, Deutsch-Test für Zuwanderer' im Jahr 2024 nach Kursarten und Ergebnis"): general integration courses — 160,804 participants (58.6 %) with B1, 87,449 (31.8 %) with A2, 26,314 (9.6 %) below A2, of 274,567 DTZ participants in total ([PDF](#), retrieved 2026-07-24; references verified against the PDF full text). Two reading notes: each person is counted with their highest result (note 1 to the table); and the shares refer to test participants only — whoever drops out of the course or never sits the test does not appear in this rate.

nected sentences and understands the main points when clear standard language is used.³ The cashier does not use clear standard language. Everyday life almost never does. Which means: even *reaching* the course goal does not guarantee the language you need at the till, at the doctor's, at a parents' evening. Amal is not the system's failure case. She is its success case.

The Italian scene has its own statistics. Italy tests its school-leaving cohorts comprehensively; in 2025, 53.3 per cent of final-year students reached the target level in English reading comprehension — in listening comprehension it was 43 per cent, and in the south of the country well under three in ten.⁴ More than a decade of instruction, and less than half understand the language when it is spoken. Note: *understand*. Speaking has not even come up yet.

Two countries, two systems, two very different groups of learners — and the same pattern: the effort is enormous, the yield in living language is not. Anyone who knew only one of the two scenes might believe in national peculiarities, in course quality, in motivation. The doubling suggests a different suspicion: it is not the countries. It is the way we believe languages get into heads.

1.3 Knowing About a Language, Being Able In a Language

The suspicion has a classic name. In the early 1980s Stephen Krashen placed the distinction at issue here at the centre of second-language research: adults have "two distinct and independent ways of developing competence in a second language".⁵ One way is *learning* — conscious knowledge about the language: knowing rules, naming rules, being able to talk about rules. The other is *acquisition* — an unconscious process, the same one by which children build their first language: you do not notice it happening, and its result is not rule knowledge but a feel for the language. A sentence "sounds right" or "sounds wrong", without your being able to say why.

This distinction explains both scenes at a stroke. Amal has learned what the course system promised to teach: knowledge about German. The dative she can explain is real knowledge — but knowledge of the wrong kind for the moment at the checkout. There is no time there to apply rules; there, the sentence would have to come by itself, out of the feel. And the class in Bologna has *learned* English for eleven years and in the process *acquired* astonishingly little English — because instruction showed them, above all, sentences about the language and far too rarely the language itself, in quantities in which a feel could have formed.

It must be said: the sharp separation of the two paths has remained controversial in the research — whether what is learned can really never become acquired, as Krashen claimed, is doubted by

³ Council of Europe, *Common European Framework of Reference for Languages* (2001), global scale, level B1 ("Threshold"); wording in the text paraphrased from the global scale and the self-assessment grid (print edition to be verified; grid online: [europass.europa.eu](https://europa.eu/europass/), retrieved 2026-07-24).

⁴ INVALSI, results presentation "L'inglese nella Prova INVALSI 2025 tra successi e fragilità" ([invalsi.it](https://www.invalsi.it/), retrieved 2026-07-24): in the final year of upper-secondary school (grade 13), 53.3 % reach the target level in reading and 43 % in listening; in the south ("Sud" 28.6 %, "Isole" 27.3 %) listening comprehension lies dramatically below the north-east (over 60 %). The basis is the Rapporto Nazionale INVALSI 2025 (full text to be verified). The test's target levels are B2 (upper-secondary academic and technical tracks) and B1+ (vocational tracks).

⁵ Krashen, S., *Principles and Practice in Second Language Acquisition*, Pergamon 1982, cited here from the internet edition released by the author (2009), p. 10: "adults have two distinct and independent ways of developing competence in a second language" (PDF at [sdkrashen.com](https://www.sdkrashen.com/), retrieved 2026-07-24; page numbers follow the internet edition's pagination, to be verified against the first print edition). There also the characterisation of acquisition as an unconscious process with a "feel" for correctness (p. 10 f.).

many.⁶ For this book the dispute matters less than it seems. For what is undisputed is the phenomenon the distinction points to: rule knowledge and fluent ability are two different things; the one arises from explaining and practising rules, the other demonstrably does not arise from them in sufficient measure. Four decades of research have changed little about this core finding.⁷

1.4 Why It Is Not the Teachers' Fault

It would be convenient to diagnose failure here: bad courses, unmotivated teachers, lazy students. This book does not do that, and not out of politeness. The teachers in integration courses and school classes work in a system that dictates their conditions. There is a curriculum that leads to examinations, and examinations prefer to test what can be tested — rule knowledge, word lists, rehearsed formats. There are classes of twenty and more, in which each individual learner gets a few speaking minutes per lesson. And there is the fear: of embarrassment at a mistake, of the exam, of the judgement of the others — a fear that accompanies every lesson, especially for adults fighting for their place in the new country.

Under these conditions, rule-centred teaching is not stupidity but a rational adaptation: it is plannable, testable, accountable. Only, it produces what it tests — and not what Amal would have needed at the checkout. If you want to understand the system rather than indict it, you must ask the question differently. Not "Who is doing it wrong?", but: "Under what conditions does language actually arise — and how do you create those conditions, outside the classroom too, without anyone having to fail for it?"

1.5 What This Book Claims — and What It Does Not

The thesis of this book can be said in three sentences. Language is acquired, not drilled: it arises from *comprehensible* input — from language you understand because image, context and prior knowledge help you understand it. It stays when this input is *anchored* — emotionally, rhythmically, melodically, the way a song stays in your head that you never tried to keep. And it unfolds where people are *connected* — where a community lowers the fear and makes speaking and singing something you do with one another instead of in front of one another. Comprehensible, anchored, connected: everything the following chapters propose will be measured against these three conditions.

Pontivo — the platform whose pedagogical concept this book sets out — is the attempt to give these three conditions a built form: authentic film with bilingual, synchronised subtitles and a click-explanation for the passage you did not understand; a songbook for singing together in

⁶ The critique targets the non-falsifiability of the strict separation and Krashen's additional thesis that what is learned can never pass over into what is acquired: McLaughlin, B., *Theories of Second-Language Learning*, London 1987, ch. 2 (to be verified against the print edition); from the perspective of skill acquisition theory DeKeyser, R., *Skill Acquisition Theory*, in: VanPatten/Williams (eds.), *Theories in Second Language Acquisition*, 2nd ed., New York 2015, ch. 5 (to be verified against the print edition). The more moderate version widely shared today distinguishes implicit and explicit knowledge and holds their relationship to be of limited permeability (the "interface debate"): Ellis, R., *The Study of Second Language Acquisition*, 2nd ed., Oxford 2008, ch. 9 (to be verified against the print edition).

⁷ Research overview: Lightbown, P./Spada, N., *How Languages are Learned*, 4th ed., Oxford 2013, esp. ch. 6 on the limits of explicit grammar instruction (to be verified against the print edition). That explicit instruction has measurable effects, but effects largely confined to explicit knowledge, is also shown by the meta-analyses of Norris/Ortega 2000 (*Language Learning* 50) — with the qualification, named there, that the measuring instruments predominantly test rule-adjacent knowledge (ibid., full text to be verified).

groups; a classroom in which a teacher leads and everyone can follow; a story that holds the whole together.⁸

Just as important is what this book does *not* claim. It does not claim that Pontivo has proven what it builds. The principles on which the platform stands are supported by decades of research; that will be documented chapter by chapter, with references. But the concrete built form — this player, this songbook, this comic, in this combination — is a series of design bets that have not yet been measured empirically. The book will keep the two levels consistently apart and, in its final chapter, draw up an honest list of what would have to be measured. The standard to which this series has committed itself applies here too: verifiable rather than asserted — towards the outside world and towards ourselves.

1.6 The Path Through This Book

The path is divided into six parts. Part I names the problem and, in Chapter 2, lays the foundation: the conditions under which people actually acquire languages — there the three questions "Comprehensible? Anchored? Connected?" will get their scientific footing. Part II turns to input: to film with its two subtitle tracks and the question of why moving image with text is comprehensible input of rare density — and where the limits of that promise lie. Part III belongs to melody: to the finding that sung language sticks differently from spoken language, and to the conditions under which that holds. Part IV enters the social space: the choir, which demonstrably bonds faster than almost any other joint activity, and the classroom, in which the mother tongue turns from disturbance into scaffold. Part V brings the three strands together in a single exercise: the song from home that a group translates into the new language together and then sings together — there it will become clear why this inconspicuous format is the densest point of the whole concept, and what role the story "Coro One Sky" plays in it. Part VI finally returns to Amal and to the class in Bologna: it describes the three concrete learning scenarios Pontivo is built for, draws the limits of the approach — and fixes the measuring stick against which it will have to let itself be measured.

At the beginning stood a woman who paid in silence although she owns a certificate. By the end of this book it should be comprehensible why six hundred hours of instruction could not take that silence from her — and what it takes instead. The next chapter begins where all language acquisition begins: with the question of what happens in a head when a person does not learn a language but receives one.

⁸ Feature note (product description, not a research finding): The built forms described in this book are — unless expressly marked as a building intention — in operation on the platform (pontivo.de, as of July 2026). Where a chapter discusses a built feature, a footnote of this kind points to the running implementation.

Chapter 2 · The Conditions of Acquisition

2.1 What a Child Receives

Nobody has ever explained the dative to a three-year-old. And yet one day he stands in the kitchen and says a sentence with a dative — not because he applied a rule, but because the sentence *sounds right* to him. The child has not learned the language like a school subject. He has received it: out of thousands of hours of language directed at him, embedded in situations he understood — at meals, getting dressed, being read to, in the fight over the last gummy bear. Understanding came first; the form came afterwards, by itself.

One must be careful with this observation. Adults are not large children; they have less time, different brains, a finished self-image and a first language that always speaks along.⁹ But the language acquisition research of the past four decades has kept one core statement astonishingly stable: the mechanism that builds language in the child is still available to the adult — if you give the adult what the child receives. The question of this chapter is therefore not whether adults can acquire languages, but under what conditions. Two of them can be named, evidenced — and built.

2.2 First Condition: Comprehensible Input

The first condition was put into a formula by Stephen Krashen that has become the discipline's best-known shorthand: $i + 1$. If i is a learner's current state, acquisition happens when he *understands* language that lies a step above it. Krashen's own wording is more precise than its popular short form suggests: a "necessary (but not sufficient) condition" for the step from i to $i + 1$ is "that the acquirer understand input that contains $i + 1$, where 'understand' means that the acquirer is focussed on the meaning and not the form of the message".¹⁰ Two things are contained in that sentence. First: it is not enough to *hear* language; it must be understood. Second: the understanding succeeds precisely not through analysis of the form but past it — with the help of everything that is present besides the language: the situation, the picture, world knowledge, the speaker's face. That is exactly why you can understand language you cannot yet *produce*. And exactly in that moment, says the hypothesis, ability grows.

From this follows a third, often overlooked point that matters for everything further in this book: you do not have to dose $i + 1$. Krashen himself stressed that input need not be tailored to the "next structure" — if there is enough comprehensible input, $i + 1$ is automatically contained in it.¹¹ The syllabus that "does" the dative today and the perfect tense next week is trying to control something that, given sufficient quantity, arranges itself. The practical consequence is a re-

⁹ The comparison with first language acquisition is an analogy with clear limits: adult learners differ in time budget, prior knowledge, literacy and the influence of the first language; native-like final levels are the exception in adult acquisition. Krashen himself claims only that adults can go on using *the same acquisition mechanism*, not that it carries them equally far: Krashen, S., *Principles and Practice in Second Language Acquisition*, Pergamon 1982 (internet edition 2009), p. 10 ([PDF](#), retrieved 2026-07-24).

¹⁰ Krashen 1982 (fn. 1), p. 20 f.: "a necessary (but not sufficient) condition to move from stage i to stage $i + 1$ is that the acquirer understand input that contains $i + 1$, where 'understand' means that the acquirer is focussed on the meaning and not the form of the message" (page numbers follow the internet edition).

¹¹ Krashen 1982 (fn. 1), p. 20 f.: input need not target $i + 1$ deliberately; "if the acquirer understands the input, and there is enough of it, $i + 1$ will automatically be provided".

versal of the usual logic of scarcity: the goal is not the *right portion* of language but the *large quantity* of comprehensible language.

Here too, honesty is required: that comprehensible input is *necessary* no one in the field disputes; whether it is *sufficient*, very much so. Interaction research has shown that negotiating meaning in conversation is what makes input fully effective, and output research that one's own speaking and writing has a function of its own that nothing replaces — someone who only understands never has to *build* sentences.¹² This book therefore adopts not Krashen's maximal thesis but the consensus core: without massive comprehensible input no language arises; everything else builds on it. What that means for the limits of a platform that above all supplies input, Chapter 9 will account for openly.

2.3 The Test Case: the Book Flood of Fiji

Hypotheses of this size need a test outside the seminar room. One of the finest comes from 1980/81, from rural primary schools in Fiji, where English was the second language and instruction was strictly structured. Warwick Elley and Francis Mangubhai equipped classes of years 4 and 5 with 250 attractive English storybooks each — a "book flood" — and had them work with the books daily for twenty to thirty minutes: one half with shared, read-aloud reading, the other with silent reading of their own choosing. The control classes kept their usual structure-based programme. Crucially: the book classes received *no additional English time* — the same hours, just filled differently.¹³

After eight months the year-4 book classes had improved their reading comprehension by fifteen months, the control classes by six and a half; listening comprehension and the structure tests showed the same pattern. In the second year the lead spread to writing and other subjects; across seven different language tests the effect sizes lay between 0.76 and 1.18 — in educational research these are large values. Children who simply received understandable, interesting stories in quantity overtook children who were systematically instructed — including, and precisely, in what the others had systematically practised: grammar.¹⁴

One caution belongs here: Fiji was a flood of *books*, with children, in the classroom. That the finding transfers to adults in front of a screen is not proven by it — what carries is the principle: rich, comprehensible, meaningful input beats form-centred instruction, without anyone having to invest more time. Whether film can play this role for adults, and under what conditions, is the question of Part II — and it has research of its own.

