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„CLIL indeed? -

An analysis and evaluation of Austrian and German course books for upper secondary education“

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1. Introduction

Content and Language Integrated Learning (i.e. CLIL), "[...] is gaining momentum and extending as an educational approach across continents" (Coyle/Hood/Marsh 2010:2). Thus it can be described as a global phenomenon. As a consequence, this is also noticeable within the Austrian educational system and within the European Union in general.

Former circumstance is not surprising at all, since Austria's "[...] history is deeply rooted in multilingualism and multiculturalism" (ÖSZ 2009:85). However, the probably politically even more relevant issue concerning the teaching of foreign language is to be seen within the European context. With the establishment of the Common European Frame of Reference (i.e. CEFR), the European Union made its commitment to *plurilingualism*, which is defined as

> [...] the ability to use languages for the purposes of communication and to take part in intercultural interaction, where a person, viewed as a social agent, has proficiency of varying degrees, in several languages, and experience of several cultures. This is not seen as the superposition or juxtaposition of distinct competences, but rather as the existence of a complex or even composite competence on which the user may draw. (CEFR 2001:168)

Therefore, it is safe to say that within the context of European policy, languages, and subsequently their teaching, are a major concern. Like the rise of CLIL, this conscious step towards a multilingual and multicultural policy can be judged within as global context. *Recommendation CM/Rec(2008)7* , which is concerned with the promotion of the CEFR and plurilingualism, states that the Committee of Ministers are

> [...][a]ware of the growing need to equip all Europeans for the challenges of intensified international mobility and closer co-operation not only in education, culture and science but also in trade, commerce and industry and indeed in all walks of life (CM/Rec 2008:1)

This clear reference to the process of globalisation reveals some of the motivation behind an explicit commitment to promoting the command of several languages within the European Union as an answer to the enhanced demands in connection with a globalised world.

Thus, CLIL with its dual-focused approach on content and language (cf. Coyle/Hood/Marsh 2010:1), seems to perfectly support the aim of making European citizens more competent both in languages as well as in professional skills, while increasing subject-specific knowledge in general. As we can see, the intention of establishing foreign language

education more prominently within European curricula seems to come from a rather economically motivated background, because the main purpose of promoting language teaching is obviously the aim of educating people who are more competitive on the global labour market.

As was mentioned before, the global phenomenon of CLIL is also noticeable on a local level, namely within the Austrian education system. Especially with English as a foreign language, teaching methods which can be associated with an approach coming from a CLIL background, are currently fairly prominent. This is not very surprising, since English is the primarily taught foreign language in the Austrian school system, which provides ample opportunities to develop concepts that use the potential of the CLIL approach.

"Locally, the most current term used to refer to situations where English is used as a medium of instruction [...] is *Englisch als Arbeitssprache* (*EaA; English as a working language*)" (Dalton-Puffer 2002:4). This realisation was implemented by the Ministry of Culture and Education in 1991 (cf. Gierlinger 2002:2). It is interesting that of all the subjects that are taught within the Austrian national curriculum, it seems that "[...] geography is by far the most widely taught EaA subject" (Dalton-Puffer 2002:13) which is probably one of the reason why in 2007, the publisher Ed.Hölzel released a book series called *Do it in English-Geography*, which was exclusively developed for a context of bilingual education in Geography. What is especially interesting about this series is the fact that it was especially written to fit the Austrian national curriculum and should therefore not only be in accordance with recent Austrian subject didactics in Geography (as far as content and its mediation are concerned), but also with the paradigm of CLIL and recent views about bilingual education. This is because it is the only officially approbated book series for bilingual education in Geography. Thus, this book series is significantly different from books which were originally written and produced for English native speakers, since curricula are still very distinct in every country.

In a way, the *Do it in English-Geography* books are a kind of pioneer work in the field of geography and economics in Austria. Hence, my personal interest in them. This paper will adapt a multidisciplinary focus, where the current fundamentals of both CLIL as well as subject didactics in the field of geography and economics are discussed and reflected, before answering the question whether this book series is successfully delivering a satisfying realisation of the currently popular CLIL approach and thus constitutes a useful accumulation of teaching materials that help to support effective teaching in the classroom or whether this

series is just a false friend who tries to benefit from the rise of the CLIL paradigm. In order to put the respective Austrian coursebook series in relation to other products of the same genre, the German series *Diercke Geography for Bilingual Classes* will also be analysed and evaluated. Thus a more comprehensive evaluation is made possible due to the elements of contrast and comparison.

2. Putting CLIL into Context

Before an informed and careful analysis of teaching material is possible, it is essential to define the specific requirements of and concepts behind CLIL. As Widdowson puts it: "Once you have identified the idea about language or language learning that lies behind a particular classroom activity [in our case materials], then you are in a position to make a judgement about how valid it is [...]" (Widdowson 2003:3).

This critical reflection on how the paradigm has evolved over time, as well as considering most recent developments, provides a solid basis for a deeper understanding of CLIL as a way of teaching, which is required to conduct informed judgements about the quality of the teaching material in question. Therefore, this chapter discusses basic principles and concepts of CLIL before linking it to the specific intended context of application.

When discussing the origins of the CLIL-movement, we have to be careful to distinguish between linguistic theories and approaches to language teaching. Of course, the two of them are closely related, since linguistic theory directly influences the respective approaches to teaching, which "[...] have [...] reflected changes in theories of the nature of language and of language learning" (Richards/Rodgers 1986:1). In this chapter, we will focus on one theory of how languages are learned or acquired in more detail, namely Krashen's Monitor Theory, while, later on, the communicative approach to language teaching will be examined and its linguistic background briefly discussed. They are interconnected, because without a doubt, "Krashen's writing has been very influential in supporting *communicative language teaching* (CLT) [...]" (Lightbrown/Spada 1999:40). On the other hand, as will be shown, Krashen was indeed influenced by the same linguistic tradition as CLT.

It is clear that CLIL is the result of an academic evolution over decades, which has witnessed fundamental paradigm shifts. Within the eventful and exciting history of linguistics and language teaching, it is probably Krashen's Monitor Theory and Communicative Language Teaching which can be considered to constitute the most important foundations for the development of Content and Language Integrated Learning. Thus, CLIL cannot be fully understood without either having discussed second language acquisition or CLT. Since the scope of this thesis is not a detailed account of the evolution of linguistic theories and approaches to teaching, Krashen's model and CLT will be our primary concern.

2.1. The origins of CLIL

"Content and Language Integrated Learning (CLIL) is a powerful and empowering way to learn languages" (Van de Craen et.al 2007:70). This rather positive evaluation of the CLIL paradigm emphasises both its efficiency as well as the fact that it grants its learners an independent position.

The latter circumstance has to be seen as one of its fundamental intentions, since "[d]iscussion started in earnest in the 1950s with what was termed the 'cognitive revolution' (Broadbent, 1958). [...] [T]his was largely a response to behaviourism" (Coyle/Hood/Marsh 2010:3). During the dominance of the behaviourist approach to language learning, "[...] all behaviour [was] viewed as a response to stimuli" (Haley/Austin 2007:35). This already suggests the intended role of the language learner, namely as a passively responding recipient of input rather than an actively producing agent. Thus, "[...] behaviourists account for learning in terms of imitation, practice, reinforcement (or feedback on success), and habit formation" (Lightbrown/Spada 1999:35). In other words, the language learner was not supported in acquiring the second language, but was trained to internalise preset language patterns.

However, "[...] the inadequacy of behaviourist models to account for the complexity involved in language learning" (Lightbrown/Spada 1999:45) became evident and thus the methods of language learning associated with it, such as the Grammar-translation method, the Direct method and the Audiolingual method (Haley/Austin 2007:35f.), were challenged. As a consequence, the stage for the rise of the cognitive revolution was set, which was a first step into the direction of current paradigms. Also today, "[...] the importance of cognitive engagement [is] central to the CLIL classroom [...]" (Coyle/Hood/Marsh 2010:30), which indicates, in opposition to the behaviourist tradition, the overall emphasis on the language learner as an independent, actively acting entity. Among the various theories and paradigms that emerged from the cognitive revolution, it is above all the theory of second language acquisition which heavily influenced the development of CLIL. It can be seen as one of CLILs origins and is therefore important to investigate on, because in order to understand the underlying ideas of CLIL, a brief look at some concepts of second language acquisition helps to enhance the understanding of this fascinating approach to language teaching.

2.1.1. Second language learning and acquisition

When investigating on CLIL, the issue of second language acquisition is a reoccurring topic which seems to be closely linked to it. "One of the most ambitious and influential theories in the field of SLA [...] is *Monitor Theory*, developed by Stephen Krashen. [...] It was the first theory to be developed specifically for SLA" (VanPatten/Williams 2007:25)

In his model, which he called the Monitor Model, Krashen postulates that "[...] adults have two independent systems for developing ability in second languages, subconscious *acquisition* and conscious language *learning* [...]" (Krashen 1984:1). This distinction between a conscious cognitive effort, namely active learning, and a subconscious mechanism that seems to work in the learner's brain, constitutes a very interesting way to look at language learning. Additionally, when taking introspection into account, the subconscious acquisition of, for example vocabulary or certain phrases and grammatical structures, is very familiar to anyone who has lived in a foreign country. However, apart from establishing an intuitively two factor model, the key aspect of Krashen's hypothesis is that he points out that "[...] subconscious acquisition appears to be far more important" (ibid.). As a result language teaching, from hence forth, gave the aspect of acquiring a language rather than learning it far more prominence than this was the case before.

Another very interesting aspect of Krashen's theory is the shift of focus from form to function within second language teaching, or acquisition. The latter "[...] requires meaningful interaction in the target language [...] in which speakers are concerned not with the form of their utterances but with the messages they are conveying and understanding" (ibid.). On the one hand this turning to meaning rather than form of the language can be seen as a response to the preceding behaviourist era, where "[l]earners were expected to accurately reproduce the sound system, morphology and syntax without error" (Haley/Austin 2007:11). On the other hand, Krashen's attention to a more interactive model of language can be seen as an indicator of the beginning rise of sociolinguistics at the time of his writing. Krashen and other "[...] theorists who view language learning in more social terms" (Mitchell/Myles 1998:122) draw attention to the fact that language "[...] is highly contextualized and particular to interactions in settings. [...] In other words, language is a means for regulating activity and interaction" (Haley/Austin 2007:60). This view is very important for understanding CLIL, because in a content based approach to language teaching, "[t]he course design must indicate the means by which the content is to be integrated with language objectives. Accordingly, the curriculum and materials must reflect this overall design" (Brinton/Snow/Wesche 2008:2).

Krashen's distinction between language learning and language acquisition - i.e. his acquisition-learning hypothesis (Lightbrown/Spada 1999:38) - is just one of five components of his Monitor Theory. Another important hypothesis is the so called 'monitor hypothesis' which states that "[...] the acquired system acts to initiate the speaker's utterances and is responsible for fluency and intuitive judgements about correctness. The learned system, on the other hand, acts only as an editor or 'monitor' [...] polishing what the acquired system has produced" (ibid.). According to Krashen, whether or not the language learner is able to actually use the 'monitor', depends on certain necessary conditions. First of all,

> "[...] in order to successfully monitor, the performer must have *time*. In normal conversation, both speaking and listening, performers do not generally have time to think about and apply conscious grammatical rules [...]. This condition, however, is necessary but not sufficient. [...] [A] second condition [is that] the performer must be "focused on form", or correctness. An important third condition for successful Monitor use is that the performer needs [...] to have a correct mental representation of the rule to apply it correctly" (Krashen 1984:3)

A judgement of the learned systems, based on these three necessary conditions clearly has to evaluate language learning as secondary to language acquisition, since it basically fails to fulfil its monitor function in almost any everyday life situation. As a consequence, "[w]ithin Monitor Theory, it turns out that learned knowledge is not terribly useful" (VanPatten/Williams 2007:27). Yet, it has to be emphasised that Krashen only draws attention to only two (namely speaking and listening) of the currently four established language skills, which would also include writing and reading (cf. Hedge 2001). The latter would indeed give a learner sufficient time to reflect on the learned system as well as implying a performer who is focused on form and has a correct mental representation of the language rules. Additionally, "[i]n any given utterance, it is impossible to determine what has been produced by the acquired system and what is the result of monitor use" (Lightbrown/Spada 1999:38). Since Krashen has heavily influenced CLIL, in our context this means that Krashen's monitor hypothesis has to be critically reflected. we have to be cautious to depict the learned system as too inferior, since it can be very supportive indeed.

Another important component of Krashen's model is the 'input hypothesis'. It is especially important for issues like how teaching material is supposed to be designed because, after all, materials, such as textbooks, are one kind of possible input in a classroom setting. This is indeed where Krashen also situates his hypothesis, stating that "[...] the classroom should be viewed as a place where the student can get the input he or she needs for acquisition" (Krashen 1984:10). The question is, what exactly this required input is. Krashen

calls it 'comprehensible input', which is understood as "[...] input [that] contains language slightly beyond the current level of the learner's internalized language" (VanPatten/Williams 2007:27). The formulaic definition of this concept is based on "[...] two more constructs: *i*, which he [i.e. Krashen] defines as a learner's current level of proficiency and *i*+1, which is a level just beyond the learner's current level" (ibid.). So what this hypothesis basically suggests is that by slightly overburdening language learners, they are likely to acquire the target language rather effectively. This takes place in

> [...] three stages [...] [which are gradually] turning input into *intake*:
> **1** understanding an L2 i+1 form (that is, linking it to a meaning);
> **2** noticing a gap between the L2 i+1 form, and the interlanguage rule which the learner currently controls;
> **3** the reappearance of the i+1 form with minimal frequency ([Krashen] 1983, pp. 138-9) (Mitchell/Myles 1998:126)

The problem with this hypothesis is that its logic foundations, which "[...] appeal to intuition, but which have not been substantiated by empirical studies" (Lightbrown/Spada 1999:39), are very problematic from an academic point of view. One of the main problems in this respect is the fact that "[i]t is not clear in Monitor Theory exactly what *1* is, or how either *1* or *i* is identified" (VanPatten/Williams 2007:27). Looking closely at the above mentioned three stages of intake, "[t]he concepts of 'understanding' and 'noticing a gap' are not clearly operationalized, or consistently proposed [...]" (Mitchell/Myles 1998:126).

This, of course, leaves ample room for interpretation. In terms of learning materials, developing textbooks, which are supposed to support second language acquisition, would be very difficult if their design was solely based on Krashen's hypothesis. If the concrete constructs of a theory are not clearly operationalised, it is practically impossible to evaluate whether or not a definitive product is in accordance with a theory's underlying argument. As will be shown, this subtle problem of on the one hand appealing to intuition, but on the other hand missing clear cut boundaries and definitive elements, was partially passed on to the contemporary approach of CLIL.

The fourth hypothesis stated by Krashen is called 'the natural order hypothesis'. It basically deals with a fundamental problem of second language teaching, namely in what order new aspects of the language, such as grammatical structures, are to be presented to the learner. Although it was not Krashen's primary intention to answer this specific question, his hypothesis tries to explain how certain elements of a language are acquired and, most importantly, in which order this takes place. According to his theory, "[...] second language

learners seem to acquire the features of the target language in predictable sequences. Contrary to intuition, the rules which are easiest to state, [e.g. the rule for the third-person s in English], [...] are not necessarily the first to be acquired" (Lightbrown/Spada 1999:39). Furthermore, "[r]esearchers claimed that these orders were independent of instructional sequences [...]" (VanPatten/Williams 2007:27), which would be, in its most radical interpretation, an academic permission to forfeit any kind of syllabus or curriculum within language teaching. If we think even one step further, the independence of acquisition from instruction would imply that any language teaching is basically obsolete. Yet, there are still curricula and concrete concepts, as well as language teachers to be observed in contemporary language teaching As was discovered rather early, this is because "[...] many second language acquisition researchers agree (on the basis of research evidence or their own introspection) that language teaching does - at least in some cases - positively affect acquisition [...] " (Lightbrown 1985:107). Thus Krashen's hypothesis has to be considered critically, since it again grants acquisition a very superior position over learning, which, nevertheless, still has its justified place within language teaching (as is indicated by the term 'language learner' rather than 'language acquirer'). However, Krashen, despite all the criticism, draws attention to the very issue of how to present certain features of a language and thus raises awareness of a crucial problem. Additionally, "[...] subsequent research has confirmed that learners pass through sequences or stages in development" (Lightbrown/Spada 1999:39), so the hypothesis has its point.

The final hypothesis in Monitor Theory, the 'affective filter hypothesis', tries to explain why language learners do not always succeed in acquiring language features and thus show differences in the progress and extend to which they master a language. Krashen's construct, the affective filter, draws attention to the importance that learners are "[...] comfortable and receptive to the input in their learning environment" (VanPatten/Williams 2007:28). It is "[...] an imaginary barrier which prevents learners from acquiring language from the available input. 'Affect' refers to such things as motives, needs, attitudes, and emotional states" (Lightbrown/Spada 1999:39). Hence, "[l]earners who are comfortable and have a positive attitude toward language learning have their filters set low, allowing unfettered access to comprehensible input" (VanPatten/Williams 2007:28). From a practical point of view this hypothesis is plausible because, recalling from introspection, probably every learner has been acquiring as well as learning input more easily if he or she has a positive intrinsic motivation and attitude towards the target language. In this respect, it seems

that "[a]ffect is, of course, relevant to language learning as well as acquisition, but it is the acquisition- affect relationship that is particularly sensitive" (Johnson 2001:85). This supports Krashen's claim that

> [...] if the direct relationship between acquisition and attitudinal factors does exist, and if our major goal in language teaching is the development of communicative abilities, we must conclude that attitudinal factors and motivational factors are more important than aptitude. This is because conscious learning makes only a small contribution to communicative ability (Krashen 1984:5).

This statement is an obvious synthesis of his 'monitor hypothesis' and his 'affective filter hypothesis'. If we look at Krashen's reasoning, we can detect two important implications. First of all, his claim implies that even learners who are not naturally gifted to learn a foreign language, in other words possess a low level of aptitude, can succeed in acquiring a language. As a consequence, within Monitor Theory, language learners are not particularly favoured or disadvantaged by nature when it comes to learning a foreign language. This in turn means for a language classroom, as a linguistic environment, that potentially everyone is able to reach approximately the same language level. The second implication of Krashen's statement is indeed concerned with the linguistic environment. If the learner's attitudes towards the target language are more important than aptitude, the classroom, again as a linguistic environment, has to provide as much motivation as possible as well as fostering a positive attitude. If we add learning materials to the classroom environment, and they are obviously a part of it, this means that they have a significant portion in making language learning interesting and motivating which in turn means that they can contribute to a positive attitude towards the target language.

It is clear that Krashen's theory is not without its problems. As was mentioned above, some parts are rather dependent on intuition than on evidence. Yet, "[d]espite these problems, Krashen's proposals encouraged other researchers to examine more closely the character of the language data available as input to second language learners" (Mitchell/Myles 1998:127). Furthermore, although the paradigm had developed before, he inspired consecutive developments and research in the field of Communicative Language Teaching.

2.1.2. Communicative Language Teaching

Despite Krashen's influence on Communicative Language Teaching (CLT), his writing were, by no means, among the pioneer work of this approach. Contrariwise, it were probably more or less the same linguistic theories which influenced both CLT and Krashen's Theory of second language acquisition. As was, for example, illustrated by his remark on aptitude and attitude, Krashen's idea of a (second) language is that it finally should provide the learner with 'communicative abilities'. This shows that he was clearly influenced by the same linguistic tradition. So both Krashen's Monitor Theory and Communicative Language Teaching share a common tradition and certainly have influenced each other mutually.

Similar to the above mentioned cognitive revolution, language teaching has witnessed a paradigm shift. From the 1840s to the 1940s, an approach called Grammar Translation dominated language teaching in Europe (Richards/Rodgers 1986:4). The basic characteristics of this method were that

- the aim of language learning was to enable learners to read literature or to benefit from the mental challenge itself as well as the intellectual development
- reading and writing were of major concern
- vocabulary was taught based on the respective literature
- the sentence was considered to be the basic unit of language teaching and practice
- accuracy was emphasised
- grammar was taught deductively
- the learner's first language was the medium of instruction (cf. Richards/Rodgers 1986:3f.)

If we look at these basic principles, the notion of a behaviouristic tradition in the background is evoked. We can observe a focus on form rather than meaning or function, as well as very hierarchical concept of language. Additionally, the importance of literature today seems very alienating to a person who is familiar with current opinions of language teaching. However, historically this makes perfect sense, because the Grammar Translation Method was "[...] based on the study of Latin [...] (Richards/Rodgers 1986:2). This, like the approaches in the behaviourist tradition, put the learner in a very passive position.