¹² On the interaction hypothesis Long, M., The role of the linguistic environment in second language acquisition, in: Ritchie/Bhatia (eds.), *Handbook of Second Language Acquisition*, San Diego 1996, pp. 413–468 (to be verified against the print edition); on the output hypothesis Swain, M., Communicative competence: Some roles of comprehensible input and comprehensible output in its development, in: Gass/Madden (eds.), *Input in Second Language Acquisition*, Rowley 1985, pp. 235–253 (to be verified against the print edition). On the general critique of Krashen's theoretical architecture already Chapter 1, fn. 6.

¹³ Elley, W./Mangubhai, F., The impact of reading on second language learning, *Reading Research Quarterly* 19 (1983) 53–67 (full text to be verified); design and results reported here after the authors' own detailed account: Elley, W./Cutting, B./Mangubhai, F./Hugo, C., *Lifting Literacy Levels with Story Books*, 1996, ERIC ED416441, p. 4 f. ([full text](#), retrieved 2026-07-24; there expressly: "no extra time was spent on English by the Book Flood Groups").

¹⁴ Elley/Cutting/Mangubhai/Hugo (fn. 5), p. 5: year 4 — 15 months of reading progress (both book groups) against 6.5 months (control) after eight months; year 5 — 15 and 9 against under 3 months; in the second year "highly significant differences" on all seven language tests, effect sizes 0.76–1.18. For scale: by the usual convention (Cohen), effect sizes from 0.8 count as large.

2.4 Second Condition: a Low Filter

The second condition concerns not the input but the person receiving it. Krashen called it the *affective filter*: fear, lacking self-confidence, lacking motivation act like a shutter between the understood input and the part of the head that builds language out of it. If the filter is high, someone can understand a message completely — and still nothing sticks. Krashen's conclusion is remarkably practical: the effective language teacher is someone who "can provide input and help make it comprehensible in a low anxiety situation".¹⁵

The image of the filter is a metaphor, not a demonstrated mechanism, and it has been criticised as such.¹⁶ But the phenomenon it points to is among the best-documented in the whole discipline. Elaine Horwitz and her colleagues gave foreign language anxiety its name and its measuring instrument in 1986 and described it as a syndrome of its own: "a distinct complex of self-perceptions, beliefs, feelings, and behaviors related to classroom language learning arising from the uniqueness of the language learning process" — for no other school subject attacks self-image and self-expression the way speaking in a language you do not yet command does.¹⁷ Four decades of research with this and related scales show the same thing throughout: the higher the language anxiety, the worse the performance, across countries, languages and age groups.¹⁸ Anyone who was ever called on in a school class and heard their own heartbeat louder than the teacher's question knows the mechanism from inside.

For the construction of learning environments this is not a side note but a first-order design requirement. It is not enough to provide good input; you must build the situation so that no one has to be afraid to receive it and to answer it. That is the deeper reason why this book devotes an entire part to community: the choir, in which the individual voice is sheltered inside the crowd, and the closed group, in which mistakes happen among friends, are — Part IV will show it — not social extras but fear-lowerers, and thus, in the literal sense, conditions of acquisition.

2.5 The Third Question: What Stays?

Comprehensible and fear-free — is that enough? Not quite. Between understanding a sentence and owning it lies a third hurdle: retention. Everyone knows language that was understood and vanished without trace — last week's lecture, yesterday's conversation. And everyone knows the opposite: the advertising jingle from childhood, the song still retrievable word for word after thirty years, the film line you quote in the actor's voice. Evidently there are forms of input that *stick* — because they are coded more than once (image and sound at the same time), because

¹⁵ Krashen 1982 (fn. 1), pp. 30–32; the two-conditions summary p. 32 ("comprehensible ... input containing $i + 1$... and second, a low or weak affective filter to allow the input 'in'"); the teacher quotation p. 32.

¹⁶ Krashen himself locates the filter "outside the language acquisition device proper" (1982, fn. 1, p. 31) — it is an explanatory image for a relationship, not a neurophysiologically identified mechanism; the concept goes back to Dulay/Burt (1977) (ibid., p. 31). Critically on testability McLaughlin (Chapter 1, fn. 6).

¹⁷ Horwitz, E. K./Horwitz, M. B./Cope, J., Foreign Language Classroom Anxiety, *The Modern Language Journal* 70 (1986) 125–132, here p. 128; on the special position of the subject ibid., p. 128 ("Probably no other field of study implicates self-concept and self-expression to the degree that language study does."), [doi:10.1111/j.1540-4781.1986.tb05256.x](https://doi.org/10.1111/j.1540-4781.1986.tb05256.x) (references verified against the full text). There also the Foreign Language Classroom Anxiety Scale (FLCAS), p. 129 f.

¹⁸ Summarised meta-analytically i.a. by Teimouri, Y./Goetze, J./Plonsky, L., Second language anxiety and achievement: A meta-analysis, *Studies in Second Language Acquisition* 41 (2019) 363–387 (consistently negative correlations of medium strength; full text to be verified); similarly Botes/Greiff/Dewaele 2020 on the FLCAS (full text to be verified). Concrete coefficients are deliberately not adopted until the primary sources have been checked.

they are emotionally charged, because rhythm and melody carry them, because a story gives them a place.

This book gathers this third condition under the word *anchored*. Unlike "input" and "affective filter", this is not an established technical term but this book's collective bracket for several separately researched effects — the dual coding of image and word, the memory for what is sung, the power of narrative — which will be evidenced one by one in Parts II, III and V.¹⁹ With that, the test grid that will run through this book is complete. It consists of three questions you can put to any learning environment, to a classroom as much as to an app:

- **Comprehensible?** — Does the learner receive language in quantity that he can *understand*, because context, image and prior knowledge help him?
- **Anchored?** — Is the input made so that it *stays* — multiply coded, emotional, rhythmic, narrated?
- **Connected?** — Does all this happen in a space that *lowers* the fear instead of producing it?

The rule-based instruction of Chapter 1 answers all three questions with no: its input is scarce and form-centred, its material is built for testability rather than for sticking, and its examination situation is a fear machine. That, in three sentences, is the diagnosis — and at the same time the building plan for everything that follows.

2.6 The Pull: Why People Come Back

Comprehensible, anchored, connected — the three questions describe what happens to the input. A fourth question decides whether there is input at all: why should someone come back on Tuesday who came voluntarily on Monday? Motivational psychology has an astonishingly stable answer to this. According to Deci and Ryan's self-determination theory, human engagement carries itself when three basic needs are met: autonomy (I choose), competence (I can) and relatedness (I belong).²⁰ Read the three terms next to this book's building plan: choosing the film is autonomy; the mother-tongue line produces the experience of competence from the first evening — you *understand* where you failed in the course; and the group, of which Part IV treats, is the relatedness. The gap-fill of a learning app meets none of the three needs: it chooses for the learner, it documents above all mistakes, and it is worked through alone.

Where the three needs come together, engagement can tip into the state Csíkszentmihályi called *flow*: the doing carries itself, the effort disappears from experience.²¹ The difference is visible in

¹⁹ "Anchored" is thus this book's own contribution as an *ordering* term, not as a finding: the building blocks — dual coding theory and multimedia learning (Part II), memory for sung language (Part III), narrative structure (Part V) — are other people's research lines, each evidenced on its own; new is only their gathering under one condition beside "comprehensible" and "connected". Wherever this book integrates rather than evidences, that is — as here — declared.

²⁰ Deci, E. L./Ryan, R. M., *Intrinsic Motivation and Self-Determination in Human Behavior*, New York 1985 (to be verified against the print edition); in summary Ryan/Deci, Self-determination theory and the facilitation of intrinsic motivation, *American Psychologist* 55 (2000) 68–78 (full text to be verified). Transfer note: self-determination theory is a general theory of motivation, not a language-teaching one; the mapping of its three basic needs onto film choice, mother-tongue line and group is this book's reading, not a measured finding.

²¹ Csíkszentmihályi, M., *Flow: The Psychology of Optimal Experience*, New York 1990 (to be verified against the print edition). Here too the transfer note: flow research was developed on active pursuits (climbing, music-making, chess); whether comprehension-led viewing with the double track produces the fit of challenge and skill described there is plausible but unmeasured — it belongs, properly, on the measuring list of Chapter 9 (retention and usage measures).

everyday life with the naked eye: the homework is completed because the system tests it; the film is watched to the end because you want to know how it goes on. For a method whose first condition is *quantity* (2.2), this is no psychological footnote but the answer to the quantity question itself: quantity arises not from discipline but from pull.

2.7 From Principle to Construction

Take the three questions seriously and language acquisition theory becomes a construction task: where does a grown woman in Gelsenkirchen, a teenager in Bologna, get *massive amounts* of comprehensible input in the target language — not forty-five minutes a week, but every evening, voluntarily, gladly? How must this input be made so that it is not only understood but stays? And how do you build around it a social space that lowers fear instead of enlarging it?

The next four parts of this book take these questions in turn. The first answer lies closer than language teaching long wanted to admit: it has been flickering across screens for a hundred years, it is authentic, emotional, available in mass and subtitled into almost every language in the world. The next chapter is about film — and about the question of what becomes of a movie night if you build it right.

Part II — The Input: Seeing, Hearing, Reading

„maiores habere vim ad discenda ista liberam curiositatem quam meticulosam necessitatem.“

— Augustinus, Confessiones I,14,23

Chapter 3 · Seeing, Hearing, Reading: the Doubly Coded Film

3.1 A European Natural Experiment

Why do the Dutch, the Scandinavians, the Portuguese speak such conspicuously good English — and the Germans, Spaniards, Italians so much worse? The usual answer points at the schools. The more interesting answer points at the television set. When sound film came to Europe in the 1920s and 30s, every country had to decide what to do with foreign-language films. Large language areas that could afford expensive dubbing — Germany, Italy, Spain, France — had the voices re-recorded. Small countries subtitled. The decision was made for economic and political reasons, long before anyone thought of language pedagogy — and it stayed, as media systems stay, for generations.

History thereby set up an experiment no researcher could ever have had approved: whole populations, over decades, one group with English original sound and subtitles, the other with the dubbed version. An econometric study has drawn the balance: countries with a subtitling tradition score markedly better on English language tests — the estimated subtitle effect amounts to about 17 per cent of the average skill level, one and a half standard deviations in the country comparison, and it is strongest exactly where television delivers most: in listening comprehension.²² Portugal subtitles, Spain dubs; the Portuguese TOEFL results lie clearly above the Spanish ones — in two neighbouring countries with closely related languages.²³ These figures must be read with due caution: they are country means, not measurements on individual learners, and countries differ in more than their television habits.²⁴ But the direction is hard to argue away — the more so as it points exactly where the laboratory and classroom research points, of which this chapter treats.

The movie night, in other words, was never mere entertainment. It is the largest language-learning machine ever built — only nobody built it as one. This chapter asks *why* it works, and the next one how to turn it from an accidental product into an instrument.

3.2 Two Channels Are More Than One

The first reason lies in the architecture of memory. In the 1970s and 80s Allan Paivio developed *dual coding theory*: humans process information in two separate but connected systems — a verbal one for words and an imagistic one for perception. What is deposited in both systems at once, a word *with* its image, has two memory traces instead of one and correspondingly more

²² Rupérez Micola, A./Aparicio Fenoll, A./Banal-Estañol, A./Bris, A., TV or not TV? The impact of subtitling on English skills, *Journal of Economic Behavior & Organization* 158 (2019) 487–499, [doi:10.1016/j.jebo.2018.12.019](https://doi.org/10.1016/j.jebo.2018.12.019) (references verified against the authors' PDF): subtitle effect "equivalent to 16.9% (one and a half standard deviations) of the average level of English skills"; strongest in listening. On the historical choice of translation modes in the 1920s/30s *ibid.*, section 2.

²³ *Ibid.*, section 2 (example Portugal/Spain: "in Spain television is dubbed. And, as a result, Portugal's results in the TOEFL exams are much better than Spain's"); subtitling countries lead by 3.4 points in the internet-based TOEFL in the raw comparison, most clearly in listening (*ibid.*, descriptive results).

²⁴ Transfer note: these are country means (national TOEFL averages) with econometric identification via the historical choice of translation mode — not learning-curve measurements on individuals. What carries: massive subtitled original sound works population-wide on language skills, especially listening. What does not carry: a statement about a particular product, a particular learner group or the dual-subtitle form (on which fns. 13 f.). Selection questions (who takes the TOEFL?) the authors discuss themselves (*ibid.*, section 4).

ways of being found again.²⁵ Richard Mayer built from this an empirically broadly tested theory of multimedia learning whose basic finding has meanwhile become textbook knowledge: people learn better from words *and* pictures than from words alone.²⁶

For language acquisition this is more than a memory technique. Recall Krashen's paradox from Chapter 2: acquisition happens when you understand language you cannot actually produce yet — and that succeeds only because something besides the language is present that helps with the understanding. Film is precisely this "besides the language": the action shows what is being talked about; the face shows how it is meant; the scene supplies the context the beginner needs to turn an incomprehensible stream of sound into an understandable message. Film is *i + 1* with built-in comprehension aid — comprehensible input in industrial quantity.

3.3 The Third Track: Subtitles in the Target Language

Yet hearing and seeing alone leave a gap. Someone who only hears a foreign language often does not even know *where one word ends and the next begins* — the stream of sound knows no spaces. Here the third track comes into play: the subtitle in the target language, reading along with what you hear. As early as the 1980s, with the BBC's teletext subtitles, Robert Vanderplank observed systematically that learners draw language from subtitled television — and that the subtitle does not distract from listening but makes the heard readable.²⁷ Since then this has grown into a research field of its own. Its meta-analysis — eighteen studies on listening comprehension and vocabulary — reaches a clear result: target-language subtitles improve both, understanding and word learning, with large effects.²⁸

Why, a much-cited study from Michigan shows particularly nicely. Learners of Arabic, Chinese, Spanish and Russian watched short videos with and without target-language subtitles; with subtitles they did better on vocabulary and comprehension tests. The authors' explanation is the decisive one: subtitles help to *identify word boundaries* — they cut the "otherwise incomprehensible stream of speech" into units to which meaning can attach, and they connect the heard with the written.²⁹ And that this mechanism does not depend on instruction is shown by the research

²⁵ Paivio, A., *Mental Representations: A Dual Coding Approach*, Oxford 1986 (to be verified against the print edition); in summary id., Dual coding theory: Retrospect and current status, *Canadian Journal of Psychology* 45 (1991) 255–287 (full text to be verified).

²⁶ Mayer, R. E., *Multimedia Learning*, 3rd ed., Cambridge 2021 (to be verified against the print edition; "multimedia principle"). Mayer's theory joins Paivio's two-channel assumption with limited processing capacity and active processing; it was developed on explanatory learning material (not on language learning material) — on the limit of transfer see 3.4 and fns. 10 f.

²⁷ Vanderplank, R., The value of teletext sub-titles in language learning, *ELT Journal* 42 (1988) 272–281 (to be verified against the print edition); id., *Captioned Media in Foreign Language Learning and Teaching*, London 2016 (to be verified against the print edition).

²⁸ Montero Perez, M./Van Den Noortgate, W./Desmet, P., Captioned video for L2 listening and vocabulary learning: A meta-analysis, *System* 41 (2013) 720–739, [doi:10.1016/j.system.2013.07.013](https://doi.org/10.1016/j.system.2013.07.013): large effect of target-language subtitles on listening comprehension (15 studies) as on vocabulary (10 studies). The full text was not freely accessible electronically; the reported effect sizes (rendered in the literature as $g \approx 0.99$ and 0.87) are taken at second hand and **to be verified against the full text**; adopted here is only the abstract's core statement (large effect on both).

²⁹ Winke, P./Gass, S./Sydorenko, T., The effects of captioning videos used for foreign language listening activities, *Language Learning & Technology* 14/1 (2010) 65–86, here p. 65 ([full text](#), references verified against the PDF): "captioning was more effective than no captioning"; subtitles help identify word boundaries and segment the "otherwise incomprehensible stream of speech" (ibid., p. 65). In honesty: in the interviews learners also reported using subtitles as a "crutch" (ibid., p. 65) — the dependence question is real and belongs on the measuring list (Chapter 9).

on children who simply *watched* foreign-language television and measurably picked up language in the process — incidentally, without assignment, without a test at their backs.³⁰

3.4 The Redundancy Question — Argued Out Honestly

At this point this book must argue out a tension you would search for in vain in advertising copy. For the same multimedia learning research on which section 3.2 rests knows a *redundancy principle* that seems to speak against on-screen text: someone who hears an explanation and additionally reads the same text written along often learns *worse* than without the text — the double presentation of the same wording clogs processing instead of supporting it.³¹ If that were true without restriction, the subtitled film would be a bad idea.

The resolution lies in the learning goal, and it deserves to be formulated precisely. The redundancy principle was won from native speakers who were to learn *content* from spoken explanations — lightning formation, braking systems. For them the accompanying text is indeed redundant: it contains nothing the ear does not deliver effortlessly. For the language learner the situation is reversed. His learning goal is not the content behind the language but the language itself — and his ear delivers precisely *not* effortlessly: it loses word boundaries, swallows endings, guesses at every third word. The target-language subtitle is for him not a second copy of the understood but often the only access to the not-understood. The redundancy literature itself meanwhile names these boundary conditions expressly: with non-native speakers, with hard-to-understand audio, with short, slowly presented text, the principle reverses or disappears.³² The captioning findings of 3.3 are thus no anomaly to be hushed up — they are the well-documented special case in which redundancy becomes support. Still, one sting should remain from this debate: text on the screen is not free. It costs attention, and a learning environment that uses subtitles must let itself be asked whether it invests this attention well.

3.5 Two Languages at Once: the Bilingual Bet

Pontivo goes beyond the monolingual subtitle: its player shows *two* tracks at once — the target language, synchronised with the sound, and below it the learner's mother tongue. The logic follows from all the foregoing: the target-language track segments the sound stream and connects sound with writing; the mother-tongue track guarantees understanding — it keeps the condition "comprehensible" upright even where image and context alone no longer suffice, and thereby makes authentic, ungraded material accessible to beginners in the first place. It is, to anticipate a term from Chapter 7, lived *translanguaging*: the mother tongue is not locked out but harnessed as a scaffold of understanding.³³

³⁰ d'Ydewalle, G./Van de Poel, M., Incidental foreign-language acquisition by children watching subtitled television programs, *Journal of Psycholinguistic Research* 28 (1999) 227–244 (to be verified against the print edition — details of the design, in particular which subtitle direction produced which gain, are deliberately not reported here until the primary source has been checked).

³¹ Mayer 2021 (fn. 5), chapter on the redundancy principle (to be verified against the print edition); foundational on "redundancy" also the cognitive load research around Sweller/Kalyuga (to be verified against the print edition).

³² Boundary conditions of the redundancy principle — i.a. non-native speakers, hard-to-understand audio source, short/slow text — are expressly listed as "boundary conditions" in Mayer 2021 (fn. 5) (to be verified against the print edition). The L2 captioning meta-analysis (fn. 7) is the empirical counterpart on the side of language learning.

³³ Feature note: The player with the synchronised double track is in operation in the platform's media library (pontivo.de/mediathek, as of July 2026).

Where does research stand on bilingual dual subtitles? It is young, small — and encouraging. An eye-tracking study with Chinese learners of English compared all four conditions (mother tongue only, target language only, both, none): the dual track produced *no* measurable extra load compared with a single track, and it helped comprehension compared with watching without subtitles; the learners' eyes distributed the work themselves — steadily to the mother-tongue line for meaning, flexibly to the target-language line for form.³⁴ Further studies find vocabulary gains from doubly subtitled viewing.³⁵ But it would be dishonest to make more of this than it is: these are few studies with small samples and short clips. That Pontivo's concrete built form — the synchronised double track in continuous use, over months, with refugees and school classes — delivers what the principles promise is a *design bet*: well grounded, not yet measured. It stands high on the measuring list of Chapter 9.

3.6 What Film Cannot Do Yet

Staying honest also means: film has limits, and two of them are fundamental. The first: it delivers understanding, but no explanation of the single word. Whoever gets stuck on a word mid-sentence is not helped by the finest double track — he needs an answer about *this one word*, now, without leaving the film. How that moment of need becomes vocabulary is the question of the next chapter. The second limit is deeper: film makes no one a speaker. It fills the ear, not the mouth. What it takes for understood language to become spoken language — and why that path can lead through singing — is what Parts III and IV are about.

³⁴ Liao, S./Kruger, J.-L./Doherty, S., The impact of monolingual and bilingual subtitles on visual attention, cognitive load, and comprehension, *The Journal of Specialised Translation* 33 (2020) 70–98, [doi:10.26034/cm.jostrans.2020.549](https://doi.org/10.26034/cm.jostrans.2020.549) (open access, references verified against the full text): "Bilingual subtitles ... did not appear to induce more cognitive load or produce more cognitive gain than monolingual subtitles"; compared with the no-subtitles condition "more beneficial ... linguistic support" (abstract, p. 70); steadier gaze on the L1 line *ibid.* Twenty participants, four short videos — a small study, to be weighted as such.

³⁵ Wang, A./Pellicer-Sánchez, A., Incidental vocabulary learning from bilingual subtitled viewing: An eye-tracking study, *Language Learning* 72 (2022), [doi:10.1111/lang.12495](https://doi.org/10.1111/lang.12495) (full text to be verified); further the follow-up research on dual subtitles and vocabulary acquisition (i.a. *ReCALL*, *SSLA* 2022 ff., full texts to be verified). The overall picture: consistently positive, but young and narrow.

Chapter 4 · The Word in the Moment of Need

4.1 The Place Where You Get Stuck

You are in the film, it is going well, you understand — and then comes a word on which everything hangs. *The swarm behaves like a single animal.* Swarm? The double track from Chapter 3 helps part of the way: below stands the translation of the sentence. But which word in the sentence was which? Why does the verb stand where it stands? And what exactly does this one word mean, which is evidently the point? In this moment the learner is in a state any teacher could only wish for: he *wants to know something*. Not because it is in the syllabus, but because it is blocking his film right now. The question of this chapter is what to do with this moment — and what becomes of words when you use it well.

4.2 Incidental Learning Is Real — and It Is Slow

Vocabulary research has good news and uncomfortable news. The good: vocabulary really does grow *incidentally* — through reading, listening and viewing, without a vocabulary notebook, simply because words occur again and again in comprehensible contexts. The overwhelming part of the vocabulary native speakers own arose exactly this way; nobody taught them twenty thousand words.³⁶ It works in front of a screen too: in the Leuven study that compared three subtitle variants, viewers had measurably absorbed words after watching three French clips twice — the subtitle groups recognised the *form* of the new words significantly better than the control group and still knew in which clip they had met them.³⁷

The uncomfortable news sits in the same study: on the question of what the words *mean*, the lead was already thinner — only the groups whose subtitles highlighted the keywords beat the control group at recognising meaning, and at freely recalling meaning the effect disappeared entirely.³⁸ This is no outlier but the normal finding of incidental learning: it first builds a feel for form — *this word exists, this is how it sounds, this is where it belongs* — and only across many encounters the secure meaning. Incidentalness is broad but shallow; per encounter little sticks, and rare words are rarely encountered.³⁹ Whoever only watches really does learn — but slowly.

4.3 What the Gloss Changes

There is a well-tried tool that addresses exactly this weakness: the *gloss* — the small word explanation in the margin of the text, as old in print as the book itself. Research has surveyed it

³⁶ Foundational on incidental vocabulary learning: Nation, I. S. P., *Learning Vocabulary in Another Language*, 2nd ed., Cambridge 2013, esp. ch. 4 (to be verified against the print edition); Hulstijn, J., Incidental and intentional learning, in: Doughty/Long (eds.), *The Handbook of Second Language Acquisition*, Oxford 2003, pp. 349–381 (to be verified against the print edition). Concrete threshold values (how many encounters a word needs, how many word families yield what text coverage) are deliberately not reproduced until the primary sources have been checked.

³⁷ Montero Perez, M./Peters, E./Clarebout, G./Desmet, P., Effects of captioning on video comprehension and incidental vocabulary learning, *Language Learning & Technology* 18/1 (2014) 118–141, here p. 118 ([full text](#), references verified against the PDF): 133 Flemish undergraduates, three French clips, watched twice; "the captioning groups scored equally well on form recognition and clip association and significantly outperformed the control group".

³⁸ Ibid., p. 118: "Only the keyword captioning and full captioning with highlighted keywords groups outperformed the control group on meaning recognition. Captioning did not affect comprehension nor meaning recall."

³⁹ On the "broad but shallow" character of incidental learning, for many: Nation 2013 (fn. 1), ch. 4; the small per-encounter gains are the reason research so stresses repetition and frequency (to be verified against the print edition).

thoroughly. A meta-analysis across 42 studies with almost four thousand learners reaches a remarkably clear result: reading with glosses led to 45.3 per cent of target words learned on the immediate test (against 26.6 per cent without glosses) and 33.4 per cent on the delayed test (against 19.8) — the gloss nearly doubles incidental learning.⁴⁰ Two details of the same analysis matter for everything further. First: glosses in the learners' *mother tongue* worked better than explanations in the target language — one more piece of evidence that the mother tongue is scaffold, not opponent, in the learning process.⁴¹ Second: glosses that made the learner briefly *work* (such as multiple-choice glosses, where you choose the fitting meaning) worked strongest, those you never have to look up weakest.⁴²

The second finding has a theory behind it worth knowing, because it directly addresses the "moment of need" from 4.1: the *involvement load hypothesis* of Laufer and Hulstijn. It says, roughly, that a word is the more likely to stay the more of three ingredients are present in the learning moment: *need* (I need this word now), *search* (I must procure its meaning) and *evaluation* (I must check whether the meaning fits my context).⁴³ The vocabulary notebook on a Sunday evening has little of all three. The click in the film has all three: the need comes from the plot, the search is the click itself, and the evaluation happens in the moment the explanation meets the scene you have before your eyes.

4.4 The Click — and What About It Is a Bet

Pontivo's click explanation is the gloss translated into its century's form: whoever gets stuck at a passage in the player taps it and receives an explanation of *this passage in this context* — in his mother tongue, without leaving the film.⁴⁴ This is more than a dictionary call, for what is explained is not the word in a vacuum but the passage: the idiom, the allusion, the grammar that built the sentence this way. By everything the gloss research knows, exactly this is the right built form: mother-tongue, need-driven, context-bound.⁴⁵

But here this book must lay two bets openly on the table. The first: the explanations are produced by a language model — a machine that produces very good and occasionally wrong explanations, and the research that surveyed glosses surveyed *editorially checked* glosses, not machine-generated ones. Whether the machine gloss holds the quality on which its evidence base

⁴⁰ Yanagisawa, A./Webb, S./Uchihara, T., How do different forms of glossing contribute to L2 vocabulary learning from reading? A meta-regression analysis, *Studies in Second Language Acquisition* 42 (2020) 411–438, [doi:10.1017/S0272263119000688](https://doi.org/10.1017/S0272263119000688) (figures verified against the publisher's abstract; full text to be verified against the print edition): 359 effect sizes from 42 studies, N = 3,802; target words learned with glosses 45.3 % (immediate) and 33.4 % (delayed) against 26.6 % and 19.8 % without.

⁴¹ Ibid. (abstract): "L1 glosses yielded greater learning than L2 glosses" — with no meaningful interaction with proficiency; the superiority of the mother-tongue gloss thus held for advanced learners too.

⁴² Ibid. (abstract): multiple-choice glosses most effective, in-text glosses and glossaries weakest. The reading — what forces brief active processing is what works — is the authors' interpretation as well as this book's and matches the involvement load hypothesis (fn. 8).