However, with the rise of linguistics, language teaching innovations, which proposed a gradual shift from form to function, took place in the nineteenth century and eventually "[...] became known as the Reform Movement in language teaching" (Richards/Rodgers 1986:7). Yet, "[t]he origins of Communicative Language Teaching [...] are to be found in the changes in the British language teaching tradition dating from the late 1960s" ((Richards/Rodgers 1986:64). Here, the theory of Hymes played a major role, because

> [...] Hymes (1971) had reacted to Chomsky's (1965) characterization of the linguistic competence of the "ideal native speaker" and proposed the term *communicative competence* to represent the use of language in social context, or the observance of sociolinguistic norms of appropriacy (Savignon 2001:16).

Due to the fact that it was rather Hyme's theory than Chomsky's propositions about language, which had a stronger influence on CLT, we will have a closer look at some basic principles of 'communicative competence'.

As was pointed out by Savignon, Hymes's concern with language was of a more sociolinguistic nature than it was the case with Chomsky, who was mainly focused on structure. The difference between the two is that "[t]he structural view of language concentrates on the grammatical system, describing ways in which linguistic items can be combined" (Littlewood 1983:1) while the functional view of language emphasises "[...] the functional and communicative potential of language" (Richards/Rodgers 1986:4). Latter points out that "[...] whereas [a] sentence's *structure* [e.g. interrogative] is stable and straightforward, its *communicative function* [e.g. request, order, statement] is variable and depends on specific situational and social factors" (Littlewood 1983:2).

Hymes argument was that it would not be sufficient if a child would only possess grammatical knowledge about a certain language and that "[...] [w]e have to account for the fact that a normal child acquires knowledge of sentences, not only as grammatical, but also as appropriate" (Hymes 1979:277). Furthermore, "[...] a child becomes able to accomplish a repertoire of speech acts, to take part in speech events, and to evaluate their accomplishment by others" (ibid.). Thereby, Hymes links the inherent skills of a speaker to the surrounding environment and claims that "[t]he acquisition of such competency is of course fed by social experience, needs, and motives [...] (Hymes 1979:278). This clearly shows his sociolinguistic approach to the nature of language because it is both stimulated by and used within a social system. Thus, learning a language is far more than learning specific structures, but rather to additionally learn the rules of appliance. In other words, a competent language user has knowledge of the underlying rules of the system he or she communicates in.

In other words, for Hymes, 'competence' is "[...] the most general term for the capabilities of a person. [...] Competence is dependent upon both (tacit) *knowledge* and (as its part) *use*" (Hymes 1979:282). However, this duality of knowledge and use would have been very vague, in terms of what the implications of communicative competence for language itself as well as language learning and teaching actually are. Therefore, Hymes draws a more detailed picture of what is actually necessary to be communicatively competent. In his view,

> [...] a person who acquires communicative competence acquires both knowledge and ability for language use with respect to
> 1. whether (and to what degree) something is formally possible;
> 2. whether (and to what degree) something is feasible in virtue of the means of implementation available;
> 3. whether (and to what degree) something is appropriate (adequate, happy, successful) in relation to a context in which it is used and evaluated;
> 4. whether (and to what degree) something is in fact done, actually performed, and what its doing entails. (Hymes 1972:281, quoted in Richards/Rodgers 1986:70)

What is significant of this theory of language competence is the vast amount of metalinguistic knowledge and awareness which is required of a speaker. It makes explicit that a grammar and the structural components of the language system are just one part. Far more important seem to be social contexts in which a speaker makes an utterance as well as cultural awareness. This is also explicitly stated by Hymes when he writes that "[i]*n sum, the goal of a broad theory of competence can be said to be to show the ways in which the systemically possible, feasible, and appropriate are linked to produce and interpret actually occurring cultural behaviour*." (Hymes 1979:286, original empahsis).

So we can observe an obvious shift in focus from the structure and form of language to its function as a means of communication. Of course, this is also reflected in Communicative Language Teaching, since Hymes is considered to be one of its intellectual forefathers, although "CLT [...] can be seen to derive from a multidisciplinary perspective that includes, at a minimum, linguistics, psychology, philosophy, sociology, and educational research" (Savignon 2001:16). This plurality of background is certainly one of CLT's outstanding strengths, since it grants a more holistic approach to what language learning actually implies and means. On the other hand, it is also a potential weakness when we want to grasp what it really is, because "[t]here is no single text or authority on it, nor any single model that is universally accepted as authoritative" (Richards/Rodgers 1986:66). This may seem to be a very odd kind of criticism at first glance, because an academic concept is not necessarily dependent of one clearly defined reference or model, especially not nowadays where multidisciplinary models, theories and approaches are widely spread. Nevertheless, the diverse background of CLT makes it rather difficult to actually define and discuss what it represents. In other words, "[t]he real problem when attempting to define CLT [...] is that it means different things to different people" (Harmer 2011:69). Since a discussion of the various concepts of CLT is not a primary focus of this thesis, only the most common features and foundations of CLT can be discussed below.

It is clear that Hymes's theory of communicative competence is of major concern when it comes to the influence which linguistics had on CLT. This is reflected in the fact that "[t]he ability to communicate effectively in English is now a well-established goal in ELT [English Language Teaching]" (Hedge 2001:44) and that, within the communicative approach, "[t]he purpose of language (and thus the goal of language teaching) is communication" (Celce-Murcia 2001:9). Even more obvious is Hymes's influence indicated by the circumstance that "[t]eaching materials, course descriptions, and curriculum guidelines proclaim the goal of *communicative competence*" (Savignon 2001:13). The overall aim of CLT is now to "[...] attempt to operationalize the concepts of communicative competence and apply it across all levels of language program design, from theory, to syllabus design, to teaching techniques" (Richards 2002:22).

The question which now arises inevitably is what exactly is involved in communicative competence within CLT, since it "[...] has become a generalised 'umbrella' term to describe learning sequences which aim to improve the students' ability to communicate" (Harmer 2011:70). According to Savignon - who obviously based her assumptions on the model proposed by Canale and Swain - in the language classroom, communicative competence involves four constituents which are considered to be of major importance for the language learner:

- *grammatical competence*, which is the ability to recognise the lexical, morphological, syntactic, and phonological feature of a language and to make use of them when interpreting and forming sentences
- *discourse competence*, which refers to the interconnectedness of a series of utterances, and/or written words and phrases to form a meaningful whole
- *sociocultural competence*, which refers to the social rules of language use and the requirement to understand the social context in which language is used
- *strategic competence*, which refers to the ability to use strategies in order to cope with constraints of actual language performance, such as insufficient knowledge of language rules or limitations in their application (cf. Savignon 2001:17f.)

Similar to Hymes's original theory, we can observe four components which are focused on the meaning of language rather than its form, although the latter constitutes one of the pillars of the model. As was mentioned above, the concrete conceptions of CLT differ among the literature, which is illustrated by Hedge, who defines the components of communicative competence as follows:

- *linguistic competence*, which refers to the knowledge of a language itself, its form and meaning. Thus it implies knowledge of spelling, pronunciation, vocabulary, word formation, grammar and linguistic semantics

- *pragmatic competence*, which refers, on the one hand, to the ability to achieve certain communicative goals or intentions and, on the other hand, to social awareness in the sense of Hyme's appropriateness
- *discourse competence*, which refers to the ability to crate and understand coherent texts and/or conversation
- *strategic competence*, which refers to the ability to cope with a lack of linguistic resources in a communicative situation
- *fluency*, which refers to the ability to link units of speech together, showing facility and no strain or inappropriate slowness or hesitation respectively (cf. Hedge 2001:46-54)

If we compare the two concepts, it is apparent that they are basically very similar. Both show a heavy emphasis on language use as well as the sociocultural context of its use, while depicting the form of language as just one of many factors of successful communication. The differences between the two schemes is that they situate certain abilities in different competences or label them differently. For example, pragmatic competence and sociocultural competence share a common denominator in the ability of social awareness. If reflected critically, the two models show far more common features than actual differences. Although many important theorists like Bachmann and Canale and Swain (cf. ibid.) have greatly contributed to the development to a theory of communicative competence, there is still a noticeable influence by Hymes's theory in both of them, which indicates that Hedge and Savignon see language in a very sociolinguistic tradition.

Overall, CLT and its theories put emphasis on communication rather than form when it comes to analysing and using language. As was shown, they make us aware of the fact that language is a very complex thing and that successful and effective communication is a highly complicated process. While Hymes laid the base by drawing attention to communicative competence, CLT tries to apply it in the language classroom and thus tries to enable the language learner to communicate successfully. Additionally, the language learner or language user is at the centre of attention, because the whole theory of CLT, including Hymes, is concerned with what abilities a person has to possess. Compared to the Grammar Translation Method mentioned earlier, this is a clear shift from the language itself as a core issue, towards the actual application of it by the learner or speaker. Which concrete elements are actually involved in this final goal, may be subject to debate and is interpreted differently within the literature.

However, the common ground is ample and it seems that nowadays there is no doubt about the importance for a language learner to communicate successfully.

2.1.3. Why CLT and a theory of second language acquisition are relevant to CLIL

After we have briefly discussed the most important and influential sources from which CLIL can be seen to originate, the question of why it is especially CLT and second language learning that are of such importance.

When looking at the two origins discussed above, we can draw two basic conclusions from them. The first one, coming from second language acquisition, is that in order to actually use a language, it is better to acquire it rather than learn it. A

> [...] second language is most successfully acquired when [...] the language input is at or just above the proficiency of the learner and when there is sufficient opportunity to engage in meaningful use of that language in a relatively anxiety-free environment. [...] CLIL offers a means by which learners can continue their academic or cognitive development while they are also acquiring academic language proficiency. (Navés 2009:25f.)

The clear reference to Krashen's input hypothesis made by Navés clearly shows that his theory of second language acquisition is still present among the arguments in favour of CLIL. On the other hand, the reference to meaningful interaction is obviously linked to CLT, which has, as is especially illustrated by Hedge's scheme, meaningful interaction as its ultimate goal. As Harmer expresses it:

> [a] major strand of CLT centres around the essential belief that if students are involved in meaning-focused communicative tasks, then 'language learning will take care of itself' [...] and that plentiful exposure to language in use and plenty of opportunities to use it are vitally important for a student's development of knowledge and skill. (Harmer 2011:69)

In this sense, CLIL is the synopsis and synthesis of second language acquisition theory and a theory of communicative competence, brought into practice. As can be deducted from Navés’s evaluation, CLIL offers the opportunity to use language in a meaningful way and thus stimulates language acquisition rather than language learning.

Since CLIL is heavily influenced by theories which were in turn influenced by sociolinguistics, psycholinguistics as well as disciplines other than structural linguistics, we will discover that the arguments which are brought forward in favour of CLIL still carry the undertone of Krashen, Hymes and other theorists.

Therefore, it is important to keep in mind the basic features of the theories discussed above when we now turn to investigate on the question what exactly Content and Language Integrated Learning is, how it can be realised and what this means for the concrete teaching materials that are analysed and evaluated below.

3. Operationalising CLIL

Now that the most important roots of CLIL have been clarified and were briefly discussed, the next logical step is to have a look at what is meant by the term 'Content and Language Integrated Learning'. As is discovered below, this is not an easy task, since there seems to be a diverse use of CLIL in the literature.

Therefore, as a first move, the concept of CLIL will be examined in more detail, before continuing to have a look at concrete forms and the realisation in Austria. This is necessary in order to be able to link the textbook series *Do it in English-Geography* to its particular educational environment and intended context of application. Additionally, this chapter will investigate the question of whether a new concept of didactics is necessary in order to implement CLIL in practice, since this is a key issue if we want to evaluate the respective course books based on properly elaborated criteria.

3.1. The concept of CLIL

In its most fundamental meaning, "[...] Content-and-Language-Integrated-Learning (CLIL) refers to educational settings where a language other than the students' mother tongue is used as a medium of instruction" (Dalton-Puffer 2007:1). Additionally, it is also "[...] a dual-focused educational approach in which an additional language is used for the learning and teaching of both content and language" (Mehisto/Marsh/Frigols 2008:9).

This very basic definition of CLIL immediately shows that we are not dealing with a single theory or a particular model of language, language learning or teaching, as it has been the case so far, but with a whole educational concept. The innovation about CLIL, as is pointed out throughout the entire literature is that, "[...] it is an approach which is neither language learning nor subject learning, but an amalgam of both and is linked to the processes of convergence [...] [which] involves the fusion of elements which may have been previously fragmented [...]. This is where CLIL breaks new ground" (Coyle/Hood/Marsh 2010:4). So what CLIL is essentially trying to achieve is the abolition of the traditional binary system of content and language subjects. As the experienced academic as well as the practitioner of any profession may intuitively guess, changing established structures is not always an easy task. Surprisingly, in the case of CLIL, we observe a process of fast progression throughout the whole world, which is why it is sensible to have a brief look at the circumstances which accompany this phenomenon.

3.1.1. The global world as the incubator of CLIL

With CLIL, at least in terms of its acceptance among various institutions as well as within the academic discourse, it has been observed that "[t]he speed at which [...] [it] has spread across Europe since 1994 has surprised even the most ardent of advocates" (Maljers/Marsh/Wolff 2007:7). This surprising development is not limited to Europe, since "[i]n recent years [...] integrating the teaching of languages with the teaching of academic subject matter has become more and more popular all over the world" (Navés 2009:22). This apparent rise of the promotion of second or foreign languages is actually nothing outstanding, since "[b]oth from a contemporary and a historical perspective, bilingualism or multilingualism is the norm rather than the exception" (Richards/Rodgers 1986:1).

However, the

> [...] recent growing interest in CLIL can be understood by examining best practice in education which suits the demands of the present day. Globalization and forces of economic and social convergence have had a significant impact on who learns which language at what stage in their development and in which way. (Coyle/Hood/Marsh 2010:2)

So, expressed from a different and simplified angle, what has happened is that the current zeitgeist of convergence in the economic as well as social sense, was imprinted on the educational system. This is fairly logical if we keep in mind that the educational system is obviously embedded in society and therefore also part of the economic system which has particular demands due to its particular organisation, institutions and development. Nowadays, the economy demands flexibly educated people who are in turn flexible in their potential fields of occupation. It seems that everyone is welcome to bring his or her particularity and add it to the ever evolving knowledge pool of economy.

This specific requirement in turn has left its traces within the education system at almost all levels. For example, B. Kumaravadivelu postulates that "[...] the L2 profession is faced with an imperative need to construct a postmethod pedagogy" (Kumaravadivelu 2001:537), which is not according to specific predetermined methods, but rather based on the principles of particularity (in the sense that it has to consider the specific local social context), practicality (i.e. a theory of practice which emerges from practice rather than vice versa) and possibility (i.e. acknowledging the socio-political consciousness of all participants) (cf. ibid.). What is interesting about the demands of a postmethod pedagogy is the fact that, on the one hand is seems to reject established paradigms such as the concept of method, moving the academic discourse in a direction of plurality and individuality. The mentioned pillars are

obviously in favour of a localised and very differentiated approach to language teaching and pedagogy. On the other hand, it is doubtable whether this is indeed compatible with the globalised labour market, which, apparently, also likes to be able to judge what qualifications a person possesses beforehand. The latter circumstance is reflected, for example, in the process of standardisation of tertiary education within the European Union, the Bologna Process, which has "[...] three overarching objectives [...]: introduction of the three cycle system (bachelor/master/doctorate), quality assurance and recognition of qualifications and periods of study" (http://ec.europa.eu/education/higher-education/doc1290_en.htm 16 April 2011). Of course, the Bologna Process is a means to deepen the European integration and a great opportunity for students to study in the whole of Europe, but another implication is that studies and degrees become comparable between the countries. Therefore, also university graduates are educated for a global labour market.

So there is obviously a parallelism of two opposing forces, namely standardisation versus particularity. At first, this seems paradoxical. Either peoples' qualifications are comparable, which implies that their education has to be comparable and therefore standardised, or education is supposed to encourage the development of individual, and therefore particular, strengths or core areas, which in turn implies that education and consecutively acquired qualifications are not comparable. The contemporary answer to this dilemma seems to be, at least in Austria, the definition of competences (cf. BMUKK http://www.bmukk.gv.at/medienpool/782/ahs8.pdf 12 April 2011). Thus, the final aims of education are defined by specific competences which have to be acquired in the course of it. Following the tradition of Hymes and others mentioned above, at least in case of the languages, communicative competence is at the centre of interest. How the learner gets there, is up to the individual classroom setting. Obviously, this is a convenient solution for both comparability and particularity within the curriculum.

The heavy promotion of CLIL can be seen as one of the by-products of the effort to converge individuality with comparability. On the one hand, "[t]he impact of globalization [...] highlighted the need for better language and communication education outcomes" (Coyle/Hood/Marsh 2010:4) and thus living up to the expectations of a modern labour market. On the other hand, CLIL perfectly serves the claim for particularity, since "[...] it comes in a wide range of shapes [...]" (Smit 2007:3). Another, not unimportant argument in favour of CLIL "[...] revolves around notions of efficiency. [...] If two things [i.e. content and language]

can be learned in the slot otherwise taken up by only one, this clearly saves time (Dalton-Puffer 2007:8) and hence money.

As for Europe, CLIL has been prioritised since 1994 and has shown a vast expansion within Europe (cf. (Maljers/Marsh/Wolff 2007). Apart from the reasons already mentioned, this focus of the European Union on the advancement of CLIL can be summarised as being the result of a process that

> [...] was due to four simultaneous major proactive forces: families wanting their children to have some competence in at least one foreign language; governments wanting to improve languages education for socio-economic advantage; at the supranational level, the European Commission wanting to lay the foundation for greater inclusion and economic strength; and finally, at the educational level, language experts seeing the potential of further integrating languages education with that of other subjects. (Coyle/Hood/Marsh 2010:8)

In other words, the establishment of CLIL can be evaluated as being carried by almost all parts of society. Accordingly, its public acceptance is not really surprising. Therefore, it can be said that CLIL is indeed a product of current society and its global economy, which have been functioning as fertile incubators of this new concept.

3.1.2. A theoretical framework for CLIL

Now that the specific surrounding conditions of CLIL have been discussed it is time to turn to the attempt to define CLIL as a theoretical concept more clearly. This is easier said than done, because, as was already discovered, CLIL is not a single theory or practice, but [...] an umbrella term covering a dozen or more educational approaches [...]" (Mehisto/Marsh/Frigols 2008:12).

A first step to define this behemoth of different approaches is to have a look at the arguments that are brought forward in its favour. Besides the already mentioned advantage in the area of efficiency, "[r]ationales for the use of CLIL tend to direct their arguments towards the perception that outcomes of foreign language learning in school settings are frequently seen as unsatisfactory [...] (Dalton-Puffer 2007:2). This lack of successful output seems to be one of the major reasons why other teaching approaches, including CLT have received some criticism.

What seems to classify CLIL as outstanding in comparison to other paradigms is that it "[...] creates conditions for naturalistic language learning, thereby contrasting CLIL with the more strongly instructional focus of classical foreign language education" (Dalton-

Puffer/Smit 2007:8). Within this argument and its reasoning, the clear influence of second language acquisition is obvious. Instead of consciously learning a language, students are intended to acquire the target language naturally and rather incidentally. One is subtly reminded of Krashen's learning-acquisition hypothesis as well as other aspects of his Monitor Theory.

Another prominent argument in favour of CLIL

> [...] revolves around the purpose and the meaning of language use in the classroom. [...] [L]earning about geography, science or history in the CLIL classroom gives the use of the foreign language a purpose over and beyond the language itself. [...] The crucial importance of meaningful communication [...] has also been a central dogma of the communicative approach [...] (ibid.)

Again, the influence of the above discussed origins is noticeable. Obviously, CLIL carries on one of CLT's core traditions, namely to make communication in the classroom meaningful and purposeful. This, of course raises the question what the difference between CLIL and CLT might be.

The latter "[...] was one step towards providing a more holistic way of teaching and learning languages, but for various reasons, especially relating to authenticity, has been insufficient in realizing the high level of authenticity of purpose which can be achieved through CLIL" (Coyle/Hood/Marsh 2010:4). In a way, CLIL is thus obviously seen as the advancement of CLT in terms of meaningful communication. This superiority is an inherent aspect of its design, because at least one ultimate purpose is always given, namely to acquire competence in the respective content subject. In the course of achieving that "[...] CLIL classroom practice involves the learners being active participants in developing their potential for acquiring knowledge and skills (education) through a process of enquiry (research) [...] and means for problem solving (innovation)" (ibid.). In other words, CLIL tries to stimulate the learner's autonomy when it comes to personal development. This seems to be a very empowering and sensible concept, especially with regard to professional practice where autonomy is certainly an advantage. After all, CLIL is an approach which "[...] attempts to bridge the gap between school life and real life. [...] [It] is a pedagogical framework within which learners are able to deal with professional and academic matters in the same way as they will have to later on in life" (Wolff 2007:15). Yet, the other side of the coin may be the danger that the learner is left alone rather quickly, since, apparently by its very definition, CLIL classroom practice gives at least some of the responsibility of learning output to the

learners themselves. Practically speaking, the respective teacher has to be careful not to overrate this invitation to self-responsibility.