⁴³ Laufer, B./Hulstijn, J., Incidental vocabulary acquisition in a second language: The construct of task-induced involvement, *Applied Linguistics* 22 (2001) 1–26 (full text to be verified; the three-component account — need, search, evaluation — follows the construct named in the title and the standard reception, e.g. in Nation 2013, fn. 1).

⁴⁴ Feature note: The click explanation is in operation in the media library's player (pontivo.de/mediathek); clicked words go into a personal card file with review and test modes (pontivo.de/review, pontivo.de/pruefung). As of July 2026.

⁴⁵ The inference from the gloss evidence (fns. 5–7) to the click explanation is a transfer with clear limits: the meta-analysis concerns *reading* with prepared glosses; the click concerns *video* with generated explanations. What carries: mother-tongue, need-near, processing-active. What does not carry: an effect size for Pontivo's concrete built form — it is unmeasured (Chapter 9).

stands is open and must be controlled — the sister book of this series has devoted an entire work to the problem that machine answers need references that carry.⁴⁶ The second bet concerns the measure: gloss research also knows that interruption costs. Whoever clicks every five seconds is no longer watching a film but leafing through a picture dictionary — and loses exactly what makes film so valuable as input: the flow, the story, the staying-with-it. Where the healthy measure lies, between the click that plugs a hole and the clicking that dismantles the evening, is empirically unsettled. Both stand on the measuring list of Chapter 9.

4.5 Understood Is Not Yet Retained

Suppose everything succeeds: the film delivers comprehensible input in quantity, the double track keeps understanding high, the click deepens the passages where it sticks. Then at the end of the evening the learner has — understood. But between understanding and owning a language lies the night, and the night is a sieve. What is still there in the morning is decided not by the number of encounters alone but by *how* the material was laid down in the head: whether it had a form on which memory finds a hold. Humanity's oldest such form is not the table and not the rule. It is the verse, the rhythm, the melody — the song you never tried to keep and never get rid of again. Why that is so, and what it means for language acquisition, is the question of the next part.

⁴⁶ On the problem of machine answers whose references must carry the claim: Streifler, D., *Kalibriertes Vertrauen*, ra.de-Verlag 2026 (this series' sister volume on trust-on.net), there esp. ch. 1 on *misgrounding*. For Pontivo's click explanation a quality debt follows: sample-based checking of the generated explanations against expert reference before the click may count as a "gloss in the sense of the research".

Part III — The Melody

„Wie wenig gehört zum Glücke! Der Ton eines Dudelsacks. — Ohne Musik wäre das Leben ein Irrthum.“

— Friedrich Nietzsche, *Götzen-Dämmerung*, Sprüche und Pfeile 33 (1889)

Chapter 5 · Why the Song Stays in Your Head

5.1 The Memory Nobody Ordered

Almost every person carries song lines around in languages they never learned. Whoever was young in the 1980s can still sing along to Italian refrains without knowing Italian; children sing English pop lines true to the sound years before they *understand* their first English word. Nobody practised these lines, nobody wanted to keep them — they simply stayed. The language educator Tim Murphey coined a fine name for the most harmless form of this phenomenon: the *song-stuck-in-my-head* phenomenon, the song that keeps running in your head whether you want it or not.⁴⁷

For a book on language acquisition this is more than a curiosity. Chapter 4 ended with the question of what form input must have to survive the night. Here an answer has been lying in the open for millennia: before all writing, people handed down their knowledge in verses, rhythms and melodies — not for aesthetic pleasure, but because bound language was the only kind that travelled reliably from head to head. The question is whether this old finding withstands modern examination: does sung language really stick better than spoken — and if so, under what conditions?

5.2 What the Laboratory Says: the Melody Cuts Up the Stream

The first modern answer comes from a laboratory in Marseille and connects directly to the segmentation problem from Chapter 3: where in the foreign stream of sound does one word end, where does the next begin? Daniele Schön and colleagues had adults listen to an artificial language stream — syllables strung together without pauses, from which "words" can be picked out only via statistical regularities. When the stream was presented *spoken*, the listeners remained at chance level after seven minutes. When the same stream was *sung* — every syllable consistently coupled to a pitch — they recognised the word boundaries.⁴⁸ The authors' conclusion: precisely in the initial phase, at the first cutting-up of a new language, "the motivational and structuring properties of music in song" work together — the melody does not merely make the stream more pleasant, it *articulates* it.⁴⁹

The second building block comes from Edinburgh and concerns not hearing but speaking. Karen Ludke, Fernanda Ferreira and Katie Overy had sixty adults learn Hungarian everyday sentences for fifteen minutes — by the listen-and-repeat method, in three groups: speaking, rhythmic speaking, singing. The singing group did best overall, and its lead was statistically significant exactly on the two tests that weigh heaviest: *recalling and producing* the spoken Hungarian sen-

⁴⁷ Murphey, T., The song stuck in my head phenomenon: A melodic din in the LAD?, *System* 18 (1990) 53–64 (to be verified against the print edition); id., *Music and Song* (Oxford 1992, to be verified against the print edition). Murphey's core observation — songs replay involuntarily and supply free repetition — is adopted here only as a named phenomenon, not as proof of effect.

⁴⁸ Schön, D./Boyer, M./Moreno, S./Besson, M./Peretz, I./Kolinsky, R., Songs as an aid for language acquisition, *Cognition* 106 (2008) 975–983, [doi:10.1016/j.cognition.2007.03.005](https://doi.org/10.1016/j.cognition.2007.03.005) (core finding verified against the abstract/PubMed; details of the three experiments to be verified against the full text): "a strong learning facilitation of song compared to speech". The seven-minute version of the finding (sung syllable streams → word boundaries recognised, monotone spoken version → chance level) is reported here after the account in Ludke et al. 2014 (fn. 4, p. 41 f.).

⁴⁹ Schön et al. 2008 (fn. 2), abstract: initial acquisition "may largely benefit of the motivational and structuring properties of music in song".

tences.⁵⁰ Remarkable is what did *not* explain the difference: neither age nor mood, neither phonological working memory nor musical ability or training.⁵¹ You did not have to be a musician — the singing itself did the work. The authors compress their reading into a formula this book adopts: a "listen-and-sing" method can support verbatim memory for foreign-language sentences.⁵²

Why this is plausible can be assembled from the previous chapters: the song is multiply coded input in the sense of Chapter 3 — text, melody, rhythm, often movement too —, it forces repetition without boring (no human reads a text twenty times, but everyone sings a refrain twenty times), it slows and stretches the syllables, making the sound shape more audible than fast speech, and it hangs language on emotion. But plausibility is cheap. The truth is more complicated, and it belongs in the main line, not in the small print.

5.3 Honestly: When the Song Does Not Help

For the same research knows findings that point the other way. Isabelle Peretz — one of the leading music cognition researchers — had adults learn song lines with Amélie Racette and found: when singing, *fewer* words were recalled than when speaking, and whether the material was presented sung or spoken made no difference to text memory.⁵³ And Wanda Wallace had shown as early as 1994 that the melody carries the text only when it *recurs* across the verses and is easy to learn; a melody heard once or constantly changing does not help — it costs.⁵⁴

Does this refute Part III of this book? No — it *sharpens* it, and precisely to where Pontivo's song-book is built. Read side by side, the findings yield not cacophony but a list of conditions. The song helps when the melody is *simple* and *repeats* — then it takes over the articulating work Wallace describes, instead of being learning material itself; where the melody is hard, it becomes a dual task, and the text loses (that is Racette's finding: her subjects had to learn unknown melodies *along with* the words). The song helps, further, with *verbatim* retention of phrases and sentences — Ludke's production tests —, not as a substitute for the broad understanding the film delivers. And it helps the one who *sings along* more than the one who only listens: singing is

⁵⁰ Ludke, K. M./Ferreira, F./Overy, K., Singing can facilitate foreign language learning, *Memory & Cognition* 42 (2014) 41–52, here p. 41, [doi:10.3758/s13421-013-0342-5](https://doi.org/10.3758/s13421-013-0342-5) (references verified against the authors' PDF): 60 adults, conditions speaking/rhythmic speaking/singing, 15 minutes of Hungarian; "superior overall performance" of the singing group, "statistically significant ($p < .05$) for the two tests that required participants to recall and produce spoken Hungarian phrases".

⁵¹ Ibid., p. 41: "The differences in performance were not explained by potentially influencing factors such as age, gender, mood, phonological working memory ability, or musical ability and training."

⁵² Ibid., p. 41: "a 'listen-and-sing' learning method can facilitate verbatim memory for spoken foreign language phrases".

⁵³ Racette, A./Peretz, I., Learning lyrics: To sing or not to sing?, *Memory & Cognition* 35 (2007) 242–253 (core finding verified against the PubMed abstract, full text to be verified against the print edition): "Fewer words were recalled when singing than when speaking"; the mode of presentation (sung/spoken) had no influence on text memory. Important for placement: unfamiliar songs were learned — text *and* melody were new, the singing thus a dual task.

⁵⁴ Wallace, W. T., Memory for music: Effect of melody on recall of text, *Journal of Experimental Psychology: Learning, Memory, and Cognition* 20 (1994) 1471–1485 (finding reported after abstract and standard reception, to be verified against the full text): melody supports text recall when it recurs across verses and is easy to learn; with a one-off or changing melody no advantage or a disadvantage. Wallace's reading — the melody "chunks" the text, marks line lengths and stress patterns — is the structural explanation of the Schön finding (fn. 2) at song level.

pronunciation practice with a built-in metronome.⁵⁵ In short: the song is no miracle cure but a specialist tool — the anchoring tool for the phrases that are meant to sit.

5.4 From the Laboratory to the Songbook

It is exactly as this specialist tool that the songbook is built into Pontivo. It relies on simple, repetition-rich songs — folk songs, children's songs, canons, modern sing-along songs —, that is, on the repertoire that fulfils Wallace's condition by itself: verse melodies that repeat, refrains that come back. It shows text and chords together (in the ChordPro format, the standard of sing-along practice), so that a guitar or a piano can carry the group. And it is — this is the decisive point that leads over into the next part — no karaoke machine for individuals but a *group tool*: the teacher and pupil mode lets one person choose the song, and all sing the same thing, at the same time, in the same room.⁵⁶

Here too this book's honesty rule applies: that *this* songbook, with *these* songs, in *this* embedding translates the laboratory lead of singing into measurable language acquisition is a design bet — the laboratory studies worked with minute-scale tasks and individuals, not with months and classes.⁵⁷ But the bet is precisely placed: it backs the best-documented case (simple, repeated melodies; verbatim retention; active singing along) and avoids the refuted one (hard melodies, passive listening, song as all-purpose substitute for input).

One thing, though, the song can do that no laboratory study measures and no film replaces: you can do it *together*. A class cannot jointly say a sentence at the supermarket checkout — but it can sing together, from day one, including those who do not yet speak a word. What happens then to a group of people — to their fear, their bonding, their sense of belonging — is perhaps the strongest single finding in this whole book. It is the subject of the next chapter.

⁵⁵ The pronunciation reading (singing stretches syllables, forces articulation in time) is this book's interpretation on the basis of Ludke's production-test finding (fn. 4) and the prosody literature (for many: Patel, A., *Music, Language, and the Brain*, Oxford 2008, to be verified against the print edition); as an independent proof of effect for pronunciation training through singing it would need testing.

⁵⁶ Feature note: The songbook is in operation (pontivo.de/liederbuch, as of July 2026): lyrics with guitar chords (ChordPro), transposing, a large-print stage view, singing together in groups — usable without an account.

⁵⁷ Transfer note: from 15-minute laboratory learning (fn. 4) and artificial language streams (fn. 2) no direct inference leads to months of group singing; what carries are mechanism (segmentation, repetition, verbatim retention) and the condition list (simple, repeated, active). The field effect of the songbook belongs on the measuring list (Chapter 9).

Part IV — The Community

„Wo man singet, laß dich ruhig nieder, / Ohne Furcht, was man im Lande glaubt; / Wo man singet, wird kein Mensch beraubt; / Bösewichter haben keine Lieder.“

— Johann Gottfried Seume, *Die Gesänge* (1804)

Chapter 6 · The Choir: Belonging Lowers the Hurdle

6.1 Ninety Minutes

Picture a Tuesday evening in a parish hall. Fourteen people who do not know each other, two of them in the country only for months. At seven o'clock they stand awkwardly between rows of chairs. At half past eight they stand in a semicircle, have botched the same canon three times and laughed twice, and when someone suggests starting ten minutes earlier next week, everyone nods. Something has happened in these ninety minutes that in language courses often does not happen in months.

This something is measurable. A research team around the evolutionary psychologist Robin Dunbar followed newly formed adult education classes over seven months — singing classes and, for comparison, crafts and creative writing classes — and had the participants rate at three time points how close they felt to their group. The result: after the first month the singers showed a significantly greater increase in felt closeness than all comparison groups; only after months did the others catch up.⁵⁸ The researchers christened the finding with a name that sticks: the *ice-breaker effect* — singing establishes fast social bonding between strangers, without long personal conversations being needed for it.⁵⁹ Their evolutionary reading: song is presumably one of humanity's oldest tools for bonding groups too large for everyone to befriend everyone individually.⁶⁰ The choir on Tuesday evening is not running a social experiment. It is using a very old machine.

6.2 What Singing Together Does to People

The ice-breaker finding does not stand alone; around it lies a broad field of research on choral singing and well-being. Singers of an amateur choir, examined before and after rehearsal, showed after *singing* more positive mood, less negative — and a rise of immunoglobulin A in the saliva, a marker of immune defence; merely *listening* to choral music in the same group did not produce this.⁶¹ Ask choir members themselves and the picture is unanimous: in one of the early systematic surveys 87 per cent said they benefited socially from singing, 75 per cent emotional-

⁵⁸ Pearce, E./Launay, J./Dunbar, R. I. M., The ice-breaker effect: singing mediates fast social bonding, *Royal Society Open Science* 2 (2015) 150221, [doi:10.1098/rsos.150221](https://doi.org/10.1098/rsos.150221) (abstract wording verified against the PubMed entry): "we followed newly formed singing and non-singing (crafts or creative writing) adult education classes over seven months"; measurement points months 1, 3 and 7; "Singers demonstrated a significantly greater increase in closeness at timepoint 1".