So far, CLIL can be classified as the convergence of all the demands proposed by recent linguistic theory and modern language teaching approaches: it promotes acquisition over learning, is meaningful communication in practice and grants the learner the freedom to actively participate in his or her own right. Additionally, it seems to bring a scent of a working life setup to the otherwise generic school classroom by demanding self-guided and self-induced participation and problem solving. What has remained in the dark so far is the issue of what exactly Content and Language Integrated Learning intends to achieve in order to draw an actual benefit from its apparently inspiring concept, which has brought forward many arguments on the positive side.

Since it is so complicated to grasp what precisely CLIL is and what it finally aims for, it may be a good starting point to explicitly mention what it is undoubtedly not. "CLIL is not about 'translating' first-language teaching and learning into another language in the hope that learners will be immersed [...] and seamlessly learn in another language" (Coyle/Hood/Marsh 2010:27).

In fact, CLIL tries to provide and encourage conditions which support and enhance the successful achievement of certain overall goals, namely

- grade-appropriate levels of academic achievement in subjects taught through the CLIL language;
- grade-appropriate functional proficiency in listening, speaking, reading and writing in the CLIL language;
- age-appropriate levels of first-language competence in listening, speaking, reading and writing;
- an understanding and appreciation of the cultures associated with the CLIL language and the student's first language;
- the cognitive and social skills and habits required for success in an ever-changing world (Mehisto/Marsh/Frigols 2008:12)

These five goals immediately show both the holistic approach to teaching pursued by the CLIL approach. What is interesting and new is that the specific situation of the particular learner (i.e. his or her mother tongue as well as cultural background) constitute fundamental basics. What is especially striking is that it seems that there is a balance between the importance of the first and the second language. This is obviously due to the influence of the theory of linguistic interdependence, which, among other things, claims that "[...] learners of a subsequent language (L2) already have conventions in their first language (L1) background,

[so] these can be their potential resources" (Haley/Austin 2007:16). A learner who possesses rich knowledge and competence in his or her L1 can therefore draw from broader resources which in turn positively influences the acquisition of the L2. On the other hand, the goals of CLIL do not only recognise where the learners come from, but also where they should go in the future. Through adding the pillar of cognitive and social skills, CLIL introduces a whole new dimension of professional development. Thus, the classroom becomes more than a place of learning. It becomes a place of personal development and professional training. As a consequence, this implies a very particular and individualised approach to teaching.

By acknowledging this particularity of learners, CLIL also divides its emphasis of education on two fronts, namely the first and second language (including their cultures), as well as content, cognition and social skills. These two basic groups which were formally treated as basically two ends of the learning spectrum, are thus merged and put into focus. If we group the subsequent goals to an overall catalogue of aims, it becomes apparent that CLIL pursues education and acquisition on three levels, namely "[...] content, language and learning skills" (ibid.). These three foci can be considered the fundamental triangle which CLIL strives after and thus can be considered to be the theoretical foundations of it.

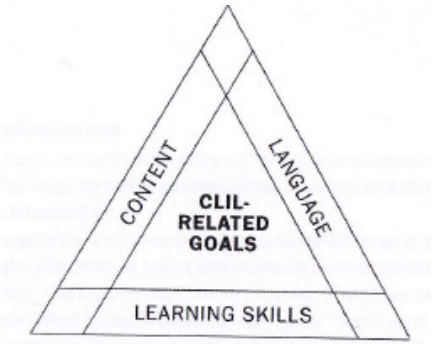

Figure 1: The three goals of CLIL (Mehisto/Marsh/Frigols 2008:12)

Of course, this step towards a more holistic pursuit of educational goals bears the question which of the three (if any) has to be seen as primary and in how far the three are interrelated (cf. figure 1). Concerning the former, it seems that especially the relationship between content and language seems to be a point of heavy debate among scholars. It is also highly relevant for the aim of this thesis, namely the evaluation of teaching materials. Therefore, it is necessary to take a closer look at the dilemma of whether CLIL is teaching a language through specific content, vice versa or if it is indeed something completely different.

3.1.3. Language versus content?

Within the CLIL triad, it seems that it is particularly the relationship between language and content which is subject to quite some debate. "This relationship, despite of the presence of the word "integrated" in CLIL, is characterized by a good deal of tension and sometimes conflict between the two areas" (Dalton-Puffer 2007:5). This is rather surprising, because the literature which deals with theoretical aspects of CLIL repeatedly points out that "[...] language is not the primary subject taught" (Mehisto/Marsh/Frigols 2008:102).

Moreover, within the CLIL paradigm and its concrete realisations, such as bilingual education, the content is seen as the primary element: "[d]ie Fremdsprache ist weniger Gegenstand des Unterrichts als vielmehr ein Medium zur Bewältigung von fachspezifischen Lern-und Arbeitsprozessen. Hieraus folgt, dass der gezielte Aufbau fachsprachlicher Elemente im Mittelpunkt der sprachlichen Lernprozesse stehen muss" (Otten/Wildhage 2007:18). This defines the relationship between language and content rather straightforwardly. While former is seen as a tool to acquire knowledge and skills in the respective content subject, latter is considered to be the underlying purpose and target of teaching. Furthermore, Otten and Wildhage explicitly say that if language teaching takes place in the content subject, the subsequent acquisition of content-specific linguistic competence is the ultimate purpose and not a deeper understanding of the foreign language as such. In other words what has to be constantly improved are the tools, yet they remain in their supportive position and never become the explicit target of learning and teaching as such.

As for Geography, which is the target content-subject of the teaching materials in question, there seems to be accordance with the primacy of the content subject, since "[a]us der Sicht der Sachfachdidaktik ist der bilinguale Unterricht nur von Interesse, wenn das Sachfach nicht unter den fremdsprachlichen Anforderungen leidet" (Meyer 2009:8). This obviously indicates that some of the debate originates from"[...] content teacher[s] [who are] concerned about the consequences of foreign language use on the students' eventual knowledge of the subject" (Dalton-Puffer 2007:5). From the perspective of any content-subject this is a rather comprehensible position, since they are indeed interested in developing their content-specific practices and techniques and are therefore not interested in concepts which slow down the progression of the subject. To be precise, "[t]he concern reflects two fears: firstly, that the foreign language may slow down proceedings so that less subject matter can be covered and secondly, that lower language proficiency may result in reduced cognitive complexity of the subject matter presented and/or learned. The concern is thus about both

coverage and depth" (ibid.). Hence the (justified) position that Geography and its related didactics and paradigms have undoubtedly to be in the foreground of teaching (cf. Ch. Sitte 1998). However, it has to be admitted that although

> [d]uring the past fifteen years a considerable number of studies have appeared, especially in Scandinavia and Germany, which provide empirical evidence of the linguistic advantage of pupils when they are taught non-linguistic topics in an L2 [...] [,] [s]cepticism remains [...] as to whether the acquisition of *knowledge* is similarly efficient [...] (Stohler 2006:41).

Additionally, the worries about the negative influence of CLIL on the content-subject may be due to the circumstance that "[m]any scholars tend to believe that within the CLIL paradigm content subjects are taught in a foreign language only to improve the students' foreign language competence" (Wolff 2007:16). As was already shown, this is clearly not the case. If it was then all content subjects would be mere topics in a second language curriculum and would therefore not enhance the students' cognitive and technical competences in such manifold ways at it is the case.

On the other hand, regarding language as a tool for knowledge acquisition does not mean that "[...] language as such should not be focused upon in the classroom" (ibid.). Or using the metaphor once again: if you have tools which help you to get your engine working, why not taking a sporadic look at them so that they are polished and up-to-date? Even if "[l]anguage may not be the designated subject of in-class interaction in CLIL, [...] there are language-related goals on top of the content subject related ones or else what would be the point of doing CLIL at all?" (Dalton-Puffer 2007:6). Therefore, language and content have to be considered as inseparable within CLIL which is thereby "[...] eliminating the artificial separation between language instruction and subject matter classes which exists in most educational settings" (Brinton/Snow/Wesche 2008:2).

The problem which arises now is how exactly we have to define the specific relationship between language and content or, more precisely, there is a "[...] need to make explicit the interrelationship between content objectives and language objectives" (Coyle/Hood/Marsh 2010:36). If the language component of a CLIL setting is supposed to cater to the specific content-subject we have to identify specific language needs which occur in the respective context. This, of course, is a very specific and thus particular task, since, as we have seen before, CLIL is very much anchored in unique settings.

Nevertheless, there are general categories which are likely to be applicable to any classroom situation imaginable. These are expressed in the so called 'Language Triptych' model, which does indeed clarify the interrelationship between language and content and,

moreover, in what ways language may be used to support the acquisition of knowledge. Again, this model of the CLIL language of instruction constitutes a triangle:

- **Language *of* learning** is an analysis of language needed for learners to access basic concepts and skills relating to the subject theme or topic. [...] For the subject teacher [this] requires greater explicit awareness of the linguistic demands of the subject or content [...]
- **Language *for* learning** focuses on the kind of language needed to operate in a foreign language environment. [...] Developing a repertoire of speech acts which relate to the content, such as describing, evaluating and drawing conclusions, is essential for tasks to be carried out effectively. [...]
- **Language *through* learning** is based on the principle that effective learning cannot take place without active involvement of language and thinking. When learners are encouraged to articulate their understanding, then a deeper level of learning takes place. [...] (Coyle/Hood/Marsh 2010:37; bullet points added)

If a teacher considers these three points while preparing a CLIL module, the language-component heavily supports and enriches the content-component. The first of the three elements, language of learning, gives the teacher the opportunity to critically reflect on subject-specific vocabulary and the concepts which underlie them. However, this is not only true for the teacher, but also for the students themselves. Especially in Geography, this leads to certain advantages:

> [e]in Vorteil des bilingualen Unterrichts gegenüber dem Erdkundeunterricht auf Deutsch liegt darin, dass der Blick im kontrastiven Vorgehen auf die Sprache bzw. auf die Begriffs- und Vorstellungsbildung gelenkt wird. Schüler hinterfragen einen auf Englisch eingeführten (Fach-)Begriff und setzen diesen in Beziehung zum deutschen (Fach-)Begriff (Meyer 2001:31).

By this, the bilingual teaching, which is a form of CLIL, encourages the learner to think not just *in* content-specific vocabulary and its underlying concepts, but *about* them as well. This results in a far deeper and more holistic understanding of the subject terminology. Thus the content-subject can actually benefit from the language-component introduced by CLIL.

The second aspect of the language needs model, language for learning, serves the communicative purpose which is rather a demand on behalf of language teaching. Yet, if the learners are encouraged and empowered to communicate about the content, active discourse which puts the subject-theory into practice, takes place. Thus the potentially otherwise passively perceived content of the subject is turned into an active product of discourse.

This is closely linked to the third pillar, language through learning. Due to the meaningful communication stimulated the by content, the subject matter becomes alive and is within immediate grasp of the learners' world. As a result, it is not simply theory presented by the teacher or materials, but rather of proximate relevance in the process of both communication and learning. By acting out communication, students are involved and in turn are stimulated to actively think about the content.

So as a conclusion, language and content are no opposites of a pedagogical spectrum, but rather form a symbiosis which results in a deeper and more sustainable kind of learning of both language and content

3.2. Towards a concept of integrated didactics

Although the dispute over the relationship between language and content is very central to the actual application of CLIL, it is only one field where the didactics of language teaching and the respective didactics of the content-subject have to be brought to convergence. As for our purpose, a synthesis of the content subject geography and economics and modern requirements of language teaching is essential if we want to evaluate teaching materials which were specifically produced for CLIL.

Obviously, course books of high quality will have to consider the good practice of both worlds. Therefore, it is necessary to have a very brief look at the basic principles of didactics of Teaching English as a Foreign Language, since the respective course books are written for bilingual education in English. Additionally, we have to consider the same for geography and economics, because of the fact that we have elaborated on earlier, namely that CLIL does not substitute the paradigms and content of the content-subjects in any way. As for the current established practices in teaching English, we have already encountered the approach of Communicative Language Teaching, which is basically the paradigm in practice within the Austrian school system. A more detailed account of the principles of CLT was already given above, which is why in this section, for the sake of the argument's cohesion, only a short summary of the relevant principles, which have partly been elaborated in the second chapter, is given. CLT is based on foundations which can be characterised as follows:

- Language is a tool for communication.
- Diversity is recognized and accepted as part of language development.
- Learner competence is relative in terms of genre, style and correctness.
- Multiple varieties of language are recognized.
- Culture is instrumental.
- There is no single methodology for language learning and teaching, or set of prescribed techniques.
- The goal is language using as well as language learning (Coyle/Hood/Marsh 2010:32f.)

From these principles, we can derive certain features which have to be considered in the respective teaching material. First of all, if language is a tool for communication, then the course books should stimulate meaningful communication by the means of meaningful tasks or questions which serve as a basis for productive discourse among the students. This is closely related to the communicative goal of language use as well as language learning, which implies a certain 'learning by doing' methodology. Secondly, a point where CLT is immediately related to CLIL, is the cultural aspect as well as the variety of language. For the context of geography and economics, it is probably not likely that the course books offer a great variety of registers apart from the formal one. Given the primacy of the content-subject, this is justified, since learning Geography in English is rather a situation which takes places in a formal setting, since even if students are to present projects, problems and so on, they would not choose a dialect or informal variety of the target language. However, the cultural aspect of language is a topic, for example if the teacher chooses to work with newspaper articles in the classroom. Teaching material of high quality should therefore, at least peripherally, draw attention to certain conventions of a language and their purposes – especially if we consider the fact that CLIL explicitly considers the culture of the target language as its fundamental goals (cf. page 20).

So there are first hints to what the course books have to contain in order to be evaluated as true CLIL-learning-materials. Yet, an aspect which we have not tackled so far is what are the basic demands on behalf of the content-subject geography and economics from a didactic point of view. This is important, because, as we have seen, the content-subject has no interest in lowering the learning output of its students. Therefore, a truly good CLIL course book has to be both a well designed language textbook (or at least has to deal with the language-component in some way), as well as a good Geography textbook.

3.2.1. Basic principles of didactics in geography and economics and its demands of CLIL

The history and development of didactics in geography and economics is as rich and varied as in any other school-subject. Because this thesis has its focus rather on English and not on Geography, this section will just focus on relevant and fairly recent principles and paradigms within the subject. Additionally, it will be explored what benefits the representatives of didactics are hoping to get from CLIL. As a consequence, the thesis presents a very distinct view of the topic and does not give a complete account of the complex landscape of subject didactics in geography and economics. Furthermore, the arguments and attitudes presented may be very specific to the Austrian discourse of the subject. However, since one of the major concerns in the analysis and evaluation of Geography textbooks lies with an Austrian course book series, this is a sensible and justified perspective on the subject.

Like in CLT or CLIL respectively, there are no strictly prescribed methodologies to teach geography and economics in the classroom in Austria. There is a great variety of aims and techniques which a teacher can apply as well as various learning theories to which he or she can commit to. Nevertheless, there are certain principles which are considered to be of fundamental validity within the didactics of Geograhy and Economics: "[d]as Schulfach soll Motive und Auswirkungen, Regelhaftigkeiten und Probleme menschlichen Handelns in den beiden [...] eng miteinander verflochtenen *Aktionsbereichen* ***"Raum"*** und ***"Wirtschaft"*** sichtbar und verständlich machen. [...] "Geographie" und "Wirtschaftskunde" bilden nach dieser Sicht eine *Ganzheit* und sind nicht zwei getrennt nebeneinander stehende Lernbereiche" (Sitte 2001a:162f.). This is very important, because geography and economics are indeed integrated areas within the subject and cannot be separated at all.

The reason for this inseparability is deeply rooted in the recent concept of didactics which has the following characteristics:

- [Das didaktische Basiskonzept] [...] stellt den in gesellschaftlicher Bindung räumlich und wirtschaftlich handelnden Menschen in den Mittelpunkt des Unterichtsfaches.
- Das dem Fach zugrundeliegende [...] Konzept ist daher ein *gesellschaftsorientiertes* ***Handlungskonzept***. [...]
- Wie, warum und unter welchen subjektiven, sozio-kulturellen und physisch-materiellen Gegebenheiten raum-und wirtschaftsbezogene Handlungen zustande-kommen, sollen Heranwachsende an lokalen, regionalen und globalen Lebenswirklichkeiten kennenlernen [...].
- Die Vermittlung von Fakteninformationen über Länder und Staaten tritt [...] sehr stark zurück. [...] Wichtig ist [...] jedoch, daß Schülern beigebracht wird, solche Informationan zu finden und kritisch zu verarbeiten. (Sitte 2001a:163; bullet points added)

These four basic principles of the subject geography and economics are very much centred around the reality of students. Its anchor is always human activity and influence in spatial and economical terms, which are supposed to be brought in convergence with the respective teenager's personal reality. If we look at the third point, it becomes apparent that the subject strives to do so an different scales which are, if we follow the order precisely, developed inductively. This is important, because the spatial component of Geography obviously is an ever-present one and is thus also a major factor on the local, particular scale of every student's life.

The reason why this has to be pointed out is that education in Geography should always try to establish a connection to the students' lives when dealing with a topic. As a consequence, a course book should do the same. To be fair, the authors of a course book cannot take account for every single particular reality of their target audience, since this would require at least a special edition for every federal state. However, an Austrian course book can achieve this easily on the scale of the national state by connecting topics of, for example, a global dimension to Austria as a particular agent in a globalised world.

The other points of the basic principles of didactics are concerned with the empowerment of the individual. The subject's underlying concepts of action and its orientation towards society is an indication that its tries to educate the individual so that he or she can act as a self-reliant and emancipated member of society. This is closely related to the concept of 'handlungsorientierten Unterricht', which is a didactic concept and very prominent in geography and economics. "Handlungsorientierter Unterricht zielt in erster Linie auf die Entwicklung gesellschaftlicher Handlungskompetenz, auf den Aufbau eines politischen und zum handeln aktivierenden Bewußtseins" (Sitte 2001b:305). Its most common realisation is the well-known 'Schulprojekt', which has a product as its aim which is supposed to add actively to the process of democracy.

This, in turn is an expression of the highest achievable output from learning, namely critical- emancipatory thinking. The didactics in geography and economics distinguishes between four levels of output from learning, characterised by increasing complexity. These can be sketched as follows:

- [*Kein reflektiertes Vermittlungsinteresse*]: [...] alle Inhalte, die in Form linearer Wissensvermittlung von Lehrpersonen an SchülerInen weitergegeben werden, ohne jeden weiteren Begründungszusammenhang [...].
- Durch das *technische Vermittlungsinteresse* werden inhaltlich Lernprozesse gesteuert, die kurz gesagt einer "Wenn - Dann" Rationalität unterliegen. [...]
- [Beim] *praktische*[n] *Vermittlungsinteresse* [...] [tritt] eine Expansion des Subjektiven [...] und damit der Aspekt einer differenzierten Wertebegründung bezüglich problematisierter Fragestellungen [auf]. [...] Es werden Lebenssituationen entworfen, die sich an einer fortgeschrittenen Moderne orientieren, und für die gilt es, für die SchülerInnen Bewährungs- und Bewältigungsszenarien zu entwerfen
- [Beim *emanzipatorischen Vermittlungsinteresse*] [...] würden nunmehr Sachverhalte, die technisch.zweckrational und praktisch aufgearbeitet wurden, nach möglichen Alternativen oder Widersprüchen unter dem leitenden Interesse an Mündigkeit und Selbstbestimmung befragt werden (Vielhaber 1999:12-17; bulettpoints added)

These stages of increasing complexity can be seen as a continuum which are achieved or not in the course of every act of learning. As we have seen before, the content-subject of geography and economics is based on principles which empower and actively involve the individual in society. In turn, learning should always pursue the highest aim of teaching, namely the emancipatory aim. It is clear that probably not every lesson in class or every module in school will successfully activate every learner to critically rethink his or her environment. This may be due to the specific content, which, for example does require technical mediation (like working with maps or atlases), or due to institutional circumstances, for example a teacher's lacking repertoire of methods. However, it should, nevertheless, always be the final goal of learning.

Therefore, since teaching materials are supposed to support the teacher and the learner alike, our course books under examination should somehow encourage critical reflection on the respective topic which they are presenting. Otherwise, fundamental elements of didactics within the subject would be disregarded.

After we have now discussed the most fundamental aspects of didactics in geography and economics, it would be interesting to examine which expectations the content-subject has with regard to CLIL. Interestingly, whenever the (Austrian or German) academic literature deals with a particular form of CLIL, it is the one of bilingual education which is in the spotlight. As will be elaborated later on, this is not surprising, since it is a very common realisation in Austria and Germany. For the scope of this thesis this is especially interesting, because both the Austrian course book series *Do it in English-Geography* as well as its German counterpart *Diercke Geography for bilingual classes* were, obviously, written for a bilingual setting. In this respect it is interesting to have a look at how the content-subject

perceives the aims and potential benefits of CLIL, or more specifically bilingual education, because this provides important input with regard to whether or not the teaching materials in question are designed in a satisfactory and proficient way.