⁵⁹ Ibid.: "Although singers and non-singers felt equally connected by timepoint 3, singers experienced much faster bonding" — the term "ice-breaker effect" comes from the study's title. In honesty this belongs with it: after seven months the groups were level; the choir advantage is a *speed* advantage, not a final-state advantage. For learning contexts in which the first weeks decide between dropping out and staying, precisely the speed is the relevant quantity (see 6.3).

⁶⁰ On the evolutionary framing (song as a bonding mechanism for large groups, "social bonding hypothesis") the discussion in Pearce et al. (fn. 1) and Dunbar's work on group sizes and social grooming (for many: Dunbar, *Grooming, Gossip, and the Evolution of Language*, Cambridge/MA 1996, to be verified against the print edition). The evolutionary reading is background theory, not a load-bearing reference of this chapter.

⁶¹ Kreutz, G./Bongard, S./Rohrmann, S./Hodapp, V./Grebe, D., Effects of choir singing or listening on secretory immunoglobulin A, cortisol, and emotional state, *Journal of Behavioral Medicine* 27 (2004) 623–635 (abstract verified against the PubMed entry): members of an amateur choir, two rehearsals a week apart, condition singing vs. listening to choral music; "Singing leads to increases in positive affect and S-IgA, while negative affect is reduced."

ly.⁶² This literature must be placed soberly — much of it rests on self-reports of people who sing in choirs voluntarily, the physiological studies are small.⁶³ But the convergence is remarkable: across methods and countries the same pattern appears, of lifted mood, lowered stress and — above all — social connectedness.

For the question of this book a third finding is the most important. The largest investigation of children's singing, the evaluation of the British national programme "Sing Up" with data from over six thousand children, found a clear relationship: the further a child's singing development, the more positive its self-concept and its sense of *being socially included* — regardless of age, sex and origin.⁶⁴ The authors themselves urge caution: this is a correlation, not a demonstrated direction of effect; whoever feels they belong perhaps also sings more gladly.⁶⁵ But precisely this study fixes what matters here: singing and belonging hang together, and they do so regardless of where a child comes from.

6.3 The Sheltered Voice

Now one might object: fine — but what has this to do with *language acquisition*? The answer leads back to Chapter 2, and it has two steps.

The first step is fear. No moment of language learning is as fear-laden as the one in which you open your mouth in front of others: you sound like a child, you are being judged, and the self-image — adult, competent, to be taken seriously — is at stake; foreign language anxiety research has shown that speaking-in-front-of-others is its centre and that it measurably depresses performance.⁶⁶ The choir is the only social form that solves this problem *constructively* instead of forbidding it: the individual voice is inaudible in the crowd. Whoever sings a mistake in the choir is not embarrassed — literally nobody notices. This makes possible something that exists nowhere else: **loud, active production in the target language from day one, with a risk of embarrassment of zero.** A class cannot draft an official letter in chorus; but it can sing in chorus, including those who do not yet speak a single word. The choir is, in the language of Chapter 2, a built filter-lowerer: it establishes the condition under which input arrives at all and production dares to happen at all.

Organisational psychology has a precise name for this condition. Amy Edmondson called it *psychological safety*: a group's shared belief that interpersonal risk — asking, erring, showing not-knowing — is not punished here; in her study of fifty-one work teams, exactly this belief was the

⁶² Clift, S./Hancox, G., The perceived benefits of singing: findings from preliminary surveys of a university college choral society, *Journal of the Royal Society for the Promotion of Health* 121 (2001) 248–256 (abstract verified against the PubMed entry): n = 84 and 91; 87 % social, 75 % emotional benefit agreement; six benefit dimensions.

⁶³ On the sobriety required: self-selection (those who like choirs sing in choirs), self-report formats and small physiological samples limit the evidential force of the well-being literature; the bonding findings (fn. 1) stand methodologically stronger (longitudinal, comparison groups). This book therefore rests its chain (6.3) primarily on bonding and fear, not on health effects.

⁶⁴ Welch, G. F./Himonides, E./Saunders, J./Papageorgi, I./Sarazin, M., Singing and social inclusion, *Frontiers in Psychology* 5 (2014) 803, [doi:10.3389/fpsyg.2014.00803](https://doi.org/10.3389/fpsyg.2014.00803) (open access, references verified against the PMC full text): 6,087 children with paired data (of 11,258 examined): "The higher the normalized singing development rating, the more positive the child's self-concept and sense of being socially included, irrespective of singer age, sex and ethnicity."

⁶⁵ Ibid.: "Whilst caution is needed in the interpretation of the correlation and regression data, and in the pitfalls of ascription of causal effects between measures ..." — the authors themselves leave the direction of effect open; this book adopts the finding accordingly only as a relationship, not as proof.

⁶⁶ Horwitz/Horwitz/Cope 1986 (Chapter 2, fn. 9), p. 125 ff.; on the special position of speaking *ibid.* The FLCAS items revolve essentially around speaking situations in front of the class.

precondition for people to learn instead of covering themselves.⁶⁷ The choir does not have to produce this safety by appeals; it builds it into its form: the crowd hides the voice, so the risk against which one would have to be protected never arises in the first place.

The second step is staying with it. Language acquisition needs, that was the lesson of Parts II and III, above all one thing: quantity — months of input, hundreds of encounters with every word. But quantity is not a didactic quantity; it is a motivational one: it arises only where people *come back*. And people come back to where they belong. The ice-breaker effect is therefore no well-ness bonus at the margin of the method but its foundation: the bonding of the first weeks decides whether the months exist at all in which the other mechanisms can work.

Both together form the chain this book asserts — and it shall lie here as openly as possible: choir research documents bonding, mood and belonging; it does *not* directly document that language is acquired in the choir. The inference from choir to language acquisition runs across two evidenced intermediate links — fear inhibits acquisition, belonging carries persistence — and is plausible as a chain, but unmeasured as a whole.⁶⁸ Chapter 9 will put exactly this chain on the measuring list.

6.4 For Those Who Have to Arrive

For one group this chain is no academic figure but daily life: for people who are new in a country. A refugee like Amal from Chapter 1 has not only a language problem; she has a belonging problem, and the two reinforce each other — whoever cannot speak finds connection hard, and whoever has no connection has nobody to speak with. The language course does not interrupt this circle: there she sits exclusively among people who have the same problem.

Singing together interrupts it at the only place reachable without language. Standing in a choir next to locals presupposes no language level — the melody carries, the text is there, the voice disappears into the crowd. Belonging arises here *before* the language, not as its reward. The community music research that has accompanied musical groups of refugees and locals describes this pattern throughout: well-being, understanding across cultural borders and a sense of arriving, long before the common language carries.⁶⁹ It is the rare case of an integration measure in which the receiving society is not examiner but fellow singer. Sociology has a term of its own for such spaces: the *third place* — neither home nor work nor public office, but the neutral ground on which status stays outside and conversation (here: song) is the only ticket of en-

⁶⁷ Edmondson, A., Psychological Safety and Learning Behavior in Work Teams, *Administrative Science Quarterly* 44 (1999) 350–383: psychological safety as "a shared belief held by members of a team that the team is safe for interpersonal risk taking" (definition and study design — 51 work teams of a manufacturing company — verified against the freely accessible full-text mirror; to be checked against the print). Transfer note: the findings come from work teams, not learning groups; what is adopted is the construct and its mechanism (safety → learning behaviour), not an effect size for choirs.

⁶⁸ Transfer note in due form: evidenced are (a) fast bonding through group singing (fns. 1 f.), (b) the association singing–belonging (fn. 7), (c) the performance-depressing effect of speaking anxiety (fn. 9, Chapter 2 fn. 10) and (d) the necessity of large input quantities (Part II). NOT directly evidenced is the overall inference "choir module → better language acquisition"; it is a two-step inference across filter and persistence and is formulated in Chapter 9 as a measuring task (fear, belonging and retention measures in choir mode).

⁶⁹ For many: Dow, R./Vougioukalou, S., Wellbeing and Integration through Community Music: The Role of Improvisation in a Music Group of Refugees, Asylum Seekers and Local Community Members, *Contemporary Music Review* 38 (2019), [doi:10.1080/07494467.2019.1684075](https://doi.org/10.1080/07494467.2019.1684075) (full text to be verified; publisher access blocked). This literature is predominantly qualitative (interviews, observation) and is cited here as a convergent pattern, not as proof of effect.

try.⁷⁰ The choir is the third place an arriving woman can enter before she commands the language of the first two.

6.5 From Finding to Construction

Pontivo's choir module translates these findings into three construction decisions. First the *teacher/pupil mode*: one person — choir leader, teacher, group founder — chooses the song, and for everyone else the same thing appears, at the same moment, with text and chords. That is technically unspectacular and socially decisive: it produces the *one shared object* on which all look at once — the basic form of shared attention, of which the next chapter treats. Second the *closed group*: choirs, classes and families sing in private rooms nobody enters from outside. What happens in the group — the crooked note, the failed attempt, the song that means something to somebody — stays in the group; the shelter that hides the individual voice in the sound is extended to the social level. Third the *repertoire*: simple, repetition-rich songs with chords (Chapter 5), among them — and this will prove in Part V to be the densest building block of the whole concept — songs that the members of the group themselves bring along.⁷¹

Whether this built version achieves the effect of the parish hall choirs is — honesty rule — open: the research cited has studied physically assembled groups, not app-supported ones.⁷² But the construction decisions are not inventions; they are translations: every one of them has a nameable finding behind it.

There remains the question of who leads the group — and what becomes of the mother tongue when a teacher steers a class through film and song. That is the classroom, and it has its own, hundred-year-old theory.

⁷⁰ Oldenburg, R., *The Great Good Place*, New York 1989 (to be verified against the print edition): the "third place" as a neutral, status-levelling community space beside home (first) and work (second place) — developed on cafés, pubs, barbershops. Transfer note: Oldenburg's criteria (neutrality, low threshold, conversation as main activity, regulars) fit the choir to a remarkable degree — with the deviation that song takes the place of conversation; used as sociological framing, not as evidence.

⁷¹ Feature note: The choir module is in operation (pontivo.de/choere, as of July 2026): closed groups, teacher/student mode, guests follow along via invitation code without an account.

⁷² Additionally open, and named for honesty's sake: whether synchronously mediated joint singing via a platform (same text, same moment, possibly distributed rooms) carries the bonding effects of physical choirs is unresearched; the physics of latency forbids distributed real-time singing anyway — Pontivo's module is therefore built primarily for the *shared room* (class, choir rehearsal, family); the platform supplies text, chords and simultaneity, not the room.

Chapter 7 · The Classroom: Shared Attention, a Legitimised Mother Tongue

7.1 The Prohibition

In Amal's integration course a rule applied that seemed so self-evident nobody justified it: *only German is spoken here*. German was explained in German, to people who did not yet know German; the Arabic Amal brought with her — a fully built language in which she can think, argue, be ironic — was in the course room not a tool but a disturbance. This prohibition has a history, and it is shorter and more profane than its reputation suggests: the "direct method" of the language schools of the early twentieth century made monolingualism a principle — not least because it was practical for school chains with international teaching staff: whoever teaches only in the target language need not know his students' languages.⁷³ Out of necessity came a doctrine, out of the doctrine a reflex. Scientifically it was never particularly well founded.

This chapter is about what a classroom actually is when you think it from learning research — and why the mother tongue in it is not the enemy of the target language but its most important scaffold.

7.2 The Scaffold

The theoretical foundation comes from the 1930s, from Lev Vygotsky, and it has a simple core: learning is first a social process and only afterwards an inner one. What a child manages today only at the hand of someone who can, it manages tomorrow alone; the span in between — between what one can do independently and what one can do "under adult guidance or in collaboration with more capable peers" — Vygotsky called the *zone of proximal development*.⁷⁴ Learning takes place in this zone, and the teacher's task is not to hand knowledge across but to husband the zone: to set tasks that lie one step above what can be done alone, and to give exactly as much hold as makes the step succeed. For this hold, Wood, Bruner and Ross coined the image that has wandered through all didactics since: the *scaffold* — the support structure that the more experienced erects and dismantles piece by piece, while the learner carries what he can already carry.⁷⁵

Note how exactly this coincides with Krashen's *i + 1* from Chapter 2, which comes from an entirely different tradition: both say that learning happens at the edge of ability, one step above the current state — and that it is *help with understanding*, not explanation of form, that carries

⁷³ On the history of the direct method and the monolingual principle (Berlitz schools, reform movement): Richards, J. C./Rodgers, T. S., *Approaches and Methods in Language Teaching*, 3rd ed., Cambridge 2014, chapter on the Direct Method (to be verified against the print edition); critically on the dogma's scientific basis Butzkamm/Caldwell (fn. 4), ch. 1. The abbreviated causal history in the text (staffing practice → principle) follows Butzkamm's account and is to be checked as such.

⁷⁴ Vygotsky, L. S., *Mind in Society: The Development of Higher Psychological Processes*, Cambridge/MA 1978, p. 86: the zone of proximal development as "the distance between the actual developmental level as determined by independent problem solving and the level of potential development as determined through problem solving under adult guidance or in collaboration with more capable peers" (page number after the standard edition, to be verified against the print).

⁷⁵ Wood, D./Bruner, J. S./Ross, G., The role of tutoring in problem solving, *Journal of Child Psychology and Psychiatry* 17 (1976) 89–100 (to be verified against the print edition; publisher access blocked). The term "scaffolding" for the tutor's dismantlable support function comes from this essay; the rendering follows the standard reception.

across this edge. The bilingual subtitle from Chapter 3 is nothing other than a scaffold in the literal sense: a support that holds understanding where one's own language power does not yet reach, and that can be dismantled — line by line — when it is no longer needed.