One major issue on part of the content-subject seems to be the cultural component. Weber (1993:32f.), for example distinguished between cognitive and affective aims in connection with bilingual education. The former are characterised by skills in the foreign language, technical vocabulary, competences in the content subject and in the target language's culture. The latter are subsumed under the term *transnational communicative competence*, which relates to the ability to respect other cultures and to show empathy for different lifestyles and traditions. Another didactic concept which heavily relies on cultural awareness is the *bilingual triangle*, which is defined as "[...] Inhalte und Gegenstände 1. der eigensprachigen, 2. der zielsprachigen Kulturen und Gesellschaften und 3. kulturübergreifende, kulturunabhängige, globale und universale Phänomene und Sachverhalte" (Hallet 1998, quoted in Breidbach 2003:14).

This emphasis on the cultural dimension is very interesting. On the one hand, it perfectly fits into the concept of CLIL, which defines the cultural component as one of its pillars. On the other hand, especially if we look at the bilingual triangle, cultural competence is a much more prominent factor than in CLIL, which also stresses the importance of other aspects such as professional skills. The focus on culture reflects a very European view on languages, since one of the explicit objectives of *plurilingualism* by the European Council is "that the rich heritage of diverse languages and cultures in Europe is a valuable common resource to be protected and developed, and that a major educational effort is needed to convert that diversity from a barrier to communication into a source of mutual enrichment and understanding;" (CEFR 2001:2). Thus, didactics of bilingual education in Geography can be seen as a practical implementation of the respective objective.

However, there are also more content-specific demands on behalf of didactics. "Von der Seite der Fachdidaktik GW ist die Verwendung von authentischen Materialien von besonderer Bedeutung. Diese Materialien umfassen darstellende Texte und mündliche Schilderungen, die durch Erklärungen (mündlicher und schriftlicher Art) ergänzt werden" (Lidauer 2001:143). Of course, this is linked to the overall concept of CLIL, which also promotes authenticity as vital, but clearly the content-subject regards it as particularly important. This, however is not without its problems, as was shown by Widdowson (1990:44f) and which will be discussed later on (cf. 4.1.2.).

A demand on the part of didactics in geography and economics, which is not explicitly mentioned in the CLIL literature is the aspect of gradual introduction of the target language:

> [w]eiters ist von der Fachdidaktik GW her zu fordern, daß sich der Einsatz fremdsprachiger Materialien in **mehreren Stufen** vollzieht: Am *Beginn* sollte eine "*Gewöhnungsphase*" an diese neuen Medien stehen". [...] Sehr gut geeignet sind in diesem Zusammenhang einfache Arbeitsaufträge, die eine Interaktion mit den fremdsprachigen Medien zum Ziel hat. [...] Auf einer *zweiten Stufe* können Texte und andere Darstellungen aus den verschiedenen Quellen eingesetzt werden. [...] Auf einer *dritten* (und schwierigsten) *Stufe* dienen authentische Materialien hauptsächlich als Vehikel für kulturelle Botschaften. (Lidauer 2001:143f.)

This approach to the gradual introduction of materials in the L2 appeals to intuition and seems to have profound face-validity. Its advantage is that both the subject-teacher and the students alike can get used to the new situation in the classroom. Interestingly, the final aim on the most complex third stage of introduction is again the mediation of cultural messages and consequently the raising of cultural awareness.

Obviously, the cultural component is perceived as a central reason for teaching in a CLIL environment at all. However, with regard to the specific Austrian educational context, it is problematic to define what the target culture actually is. Since the course books which will be examined below are apparently written for the target language English, things get complicated. Due to the fact that developing professional skills is an explicit rationale for bilingual teaching in the classroom, it is fairly safe to claim that the intention behind it is to teach English as a lingua franca rather than a second language in the sense of the famous immersion programmes (cf. Brinton/Snow/Wesche 2008:7ff., Navés 2009:22ff.). While the latter were situated in a bilingual setting on the national level (like in the French-Canadian state of Quebec), where a clear second language and culture can be identified, it is difficult to grasp what the target culture of English as a lingua franca is. Is it the cultures of the United Kingdom, Commonwealth, United States, or the whole Anglophone world? Or is it a global culture (if there is such a thing at all) which is gradually shaped by the internationalisation of our lifestyles? Even if we consider the specific European context and the European Council's aim of mutual cultural respect on the continent, what is this European culture we are talking about? Since it is not the intention of this thesis to answer this highly complicated questions, they will have to remain unanswered, because the answer is not at all an obvious one.

What has become obvious though is the necessity to assure the convergence between the didactics of the content-subject and language teaching, or rather CLIL. As we have seen, there is plenty of overlap between the two, because the cultural component and the

importance of authenticity seem to constitute a promising denominator. Yet, "[d]ie originären geographischen Zielvorstellungen [...] bilden auch die Grundlage des bilingualen Unterrichts und haben aus geographiedidaktischer Sicht oberste Priorität" (Meyer 2006:160). As a consequence, the fundamental principles such as Geography as a 'gesellschaftsorientiertes Handlungskonzept' and the different levels of mediation have to be integrated in both the CLIL classroom and its accompanying materials. The problem now is how to do that and shall be addressed in the following section.

3.2.2. A concept of converging didactics

It is clear that CLIL is a different educational setting than the traditional division in content-subjects and language subjects. An issue which accompanies this new learning environment is the question whether CLIL as an approach needs its own set of didactics or if it has to be seen as a mere addition to the respective content-subject. In our case of bilingual education, it is clear that it is "[...] ein transdisziplinäres Phänomen, bei dem Fremdsprache und Sachfach kooperieren müssen" (Abendroth-Timmer et.al. 2004:14). CLIL, of course provides means and principles which bring language and content-subjects closer together, yet it has, so far in our discussion, not explicitly stated how this convergence is supposed to be implemented.

The specific aims of CLIL demand specific methods if the didactics of content-subjects and language teaching want to succeed in supporting the learner in his or her particular environment and at the same time to achieve a balance between language and content. This requires that in a bilingual classroom, the teacher has to see through the eyes of language teaching as well as the content-subject. "Hieraus folgt, dass sich eine Didaktik und Methodik des bilingualen Unterrichts nicht aus der Addition von Fremdsprachen- und Sachfachdidaktik ergibt, sondern dass sie ein eigenständiges Profil - differenziert in fach*spezifische* und fächer*übergreifende* Elemente - haben muss" (Otten/Wildhage 2007:23). If we look at the section above, distinguishing between subject-specific elements and those which show an interrelation between language teaching and the actual content seems sensible and plausible. This distinction is a first step to assure that each side has its place when it comes to concrete and practical teaching.

However, if we want to clarify how didactics in the bilingual setting are supposed to work, this binary distinction is rather vague. Hence, Otten and Wildhage draw a more detailed

sketch of a concept of integrated didactics, formulating six claims, which we will now discuss briefly:

> These 1
> Integration von Inhalt und Sprache bedeutet für das bilinguale Sachfach die Verwendung der Fremdsprache als Arbeitssprache. Ausgangs- und Bezugspunkt didaktischer Planung ist damit zunächst die Didaktik des Sachfaches. Fremdsprachendidaktische Konzepte und Methoden unterstützen die fachspezifischen Lehr- und Lernprozesse. (Otten/Wildhage 2007:24)

The first thesis basically covers what has been elaborated before, namely that the content-subject is the hub of CLIL in the classroom. As has been mentioned before, this is just logical, since otherwise all subjects would finally be altered into topics of language teaching. Despite the primacy of the content, the language component is seen as a beneficial addition to the respective subject.

> These 2
> Integration von Sprache und Inhalt bedeutet deshalb zunächst eine gezielte Erschließung der bisher ungeahnten Chancen für die Sachfächer selbst, die sich aus den erweitereten fachlichen Perspektiven in der Dimension des interkulturellen Lernens und durch die Verwendung von Fremd- und Muttersprache als Arbeitssprache ergeben. (Otten/Wildhage 2007:25)

The second thesis stated by Otten and Wildhage implies two things. On the one hand, it indicates that the content-subjects themselves have neglected the language and cultural component so far and that they have yet to reach their full potential. It also is an encouragement for intensive research, since if we have not discovered all possibilities yet, the time has definitely come. On the other hand, the thesis explicitly demands that education is indeed *bi*lingual. Otherwise, benefits like, for example, the holistic reflection on technical terms (cf. page 23) cannot be realised. This serves the model of CLIL just well, because appropriate competence in the mother tongue has been identified as one of its fundamental subjects.

> These 3
> Die Integration von Inhalt und Sprache im Sachfach erfordert, dass die Formen des Lehrens sich am derzeitigen Wissensstand über institutionellen Spracherwerb orientieren. (Otten/Wildhage 2007:27)

For the context of this thesis this means that language in the content-subject geography and economics has to be taught communicatively. This is, however, stating the obvious, since a

model of bilingual education is a realisation of CLIL, which in turn has evolved from Communicative Language Teaching.

> These 4
> Integration von Inhalt und Sprache im bilingualen Sachfach zur Optimierung der sachfachlichen Lehr-und Lernprozesse bedeutet die systematische und gezielte Unterstützung der sprachlichen Komponenten in komplexen Lernsituationen. (Otten/Wildhage 2007:28)

This is clearly a demand for scaffolding, or language support respectively, in the bilingual classroom and overlaps with the requirement of the gradual introduction of the foreign language, as it was stated by Lidauer (2001:143f.). It foregrounds the careful and individual treatment of the language learner in the CLIL classroom. The intention is to assure that the learner output is of high quality and an enrichment for the individual. Within the aspect of language support, the focus of this thesis, learning materials, is a crucial element: "[...] das klassische CLIL-Lernarrangement weist demnach die folgenden Komponenten auf: materials, tasks, support [...]" (Otten/Wildhage 2007:30). Therefore, a central point of the evaluation of the textbooks in question will be in how far they provide language support for the learner.

> These 5
> Integration von Sprache und Inhalt im bilingualen Sachfach bedeutet Orientierung an einem Konzept funktionaler Mehrsprachigkeit. (Otten/Wildhage 2007:31)

This postulate ensures that the respective use of either the first or the second language is motivated by a specific, professional purpose rather than an arbitrary switching between the languages. Texts in the L1 or L2 respectively are combined with tasks in the other language, such as reading a German text and giving a presentation in English. Thus a level of deeper meaning and function to the use of both languages is added, since a potential real-life situation from working life is simulated. This gives the language environment a much more natural character.

> These 6
> Integration von Inhalt und Sprache bedeutet für die fächerverbindende Koordination von Fremdsprachen- und bilingualem Sachfachunterricht eine gezielte arbeitsteilige erschließung und Nutzung von Synergieeffekten und die entscheidende Akzentuierung des jeweiligen Profils von Sachfach- und Fremdsprachenunterricht. (Otten/Wildhage 2007:32)

The last thesis postulated by Otten and Wildhage very much deals with institutional parameters. What is implied are basically three areas of cooperation between content-subjects and the languages, namely language across the curriculum (which refers to the teaching of language competence in basically all subjects), interdisciplinary methods which promote the acquisition of skills, as well as interdisciplinary cooperation on the level of content and topics across the subjects. Thus a holistic approach to teaching and learning is achieved, which is indeed in the spirit of CLIL.

Overall, the six theses introduced above represent a very concrete sketch of what steps are necessary to achieve a practical implementation of the CLIL concept. Under the guidance of the content-subject, the language component broadens and enriches the scope of teaching and learning, by breaking down barriers between subjects and integrating otherwise isolated disciplines. Hence, this concept of integrated didactics provides a good model of how to actually realise CLIL's premise of content and language integration.

3.3. Defining the target CLIL-context of the book series

After investigating on the most fundamental theoretical principles and concepts which underlie the CLIL and the content-subject geography and economics, there is one final aspect which has to be investigated on. While the discussion of basic theories allows us to develop a catalogue of criteria in order to evaluate if the coursebooks subjected to analysis live up to the standards of CLIL, having a look at the concrete educational situation and demands in Austria will allow us to evaluate whether they are suitable for the Austrian market or an Austrian classroom respectively. After all, as was discussed above, CLIL as well as the didactics of geography and economics emphasise the local and national dimension of learning.

Therefore, this section will have a look at the forms of CLIL, with an emphasis on bilingual education, which, as was already indicates, is the most relevant for the Austrian context and the target situation of the teaching material in question. After having clarified the forms of CLIL, a brief look at the situation in Austria will be taken, before the section concludes with the national curriculum for geography and economics. The last point is important if we want to evaluate whether the textbooks indeed support the teachers and learners to achieve the goals which are demanded by the subject's didactics.

3.3.1. Forms of CLIL: bilingual education in the spotlight

Since "[...] there is no one model for CLIL" (Coyle/Hood/Marsh 2010:14), several models of implementing CLIL have emerged over the years. There are "[...] a range of types which depend largely on the reasons for wishing to introduce the approach and the capacity to implement CLIL which is available within an educational setting" (ibid.). This, of course, makes a concrete discussion of actual implementations of the paradigm rather difficult, because the possibilities are nearly endless, especially if we consider the local dimension of the various schools which pursue different goals based on diverse reasons. As a consequence, we will have a look at just some possible variants of CLIL.

A first, basic distinction between the various forms of CLIL models, is their respective extent to which they expose the learners to the L2 as an instructional language. Here, we can differentiate between extensive instruction through the vehicular language, where it "[...] is used almost exclusively to introduce, summarize and revise topics, with very limited switches into the first language" (Coyle/Hood/Marsh 2010:15), and partial instruction through the vehicular language, where only "[...] specific content [...] is taught through CLIL according to limited implementation periods" (ibid.). Thus, the total time of exposure to the L2 can be seen as one aspect of defining what type of CLIL model is implemented in a particular educational setting.

However, there are more sophisticated ways to define a model. The CLIL-compendium website postulates 8 basic forms of CLIL, which are based on characteristics such as the age of learners, target language(s), as well as the three basic dimensions of learning, namely content, language and skills (cf. www.clilcompendium.com). Thus the following forms of CLIL-education can be distinguished:

Monolingual 14 - 20 years	Bilingual 14-20 years	Multilingual 14-20 years
Monolingual 5-15 years	Bilingual 5-15 years	Multilingual 5-15 years
Monolingual 3-6 years		Bilingual and Multilingual 3-6 years

Figure 2: Forms of CLIL (http://www.clilcompendium.com/clilcompendium.htm)

Since the target educational setting of the textbook series is obviously the bilingual form, it is where we put our focus. More precisely, the Austrian series *Do it in English-Geography*, is written for students from grade 9 to 12 (so approximately aged 15-19), while the German

series *Diercke Geography for bilingual classes* is written for students from grade 7 to 10 (aged around 14-17). therefore, we will examine the model of bilingual education between 14 and 20 years in more detail.

According to the CLIL- compendium, the total exposure to the target language is rather low to medium, which means that it is between 5-15 percent (low exposure) and 15-50 percent (medium)of overall teaching time (cf. http://www.clilcompendium.com/keyt.htm#ex). So we are dealing with a partial instruction model of CLIL, which is, if we think about the very term 'bilingual education', rather obvious. Interestingly, "[t]he CLIL-type bilingual education includes all children in the learning of an additional language and builds flexibility in its conception of bilingualism. It does not require equal time for the two languages, nor does it call for "native-like" proficiency of bilingual teachers or bilingual children" (García 2009:130). Regarding, the nature of bilingual education within CLIL, a few characteristics thus become obvious. First of all, by including all students, this concept of bilingual education is clearly aimed at a mainstream implementation, obviously as part of European language policy. Thus, it is quite different from other forms of bilingual education, like the immersion programmes, which aim at a specific minority group or language. Secondly, its rather practical criteria and its flexibility in teaching time and teacher proficiency, characterise bilingual education within CLIL as an enrichment of education rather than its purpose. In other words, it seems that the goal in terms of language skills is not a level which actually matches the first level, but rather the second language as a means of communication (in the case of English in a lingua franca).

This is also reflected in the motivation behind implementing (especially English) in schools: "[m]uch of the drive for introducing CLIL with this age group [i.e. 12-19 years] relates to parental and school-based attitudes towards globalization, and this is where English, in particular, has a dominant position [...] (Coyle/Hood/Marsh 2010:20). As a result, the L2 is supposed to "[...] prepare students for opportunities which may require use of the CLIL language in later life. Therefore, some of the models found at secondary level place fairly high demands on cognition [...]" (ibid.). Apart from cognitive skills, other motives behind the establishment of bilingual education go hand in hand with CLIL in general, namely "[...] the use of two languages to *educate generally, meaningfully, equitably, and for tolerance and appreciation of diversity* [...]" (García 2009:6). In other words, bilingual education tries to pursue a more holistic approach to education as well as its big brother CLIL.

Tangibly, in the model of bilingual education we are dealing now with, "[...] learners study a significant part of the curriculum through the CLIL language for a number of years with the intention of developing required content-learning goals and advanced language skills" (Coyle/Hood/Marsh 2010:21). Interestingly, we are again drawn to the very definition of *bi*lingual education by the fact that just parts of the subject matter are taught in the target language. Hence it would be surprising if the coursebooks would only be written in the target language, namely English, which actually would not make them bilingual materials, but rather monolingual ones. This is indeed an issue which we are about to investigate on in the course of our analysis.

Now that we have briefly sketched the basic CLIL model which is supposed to be our target situation in principle, one of the last elements we have to clarify in order to get a comprehensible picture of the concrete target CLIL-context of the book series, is to have a look at the educational situation of CLIL in Austria. After all, the book series of our primary concern was written specifically for the Austrian market.

3.3.2. CLIL in Austria

It seems that English as a foreign language is on the rise in Austria, because "[...] over the last ten years there has been a continuous growth in the use of English as a medium of instruction in Austrian (and indeed European) mainstream schools [...]" (Dalton-Puffer 2002:4). This is not very surprising, if we keep in mind that plurilingualism is indeed a decided aim of the European Union.

Its realisation was achieved at the beginning of the 90ie, when "[...] the Federal Ministry for Education, Science and Culture started a 'foreign language offensive': one or two foreign languages (English and French) at lower secondary level and two foreign languages (usually English and French [...]) at upper secondary are compulsory, and even a third or fourth modern language may be offered" (Abuja 2007:14). By this, the headstone for the development of CLIL in Austria was laid. In the Austrian education system, "CLIL is known under the term 'Englisch als Arbeitssprache (EAA) meaning the use of English (or any other FL) in teaching situations ranging from short projects to bilingual education throughout the whole school year" (Abuja 2007:16).

Like with its original educational concept, CLIL, 'Englisch als Arbeitssprache' is a very broad term, in Austria, which makes it difficult to actually pin down to a concrete model

or practice. On the one hand, this is an advantage, since it gives the CLIL paradigm manifold opportunities to be actually implemented. As long as CLIL's basic objectives are pursued and finally achieved, in the sense of utilitarianism, the end indeed justifies the means. However, this form of educational ethics is, on the other hand, not without its problems, because with this rather blurry perception of EEA, instances of inappropriate or inadequate implementation are likely to occur. Additionally, such a broad spectrum of teaching practices under the term of EEA raises the question where the concepts is actually heading. As a negative side effect of this circumstance, "[...] a clear formulation of its objectives is still a desideratum [...]" (Dalton-Puffer 2002:13). Judging from its CLIL background, the objectives are rather clear: to educate the individual more holistically and thus produce more (economically) capable subjects. Yet, what seems to have been left out is the road to get there, since a final goal is achieved by several intermediate steps. If these are lost in obscurity, the ends will neither be justified by its preceding means, nor, in fact, reached at all.

As a consequence, it was observed that "CLIL in Upper-Austria and in most of the rest of Austria is a voluntary enterprise driven mostly by individual teachers' motivation. Support structures hardly exist at all [...]" (Gierlinger 2007:80). Admittedly, Gierlinger's observation is based on regional experiences, yet they are symptomatic for a parallelism of political guidelines and educational practice. Obviously, by starting the before-mentioned 'language offensive', education policy in Austria intended to promote the teaching and learning of foreign languages within the school system. However, without accompanying support structures and institutions which assure a high-quality implementation of the policy, the offensive seems to be rather ineffectually carried out. This becomes obvious when looking at Gierlinger's further criticism:

- There is very little, if any, methodological support for CLIL teachers.
- CLIL teachers will mostly work on their own without any language assistants.
- There are no external incentives for CLIL teachers, such as extra money or increased status.
- There is hardly any suitable material around; on the contrary, teachers have to create their own materials at their own costs. [...]
- There is hardly any support from the pedagogical authorities (Gierlinger 2007:81)

So overall, the situation in the Austrian educational landscape is very fragmented. It seems that politics has missed to assure the required infrastructure to carry CLIL to its full potential. For our discussion, especially the penultimate remark concerning materials, is indeed a central issue. If the market for CLIL materials is characterised by a do-it-yourself-mentality,

releasing a sound textbook series would be a major opportunity to introduce good practice and a point of reference into the fragmented CLIL market in Austria. In this sense, the *Do it in English-Geography* series has not only a heavy didactic burden to bear - since it has to live up the high standards of CLIL - but also a political one - as a first attempt to professionalise CLIL materials and to find a common denominator within all the different practices. This may sound very idealistic, but, at least for the content-subject geography and economics, being the only officially approbated textbook series for bilingual education equals a trend-setting position on the market.