7.3 The Mother Tongue as Scaffold

But what do you build scaffolds from? The most stable support an adult learner owns is the language he already has. Wolfgang Butzkamm — the German anglicist who wrote against the monolingual dogma for a researcher's lifetime — put it in the plainest form: the mother tongue is not the disturbance factor of foreign language learning but its greatest asset; in it we learned what speaking *is* at all — that sounds mean, that sentences are built, that one acts with words — and this knowledge migrates into every further language.⁷⁶ The newer multilingualism research has unfolded the same thought under the term *translanguaging*: multilinguals do not own two separate language compartments but one shared repertoire from which they draw as the situation requires; a lesson that locks out the first language locks out part of its students' thinking tools.⁷⁷

This is no mere theoretical position; the empirical traces lie scattered across this book, and it is worth collecting them once. The gloss meta-analysis from Chapter 4: word explanations in the *mother tongue* beat explanations in the target language, for advanced learners too.⁷⁸ The eye-tracking study from Chapter 3: the mother-tongue subtitle line is the stable anchor from which learners explore the target-language line — the meaning rests, the form is conquered.⁷⁹ And the book flood from Chapter 2 worked in schools whose children spoke Fijian or Hindi at home — nobody drove that out of them; the English came *in addition*.⁸⁰ Wherever you admit the mother tongue as a tool instead of treating it as a leak, it works along.

Lest a misunderstanding arise: none of this speaks against as much target language as possible in the room — the quantity of comprehensible input remains the first condition of all. It speaks against the *prohibition* of the first language: against the course that refuses a comprehension aid that would cost half a sentence, and against the shaming of those who think in their own language. The scaffold does not stand in the way of the building. It makes it possible.

Whoever takes this for a fringe position underestimates how far language policy has already come: in the companion volume to the reference framework (2020) the Council of Europe expressly raised plurilingualism to a pedagogical guideline — plurilingual competence counts there not as a sum of separate monolingualisms but as one connected repertoire that teaching

⁷⁶ Butzkamm, W./Caldwell, J. A. W., *The Bilingual Reform: A Paradigm Shift in Foreign Language Teaching*, Tübingen 2009 (to be verified against the print edition); core thesis: "The mother tongue is the greatest asset people bring to the task of foreign language learning" (the authors' standard formulation, reference to be verified against the print). In German: Butzkamm, *Psycholinguistik des Fremdsprachenunterrichts*, 3rd ed., Tübingen 2002 (to be verified against the print edition).

⁷⁷ García, O., *Bilingual Education in the 21st Century: A Global Perspective*, Malden 2009 (to be verified against the print edition); García, O./Wei, L., *Translanguaging: Language, Bilingualism and Education*, Basingstoke 2014 (to be verified against the print edition). Transfer note: translanguaging is well worked out as a description of multilingual practice and as a pedagogical stance, but not an experimentally quantified principle of effect; the quantitative supports of this chapter are the individual findings gathered in fns. 6–8.

⁷⁸ Yanagisawa/Webb/Uchihara 2020 (Chapter 4, fns. 5 f.): "L1 glosses yielded greater learning than L2 glosses", with no interaction with proficiency.

⁷⁹ Liao/Kruger/Doherty 2020 (Chapter 3, fn. 13): steadier gaze on the L1 line, flexible exploration of the L2 line, no extra load from the double track.

⁸⁰ Elley/Mangubhai (Chapter 2, fns. 5 f.); on the effects spreading to the first language (Fijian) in the second year the authors' account there (Fiji Intermediate Examination, mean of 58 % also in the subject Fijian Language).

should use rather than suppress.⁸¹ Involving the first language is thus no longer a didactic gamble but the direction in which the European framework itself points.

7.4 The Built Classroom

Pontivo's classroom implements these two ideas — shared attention under guidance, mother tongue as scaffold — technically, and at one point it does something a physical classroom cannot.

The *teacher/pupil mode* is the built form of shared attention: the teacher chooses — the film, the scene, the song — and the same thing appears for everyone at the same moment. That sounds banal and is the core of every form of teaching since the village school: one object, many gazes, one guiding hand. The platform does not take the leading from the teacher, it takes the friction — the distributing, the "page 34, second paragraph", the "mine isn't working".⁸²

The special part lies on the second level: the same film runs for each pupil *with his own mother-tongue line*. A class in which Arabic, Ukrainian, Tigrinya and Polish sit together — the normal case of every integration class — watches the same German film, and each child has its own scaffold beneath it. In the physical classroom this is impossible; no teacher can whisper in four languages at once. Here it is one line of configuration: the engine separates target language, mother tongue and interface as independent axes.⁸³ That is translanguaging as infrastructure: the class shares the object and the target language — and everyone keeps their own tool.

And the teacher? She is not replaced, she is *unburdened* — of exactly that part of her work the machine can do (securing comprehension in four languages simultaneously), for the part only she can do: choosing, interpreting, encouraging, leading the conversation after the film, setting the task that turns the seen into language. Educational research supports this division of labour: in Hattie's great synthesis, the quality of the teacher–learner relationship is among the strongest known influences on achievement — time a machine gives back to relationship work is invested in the most effective quantity teaching has.⁸⁴ A tool meant to make teachers superfluous would also be pedagogically misbuilt: the scaffold principle *needs* the one who can, who knows when to support and when to let go.⁸⁵

⁸¹ Council of Europe, *Common European Framework of Reference for Languages: Learning, teaching, assessment — Companion volume*, Strasbourg 2020: plurilingual/pluricultural competence as a key concept and guideline of language education (core statement verified against the Council of Europe's official pages; pinpoints to be checked against the PDF full text — direct electronic access to rm.coe.int was blocked). Deliberately called a "guideline": the framework is a reference work, not a legal norm.

⁸² Feature note: The classroom is in operation (pontivo.de/fuer-lehrer, as of July 2026): class with invitation code, homework, class chat, shared sync cinema; display on a projector or TV via pontivo.de/tv.

⁸³ The axis architecture (target language / mother tongue / interface language independent per user) is product description, not a research finding; it is reported here because it is the technical condition of the multi-language class. Whether the many-languages class with individual scaffold line has the expected advantage over a single shared line is unmeasured (Chapter 9).

⁸⁴ Hattie, J., *Visible Learning: A Synthesis of Over 800 Meta-Analyses Relating to Achievement*, London 2009 (to be verified against the print edition): teacher–student relationship at $d \approx 0.72$ among the strongest influences — expressly not "the strongest": in Hattie's later rankings other factors lie above it (e.g. collective teacher efficacy, $d \approx 1.57$; values after the author-run overviews, to be checked against the print). Moreover Hattie's methodology (aggregating heterogeneous meta-analyses) has been substantially criticised — the order of magnitude "relationship works strongly" is nonetheless considered robust; no more is claimed here.

⁸⁵ On task orientation (the task after the input, which turns understanding into language): Ellis, R., *Task-based Language Learning and Teaching*, Oxford 2003; Long, M., *Second Language Acquisition and Task-Based Language Teaching*, Malden 2015 (both to be verified against the print edition). Pontivo deliberately supplies the input and community part and leaves the task level to the teacher — a division of labour, not a claim to completeness.

Honesty also requires, at this point, a declaration of intent marked as such: in the long run, practice is to co-develop the platform — teachers who report an imprecise click explanation or give a successful song translation into the shared stock, after the model of participatory action research.⁸⁶ This feedback loop is not yet built; it stands here as a building plan, not as a claim.

7.5 What the Classroom Still Lacks

A classroom that watches together and sings together has much — but it does not yet have material that comes *from the class itself*. So far all material flows in one direction: from the catalogue to the group. The densest building block of the whole concept reverses this direction: it makes what the learners bring along — the songs of their origin — into the teaching material, and the learners themselves into the ones who explain it. What happens then, linguistically, socially and humanly, is the next chapter — and with it this book reaches its point.

⁸⁶ On the methodological model: Kemmis, S./McTaggart, R./Nixon, R., *The Action Research Planner: Doing Critical Participatory Action Research*, Singapore 2014 (to be verified against the print edition). The status is declared in the text: stated building intention, not an existing feature — the feedback loop (gloss correction, verse contribution) does not currently exist in the platform.

Part V — The Test

*„Ihre Gesänge sind das Archiv des Volks, der Schatz ihrer Wissenschaft und Religion ...
Abdruck ihres Herzens, Bild ihres häuslichen Lebens in Freude und Leid, beym Brautbett
und Grabe.“*

— Johann Gottfried Herder, Deutsches Museum 1777, S. 433

Chapter 8 · Coro One Sky: the Song from Home, Sung in the New Language

8.1 The Exercise

The exercise this chapter is about can be described in one sentence: a member of the choir brings along a song from home; the group translates it together into the new language; then everyone sings it — in Italian, in German — to the old melody.

You have to picture the process concretely to see what is in it. A Syrian teenager hums the melody his mother used to sing; he writes down the Arabic lines and explains to the group, line by line, what they mean — what they *really* mean, for the dictionary meaning is too little for him. The group proposes Italian versions, discards, polishes: this line is too long for the melody, this word misses the tone, here the stress must fall on the second syllable. The teacher helps with grammar where it jams. After two evenings a singable Italian verse stands. Then the choir rises and sings it — and the boy whose song it is hears twenty people singing in the new language what his mother sang in the old.

In this inconspicuous exercise all the strands of this book run together in a single point. It is worth taking the mechanics apart — there are five mechanisms, and for every single one the evidence lies ready in an earlier chapter.

8.2 Five Mechanisms

First: the melody is already there. Chapter 5 ended with a list of conditions: the song carries the text when the melody is simple, repeats, and does not itself have to be learned — Racette's counter-finding arose precisely because her subjects had to master text *and* unknown melody at once.⁸⁷ The song from home is the limiting case in which this condition is perfectly met: the melody has sat since childhood, with rhythm, line lengths and stress pattern — the whole scaffold that, according to Wallace, "chunks" the text stands ready-built in memory.⁸⁸ The new Italian words are hung into an old, deeply anchored and emotionally charged structure. Memory research knows no more favourable storage place for foreign language.

Second: translating is the deepest form of word work. Chapter 4 named the three ingredients that make a word stay: need, search, evaluation.⁸⁹ The joint song translation drives all three to their maximum. The need is not didactically simulated but real — it is *my* song, and the version has to be right; the search runs through dictionary, teacher and group discussion; and the evaluation is the strictest imaginable: the word must not only be correct but *singable* — syllable count, stress, sound. Every line is a multiple-choice gloss in group form: generate versions, com-

⁸⁷ Racette/Peretz 2007 (Chapter 5, fn. 7): what was learned there were unfamiliar songs — the melody was co-learning material, the singing a dual task. The home-song format eliminates exactly this dual task for the one who brings the song; for the other group members the melody is learned after a few passes (simple, strophic songs presupposed, Chapter 5, fns. 8 and 11).

⁸⁸ Wallace 1994 (Chapter 5, fn. 8): melody supports text recall when it recurs and is easy to learn; its articulating performance (line lengths, stress patterns, chunking) transfers to every text fitted into it — thus also to the translation. That the transfer of the memory support from the original to the translated text version succeeds without loss is plausible expectation, not a tested finding.

⁸⁹ Laufer/Hulstijn 2001 (Chapter 4, fn. 8): need, search, evaluation.

pare, discard.⁹⁰ And what stands at the end the group has *produced itself* — the generation effect, one of the most robust findings of memory psychology, says exactly this: what is self-produced is retained better than what is merely read, across all test forms.⁹¹

Third: the roles reverse. In the language course the refugee is structurally the deficient one — the one who lacks something. In this exercise he is, for the duration of the song, the only expert in the room: he knows the original, he decides whether the translation hits it, teacher and group depend on him. Foreign language anxiety, whose performance-depressing effect Chapter 2 documented, hangs on the threatened self-image — on the adult who hears himself sounding like a child.⁹² Here the opposite happens: competence becomes visible before the new language can express it. The Sing Up study from Chapter 6 gave this an empirical trace: successful singing is associated with self-concept and the sense of belonging — as the mechanism the authors suspect precisely the experience of one's own efficacy.⁹³

Fourth: integration runs in both directions. Assimilation says: leave your songs behind and learn ours. This exercise says the opposite: *your song is worth existing in the new language*. The origin is not laid down but carried across; the new language becomes the bearer of one's own story instead of its competitor. That is translanguaging not as a teaching technique but in the literal sense: two languages working on the same verse.⁹⁴ And the receiving society is not examiner but co-translator and fellow singer — it learns the song, the story behind it, a piece of the people it sings with. Of all the formats this book describes, this is the only one in which the locals *learn something from* the arrivals — integration stops being a one-way street.

That exactly this constellation dismantles prejudice is no pious hope but one of social psychology's best-tested findings. Gordon Allport's contact hypothesis names the conditions under which encounter between groups works: equal status in the situation and a common goal — and the great meta-analysis by Pettigrew and Tropp across more than five hundred studies confirms: contact typically lowers prejudice anyway, but most strongly under Allport's conditions.⁹⁵ Read the conditions next to the exercise: the role reversal establishes the equal status, the singable verse is the common goal. What music contributes beyond that — shared rhythm, shared breath, and in the translated song the audible experience that the song from Asmara tells of the same

⁹⁰ On the superiority of processing-active gloss forms Yanagisawa/Webb/Uchihara 2020 (Chapter 4, fns. 5 and 7); the analogy song line ↔ multiple-choice gloss is this book's reading.

⁹¹ Slamecka, N. J./Graf, P., The generation effect: Delineation of a phenomenon, *Journal of Experimental Psychology: Human Learning and Memory* 4 (1978) 592–604 (abstract core statement verified: superiority of the generate over the read condition in all five experiments, across free/cued recall, recognition and confidence ratings; full text to be verified). Transfer note: the classic generation effect concerns single words/word pairs in the laboratory; its extension to communally produced song lines is analogy.

⁹² Horwitz/Horwitz/Cope 1986 (Chapter 2, fn. 9): foreign language anxiety as threat to self-image and self-expression; Chapter 2, fn. 10 on the performance effect.

⁹³ Welch et al. 2014 (Chapter 6, fns. 7 f.): association singing development–self-concept–belonging; as mechanism the authors suspect "perceived competence and singing self-efficacy" — expressly as inference, not as proof.