Due to this unfortunate fragmentation, it is difficult to decide which specific realisation of EAA the textbook series could be considered as its target context. One solution to this problem is to again have a look at didactics in geography and economics, as well as politics. Lidauer claims that there are four intended variants of EAA within the schools system, which were proposed by a commission of experts on behalf of the Ministry of Science, Education and Culture:

> - *Variante 1*: Englisch wird als Arbeitssprache phasenweise im regulären Fachunterricht
> eingesetzt; Fachinhalte werden in solchen Phasen hauptsächlich mit Hilfe der Fremdsprache erarbeitet.
> - *Variante 2*: Bestimmte sprachliche Fertigkeiten ("skills") werden in einem fächerübergreifenden Unterricht erarbeitet [...]. Primär sollen Fertigkeiten mit universalem Charakter erarbeitet werden [...]
> - *Variante 3*: Der gezielte Einsatz von Englisch als Arbeitssprache in Kleinprojekten.
> -*Variante 4*: Hier wird ein länger dauernder, ununterbrochener fremdsprachiger Fachunterricht in einem oder mehreren Fächern im Rahmen des Regelschulwesens angestrebt. (cf. Abuja/Heindler 1993, quoted in Lidauer 2001:140)

Honestly spoken, this does not lead us really further, except that the diverse possibilities of implementing EAA now seem to be summarised in four variants. Yet, if we take a look at didactics, it appears that "[a]us der Sicht der Fachdidaktik Geographie und Wirtschaftskunde erscheint die Variante 1 als besonders zielführend. Die übrigen Varianten beinhalten zwar auch die Idee, die Fremdsprache als Arbeitsmittel einzusetzen, betonen jedoch mit unterschiedlichem Gewicht die Aspekte des reinen Fremdsprachenunterrichts" (Lidauer 2001:140).

For our bilingual setting, this works, because if we would deal with a variant of CLIL where the target language is solely used, it would not be a form of bilingual education. Furthermore, if we stick to the rule that the anchor of CLIL is indeed the content-subject and

variant 1 apparently fits best into its principles, we are confronted with a grave argument in favour of it. Therefore, we will consider the target model of EEA as it is defined by variant 1, namely phases of learning where content is learned through the L2. This means that the materials have to assure on the one hand, the respective topic is elaborated on in a way which lives up to the expectations of the content-subject, while on the other regarding the principles of CLIL.

This leads us to the final piece of the puzzle concerning the target context, namely what are the learning and teaching aims for the respective grades in the Austrian school system for geography and economics. Clarifying this question will allow us in the consecutive analysis to evaluate whether the textbook series perform competently on the side of the subject's didactics or not.

3.3.3. The Austrian curriculum for geography and economics

Apart from the ideas and expectations which are brought forward by its didactics, the content-subject geography and economics has explicitly predetermined educational objectives, which are specified in the curriculum. Here, we have to distinguish between three parts of the curriculum for the subject, namely 'Bildungs- und Lehraufgabe', 'didaktische Grundsätze' and 'Lehrstoff' (cf. BMUKK 2004). Furthermore, Austria has separate curricula for the lower secondary, upper secondary, as well as the respective schooltypes (i.e. AHS, BHS, HAK, etc.). Since the Austrian coursebook series subject to evaluation is recommended for the upper secondary of an AHS (cf. Sonnenberg 2007:1), we will have a closer look at the its curriculum for geography and economics.

The first part of the curriculum, 'Bildungs- und Lehraufgabe' is very general. The aim of the subject is defined as follows:

> Der Geographie- und Wirtschaftskundeunterricht soll Motive und Auswirkungen, Regelhaftigkeiten und Probleme menschlichen Handelns in den eng miteinander verflochtenen Aktionsbereichen "Raum, Gesellschaft und Wirtschaft" sichtbar und unter dem Gesichtspunkt der Politischen Bildung verständlich machen. (BMUKK 2004:1)

In other words, the subject is supposed to make the causal chain of certain decisions explicit and aims at a the awareness of the interrelatedness of society, the economy and their spatial components - a highly complex anticipation. In connection with this aim, the curriculum defines the mediation of 'Sythesekompetenz' through the subject, which refers to the

capability of learners to establish links and relationships between certain problems instead of looking at them in isolation.

This is a very interesting point for the analysis of the course books, since, due to the fact that they actually represent case studies of complex topical areas, they should make interrelations between problem areas explicit. Of course, one could argue that this would be the teacher's job. However, in a CLIL context, where the learner should be empowered to develop his or her skills in the best possible autonomy, materials are without a doubt effective means to support individual processes of higher cognition and therefore to secure the learning outcome. Apart from 'Synthesekompetenz', the curriculum lists five others, namely 'Methodenkompetenz', i.e. using modern media for information and presentation; 'Orientierungskompetenz', i.e. basic knowledge of topography and the capability to use acquired knowledge in everyday life; 'Umweltkompetenz', i.e. awareness of the environment and our responsibilities towards it; 'Gesellschaftskompetenz', i.e. awareness of gender, mass media, politics and consumption; and finally 'Wirtschaftskompetenz', which is basically micro- and macroeconomics and their interrelatedness as well as knowledge of basic structures of working life.

In the evaluation conducted bellow, we will just have a look at whether or not the course books support the synthesis of the presented subject matter. The reason for this is, on the one hand, a purely pragmatic one, because having a look at all the competences and their support would lead us too far astray from CLIL. On the other hand, latter is indeed the reason for focusing in synthesis, since it perfectly fits into the holistic approach of CLIL. Thus, supporting the cognitive linking of problem areas is a demand stated by both systems (i.e. the content-subject and CLIL).

The second section of the curriculum concerning the didactic principles of teaching geography and economics basically contains two guidelines. First of all, the teacher is supposed to show individual responsibility for teaching the subject matter and, in return, is granted a fairly high amount of freedom of how to teach the subject. Secondly, it states that the topics and learning aim are supposed to be tackled in an increasing amount of complexity and synthesis. Again, we encounter the factor of synthesis as a key element to learning. Besides these two basic demands, the curriculum considers the learner's active engagement as central to the learning process. This, once more, ties in with CLIL, which wants to create meaningful, active and communicative interaction. Therefore, the aspect of in how far the tasks encourage learners to actively deal with the topic, will be part of the evaluation.

The third major part of the curriculum is basically the subject matter and what aspects are supposed to be discussed in the course of teaching. Since we are analysing an approbated course book series for the Austrian market, its content has to be in accordance with the subject matter in the curriculum. In how far the actual content and its presentation live up to the guidelines of the actual curriculum is a different kind of matter. Just because I put a chapter about economy into a course book does not necessarily mean that I stick to the problem areas defined in the curriculum. The analysis of the teaching materials will consider this by providing a brief overview of the chapters in the books while linking it to the curriculum. This, of course, will only be conducted for the Austrian textbooks, since Germany has its own aims and curricula.

Finally, we have all the puzzle pieces together to define the target context of our Austrian course books. The only thing we have to do now, is to link them to the concept of CLIL and our analysis.

3.4. What are the implications for the course book analysis?

After having discussed both sides of the medal (i.e. CLIL and Geography) behind the teaching materials in question, it is necessary to sum up what we have discovered so far in relation to the features which teaching materials are supposed to have from a theoretical point of view.

The first point which was illustrated by discussing the concept of CLIL is that a holistic approach has to be pursued by any material which is produced under the label of CLIL. This is achieved by regarding the five pillars of the paradigm, namely content, competence in the first language, competence in the second language, cultural awareness as well as professional skills. These premises are most likely to be transferred into a textbook by the means of tasks, critical questions, comments or cross references to external resources, such as the internet. In short, there has to be some kind of meta level which helps the learner to make himself aware of elements which go beyond the level of pure cognitive knowledge.

Secondly, as was also emphasised by the CLT approach, language in CLIL is a tool for meaningful communication, which means that the materials are supposed to encourage communicative events which have a clear goal, for example discussing the pros and cons of situating a factory near a small rural village in order to come to a final decision whether to build it or not. So one of the criteria for evaluation will be whether the course books are indeed communicative or not. Additionally, we will have to consider if the materials

eventually help to develop awareness and competences on the three levels of language (language of learning, through learning and for learning). Only then an actual benefit from conducting bilingual education can be secured.

A third aspect which became clear in the course of our discussion was the actual bilingualism of the materials. Since we are dealing with CLIL in the shape of bilingual education, we will have to examine if the materials are indeed bilingual and hence adopt a functional approach to the use of the L1 and L2 respectively (as demanded by Otten and Wildhage; cf. 3.2.2.). After all, CLIL encourages proficiency in both languages.

Another important element was revealed on part of the content-subject, namely that geography and economics intends to mediate concepts of action which should capacitate the learner to actively take part in society and critically reflect upon it. Thus the requirement of teaching materials should be to support a final achievement of this goal, again by encouraging the learner to think 'out of the box'.

Finally, we revealed that also the national educational system strives to educate the learner in a holistic, interdisciplinary way which encourages critical thinking and the use of acquired competences. If teaching materials are supposed to be a supportive element in the classroom, they certainly have to give the learner the opportunity to practice and further develop their acquired skills and competences.

Given the fact that the *Do it in English-Geography* series is one of the few actual CLIL materials on the market, they are a great opportunity to lead the way for following series in other subjects, if they indeed live up to the high standards and expectations of CLIL, the didactics of Geography and English, as well as the education system.

Now that we have laid down the theoretical foundations for our analysis and evaluation, it is time to consider how we want to analyse and evaluate if the teaching materials are in accordance with its related theories and paradigms.

4. Establishing an approach towards material analysis

"As the poet Gertrude Stein lay on her deathbed, her partner, Alice B. Toklas, leaned over and whispered, "What is the answer, Gertrude?" Replied Stein, "What's the question?" (Cathcart/Klein 2007:129). This brief anecdote in the tradition of Philosophy of Language illustrates the last task which has to be fulfilled, before actually conducting an analysis and an evaluation, namely to ask the right questions. As we have already seen, there are strong indicators of what well-developed materials will have to provide in order to be evaluated as a true practice of the CLIL paradigm. However, the problem we have not dealt with so far is how to approach the analysis and, consequently, which questions to ask.

There is no doubt that the development and publication of teaching materials has become an important market for publishers and authors around the world. As a consequence, teachers and learners alike are facing an increasing number of materials which become more diverse. "In recent years, materials design has become characterised by two important developments. Firstly, the use of published materials is now more widespread than ever before [...]. Secondly, [...] materials themselves have evolved into much more complex objects" (Littlejohn 1998:190). If we keep in mind that the market for teaching material has become increasingly competitive due to a greater variety of products, this development seems rather logical. However, what is important for actual teaching is the fact that nowadays "[...] materials frequently offer complete 'packages' for language learning and teaching, with precise indications of the work that teachers and students are to do together. The extent to which materials now effectively structure classroom time has thus increased considerably" (ibid.).

This development can be seen in two different ways. First of all, if it is indeed true that materials have such a deep impact on the classroom, teachers seem to actually make use of the services that coursebooks offer. This either implies that the quality of materials is currently at such a high level that teachers see no danger in doing so, or - if we apply a more pessimistic interpretation - that teachers gradually have become comfortable and thus produce less materials themselves. Secondly, independent from the reasons of consumption and actual use of materials, both publishers and authors should act more responsibly than ever. If their products have such a huge impact on learning, they have to carry a heavy burden, at least from an ethical point of view. Thus, analysing and evaluating materials thoroughly is more important than ever before.

Hence this chapter will establish criterion-referenced questions and an approach to analysing and evaluating the materials in question by referring to the before mentioned theoretical background as well as to techniques of material evaluation and analysis.

4.1. The role of materials in CLIL

Per definition, designing materials for a CLIL context, which apparently emphasises the individual learner's needs and particular situation, is a very complicated undertaking. Clearly, publishers and authors have some reference points, such as national curricula, to create their materials. Yet, "[s]yllabuses and programmes all have their aims and objectives, often with articulated goals and outcomes for teaching and learning. But these alone do not address the *how* of content learning - only the *what* of content teaching" (Coyle/Hood/Marsh 2010:28).

In our case, the national curriculum does indeed predetermine the *what* of content teaching, since an approbation of an Austrian coursebook is obviously closely connected to its content representing the subject's curriculum. As for the *how* of teaching, CLIL as a paradigm, at least in theory, proves to be difficult ground in terms of material design, since, as we have seen, "[t]he concept of what constitutes content in a CLIL context is much more flexible than selecting a discipline from a traditional school curriculum such as geography [...]" (Coyle/Hood/Marsh 2010:27). Of course, designers of coursebooks cannot live up to the high expectations of flexibility demanded by CLIL, simply because they have to be pragmatic. After all, they certainly want to appeal to a broad audience within a specific market (such as bilingual education in geography and economics), which limits their possibilities to a certain extent.

Yet, it has to be pointed out that the actual context of teaching of the materials in question is in itself a limitation, since it is one possible form of CLIL, namely bilingual education, or more precisely EAA. Thus, the theoretical demand of high flexibility is partially limited per se, since we are dealing with a practical implementation of a paradigm which has to obey national rules, such as the mentioned curriculum. Nevertheless, it is interesting to see which place teaching materials actually have within CLIL and what specific demands are proposed prior to their production.

Many of the core features which are demanded from teaching materials are a logical deduction from the theoretical background of CLIL, because, since it cannot deny its roots, there are still heavy influences through Second Language Acquisition as well as

Communicative Language Teaching noticeable when it comes to the question of what CLIL-materials have to emphasise and stimulate. Therefore, some of the features discussed below may trigger the one or the other faint déjà-vu.

4.1.1. Criteria for CLIL-materials

Without a doubt, materials are an important parameter when it comes to teaching a successful CLIL course, because "CLIL learners need appropriate materials to learn English and content" (Navés 2009:33). Otten and Wildhage (2007:30), for example, consider materials, along with tasks and language support, to be of vital importance in their concept of integrated didactics (cf. 3.2.2.).

Due to the innovative approach of CLIL towards language and content, materials have to fulfil specific criteria which reflect the paradigm's underlying philosophy as well as didactic criteria. The CLIL Cascade Network (www.ccn-clil.eu/index.php?name=Content&nodeIDX=3488), a recent platform for CLIL, lists specific criteria which are to be kept in mind when producing materials for CLIL teaching and thus provides a good insight into what the paradigm actually demands from them.

In general, learning materials in CLIL can be described as "[...] information and knowledge that are represented in a variety of media and formats that support the achievement of intended learning outcomes" (Mehisto 2010, http://www.ccn-clil.eu/clil_criteria_web/index.php 15 May 2011). This is a very interesting definition, because it apparently sees materials as a system of support rather than as the mere content of learning and thus implies that they necessarily have to contain some form of meta-cognitive elements (such as information about the function of a specific language item). This is because an unreflective representation of whatever content probably does not support or secure learning outcomes. However, one wonders if this definition does not pose a significant opposition to the claim of CLIL that the content of learning has to be as authentic as possible - a question which we will address in the next section.

Based on the premise that learning materials are knowledge which is intended to support the achievement of learning outcomes, Mehisto (ibid.) postulates 10 criteria which should be significant for good CLIL learning materials, namely:

1. Making the learning intentions (language, content, learning skills) & process visible.
2. Systematically fostering academic language proficiency.
3. Fostering learning skills development and learner autonomy.
4. Including self, peer and other types of formative assessment.
5. Helping create a safe learning environment.
6. Fostering cooperative learning.
7. Seeking ways of incorporating authentic language and authentic language use.
8. Fostering critical thinking.
9. Fostering cognitive fluency through scaffolding of content, language, learning skills development.
10. Helping to make learning meaningful. (ibid.)

Overall, the criteria obviously have to support the learner in the best ways possible, or in a range of areas connected to learning in general, respectively. If we look at these criteria, we recognise some of the core features of CLIL, such as the goal to develop sufficient academic language proficiency or the explicit requirement of meaningful learning. Furthermore, prominence is given to learner autonomy as well as their development of learning skills, which also reflects one of CLIL's foundations.

Additionally, demands such as the first one, to make the learning process and its intentions visible, or trying to create a save learning environment apparently draw attention to the issue of affective factors such as learner motivation and anxiety. This area is of outstanding significance regarding the language component of CLIL, because "[m]otivation is a key theme for language learning" (Coyle/Hood/Marsh 2010:88). As has been widely recognised and experienced, "[l]earing a language is difficult and demanding [...] and students need to be encouraged and stimulated as they progress. This is largely the teacher's job, but course materials can help by using subject matter that is intellectually stimulating and to which the students can relate personally" (Cunningsworth 1986:5).

Closely connected to affective aspects is the topic of scaffolding, which is also present among the criteria for CLIL materials. Scaffolding content, language and learning skills, learners not only makes the learners feel more comfortable in their learning process, but also secures the learning outcome in the rather complex CLIL context (cf. Meyer 2009:8), which requires a diverse repertoire of study skill. Especially the latter, "[...] makes the scaffolding of language and learning a key component of successful CLIL teaching" (Meyer 2010:14). This also supports Otten and Wildhage's concept of language learning support (cf. 3.2.2.).

As we can see, these 10 criteria stated by Mehisto are indeed some kind of summary of the best practice in CLIL. As a consequence it is reasonable to say that the respective teaching materials, if used and produced in a CLIL environment, have to adapt to the holistic concept of the paradigm. Therefore, these ten criteria will be regarded as one central issue when it comes to the evaluation of the teaching materials under examination. Of course, in order to be suitable for our specific purpose, we will have to expand and adapt the catalogue of criteria for our final evaluation.

One issue which is also part of the ten criteria presented above, is the problem of authenticity, which is very important if we look at the scientific literature and even more important when it comes to teaching materials. Yet, as we will see, authenticity is not without its contradictions. Therefore, the next section is going to have a brief look at this central but rather problematic area of CLIL materials.

4.1.2. The issue of authenticity

When we look at the demand for authenticity within CLIL, Stephen Krashen's Monitor Theory proves to be topical once more (cf. 2.2.1.). As we recall, Krashen's distinction between conscious learning and natural acquisition of language implies that languages are best learnt via the latter rather than the former. It seems that based on this fundamental rationale, it was concluded that since 'natural language' is not manipulated in any (pedagogical) way, input in the classroom should not be either, because that would place input towards learning rather than acquisition. In other words,

> [t]he belief here is that the language behaviour of natural use, which is the end of learning, should be replicated as closely as possible in the classroom as this language behaviour will also be conductive to learning, to the means whereby communicative ability is achieved. (Widdowson 1990:44)

Hence the actual content is supposed to be as 'authentic' as possible.

One of the major problems in the area of authenticity is that it is "[...] defined variously [...]" (Brinton/Snow/Wesche 2008:89), which makes an informed discussion very difficult. However, with regard to materials, it seems that it "[...] is generally agreed upon as text not generated specifically for language-teaching purposes" (ibid.). Yet, if we would reduce authenticity to materials only, we would neglect the fact that they are just means to an end, namely mastering a language.

Therefore, if materials are supposed to support learning on the road to language competence, it is actually authentic or natural language use which has to be triggered. This, in return, adds a new layer to authenticity, namely the authentic nature of language use. This, however, implies problems for the whole concept of authenticity, especially in the classroom.

> In actual language use, as the work on discourse analysis and pragmatics makes abundantly clear, meanings are achieved by human agency and are negotiable: they are not contained in text.[...] [I]f authenticity is to be defined as natural language behaviour (and it is hard to see how else it might be defined) there is [...] the difficulty that learners will naturally incline to draw on their own language in any situation that calls for uncontrived linguistic communication. So the situations which are to stimulate the use of language being learned will have to be contrived in some way, and the learners will have to co-operate in maintaining the illusion of reality. (Widdowson 1990:45)

In this respect, claiming authenticity in a language learning environment is basically an unrealistic pursuit, since no course design can take into account the infinite number of possible situations and contexts of linguistic communication. Additionally, claiming absolute authentic materials would, in its most radical interpretation, make any form of language teaching or pedagogy in general obsolete, because both, by their very nature, imply the manipulation of input for the sake of learning support.