⁹⁴ García/Wei 2014 (Chapter 7, fn. 5). The song translation is at the same time the point where the L1-gloss superiority cited in Chapter 7 (Chapter 4, fn. 6) becomes practical: the clarification of meaning runs constitutively through the song-giver's first language.

⁹⁵ Allport, G. W., *The Nature of Prejudice*, Reading/MA 1954, esp. ch. 16 (to be verified against the print edition); meta-analytically Pettigrew, T. F./Tropp, L. R., A meta-analytic test of intergroup contact theory, *Journal of Personality and Social Psychology* 90 (2006) 751–783 (core findings verified against the abstract): 713 independent samples from 515 studies; contact typically reduces prejudice even without Allport's optimal conditions, more strongly with them — the conditions are facilitative, not strictly necessary. Exactly for this reason it is not claimed here that the exercise is the only effective form — only that it establishes the facilitative conditions unusually completely.

hopes as the local one — is discussed in music cognition as a social bonding mechanism; it must not be passed off as a proven neurobiological eraser of prejudice, but it may well be taken as a plausible amplifier of the contact conditions.⁹⁶

Fifth: the performance is fear-free. At the end there is singing — the only form of loud production in the new language possible from day one without risk of embarrassment, with the sheltered individual voice in the crowd (Chapter 6). And the translated song does not disappear: it enters the group's repertoire and is sung again and again — the repetition that incidental learning needs (Chapter 4) is built in without ever being called "practice".

You see: not one of these five mechanisms is an invention of this book — melody scaffold, processing depth, generation effect, self-efficacy, fear reduction are findings evidenced each on its own, some decades old. The exercise is their union in a single format. Exactly that is its strength — and, honestly, also its problem of proof, to which the final section returns.

8.3 The Story: Why the Whole Needs a Narrative

Pontivo tells this exercise — and the method behind it — as a story: *Coro One Sky*, a comic about a choir in which children from different countries sing together under the same sky. One might take that for packaging. Cognitive research suggests it is more.⁹⁷

Jerome Bruner — the same from whom the scaffold image of Chapter 7 comes — argued that narrative thinking is a mode of understanding of its own, not replaceable: humans order social reality in stories, not in sentences with truth values.⁹⁸ Mar and Oatley turned this into a research programme: fiction functions as *simulation* of the social world — it abstracts, condenses and lets the reader live through social experience he has not had himself.⁹⁹ For language pedagogy a more tangible finding is added, which already appeared in Chapter 2: the book flood worked with *storybooks*, and the extensive reading tradition has shown again and again since that narrative, self-chosen, light reading — expressly including comics — carries language, because the story pulls the reader where the exercise would have to push him.¹⁰⁰

In the concept the story therefore takes on three tasks. It gives the method *characters and sequence*: whoever reads the comic sees children living through exactly what the exercise demands — the being foreign, the first singing along, the own song — and thereby knows what is

⁹⁶ On the discussion of music as a social bonding mechanism, for many, Koelsch, S., *Brain and Music*, Chichester 2012 (to be verified against the print edition), and the bonding findings from Chapter 6 (fns. 1 f., 4). Expressly rejected is the stronger reading that joint music-making "dissolves the neurobiological boundaries between in-group and out-group" — the evidence does not cover it. For those who prefer to frame the moment sociologically: Hartmut Rosa's concept of *resonance* (Rosa, *Resonanz. Eine Soziologie der Weltbeziehung*, Berlin 2016, to be verified against the print edition) describes it as a successful relation to the world — cited as an interpretive frame, not as evidence.

⁹⁷ Feature note: The comic can be read on the platform (pontivo.de/comic, as of July 2026).

⁹⁸ Bruner, J., *Actual Minds, Possible Worlds*, Cambridge/MA 1986, ch. 2 (paradigmatic vs. narrative mode; to be verified against the print edition); id., The narrative construction of reality, *Critical Inquiry* 18 (1991) 1–21 (full text to be verified).

⁹⁹ Mar, R. A./Oatley, K., The function of fiction is the abstraction and simulation of social experience, *Perspectives on Psychological Science* 3 (2008) 173–192 (abstract verified against the PubMed entry): fiction offers "models or simulations of the social world via abstraction, simplification, and compression" and creates "a deep and immersive simulative experience of social interactions".

¹⁰⁰ Elley/Mangubhai (Chapter 2, fns. 5 f.); on the extensive reading tradition Day, R./Bamford, J., *Extensive Reading in the Second Language Classroom*, Cambridge 1998 (to be verified against the print edition); on comics and light reading Krashen, S., *The Power of Reading*, 2nd ed., Westport 2004, ch. 3 (to be verified against the print edition); Cary, S., *Going Graphic: Comics at Work in the Multilingual Classroom*, Portsmouth 2004 (to be verified against the print edition).

coming; expectability is a comprehension aid, for children as for the teacher daring the format for the first time. It supplies *light reading matter* in the target language, doubly coded in the literal sense — image and text — as the platform's lowest-threshold input form. And it makes the method *tellable*: a school, a parents' evening, a choir leader understands "a choir under one sky" faster than any list of hypotheses.

Here too the honesty line: the narrative evidence comes from reading and fiction research; that a *platform comic* fulfils these functions is transfer, not proof.¹⁰¹ The comic is the least measurable piece of the concept — and at the same time the cheapest: it costs no teaching time and competes with nothing. Bets with small stakes and plausible gain may be entered, if you keep them on the books as bets.

8.4 The Rule of Care — and the One Big Bet

Two things must stand at the end of this chapter, precisely because it is the book's most enthusiastic.

The first is a protective rule. Songs from home are not neutral: childhood, family, sometimes loss and worse hang on them. A format that invites people to make their innermost into teaching material needs voluntariness as a hard principle — *whose* song is sung is decided solely by the one it belongs to; whoever does not (yet) want to sing along with the others' songs, and that is no deficit. And nobody is appointed representative of "his culture": the boy brings *his* song, not "Syrian music". The line between honouring and putting on display is narrow, and it runs where the decision lies: with the singer, not with the format.¹⁰²

The second is the balance of the evidence, without protective claims: the five mechanisms are evidenced individually; their combination in this format is not. To this book's knowledge, the translated song from home as an integrated learning and integration format has not been empirically studied — it is the central design bet of the whole concept, with the best foundation of reasons and the thinnest direct evidence.¹⁰³ A concept that calls itself scientific has exactly one honest way of dealing with that: name the bet, keep the stake small, plan the measurement. What exactly would have to be measured — and what the concept as a whole can and cannot do — is the final chapter.

¹⁰¹ Transfer note in due form: evidenced are simulation and comprehension functions of narratives (fns. 12 f.) and the language effect of narrative reading matter (fn. 14). Not evidenced is the effect of a particular comic as the narrative roof of a learning platform; most measurable would be its use (is it read? by whom? before or after the films?) — Chapter 9.

¹⁰² The protective rule is this book's pedagogical judgement, not a research report; it follows from the trauma sensitivity of work with refugees (cf. the qualitative community music literature, Chapter 6, fn. 12, which stresses voluntariness and ownership of contributions throughout).

¹⁰³ Related but not congruent research lines exist — singing in L2 teaching (Part III), community music with refugees (Chapter 6, fn. 12), translation in language teaching (for many Cook, G., *Translation in Language Teaching*, Oxford 2010, to be verified against the print edition) —; the intersection of all three is, by the present research, unstudied. Should deeper literature searching change that, the finding belongs in this book's next revision. — Numbering of this apparatus adjusted in rev. 3 (fns. 9 f. new; old 9–14 → 11–16); adjusted again in rev. 4: feature footnote 11 new, old 11–16 → 12–17.

Part VI — The Scenarios & the Open Road

„Nicht die Wahrheit, in deren Besitz irgend ein Mensch ist, oder zu sein vermeinet, sondern die aufrichtige Mühe, die er angewandt hat, hinter die Wahrheit zu kommen, macht den Werth des Menschen.“

— Gotthold Ephraim Lessing, Eine Duplik (1778)

Chapter 9 · Three Classrooms and an Honest Agenda

9.1 Three Classrooms

Everything this book has developed runs together in three concrete scenarios for which Pontivo is built — and it is the same machine that carries all three.

The first classroom stands in Germany: refugees learn German. The evening film — a documentary in the German original — runs with the German target track and each viewer's own mother-tongue line; the click explains the passage where it jams; once a week the group sings, and at irregular intervals a song from Aleppo, Kherson or Asmara passes through the translation workshop of Chapter 8. The second classroom stands in Italy and differs in only one axis setting: refugees learn Italian — the choir here is called *One Sky*, and it is the scenario that gives the comic its name. The third classroom is the class from Bologna with which this book began: Italian teenagers learn English — the same double track, only that Italian now stands below, and in the player runs the documentary that used to founder in class on the dubbed version.

That three such different situations — integration under pressure, integration in the country of arrival, school foreign language in prosperity — can be served by one engine is not a marketing point but a consequence of the theory: if language acquisition follows the same conditions everywhere — comprehensible input, anchoring, low fear — then the scenarios differ only in the setting of the axes: which language is target, which is scaffold, who leads the group.¹⁰⁴

The three classrooms are therefore not a closed list either. Administration sorts migration into separate spheres — "expats" here, "refugees" there — and in classical learning environments the groups never meet. Cognitively, though, the Irish engineer in the corporate office and the Syrian boy from Chapter 8 share the same experience: the loss of linguistic sovereignty, the exhaustion of constant not-understanding, the task of finding a new place. For this book's conditions the residence status is not a variable; the same axis setting that carries the integration course carries the international professional and her family. And it carries the mainstream school, whose classes have long been as multilingual as any integration class: watching and singing together in heterogeneous classes demands no cognitive entry hurdle — it lets children act as a group before the grading scale sorts them. What arose from the plight of refugees is at no point built only for them.

9.2 Amal, One Year Later — a Hypothesis

It is tempting to resolve the opening scene here: Amal, a year of evening films and choir rehearsals, at the same supermarket checkout — and this time she answers. This book will not quite give in to the temptation, for exactly this scene is not a fact but the *hypothesis* whose honest testing is the point here. What can be said is more modest and firmer: after such a year Amal would have heard several hundred hours of real, understood German — more spoken everyday language than six hundred course hours can ever contain; she would have dozens of phrases available verbatim because she sang them; and she would no longer stand alone: people you have sung next to for a year are no longer strangers before whom you fall silent. Whether that is

¹⁰⁴ The axis architecture is product description (Chapter 7, fn. 11). The sentence "same conditions, different axis setting" is the consequence of the acquisition theory developed in Part I and shares its limits of validity — in particular the literacy limit (9.3).

enough for her to understand "Sammeln Se Punkte?" and decline it laughing, nobody knows — *yet* nobody. The difference from the course system of Chapter 1 is not the promise. The difference is that the conditions are right — and that the result can be measured and is meant to be measured.

9.3 What the Approach Cannot Do

But first the limits, and the fundamental ones, not the cosmetic ones.

The approach does not make speakers. The research that gives this book its foundation has an open flank, and it was named in Chapter 2: understanding is necessary, but presumably not sufficient. One's own freely formed speaking — the negotiating in conversation, the wrestling for one's own sentence — has, by everything output and interaction research shows, a function of its own that no input replaces.¹⁰⁵ Of production, Pontivo covers only singing — verbatim, sheltered production, valuable and limited. The free conversation takes place outside the platform or not at all; the task of bringing it about stays with teachers, tandems, encounters. Whoever sells the approach as a full substitute for language teaching has not read this book.

The approach presupposes reading. The double track, the heart of Part II, is text. For someone who cannot read, or barely — and in integration courses sit people who were never schooled in literacy or who bring a different script — exactly the mechanism that is best documented here does not carry.¹⁰⁶ For these learners there remain sound, image and song; whether that suffices is open. It would be cheap to conceal this limit, because it concerns the most vulnerable group.

The approach hangs on the rights. Authentic film is other people's property; what may be shown, subtitled and clicked is decided by licences, not by educators. The source situation limits the catalogue, and a concept built on quantity must carry this dependence as an operating risk — the following section unfolds this limit and the ways out.

The click can explain wrongly. The machine-generated gloss is a quality debt (Chapter 4): without sample checking against expert reference, every single explanation remains a small promise without evidence.

And the teacher remains unreplaced. Tasks, conversation, encouragement, the decision when a scaffold falls — all that the platform can frame but not perform (Chapter 7). Wherever it were misunderstood as a savings model for staff, it would be pedagogically misapplied.

9.4 The Rights Paradox and the Song Donation

One of the limits of 9.3 deserves a section of its own, because it is not cognitive but legal in nature — and because it can be shaped. Copyright law does know an exception for teaching: § 60a of the German Copyright Act (UrhG) allows educational institutions, for non-commercial purposes, to use up to 15 per cent of a published work — works of small scope, and thus typically individual song lyrics too, even in full. But the exception has two catches, and both strike this

¹⁰⁵ Swain 1985; Long 1996 (both Chapter 2, fn. 4, to be verified against the print editions). The boundary drawn follows the consensus core marked there: input necessary, output/interaction with a function of its own that nothing replaces.

¹⁰⁶ On distance from writing and literacy in integration courses, the BAMF runs dedicated literacy courses (cf. the report cited in Chapter 1, fn. 2, course-type tables); the captioning evidence (Chapter 3) was won throughout on literate samples. For non-literate learners the subtitle mechanism is unevidenced and plausibly ineffective — a concept limit, not a side note.

concept at its centre. First, it privileges the educational institutions themselves — schools, universities, institutions of vocational and further training —, not a platform: for its catalogue Ponto cannot invoke § 60a; privileged is only its use *by* an educational institution in its teaching. Second, the law exempts, of all things, the sheet music: graphic recordings of musical works may not be reproduced without a licence even in teaching.¹⁰⁷ A method, however, that lives on immersion in whole works — the whole film, the whole song — gets nowhere with fifteen per cent. That is the rights paradox of language education: precisely the material that carries most strongly, linguistically and emotionally, is hardest to use with legal certainty in the learning space.

The way therefore leads not through exceptions but through licences — and thus through the international web of collecting societies: in Germany GEMA and, for sheet music and lyrics, VG Musikedition, in Austria AKM, in Switzerland SUISA, beside them SACEM, PRS, ASCAP and their sisters. Their tariff structures are historically cut to broadcasting, performance and the schoolbook, not to protected digital learning spaces that need whole works.¹⁰⁸ Two ways out are emerging. Public-service and publicly funded broadcasters can grant educational releases for closed learning environments — their mandate carries that, and the subtitle evidence assembled in Chapter 3 supplies the justification along with it. And for the songs the concept establishes a reciprocity model, the *song donation*: musicians and choirs use the songbook with its ChordPro settings as a tool of their own rehearsal and stage practice; in return, rights holders can release individual works of their own by direct licence for the didactic space. Thus the rights obstacle becomes an exchange relationship — voluntary, documented, terminable. Whether it holds is decided not by the concept but by the contracts; that too belongs to this chapter's honest balance.

9.5 The Measuring List

A concept that calls itself scientific says itself what it could fail by. The following list is ordered by weight: at the top, the bets on which the concept hangs.

1. The double track. Do beginners with a synchronised target- and mother-tongue line measurably learn more than with monolingual subtitles — over months, not minutes? (Design: comparison groups in the field; vocabulary and listening tests; the short-clip findings of Chapter 3 are the starting point, not the answer.)

¹⁰⁷ § 60a(1) UrhG (15 % limit, non-commercial purposes, privileged circle of users), (2) (full use i.a. of "works of small scope" and out-of-commerce works), (3) sentence 1 (i.a. no "reproduction of graphic recordings of works of music" = exclusion of sheet music), (4) (institutions covered) — wording verified against the official full text ([gesetze-im-internet.de/urhg/_60a.html](https://www.gesetze-im-internet.de/urhg/_60a.html), retrieved 2026-07-25); introduced by the UrhWissG (2017). Whether a concrete song lyric is a "work of small scope" is decided case by case (framework agreements with the collecting societies, to be checked against the wording); the remuneration duty under § 60h UrhG remains untouched. This section replaces no legal advice in the individual case.

¹⁰⁸ On the division of competences (GEMA: performance/communication rights; VG Musikedition: i.a. graphic rights in sheet music and texts) and the international sister societies: the societies' self-descriptions (to be checked against the respective tariff and contract frameworks). The statement about the cut of the tariff structures is a structural observation, not a tariff opinion.

2. **The choir effect on retention.** Does the choir module lower language anxiety and raise belonging and persistence? (The instruments exist: the FLCAS anxiety scale, belonging measures, simply the drop-out rate — the two-step chain of Chapter 6 becomes testable with them.¹⁰⁹)

3. **The home-song format.** Do words from self-translated songs stay better than equally frequent words from the film corpus? Does the song-givers' experienced self-efficacy rise? (A small before/after design per choir group; the central bet of Chapter 8.)

4. **The sung wording.** Are sung phrases still retrievable after weeks where heard ones have faded? (The laboratory findings of Chapter 5, translated to field scale.)

5. **The click gloss.** Sample audit of the machine explanations against expert reference (error rate, error types); in addition: retention of clicked versus unclicked words, and the flow question — at what click density does the film evening tip into dictionary work?

6. **Vocabulary growth per viewing hour** as a running base quantity (sample vocabulary tests along the material actually watched), to hold the incidental-learning expectation of Chapter 4 against reality.

7. **The comic:** is it read, by whom, and does its reading precede or follow use of the other modules? (Pure usage measurement — the state of evidence gives no more, Chapter 8.)

Nothing on this list is exotic; every line is feasible with a platform's on-board means and the standard instruments of research. What it demands is only one thing: the will to be measured — even at the risk that a bet is lost. Lost bets are, by this series' standard, no blemish; unnamed ones are.

9.6 The Family Tree

Finally, the inventory every book in this series owes itself: what in it is borrowed, what is its own?

Borrowed is almost everything, and deliberately so. The acquisition-not-learning perspective and the two conditions come from Krashen and the research following him; the two-channel architecture of memory from Paivio and Mayer; the subtitle evidence from Vanderplank via the Leuven meta-analysis to the double-track studies; the gloss and involvement findings from Nation, Laufer, Hulstijn and the meta-analysis of Yanagisawa; the memory for song from Wallace, Schön and Ludke together with the sobering by Racette and Peretz; the ice-breaker effect from Pearce, Launay and Dunbar; scaffold and zone of proximal development from Vygotsky, Wood, Bruner and Ross; the rehabilitation of the mother tongue from Butzkamm and the translanguaging research; narrative theory from Bruner, Mar and Oatley; motivation and safety from Deci, Ryan, Csíkszentmihályi and Edmondson; the contact hypothesis from Allport, Pettigrew and Tropp.¹¹⁰

¹⁰⁹ FLCAS: Horwitz/Horwitz/Cope 1986 (Chapter 2, fn. 9), scale pp. 129 f.; belonging/closeness measures after the model of Pearce et al. 2015 (Chapter 6, fn. 1). That retention counts as an integration measure is this book's stipulation: whoever stays receives quantity — and quantity is, by Part II, the first condition.

¹¹⁰ All references in Chapters 2 through 8; the source register in the appendix lists them collectively, with verification status (verified / to be checked against the print) per reference — the state of verification is part of the publication, not internal material: that too belongs to "verifiable rather than asserted".

Its own are three things. First the *integration*: the joining of these strands into one architecture — film as input, song as anchor, group as filter-lowerer — and into an engine that serves all three scenarios with the same axes. Second the *home-song format* as the exercise in which the strands cross; the building blocks are borrowed, the combination is, as far as can be seen, new. Third the *memory anchor* as test grid: the three questions with which any learning environment — including every future version of Pontivo itself — can be interrogated.

And so to the last application of this grid, to the book itself. **Comprehensible?** It has built its main line for readers without specialist study and laid the depth into the footnotes; whether that has succeeded is decided by the choir leaders and teachers who read it. **Anchored?** It has, where it could, told in scenes rather than in constructs — a woman at a checkout, a boy whose song twenty voices sing. **Connected?** It appears openly, readable by anyone, in a publishing house that does not put knowledge behind barriers — and it expressly invites refutation: every figure carries its reference, every bet its name.

At the beginning stood a woman who paid in silence although she owns a certificate. This book has not promised that she will speak. It has shown under what conditions people begin to speak — and described an instrument that creates those conditions, together with the list against which it must let itself be tested. The rest is no longer theory. The rest is a Tuesday evening in a parish hall, a film with two lines of text, and a song that somebody brought along.

Source Register

Alphabetical. Status: **[V]** = verified at the primary source (full text or publisher abstract; verification path in the verification log) · **[D]** = to be checked against the print/full text (declared as such in the respective footnote). Chapter references in brackets ("Kap." = chapter; "Motto Teil" = part motto). The register is kept in its original bibliographic form across all language editions.

- Allport, G. W., *The Nature of Prejudice*, Reading/MA 1954 — [D] (Kap. 8)
- Augustinus, *Confessiones*, Buch I, Kap. 14 (I,14,23) — [V, lateinischer Volltext] (Motto Teil II)
- BAMF, *Bericht zur Integrationskursgeschäftsstatistik für das Jahr 2024*, S. 17 ff., 19 — [V, PDF-Volltext] (Kap. 1, 9)
- Bruner, J., *Actual Minds, Possible Worlds*, Cambridge/MA 1986 — [D] (Kap. 8)
- Bruner, J., The narrative construction of reality, *Critical Inquiry* 18 (1991) 1–21 — [D] (Kap. 8)
- Butzkamm, W., *Psycholinguistik des Fremdsprachenunterrichts*, 3. Aufl. 2002 — [D] (Kap. 7)
- Butzkamm, W./Caldwell, J. A. W., *The Bilingual Reform*, Tübingen 2009 — [D] (Kap. 7)
- Cary, S., *Going Graphic: Comics at Work in the Multilingual Classroom*, Portsmouth 2004 — [D] (Kap. 8)
- Clift, S./Hancox, G., The perceived benefits of singing, *J Royal Society for the Promotion of Health* 121 (2001) 248–256 — [V, Abstract] (Kap. 6)
- Cook, G., *Translation in Language Teaching*, Oxford 2010 — [D] (Kap. 8)
- Council of Europe, *CEFR Companion Volume*, Straßburg 2020 — [V, Kernaussage an coe.int; Pinpoints am PDF zu prüfen] (Kap. 7)
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Abbreviations

- **BAMF** — Bundesamt für Migration und Flüchtlinge (German Federal Office for Migration and Refugees)
- **DTZ** — Deutsch-Test für Zuwanderer (German test for immigrants)
- **ES** — effect size
- **FLCAS** — Foreign Language Classroom Anxiety Scale
- **CEFR/GER** — Common European Framework of Reference for Languages
- **IntV** — Integrationskursverordnung (German Integration Course Ordinance)
- **INVALSI** — Istituto nazionale per la valutazione del sistema educativo di istruzione e di formazione (Italian national institute for the evaluation of the education system)
- **JEP** — Journal of Experimental Psychology
- **L1 / L2** — first language (mother tongue) / second or foreign language
- **LLT** — Language Learning & Technology (journal)
- **SLA** — Second Language Acquisition
- **SSLA** — Studies in Second Language Acquisition (journal)
- **TBLT** — Task-Based Language Teaching
- **TOEFL** — Test of English as a Foreign Language
- **UE** — Unterrichtseinheit(en) (teaching hours/units)
- **ZPD** — Zone of Proximal Development

Glossary

- **Affective filter** — Krashen's image for the blockage between understood input and language acquisition caused by fear, lacking self-confidence or lacking motivation; high filter = little gets through (Ch. 2).
- **Captions / target-language subtitles** — subtitles in the same language as the sound; they segment the sound stream and connect sound with writing (Ch. 3).
- **ChordPro** — text format for song sheets that embeds chord symbols in the lyrics; the standard of sing-along practice, basis of the songbook module (Ch. 5).
- **Contact hypothesis** — Allport's conditions under which intergroup encounter reduces prejudice (equal status, common goal); confirmed meta-analytically by Pettigrew/Tropp (Ch. 8).
- **Dual subtitles (bilingual subtitles)** — simultaneous display of target- and mother-tongue line; the built form of Pontivo's player (Ch. 3).
- **Dual coding** — Paivio's theory of two connected memory systems (verbal and imagistic); doubly coded content has more retrieval paths (Ch. 3).
- **Flow** — Csíkszentmihályi's state of self-sustaining activity in which effort disappears from experience (Ch. 2).
- **DTZ** — "Deutsch-Test für Zuwanderer", the scaled final test of the German integration course (B1/A2) (Ch. 1).
- **FLCAS** — Foreign Language Classroom Anxiety Scale; the standard scale for measuring foreign language anxiety (Horwitz et al. 1986) (Chs. 2, 9).
- **Generation effect** — self-produced content is retained better than merely read content (Slamecka & Graf 1978) (Ch. 8).
- **CEFR** — Common European Framework of Reference for Languages; levels A1–C2, B1 = "threshold" (Ch. 1).
- **Gloss** — brief word explanation in a text's margin; digitally: the click explanation (Ch. 4).
- **$i + 1$** — Krashen's formula for input just above the current state i ; acquisition happens in understanding such input (Ch. 2).
- **Incidental learning** — learning as a by-product of comprehension-driven engagement, without intention to learn (Ch. 4).
- **Involvement load** — Laufer/Hulstijn's three-factor model of processing depth in word learning: need, search, evaluation (Ch. 4).
- **Third place** — Oldenburg's term for neutral, status-levelling community spaces beside home and work; in this book: the choir (Ch. 6).
- **Memory anchor** — this book's test grid: "Comprehensible? Anchored? Connected?" (Ch. 2).
- **Psychological safety** — Edmondson's shared belief of a group that interpersonal risk (asking, erring) is not punished; precondition of learning (Ch. 6).
- **Rights paradox** — this book's finding: the linguistically and emotionally most effective material is hardest to use with legal certainty in the learning space (Ch. 9.4).

- **Misgrounding** — a reference that exists but does not support the claim (term from the sister volume *Kalibriertes Vertrauen*) (Ch. 4).
- **Self-determination theory (SDT)** — Deci/Ryan's theory of motivation: autonomy, competence and relatedness as basic needs from which engagement carries itself (Ch. 2).
- **Song donation** — this concept's reciprocity model: stage and rehearsal use of the songbook in return for direct licensing of individual works for the learning space (Ch. 9).
- **Scaffolding** — dismantlable support structure that someone more able erects for a learner (Wood/Bruner/Ross 1976) (Ch. 7).
- **Translanguaging** — understanding multilingualism as one shared repertoire; pedagogically: the first language as a legitimate tool in class (Ch. 7).
- **Zone of proximal development (ZPD)** — Vygotsky's span between what a learner can do alone and what he can do with help; the place where learning happens (Ch. 7).

About the Concept & Team

Pontivo (pontivo.de) is a platform for language acquisition with film, song and community: authentic video with a synchronised, bilingual subtitle player and click explanation; a songbook with chords for singing together in groups with a teacher/pupil mode; a classroom for learning scenarios on the same multilingual engine; and the comic "Coro One Sky" as the narrative roof. The platform is developed by a small team around ra.de Verlags-KG.

This book is to Pontivo what its sister volume *Kalibriertes Vertrauen* is to trust-on.net: the open scientific justification of the approach — including the list of what has not yet been proven. It appears as volume 1 of the series "**Schriften zur Sprachbildung mit Film und Musik**" (Studies in Language Education with Film and Music) at ra.de-Verlag (Diamond Open Access: freely readable, without fees for readers or authors).

Verifiability. Every reference in this book carries a verification status (verified at the primary source, or expressly "to be checked against the print edition"); the verification log is part of the publication materials. Corrections and refutations are welcome and are incorporated in revisions with a change log — the series' standard applies to this book too: verifiable rather than asserted.

This English text is a translation of the German original; in case of doubt the German version governs.