Obviously, CLIL does not represent the most radical position in the debate of authenticity, as can be seen by Mehisto's (2010, http://www.ccn-clil.eu/clil_criteria_web/index.php 15 May 2011) formulation of the seventh criterion, since "[s]eeking ways of incorporating authentic language and authentic language use" is not an absolute claim at all. On the contrary, some of the literature presents a very differentiated concept of what is meant by authenticity in CLIL. For example, Mehisto, Marsh and Frigols (2008:29) identify five components of authenticity within the CLIL methodology:

- letting the students ask for the language help needed
- maximizing the accommodation of student interests
- making a regular connection between learning and the students' lives
- connecting with other speakers of the CLIL language
- using current materials from the media and other sources

These elements of authenticity are mainly concerned with the respective learners and their needs and interests. Thus there is no absolute claim for authenticity in the sense of original, not manipulated texts, but rather features which are true for the learning context of CLIL. By this, the particularity of the classroom environment is taken into account and can therefore be considered suitable for our specific context. Furthermore, the elements of authenticity listed

above aim for an interactive design of input, which again caters to the communicative needs and competences required by CLIL.

As a consequence, we are presented with an understanding of authenticity which is in accordance with the language and content pedagogy underlying every classroom setting. It also shifts the focus from the nature of the source of the respective input (i.e. the text) to the learner. By doing that, what seems to be disregarded quite often, namely that "[a]uthenticity in the classroom is bound to be, to some extent, an illusion. This is because it does not depend on the source from which the language as an object is drawn but on the learners' engagement with it" (Widdowson 1990:44) is considered.

Hence, the implication for our analysis and evaluation is that we will not investigate whether the *nature* of the textbooks is 'authentic' regarding its content, but rather if the materials stimulate an authentic and meaningful *engagement* of the learners with the subject matter by the means of their content.

4.1.3. The functions of a course book

As we have already postulated at the beginning of section 3.2., a high quality CLIL textbook has to meet the requirements of both the language and the content-subject. Therefore, we will now have a brief look at what subject didactics in geography and economics demand from a course book. Ultimately this will allow us a more precise evaluation and analysis.

When it comes to course books in geography and economics, we have to distinguish between what functions a book has to fulfil and what features it has to have in order to be evaluated as recent state of the art learning material. Clearly, the features a book has will have an influence on what functions it is capable to fulfil and vice versa, since whether or not a book fulfils a particular function will depend on its features or the didactic design of its content and tasks respectively.

According to Hacker (1980: 7f., quoted in Ch. Sitte 2001:448ff.) we can differentiate between six basic functions which a course book may fulfil within the classroom:

1.) Die *Strukturierungsfunktion*: Sie umfaßt die [...] Konkretisierung bzw. Anordnung der in den Lehrplänen verordneten Inhalte und unterstützt damit den Unterrichtenden. [...]
2.) Die *Repräsentationsfunktion*: Sie umfaßt das textliche, bildliche, graphische und kartographische "Material", anhand dessen der Unterrichtsgegenstand vermittelt wird. [...] Die Schüler sollen in der Lage sein, mit Hilfe dieses Angebots einzeln, zu zweit

oder in Gruppen und möglichst selbstständig Kenntnisse, Fähigkeiten und einsichten operativ zu erwerben. [...]

3.) Die *Steuerungsfunktion*: Sie betrifft den Ablauf des Unterrichts. Die in Buch enthaltenen Lernaufgaben [...] können die Auswertung des Materialangebotes lenken und sollen somit nicht nur zur Wiederholung des Gelernten dienen. [...]
4.) Die *Motivationsfunktion*: Das Schulbuch soll ein die Schüler ansprechendes, modernes Layout haben. Es soll Anreiz geben, sich [...] mit dem in ihm Enthaltenen zu beschäftigen. [...] Allerdings sollte die Aufwendigkeit der "Verpackung" [...] nicht zu Lasten einer abwechslungsreichen Methodik bzw. der fundierten Inhalte gehen! [...]
5.) Die *Differenzierungsfunktion*: Sie betrifft die unterschiedliche Lernfähigkeit und Lernbereitschaft sowie die verscheidenen Interessenlagen der Schüler. [...]
6.) Die *Übungs-und Kontrollfunktion*: Diese soll nicht nur in simpler verbaler Frageform wahrgenommen werden. Anwendungswissen, Systemerkenntnisse, Fertigkeiten und Fähigkeiten sind in methodisch vielfältiger Form zu festigen und zu überprüfen. [...] Den Schülern wid bei diesem Transfer des Gelernten die Möglichkeit geboten, selbst festzustellen, ob sie das angebotene Lerngut richtig aufgenommen und verstanden haben [...]. (Ch.Sitte 2001:448ff.)

If we look at these functions, some overlaps with the criteria proposed by CLIL become apparent. Especially the *Motivationsfunktion*, the *Differenzierungsfunktion* as well as the *Übungs-und Kontrollfunktion* show requirements which are thoroughly in the sense of learner-focus and individualisation in the classroom, as demanded by CLIL and the criteria proposed by Mehisto. Furthermore, via the *Repräsentationsfunktion*, there is also a demand for interactivity and communication among the students, which gives the whole process of learning a communicative undertone. Additionally, we are reminded of the prominent concept of learner autonomy and the development of skills and competences specific to the content-subject, which is also an important element of the CLIL paradigm.

Therefore, the requirements on the part of subject didactics in geography and economics is by no means a contradiction but rather an enhancement to the already profound criteria discussed under 4.1.1., since we are provided with a perspective on teaching materials which are founded on the content-subject. Thus, the mentioned functions of a course book will be taken into consideration in the course of our analysis and evaluation. This will be done by looking at their features and drawing the according conclusions regarding the respective functions.

After having clarified what we have to look out for in principle, the next step towards asking the right questions is to define how we want to state them. Hence we will now have a look at the possibilities of conducting an analysis and evaluation of teaching materials, before finally determining our questions for both of these techniques.

4.2. Analysis versus evaluation - establishing principles

When confronted with the current academic literature, one cannot help but notice two technical terms, - ‘analysis’ on the one hand and ‘evaluation’ on the other - that both seem to be used to achieve similar goals. Nevertheless one should refrain from equating one with the other, because there is an important difference between those two:

> An evaluation is not the same as an analysis. It can include an analysis or follow from one, but the objectives and procedures are different. An evaluation focuses on the users of the materials and makes judgements about their effects [...] [Thus] it will be essentially subjective. On the other hand, an analysis focuses on the materials and it aims to provide an objective analysis of them. (Tomlinson 2007:16)

In other words, “[a]t its most basic level, analysis is a process which leads to an objective, verifiable *description*. Evaluation, as the words suggests, involves the *making of judgements*” (McGrath 2002:22) However, the distinction between subjective and objective conclusions is not as straightforward as is seems per definition.

The problem is that even if we conduct an analysis, we will necessarily have to define certain criteria which are limiting by their very nature. If those criteria were not defined, the course book in its very physical shape and content would present the most objective description. This, of course would not make any sense, since we would not be able to deduct any findings for bilingual teaching or CLIL in practice. Hence, we have to make choices which imply judgements about what is worth analysing and what is not.

Regarding the more subjective method of evaluation, we also have to define criteria in order to decide what it is that we want to evaluate, since there can be no evaluation which covers all possible aspects. In spite of its subjective nature, “[...] it is important that evaluations [...] are driven by a set of principles [...] articulated by the evaluator(s) prior to the evaluation. In this way greater validity and reliability can be achieved [...]” (Tomlinson 2007:17).

Therefore, the next step is to define criteria and principles for both the analysis and the consecutive evaluation of the teaching materials in question. Yet, we have to be very careful in doing so, since the vast majority of literature comes from the background of language teaching and thus puts an emphasis on language rather than content. Hence, when determining the necessary criteria, adoptions have to be made in order to recognise the specific CLIL-context of the teaching materials under examination.

4.2.1. Establishing principles for the analysis

Following the logic of Tomlinson (2007:16), an analysis has the character of a description, yet "[...] this description can be at different levels of sophistication. Beyond the most basic level, the concern is to understand what assumptions and beliefs lie beneath the surface and what effects can be anticipated" (McGrath 2002:22). This shows that the boundaries between analysis and evaluation are to some extend difficult to define. However, the most obvious distinction, which is also the one by which we shall draw the line, is the different focus of an analysis in comparison to an evaluation.

As already mentioned earlier, analysis focuses on the materials rather than the actual users. Of course, the nature of the materials will influence the effect of learner-progress as well as the actual outcome of learning. Therefore, this thesis will involve an analysis before the actual evaluation, as suggested by McGrath (ibid.) who considers a textbook analysis a necessary step to precede an evaluation.

A very interesting framework for a textbook analysis is provided by Littlejohn (1998:192), who provides an approach which focuses on "[...] materials as a *pedagogic* device, that is, as an aid to teaching and learning a foreign language", and in particular investigates on "[...] aspects of *methodology* of the materials and their *content*". As pointed out earlier, the problem here is that the framework comes from a language teaching background, which is not the sole intention of CLIL. Nevertheless, the basic structure of the framework suggested by Littlejohn is very suitable for our purpose, since it incorporates questions which can be applied quite generally, hence also to our bilingual setting.

On a global level, within the framework for analysis we can distinguish between aspects of publication and aspects of design:

> *Publication*, relates to [...] the relationship between the student's materials and any other components (e.g. [...] answer keys [...]) and the actual form of the material (e.g. [...] worksheets [...]) [,] [...] how they are divided into sections and sub-sections, how a sense of continuity or coherence is maintained and whether the order in which the material can be used is predetermined. This final aspect suggests one further element [namely] how access *into* the materials is supported. (Littlejohn 1998:193)

If we look at these aspects, the usability becomes obvious, since there are clear overlaps with the before-mentioned criteria for teaching materials. First of all, the issue of how the materials are structured is closely connected to the aspect of the *Strukturierungsfunktion* (cf. 4.1.3.), since it will allow us to compare the content of the Austrian national curriculum for geography and economics to the actual content of the *Do it in English-Geography* series.

Secondly, investigating on how access into the materials is provided will allow us to make explicit whether learner autonomy is supported by the books or not, which correlates to both the *Repräsentationsfunktion* (ibid.) as well as the demand of fostering learner autonomy and the fostering of learning and personal skills by scaffolding (cf. 4.1.1.).

The second area of analysis, design,

> [...] relates to the thinking underlying the materials, the apparent aims of the materials, how he tasks, language and content in the materials are selected and sequenced and the nature and focus of content in the materials. [Another element is] [...] the nature of the teaching/learning activities which are suggested by the materials. An analysis of materials will need to focus closely on what precisely learners are asked to *do* [...]. [...] Finally, we may examine the materials to determine what role they intend for themselves. (Littlejohn 1998:193f.)

Again, the specific areas which are covered by *design* in Littlejohn's framework are connected to the criteria for CLIL materials, especially when it comes to the discussion of tasks. Here we have to point out that analysing the latter according to the framework will not allow us to finally evaluate whether or not they support a high standard of bilingual education, but nevertheless will enable us to draw first conclusions nevertheless, for example, if the tasks have a communicative nature and thus stimulate meaningful interaction where the emphasis is on function rather than on form (cf. 2.1.2.; 4.1.1.).

A similar approach is proposed by Breen and Candlin (1987:13), who propose four questions with regard to the usefulness of materials, namely

a.) What the aims and content of the materials are
b.) What they require learners to do
c.) What they require you, as a teacher, to do
d.) What function they have as a classroom resource (ibid.)

Again, tasks and the underlying principles behind the content are of major interest.

Apart from the broad areas which may be explored in an analysis, there are distinctive levels of depth which can be pursued in the course of dealing with the questions raised. This can range "[...] from the most objective (what is physically there [...]), trough deductions about the demands likely to be made of teachers and learners [...], to conclusions about the apparent underlying principles [...]" (Littlejohn 1998:195). Hence, we are facing an increase of subjectivity by the complexity and depth of our investigation, as can be seen in the figure below:

• **Level1** [most objective] **'What is there?'**
  o Statements of description
  o Physical aspects of the materials
  o Main steps in instructional sections

• **Level 2 'What is required of Users'**
  o Subdivision into constituent tasks
  o An analysis of tasks: What is the learner expected to do? With whom? With what content? Who determines these things?

• **Level 3** [most subjective] **'What is implied'**
  o Deducing aims, principles of selection and sequence
  o Deducing teacher and learner roles
  o Deducing demands on learner's process competence [regarding the content]

Figure 3: Levels of analysis (Littlejohn 1998:195; own emphasis)

It appears, the most complex level (3) is the most subjective and can thus be considered on the brink of making judgements. Therefore, this thesis will follow the pattern proposed by Littlejohn, namely moving from Level 1 to Level 3 in the analysis, since it is a suitable possibility to develop a logical and coherent argument, before arriving at an actual evaluation.

The latter will allow us to answer the question whether the course books in question do indeed support the development of skills and knowledge, as demanded by CLIL or if they turn out to be a 'false friend'. Yet, even though we may arrive at a subjective conclusion, we have to establish principles for evaluation the materials as well in order to make explicit why we will come to a particular conclusion in the end. Thus, the next section will define the principles on which the evaluation in the later part of the thesis is based on.

4.2.2. Establishing principles for the evaluation

"Evaluation and selection of textbooks is a complex process that is carried out in many different ways" (Byrd 2001:415). As a consequence, "[...] no two evaluations can be the same, as the needs, objectives, backgrounds and preferred styles of the participants will differ from context to context" (Tomlinson 2007:15). Due to this circumstance, the evaluation conducted in this thesis has to be considered as very specific, because of the parameters set in this section.

The context of the materials subject to evaluation has already been clarified under 3.3., namely a bilingual setting in the Austrian education system. Also the background to which the evaluation relates is rather obvious, since bilingual education is, as has already been pointed out, one form of CLIL and has therefore objectives which have to be in accordance with the five goals of CLIL (cf.3.1.2.). The issue that has to be resolved now is to find a way to make the evaluation as objective as possible.

According to Tomlinson (2007:18), "[...] the starting point of any evaluation should be reflection on the evaluator's practice leading to articulation of the evaluator's theories of learning and teaching". Like the context and background of the evaluation, this has already been made explicit, mainly in chapter 3, where it was shown that Krashen's Monitor Theory and the principles of Communicative Language Teaching are still very important for the theory of learning and teaching within CLIL.

The next logical step is to choose the desired method of evaluation. Here, we have to distinguish between the timing of the evaluation and the actual method of evaluation. Concerning the former, there are basically three different types of evaluation. First of all, a 'pre-use evaluation' can be conducted, which "[...] involves making predictions about the potential value of materials for their users" (Tomlinson 2007:23). Furthermore, there is the 'whilst-use evaluation', which "[...] involves measuring the value of materials whilst using them or whilst observing them being used" (Tomlinson 2007:24) and the 'post-use evaluation', which "[...] is probably the most valuable [...] type of evaluation as it can measure the actual effects of the materials on the users" (Tomlinson 2007:25).

Ideally, these three types are combined and conducted in a cyclical process in order to assure the best possible outcome (cf. McGrath 2002 14f.). However, since there is no testing population available for the analysis and evaluation of the course books in question, this thesis will conduct a pre-use evaluation, since it is, on the one hand, suitable for answering the research question of whether or not the materials support effective teaching and learning

according to the CLIL paradigm and, on the other hand, can be conducted without a testing population.

Concerning the method of evaluation, the academic literature provides an almost infinite number of possible criteria and approaches. However, it seems that their most distinguishing feature is the level of depth which is achieved by a particular method, which closely corresponds to Littlejohn's concept of the different levels of analysis presented above.

The first and rather superficial method is called the impressionistic method and "[...] is concerned to obtain a general impression of the material. [...] This kind of overview [...] is of course inadequate if it constitutes the sole basis for textbook evaluation [...]" (McGrath 2002:25f.). for the purpose of this thesis, an evaluation which remains on the surface of materials is not sufficient, since the overall research question does not intend to solely evaluate the structure of the course books or their content, but rather tries to unearth an issue (i.e. usefulness) of a more fundamental character.

The second method is evaluation via a checklist (hence called the 'checklist method'). Generally spoken, a checklist has certain advantages in comparison to the other two methods:

1. It is *systematic*, ensuring that all elements that are deemed to be important are considered.
2. It is cost *effective*, permitting a good deal of information to be recorded in a relatively short space of time.
3. The information is recorded in a *convenient* format, allowing for easy comparison between competing sets of material.
4. It is *explicit*, and, provided the categories are well understood [...], offers a common frame-work for decision-making. (McGrath 26f.)

Apart from the advantage of low costs, which is an issue in projects conducted in a commercial context, all advantages are relevant for the purpose of this thesis. Therefore, at first glance, a checklist appears to be a good and well-grounded approach for evaluating the course books in question. However, due to the specific context of Austrian bilingual education in the particular subject of geography and economics, there is practically no checklist which incorporates the distinct criteria which are relevant to the research question. The reason for this is that most checklists are apparently aimed for a broad range of CLIL contexts and therefore neglect the demands stated by subject-didactics in geography. Adapting a checklist is not a real option, because it would disturb the systems which underlies the list.

Hence, the third option for evaluation, the 'in-depth-method' is the best choice for the presented thesis, because it allows an evaluation to "[...] go beneath the publisher's and author's claims [...] [and], in a broader sense, [to evaluate] whether the materials are likely to live up to the claims that are being made for them" (McGrath 2002:27f.). The feature

perfectly complements the investigation on the effects of the user by a pre-use-evaluation such as the one conducted in this thesis. Nevertheless, it has to be pointed out that an in-depth evaluation has potential weaknesses:

1. *Representativeness of samples*: (e.g. exercises, lessons, units) selected for analysis may not be representative of the book as a whole, and this may therefore distort the judgement.
2. *Partiality*: because in-depth analysis is normally narrowly focused [...] it gives only a partial insight into what the material offers.
3. *Time and expertise required*: some proposals for in-depth evaluation would involve a good deal of time; others require expert knowledge [...] (McGrath 2002:28)

Especially the problem of representativeness cannot be denied for this thesis, since it is not only one book, but a whole book series, consisting of four books (in case of *Do it in English-Geography*) or 3 books (for the *Diercke Geography for bilingual classes*) subject to evaluation. Yet, choosing samples from every volume of the respective series is a possibility to reduce the impact of sample-choice for the overall judgement. The second weakness, partiality, is a problem which is inherent to basically all evaluations, since they have to make judgements based on certain criteria. The last con is again more an issue in commercial settings. Besides, the expert knowledge which constitutes the basis of our criteria is presented in chapters two and three of this thesis. Therefore, the method of evaluation will be an in-depth evaluation.

In order to reduce the subjectivity of the evaluation, guiding principles have to be established (cf. Tomlinson 2007:27ff.). Here, the expert knowledge can function as a guideline by providing the criteria by which the evaluation is conducted. The most obvious catalogue of criteria so far is the one proposed by Mehisto (2010; http://www.ccn-clil.eu/clil_criteria_web/index.php 15 May 2011), which was already introduced under 4.1.1. of this thesis. This is because it is a catalogue which was specifically designed for CLIL materials and thus sufficiently incorporates both dimensions of language and content. Yet, as was mentioned in chapter three and 4.1.3., a CLIL textbook also has to be a sufficient geography book. Therefore, we have to enhance the catalogue of criteria by the functions of a course book, since it represents the view of subject-didactics on a course book. Thus, the criteria which underlie the evaluation do justice to both the content-subject, which is the pivot of CLIL, as well as the CLIL paradigm as a whole.

The last step that has to be taken now, is to specifically define the questions which will be answered by the evaluation. This task will be done in the next section.

4.3. Asking the right questions - A synopsis of theories

The final challenge before conducting the analysis and evaluation is to bring the theories, methods and concepts discussed in chapters one to four to a synopsis and therefore define an informed catalogue of questions. This is rather straightforward for the analysis, which is why these questions will be defined first, before continuing to establish the questions for the evaluation.

4.3.1. Defining the questions for the analysis

Since the analysis is intended to provide a first objective impression of the materials and not to make judgements, it will broadly follow the concept developed by Littlejohn (1998). Yet, it has to be pointed out that since the analysis conducted relates to a very specific context, not all of the questions postulated by Littlejohn have proven to be useful. This is mainly, because in this thesis, the analysis is just one first step into the materials, rather than the sole subject of interest. Therefore, some of the questions introduced under 4.2.1. will have to be left out in order to avoid a repetition of arguments and conclusions, as well as superficiality due to an overly broad diversification of issues that are analysed. In the course of research and close-reading of the materials, the following questions have proven to be suitable for this thesis:

1. How is the content of the course books organised/structured overall? (statements of description)
2. How are the chapters organised? Is there a recognisable pattern (main steps in instructional sections)
3. Is access into the content provided? How? (main steps in instructional sections)
4. What is the learner expected to do? With whom? With what content? Who determines these things? (an analysis of tasks)
5. What are the implied aims and principles behind the materials? (Deducing aims, principles of selection and sequence)

This set of questions, which are directly related to the categories defined by Littlejohn, provides a profound basis for a detailed analysis of the course books in question. As may be noticeable, physical aspects of the materials are not part of the analysis, since it is not part of the academic focus of this paper, which investigates more on the level of (academic) theory

(i.e. CLIL) put into practice. Due to the fact that the CLIL literature does not pay significant attention to the physical properties of materials, this aspect can thus be left out. Additionally, the question which deals with the roles of learners and the teacher was also not taken over from Littlejohn's suggested catalogue of questions. The reason for this is that this is an issue very specific to language teaching, which is not at the centre of attention of this thesis. Finally, the question investigating on the processing of learners' competence was also left out, since this issue will be discussed in the course of the evaluation when dealing with the question of to what extent the materials foster academic and language skills.

Despite these adaptations, the catalogue of five questions allows a detailed and informed analysis which provides a sound basis for the consecutively conducted evaluation of the teaching materials.

4.3.2. Defining the questions for the evaluation

After analysing the materials, the thesis will continue to conduct an evaluation, based on the criteria proposed by Mehisto (2010, http://www.ccn-clil.eu/clil_criteria_web/index.php 15 May 2011), as well as the functions of a course book stated by Hacker (1980: 7f., quoted in Ch. Sitte 2001:448ff.). Thus it is assured that both the subject-didactics of the CLIL paradigm, as well as those of the content-subject are taken into consideration. However, again due to the specific context of the evaluation, further adaptations have to be made in order to clearly link the evaluation to the logic of this thesis. Therefore, some aspects auf authenticity as stated by Mehisto, Marsh and Frigols (2008:29) are examined and evaluated in addition. Last but not least, the issue of bilingualism has to be necessarily addressed, since the specific context of the materials is, after all, bilingual education. If we recall the theses postulated by Otten and Wildhage (2007) (cf. 3.2.2), functional bilingualism is one key element of successful bilingual education.

Based on a synopsis of frameworks of criteria, a catalogue of questions, which constitutes a synthesis of all the theory which has been presented so far in this thesis, will be adapted for evaluating and thus finally judging the materials in question. It is clear that the evaluation conducted below is very specific and selective. Yet, this is legitimate, given the fact that every evaluation is basically unique (cf. Tomlinson 200715f.), as long as it is based on elaborated principles and criteria. The latter have been gradually established in the course

of this thesis so far. Therefore, the evaluation of the course book series will involve the following questions:

1. To what extent does the organisation and presentation of the topics account for the aims and demands of the Austrian national curriculum (cf. *Organisationsfunktion*)
2. To what extent do the materials make the learning intentions and process visible by highlighting relevant aspects within the units?
3. To what extent do the materials foster the development of academic language proficiency?
4. To what extent do the materials foster the development of learning skills and learner autonomy? (cf. also *Repräsentationsfunktion*)
5. To what extent are the materials likely to motivate learners to deal with the content? Is their design motivating and engaging from a learner's perspective? (cf. *Motivationsfunktion*)
6. To what extent do the materials foster cooperative learning and a communicative use of language and knowledge?
7. To what extent do the materials foster critical thinking and thus provide multiple perspectives on one topic?
8. To what extent do the materials foster cognitive fluency by providing means of scaffolding language, content and (learning) skills?
9. To what extent do the materials try to incorporate an authentic language (engagement) by the learners?
10. To what extent do the materials apply an approach of functional bilingualism?

These ten questions are the basis of the evaluation conducted. Obviously, they are an adaptation, selection and enhancement of different criteria presented throughout the thesis. This is a necessary step in order to avoid repetition as well as to assure that subject didactics of geography and economics get sufficient attention.

However, they are nevertheless the most relevant for the materials under examination and the focus of this thesis and allow a detailed and differentiated evaluation, which involves most of the theoretical claims presented above.

5. Analysis and Evaluation of the *Do it in English-Geography* and the *Diercke Geography for bilingual classes* series

The practical part of the thesis consists of an analysis of the respective materials, before an evaluation is conducted. Here, it has to be pointed out that the main interest of both methods lies with the Austrian course books, while its German counterparts are a means for providing an illustration of potential differences in design and overall realisation of the goals and principles proposed by the CLIL paradigm. Therefore, for example when evaluating the correspondence between the Austrian curriculum and the actual materials, the *Diercke Geography for bilingual classes* series will be secondary.

5.1. An analysis of Do it in English-Geography and Diercke Geography for bilingual classes series

As was already pointed out, the analysis follows the concept proposed by Littlejohn (1998). At points where a more precise description of the respective level and question is necessary in order to maintain cohesion and comprehensibility, short definitions and clarifications based on the literature are provided. Furthermore, scans of the passages subject to analysis are provided in the Appendix at the end of the thesis to ensure the traceability of the argument developed in the following sections.

5.1.1. How is the content of the course books organised/structured overall?

By looking into the materials and conducting an analysis on the descriptive level, "[...] we can examine how the 'units', 'chapters' etc. are subdivided, their length, and if there is any standard pattern within them" (Littlejohn 1998:196).

In the case of the *Do it in English-Geography*. series, each chapter represents a specific topic- area rather than a single topic. For example, volume one contains chapters like 'population', which involves several topics like population-growth or migration (cf. Sonnenberg 2007:2) and is clearly associated with human geography. Throughout the series, the chapters are consecutively numbered within each individual course book, suggesting a specific order in which the respective topics may be discussed. Additionally, each chapter has several sub-sections, which are also ordered numerically.

Concerning the topic-areas which are presented to the learner, there is an indication that issues concerning the physical geography are at the beginning of the course books, whereas topics concerning human geography and economics are to be found towards the end. This is noticeable if we look at the table of contents of volume one, two and three. In volume one, chapters one to three deal with topics in the area of physical geography, before the course book tackles population and economics. Interestingly, the penultimate chapter is to some extend a combination of economics, population and physical geography, since it deals with resources. Also volume two introduces the topic of Europe and the European Union by dealing with topography and physical geography, namely climate, relief and vegetation. In the case of volume three, the author chooses a historical introduction to the overall-topic of Austria by discussing the geostrategic changes of the country. However, right afterwards, physical geography again precedes human geography. Volume four is an exception to the rule, since it deals with globalisation in general, which is indeed a topic of economics rather than physical geography.

Another recurring pattern concerning the structure of the course books is that each volume provides worksheets and a glossary, which explains important vocabulary in English, at the very end of the volume, rather than at the end of each chapter.

Apart from these criteria, there are no other recognisable patterns. The content is not structured according to particular learning aims, or any other pedagogical reason. Yet, if we keep the national curriculum of Austria in mind, the overall organisation of the entire course book series very strongly resembles the structure of the curriculum. This issue will be, however, further investigated under 5.2.1. when the question of whether the series accounts for the content and aims of the national curriculum will be discussed.

If we look at the *Diercke Geography for bilingual classes* series in comparison, the first difference that is immediately recognisable is that both volumes show no numerical structuring of chapters. As a result, there are also no sub-sectioning via numbers, like in the Austrian course books. Yet, each chapter, of course has several sub-categories, which are, however rather showcase examples of broader topics. For example, 'The Monsoon - Hope and Despair in Bangladesh' (Dreymüller et.al. 2007:4) or 'Lake Victoria - Once Rich Fishing Grounds' (Dreymüller et.al. 2008:4). This is significantly different from the Austrian course books, which provide a more abstract presentation of sub-categories of a specific topic, for example 'The classification of resources' (Sonnenberg 2007:2), which does not introduce the respective issue in an exemplarily manner.

Another specific feature regarding the overall organisation of content is the alternative table of contents in Volume one of *Diercke Geography for bilingual classes* (cf. Dreymüller et.al. 2007:6f.) . Here, the authors define four global topics, namely 'Natural Forces, Living and Working in Different Regions', 'Living and Working under Different Political and Cultural Conditions', 'The Opening up and Change of Places' as well as 'Endangered Environment', while reassigning the various sub-sections of the course book accordingly. Thus, the learners as well as the teacher can choose between two approaches to the content of the book. This is, however not featured in volume two, where the content is structured similarly to the Austrian course books, namely by broad topic areas, such as 'Global Disparities' and 'Energy Resources'.

Volume one also has a slightly different approach to structuring its content, since its main topic, 'living and working', is divided into several regions of the world such as Africa, Asia, Russia, the Orient and North America. Here, another significant difference to the Austrian course books is noticeable, namely the focus on one topic, which is discussed in different cultural and geographical settings. Interestingly, the respective scale of the different regions varies. For example, in some chapters the topic 'living and working' is discussed on a continental level, like Africa. Yet, in other chapters, there is a focus on a particular region (e.g. 'the Orient') or just a specific country (e.g. Russia). Volume two does not follow through with the concept of focussing on one central topic and tackles one topic-area per chapter, for example 'energy resources' or global economy'. Yet, it has to be pointed out that there is still one underlying topic noticeable, namely globalisation.

Aonother pattern throughout the German course book series is that there is one separate section called 'skills' at the end of each textbook. These sections are organised into sub-categories which deal with one particular type of media (such as films or the internet - cf. Dreymüller et.al. 2008:5), graph (e.g. pie charts - cf. Dreymüller et.al. 2007:5) or maps (e.g. thematic maps - cf. ibid.).

Another interesting difference in comparison to the Austrian course books is that there is a separate workbook with additional tasks and worksheets for each volume (cf. http://www.westermann.de/shop/reihenansicht.php?reiId=114010 15 March 2011). Unfortunately, the workbooks for volume one and two were not available. Hence an analysis of the workbooks' structure is not applicable.

After having discussed the overall organisation of content in both series, the next step is to have a look at the chapters and their organisation.

5.1.2. How are the chapters organised? Is there a recognisable pattern?

If we analyse the next deeper level of structuring hierarchy in throughout the *Do it in English-Geography* series, some interesting features in terms of their organisation become apparent. As is widely known, it is usual to introduce a chapter by an introductory sentence which is rather general in its statement and is intended to prepare the reader for the following content of the respective text.

In the case of the Austrian course book series, the author does not consistently provide introductions to chapters throughout the whole series, which becomes apparent if we look at the first sentences of some chapters (written in italics):

- *Weather and Climate*: "One of the best ways to characterize climatic zones is to look at the **climatic graph** - a graph showing the average rainfall and average temperature [...]" (Sonnenberg 2007:9).
- *Changing Life in Europe*: "Agriculture and food production are basic to any society. History has shown how important food production, food supply (food security), self-sufficiency and a functioning agricultural market are for any given country" (Sonnenberg 2008:34).
- *Austria's Position in Europe*: "Austria is situated in southern central Europe, covering parts of the **Eastern Alps** and the **Danube region**" (Sonnenberg 2009:3).
- *Natural Geography of Austria*: "Austria (83, 863 km2) is made up of three main natural landscapes: [...]" (Sonnenberg 2009:10).
- *Global Finance*: "In a modern economy people, firms and government institutions need to save and borrow money, make payments to others, make investments and exchange the money used in their country to make overseas payments" (Sonnenberg 2010:79)

The excerpts from all volumes of the series show significant differences, which are representative of the mode of introduction of the various chapters. Sometimes, the author applies an approach which is rather in medias res than actually introducing a topic. The former is most obvious in the opening sentences of the chapters *Weather and Climate* or *Natural Geography of Austria*, which are factual statements dealing with one specific aspect of the respective chapter or confront the learner immediately with a set of hard facts.

In contrast, some chapters actually do have introductory sentences, as can be seen in the excerpts from *Changing Life* in *Europe and Global Finance*. Here, both chapters are introduced by rather general statements which of course deal with the topic of the chapter, but by no means confront the reader with specific facts or aspects of the chapter.

Strictly speaking, the respective introductions of the various chapters are actually part of the first sub-sections. Every single chapter in the whole series is thus not introduced at all, but rather immediately jumps to the level of sub-sections, which deals with one particular aspect of the chapter. Therefore, it can be concluded that the text basically leaves out the typical move of introducing a topic to the reader or learner respectively. This pattern is noticeable throughout the entire course book series.

As was indicated in the course of the analysis of the overall organisation of the course books, chapters are indeed organised into sub-sections and sometimes even sub-sub-sections. Here, one sub-section represents one differentiated aspect or subcategory of the respective chapter. One chapter which illustrates the systematic structuring of each chapter is found in volume two of the *Do it in English-Geography* series:

The Different Policies of the EU Today

- The Common Market Policy of the EU
- The Regional Policy of the EU
- The Common Agricultural Policy (CAP) of the EU
- The Economic and Monetary Union of the EU - The Euro
  (cf. Sonnenberg 2008:25-33)

In other words, each topic, as in the case of 'policies' in the example provided, is divided into its basic constituents which are presented and discussed in isolation. In this respect it is interesting that the author abandoned the option of introducing each chapter as a whole topic, because this would follow the deductive structure (i.e. from general to specific) of the organisation of the various chapters.

Within the respective subsections, bold headings mark further subordinate topics of the respective sub-section. In the case of the example provided above, this results in the following organisation:

The Different Policies of the EU Today

- The Common Market Policy of the EU
  - The single market
- The Regional Policy of the EU
  - Regional development
  - Regional action
  - The social dimension
  - Employment policy
  - Financing the common policies
- The Common Agricultural Policy (CAP) of the EU
  - Reforming the Common Agricultural Policy
  - The challenge of enlargement
  - Visions of the future (ibid.)

This organisation which is representative of all volumes results in relatively small chunks of factual input which are organised hierarchically. One interesting aspect is that in rare cases, the headlines obviously relate to entities of a higher semantic and conceptual order. For example, 'employment policy' is semantically and conceptually similar to 'regional policy' in the sense of one specific kind of policy. 'Regional development', on the other hand is clearly semantically subordinate to 'regional policy', since it is one constituting element of it. Yet, both 'employment policy' and 'regional development' are on the same hierarchical level, which somehow disturbs the otherwise clear organisation (apart from the fact that employment policy is not solely conducted on a regional level).

One further significant feature of the Austrian course books is that additional information or further explanations regarding one particular aspect or particular terms used in a section, is always provided in yellow boxes. These are mainly at the very margins of the page, (e.g. Sonnenberg 2010:63) or moved to the centre and thus interfering with the actual text (e.g. Sonnenberg 2007:41). One last feature which is noticeable within the series is the sporadic inclusion of so called 'case studies' which are basically adapting an exemplarily approach to a certain topic. This however, is only conducted in volume one, chapter six *The Use of Resources and Land* as well as in volume three, chapter five *Austria as a Business Location*. In both instances the case studies are at the very end of the respective chapter.

If we look at the organisation of the *Diercke Geography for bilingual classes* series and examine the same features in comparison, the first issue, introducing a topic via introductory sentences, is not a very prominent move either:

- *Living and Working in Africa*: "Africa is a continent with different vegetation zones". (Dreymüller et.al. 2007:38)
- *Living and Working in Asia*: "You can still find the traditional China even in big cities. There are still many small industries in narrow streets close to the city." (Dreymüller et.al. 2007:76).
- *Living and Working in Latin America*: "About 135 natural and historical locations in Latin America are listed in the UNESCO World Heritage site catalogue (Dreymüller et.al. 2007:132).
- *Global Disparities*: "Globalisation strengthens the world's economic efficiency. At the same time, however, it has led to a split in society, especially in less economically developed countries (LEDCs)" (Dreymüller et.al. 2008:68).
- *Europe Changes*: "Since 1951 the co-operation of initially six European states has led to a powerful region in the world, the European Union (EU), consisting of 27 member states in 2008" (Dreymüller et.al. 2008:92)

Again, there are some instances where the learner is introduced via a relatively general statement, as in the case of *Global Disparities* and *Europe Changes*, while at the beginning of other chapters one particular aspect is discussed right away. Therefore it is not valid to say that introducing chapters via the body of the text is a regular pattern. Although this way of opening a chapter is indeed present in the series, it is not regularly conducted or shows any recognisable pattern.

Yet, there is one other mode of introducing a topic to the learners in the German course book series which is not adopted in the Austrian course books at all, namely introduction via a stimulus. While the latter either start with a general statement or present specific facts right away, the former series at some points places an additional text or figure at the very beginning of each chapter. If we look at the chapter *Natural Forces Affect Life on Earth* (Dreymüller et.al. 2007:10) the learner is initially presented a short text about drilling in one part of Germany. Here, the text obviously functions as an introduction to the whole topic of how our planet is structured inside. Another example of introducing a chapter via a stimulating text is found at the beginning of the chapter *Global Economy* (Dreymüller et.al. 2008:10), where the learner is confronted with the text 'The global toothbrush', which depicts the global manufacturing of the constituting parts of an electrical toothbrush and is thus a concrete example of globalisation. It is interesting that both introductory texts are found at the beginning of each respective volume and are the only instances where this method is applied.

Concerning the structuring of content within the respective chapters, there is, due to the missing of numerical sectioning, a less hierarchical organisation of the content. The only recognisable distinction between sub-sections and sub-sub-sections within the chapters is by a different font size of the bold headings. A very good example of this is to be found again in the chapter *Natural Forces Affect Life on Earth*. If we look at the sub-section 'The Shaping of the Earth at Plate Boundaries', a for the series typical structure is observable. Although it is not numerically ordered, the chapter's logical structure is basically identical with the one observed in the Austrian course book series, namely on particular topic is sub-sectioned into its constituent aspects:

Natural Forces Affect Life on Earth

What does our Earth Look Like Inside?

- The crust
- The outer core
- The mantle
- The inner core

- Wegener's Theory of Continental Drift
  - The theory of plate tectonics
- The Shaping of the Earth at Plate Boundaries
  - Plates moving apart - constructive margins
  - Plates sliding past each other - conservative plates
  - Plates moving under each other - destructive margins
- Earthquakes - The 1995 Kobe Earthquake in Japan
  - Why was the Kobe earthquake so disastrous?
- Tsunamis - The Indian Ocean Catastrophe of 2004
- Volcanoes - A Curse or a Blessing?
  - 500 active volcanoes
  - Why do so many people live near active volcanoes?
- The Water Cycle
- Living on a River - Living with a River
  - The upper valley
  - The middle valley
  - The lower valley
- Tilted Axis
  - More heat - less heat
  - Hot places - cold places
- Polar Day - Polar Night
- The Global Wind and Pressure Belts
- Climatic Zones of the World

  What influences climate?
- The Earth's Vegetation Zones (Dreymüller et.al. 2007:8-34)

As can be seen, the book also follows a deductive logic from general concepts (natural forces) over concrete examples (e.g. plate tectonics) to specific aspects (e.g. plate boundaries).

Another interesting feature of the Diercke Geography for bilingual classes series that the authors provide showcase examples within the chapters, or even discuss entire issues via them - as opposed to the Austrian course books which place 'case studies' at the very end of the respective chapter. As a result, the showcase examples are far less isolated from the general text than in the *Do it in English-Geography* series.

Like in the latter, the German series also provides additional information, data and explanations within each chapter, mostly depicted by boxes which resemble notes or post-its (e.g. Dreymüller et.al. 2008:38). Apart from that, boxes of colours corresponding to the respective colour of the chapter provide a range of additional texts and text types which

illustrate personal comments (e.g. speeches as at Dreymüller et.al. 2007:78), provide further information or raise awareness towards problems (e.g. Dreymüller et.al. 2008:101).

5.1.3. Is access into the content provided? How?

After having discussed the structuring and organisation of chapters and their constituting elements, the next interesting aspect to analyse is what are "[...] the means of access into the materials that are provided (for example an index of vocabulary items)" (Littlejohn 1998:196). This is obviously connected to the issue of scaffolding, which will be a topic in the evaluation conducted above. For the time being, the various ways of how the learner is supported in accessing the content of the course books are analysed.

The most obvious form of providing access into the content in the *Do it in English-Geography* series is the glossary at the end of each volume. In the glossary, key terms of the respective volume are listed alphabetically and are explained in English, while the German translation is provided at the very end of the entry. Additionally, the book page where the word occurs is listed:

> **agglomeration**: here: a concentration of economic activities in related sectors in a certain geographical area (Ballungsraum).**37** (Sonnenberg 2009:91, original emphasis)
>
> **flood**: large amount of water covering an area that is usually dry (Überflutung/Hochwasser). 62 (Sonnenberg 2007:77)

This is an interesting solution, because it combines descriptions in the target language, which are typical for monolingual dictionaries, or are found in monolingual textbooks for teaching English as a foreign language, with a German translation in order to clarify the meaning of the word. In addition, each of the terms listed in the glossary is additionally printed in bold within the text, in order to highlight potentially difficult vocabulary (e.g. Sonnenberg 2009:37). However, as is illustrated by the page cited, the layout sometimes also highlights phrases which are not listed in the glossary. For example, ‘raw materials’, ‘communications’, ‘power supply’ and ‘political and social stability’ are mere concepts, which belong to the discussion of the sub-section rather than key vocabulary. On the other hand, key terms, which are described in the yellow box on the right are also listed and explained verbatim in the glossary (as can be seen above). So there is not an entirely straightforward pattern in terms of making important vocabulary and concepts explicit.

Yellow boxes explaining key terms on the same page as they occur are common in the whole course book series. Every now and then, the explanation of a particular technical term is taken from an external source. One good example is found in volume four (Sonnenberg 2010:30), where the technical term 'terms of trade' is explained by a text taken from the internet (in this case, answers.com). There is no noticeable difference between the actual language and sentence structure of the external sources and the explanations provided by the author. In other words, there is no simplified or somehow didactically manipulated language used for providing easier access into the concepts and new vocabulary.

Apart from yellow boxes which explain vocabulary in English and are obviously intended to provide access into new language, there is one incident in the course book series, where the material tries to provide access into technical skills content wise. Figure 9.1. (cf. Sonnenberg 2007:9) shows a climatic graph, which is a kind of graph, which learners probably only encounter within geography and economics. Thus, the box to the left provides basic phrases which mark significant point in the graph given as an example. This is clearly an attempt by the author to provide access into the description of climatic graph. However, no phrases that are/could be useful to interpret graphs successfully are provided.

Interestingly, apart from yellow boxes explaining vocabulary, a glossary at the end of each volume and one instance where the material tries to provide access into a content-specific item, there are no further instances or means of supporting learners to get into the subject matter, neither regarding the language component nor the subject-specific content. Of course, there are several figures that try to depict abstract processes, such as weather circulations in a schematic and comprehensible way. Yet, this is indeed not a distinctive feature of CLIL materials, since the very definition of a course book is that it tries to explain and make explicit abstract features of a subject in order to support students in understanding the subject matter. Thus all course books in one way or another have to contain figures designed to make underlying interrelations and aspects of a particular topic explicit.

The German course books series also provides a list of important vocabulary at the end of each volume. However, learners do not find a glossary like in the Austrian books, but rather a vocabulary list providing the German translation of the respective word:

agglomeration Ballungsraum (Dreymüller et.al. 2007:188, original emphasis)

flood Flut (Dreymüller et.al. 2007:194, original emphasis)

The first big difference in comparison to the *Do it in English-Geography* series is that there is no English explanation of the respective piece of vocabulary provided. So the learners have

indeed no glossary at their disposal, but just a list of words. Another difference is that there is no reference to the respective page where the word is used.

Similar to the yellow boxes in the Austrian course books, the German books provide orange boxes where key terms are listed (e.g. Dreymüller et.al. 2008:105). In contrast to the Austrian books, these key terms are not highlighted in any way within the text corpus. Every key term is actually listed in the word list at the end of the book, which provides a rather quick way to look it up. Another feature in terms of explaining vocabulary is sporadically provided by the already mentioned boxes which look like post-its. Here, again similar to the yellow boxes in the Austrian books, some words are explained in more detail, as can be seen, for example in Volume 1 in the chapter *Living and Working in Asia* (Dreymüller et.al. 2007:85), where typhoons and some of their aspects are introduced and discussed. If we compare the structuring of the explanation to the ones provided by the Austrian course books, it becomes apparent that the text is organised more clearly by the use of paragraphs. Additionally, the explanation is more written like an actual short text rather than a glossary entry. This is noticeable in the first sentence, which actually uses a subject, predicate and an object (as opposed to the yellow boxes, where the predicate is often omitted, e.g. Sonnenberg 2010:31).

One feature of providing access into the content and the language of the course books which is unique to the *Diercke Geography for bilingual classes* series are the before-mentioned 'skills'-chapters. Here, the learners are provided with phrases, model texts, moves and tasks which are intended to help them to access the respective graph, media or text type more easily.

One example which is ideal for comparison with regard to the Austrian course books is found in Volume 1 (Dreymüller et.al. 2007: 174). Like the section mentioned above, this part of the book deals with the rather difficult climate graphs. Here, every part of a climate graph is clearly labelled and different elements of the graph differently coloured. For example, each element of the climate graph which deals with precipitation is labelled by a blue box, while elements dealing with temperature are labelled in orange. Apart from the clear structured labelling of the various elements, the section provides a box with useful words and phrases which help to interpret the graph. Furthermore, the respective necessary to provide a coherent interpretation of climate graphs are provided, along with a model text which illustrating the moves accordingly. Beyond that, an instruction of how to draw this kind of graph is provided, which even suggests a scale to the learner.

An example illustrating a slightly different approach to providing access into subject-specific texts can be found in Volume 1 as well (Dreymüller et.al. 2007:160). Here, the learners are also provided with careful instructions of how to use physical maps and how to find places on them. Yet, compared to the section on climate graphs, the various elements of a map are not as explicitly labelled and the actual representation of the map is not quite natural, since title, the actual map, as well as the legend are presented as fragments rather than a whole.

What is also slightly different is the presentation of the model text. Here, there are no explicit moves, but phrases, which are suggested by the orange box are highlighted in order to illustrate their use in a text. The latter are also divided into general topics which relate to physical maps, like describing locations or transportation routes.

This diverse support is provided for any media or text relevant to geography and economics. Learners quickly find the respective section, since they are organised according to genre or the type of map or graph respectively.

One further interesting feature, which can also be considered as providing access into the content – or rather cultural differences – are the last two pages of every volume (cf. Dreymüller et.al. 2007:210f.; Dreymüller et.al. 2008:178f.). Here, the differences between the metric system and the imperial system are illustrated along with common geometrical shapes, figures and numbers in general. Since especially geography and economics greatly deal with distances, scales and figures in general, this feature probably helps the learners at various points of education and allows easier access into authentic texts and their measurements and numbers.

Overall, the German course books offer a wide range of different methods to provide access into the subject-specific content, while the Austrian course books mainly focus on providing a glossary or glossary-like explanations for key vocabulary.

1.5.4. What is the learner expected to do? With whom? With what content? Who determines these things?

It is now time to go one level deeper in the analysis. Based on Littlejohn's (1998) framework, the analysis examines what the materials actually demand of the learner. This provides a first insight for central issues within the evaluation below, since one key issue here are obviously the tasks. They in turn are important for various questions, which will be discussed later on, like to what extent they foster meaningful communication, or whether they encourage learner autonomy.

Yet, before tasks can be analysed, it has to be made explicit what tasks, in Littlejohn's definition are. This is important, because only then it can be precisely determined what a course book task is and what is not. According to Littlejohn (1998:198), a task "[...] refers to any proposal contained within the materials for action to be undertaken by the learners, which has the direct aim for bringing about the learning of the foreign language". If we expansion this definition by the dimension of subject-content and skills or competences associated with it, a suitable operationalisation of 'task' for our context is achieved. Furthermore, there are three aspects of tasks, which have to be considered when analysing them:

- a *process* through which learners and teachers are to go
- classroom *participation* concerning with (if anyone) learners are to work
- *content* that the learners are to focus on (ibid.)

Although these may be considerations which were developed with language teaching in mind, all three aspects are absolutely valid for the CLIL-context of the course books under examination. Especially participation and the focus on content are worthwhile to investigate on.

If we start again with the *Do it in English-Geography* course books, the first interesting thing is the overall number of tasks. Excluding the worksheets provided at the end of the course books, there are seven tasks to be found in the entire series. All of them occur in volume 3, while four out of seven are found at the very beginning of the book:

1. Name the European capitals that are situated within the radius of 1000km from Vienna.
2. Which European capital is closest to Vienna?
3. Which European capital is farthest away from Vienna?
4. Find out which European Capitals do have more inhabitants than Vienna. (Sonnenberg 2009:3)

Apparently, the four tasks or rather questions, are intended to stimulate the learners to work with the maps provided below, since questions one to three obviously deal with topography, while the last one refers, in a very broad sense, to cities as agglomerations and is hence not concerned with topography as such but rather with attributes of cities, in this case, total population. Since the map shows all capitals around Austria, and all of the questions deal with capital cities, it is logical to assume that the tasks have the map as their target. The only exception may be the last one, since the map does not provide any information about the population of the cities.

However, the remaining tasks, strictly speaking, cannot be fulfilled with the help of the thematic map either, because the map does not provide any scale. Thus the learner cannot judge what the radius of the red circle is or what the distances between the capitals are. So basically, the learner is indirectly asked to work with an atlas or digital maps which allow him or her to determine the actual distances between Vienna and the respective cities. On a very general level, the learner is thus asked to measure distances and to investigate on the spatial position of capitals in relation to Vienna. From the syntax of the task-instructions, there is no indication of group work or pair work, which is why it can be assumed that the learner is supposed to work alone.

The next task in the chapter *Natural Geography of Austria* is also rather interesting. Right at the beginning of the sub-section dealing with climate and vegetation, the learner is confronted with the following task:

> Match the nine climatic graphs in figure 2 with the nine points marked in the cross-section. What are the main climatic differences between these locations? (Sonnenberg 2009:12)

Obviously, the learner is asked to interpret the climatic graphs and, based on the information he or she can read from the graph, to relate the respective graph with the corresponding position in the cross-section. If we take a close look, this task basically relates to only one information given by the climate graph, namely the sea level of the station collecting the depicted data. Yet, even if the task intents to stimulate the obtaining of specific information (i.e. the sea-level), the first part of the task is already provided by the course book. The respective climate graphs are already matched, as is indicated by the number in brackets. Thus the first part of the task is obsolete.

The second part of the task intents learners to interpret the remaining information provided by the various climate graphs and thus asks the learner to deal with them in detail. Yet, again not every information can be obtained via the graphs provided, since the author has

omitted the labelling of the abscissa of all diagrams and the of the ordinate of all but one diagram. The latter circumstance is probably not a factor that makes the task impossible to solve, since it can be assumes that the scaling of the ordinate of all graphs is identical to the one of depicting 'Untersberg'. However, the omission of the abscissa eliminates the possibility to interpret the course of temperature and precipitation correctly, since the months, which are supposed to be labelled, are not always arranged from left to right, starting with January, but, although in rare cases, place January at the centre of the axis. Again, the learner is obviously intended to work alone, since there is no reference to another participant in the whole task.

The penultimate task, which occurs outside the section with worksheets is found in the chapter which deals with a central topic of geography, namely population. In the sub-section dealing with Austria's population structure, the learners are asked to do a matching-exercise:

> Match a, b and c in Figure 17.1 with their correct definitions given below the population pyramid. (Sonnenberg 2009:17)

If we look at the double-page, it becomes apparent that the left page (16) contains the information which is necessary to correctly identify the respective age-groups that are marked in the population pyramid to which the task refers. Thus, the learners have to link the content of the text to the graph by labelling the respective age-groups. Yet, the categories, which are supposed to be labelled have a rather unveiling definition, since two out of the three phrases, which have to be matched with the graph already contain the respective year. As a result, the learners do not necessarily have to link the text to the graph, but rather can fulfil the task by merely looking at the phrases. Like the other tasks so far, there is no indication that the learner is supposed to work with another person or communicate with anyone in order to solve the task.

The final task in the course book apart from the worksheets is to be found on page 25 of the third volume. Under the section concerning the balance of payments of the Austrian state, learners are instructed to conduct a research:

> Complete figure 1 with the most topical statistical data available (Sonnenberg 2009:25)

If we examine the table, being is the basis of the task, there is one vital information which is apparently missing, namely where the data for 2006 were taken from. This is important, because different institutions use different categories for their statistical data. For example, the Statistik Austria have a different set of attributes which they collect for observing the

development of the Austrian balance of payments than the European council or the OECD. Therefore, in order to make the data truly comparable, the author has to declare which set of data was used.

Furthermore, the task does not give any details concerning where the learner is supposed to get the most topical data from, which would solve the problem of comparability as well. So overall, the learner may be asked to conduct some research concerning recent statistical data, but based on a very imprecise starting point. Once again, the task is obviously designed to be completed individually.

On the whole, the tasks which are provided outside the worksheet-sections of the Austrian course books generally ask the learners to deal with a figure by filling-in and matching certain categories, which implies that the materials intend the learners to get involved with the respective figure in more detail. Yet, there is no reference to other segments of a chapter or other sections of the book at all. In terms of classroom participation, the only form suggested by the tasks is individual-work.

If we include the worksheets into our consideration, the exclusiveness of individual-work as a social form does not change. In the whole series, there is not a single task which explicitly demands of the learner to work with a partner or participate in group work. All tasks are obviously meant to be completed individually.

Among the worksheets, broad categories of tasks are noticeable which are now discussed via one example which illustrates the basic design of each category. They, however, share a common feature, namely that the learner has to fill in a blank grid, figure or map. There are no worksheets asking the learners to produce something on their own or require them to draw on any material apart from the respective worksheet.

The first category noticeable is best described as repetition or practice of the content presented in the textbook. Here, the learners are confronted with a blank worksheet, which is similar to a figure depicted in the corresponding book and have to complete the blank spaces with the help of a particular section of the book. Sometimes this boils down to copy-and-paste-activities, as is illustrated by Worksheet 1 in Volume one (Sonnenberg 2007:64) and Worksheet 3 of volume four (Sonnenberg 2010:93). Here, the learners are confronted with an absolutely identical figure, which has to be filled out (cf. Sonnenberg 2007:3 and Sonnenberg 2010:10). A more common method in this category is adopted by worksheet 11 in volume three (cf. Sonnenberg 2009:81), where the learners have to complete the depicted scheme by extracting information from a text in the textbook-section (cf. Sonnenberg 2009:34f.).

The second category of worksheets mainly deals with blank thematic maps. These either require the learner to refer to a map found in the book and colour the blank map accordingly, for example Worksheet 2 in the third volume (Sonnenberg 2009:72), which refers to a map on page ten. The other tasks in this category ask the students to complete a blank map with the help of an atlas, for example Worksheet 13 in volume three. Of course, the concrete data that has to be found or filled in differs in each map, yet the processing of the task is basically the same.

The third category of tasks deals with vocabulary. On average, there are two different kinds of worksheets related to vocabulary work. The first kind, requires the learners to provide either German or English translations for particular words, for example the correct English term for 'öffentliche Unternehmen' (cf. Sonnenberg 2009:88), which has to be filled in the blank spaces. The second kind of tasks that deal with vocabulary ask the learner to match definitions with particular phrases or words or to assign certain terms to superordinate categories (cf. Sonnenberg 2007:70.).

Overall, all worksheets adapt very similar steps in their processing of tasks, although, as was shown, they deal with different aspects of content and learning skills. Another interesting decision by the author is to strictly separate textbook and worksheets (or tasks respectively), except in volume three, where some tasks are included among the actual text. However, as can be seen by their instructions, these do not differ significantly from the tasks provided by the worksheets, since all of them also refer to one particular figure or paragraph or require the students to fill-in or assign certain elements to a certain figure.

One last aspect of tasks which has not been tackled so far is the question of who determines the actual content and process of the tasks. Obviously, these things are predetermined by the course books, since there is no task which leaves the learners free choice in any area. Thus, the tasks in the Austrian course books are strictly predetermined by the author.

If we look at the German course books, the first difference is to be found in the quantity of tasks. Volume 1 of the *Diercke Geography for bilingual classes* series provides 193 tasks, while Volume 2 contains 168 tasks for the learner. Due to obvious practical reasons it is hence not possible to discuss each occurring task in detail, like it was the case with the Austrian books. Yet, a few examples, which illustrate the most important kinds of tasks, will be analysed below.

One common type of task requires learners to explain and describe certain aspects which are mentioned in the text or a figure of a particular section:

> Describe the essential economic changes in the Lake Victoria region.
> Explain the ecological impact of the introduction of the Nile Perch on Lake Victoria (Dreymüller et.al. 2008:77)
>
> Describe the changes in the Israeli territory between 1948 and the end of the 1960s.
> Explain in what way the conflict influences the lives of Israelis and Palestinians. (Dreymüller et.al.2007:69)
>
> Describe the process of soil erosion.
> Explain different reasons for soil degradation. (Dreymüller et.al. 2008:59)
>
> Describe the characteristics of the Mexican-US border.
> Describe the push and pull factors which motivate many Mexicans to emigrate to the USA. (Dreymüller et.al. 2007:147)

Obviously, the learners are required to draw information from the corresponding texts or figures, yet they have to state the answer (apparently in oral or written form) on their own, without any particular restrictions save their knowledge. What is interesting regarding this category of tasks is the differentiation between description and explanation. While the former typically requires merely more than a repetition of information presented, the latter involves a deeper understanding of a topic. In other words, describing cognitively only requires to grasp *what* is there, while explaining always implies the aspect of *why* something is there, which is cognitively more challenging. Hence description always precedes explanation in the respective tasks.

Another type of task follows the structure of increasing difficulty for the learners. In some sections of the book, the authors have placed tasks involving deepening aspects of the respective topic, or encourage the learners to conduct further research. These tasks are always labelled 'for experts':

> For experts: Compare the situation of the black people in South Africa and the USA. (Dreymüller et.al. 2007:55)
>
> For experts: With regard to two types of soil degradation look for measures to protect the soil. Use additional sources. (Dreymüller et.al. 2008:59)
>
> For experts: Prepare a presentation showing the new face of Duisport. Use the internet: http://www.duisport.de. (Dreymüller et.al. 2008:127)

As the examples suggest, the 'expert tasks' clearly require additional examination on the respective topics and thus differentiate between students who really intend to deal with a topic in more detail and those who are satisfied with less specific knowledge. What is also significant in comparison to the Austrian course books is that the authors clearly refer to

additional sources, or even a specific source (in the example a webpage), which indeed gives the learners some orientation. The latter was not always provided by the Austrian books, although, as was discussed, some tasks require external sources.

The third type of task which immediately catches the attention of any analyst is dealing with suggestions for potential research projects, which provide the learner with a broad topic area, but do not determine the actual content. Again, these tasks are clearly labelled, namely as 'projects':

> Project: Choose one of the car manufacturers in M3 and collect information about the new location. (Dreymüller et.al. 2008:99)
>
> Project: Collect information from newspapers, and the internet to find out more about the views of globalisation in Germany (Dreymüller et.al. 2008:79)
>
> Project: Find out and discuss the pros and cons of GM food. (Dreymüller et.al. 2007:121)
>
> Project: Make a poster with photos which show what different vegetation zones in Africa look like. Do not forget to label them. (Dreymüller et.al. 2007:39)

One thing which clearly stands out within the category of project-tasks is their variety. All examples provided have a different starting point (e.g. a thematic map in the first example, newspapers in the second) and are supposed to produce various kinds of results (e.g. a concrete product in the case of poster or a deeper understanding of the topic in general), yet the steps in-between are not predetermined. Thus the tasks apply a less guided method than it is the case with the Austrian course books, which provide static grids and worksheets that have to be filled-in.

Encouragement for learners to create a specific product, however, is not exclusively found in project tasks. There are several other tasks that require the learners to actually produce a wide variety of texts or prepare presentations:

> Follow-up work: Use the internet to collect information about the Windischeschenbach project and prepare a short presentation (Dreymüller et.al. 2007:11)
>
> Write an interesting article for a newspaper in connection with M3 and M5. (Dreymüller et.al. 2007:129)
>
> Design a leaflet to create an awareness of the problem of hunger. (Dreymüller et.al.2008:29)
>
> Prepare a role play about the conflict of interests in the distressed areas of Appalachia (c.f. pages 160/161 for further information) (Dreymüller et.al. 2008:73)

These examples illustrate well how varied the results intended by the tasks are. Additionally, there is a high amount of autonomy on part of the learners, since the tasks basically just define

the final medium of communication, but do not in any way prescribe the actual structure, design or any other parameters of the final product. All these aspects are up to the learners.

The last example provided above overlaps with the next aspect of tasks in the German course books, namely the aspect of class participation. Again, the learners are provided with a variety of different forms of participation, ranging from pair-work to class discussion:

> Explain to your partner how the tropical circulation system works. (Dreymüller et.al. 2007:39)
>
> In groups of three describe what happens at plate margins that a) move apart, b) collide, and c) slide past each other (Dreymüller et.al. 2007:15)
>
> Discuss in class: Improving energy efficiency is linked with lifestyle (Dreymüller et.al. 2008:53)
>
> In a role play discuss the pros and cons of generating electricity from wind (Dreymüller et.al. 2008:47)

As illustrated above, the books contain different forms of class participation, which require learners to actively communicate with each other. What is interesting in this respect is that there are absolutely no preset structures or any other restricting guidelines. Based on a stimulus in the text, learners have to communicate freely, which probably increases the dynamics of the tasks.

Thus, the actual content is just the basis for tasks and not its sole subject, like it is the case with the Austrian course books. The latter show a task design that has much to do with repetition of knowledge rather than considering the subject-matter as a basis for further learning and communicating. In opposition, the German course books very often treat the subject-content illustrated by the books as a starting point for negotiating meaning and thus take the learning process one step beyond the physical content presented in the book.

Closely connected to this is the factor of who determines what the learners have to do. Indeed, the German course books also give instructions to learners and thus predetermine what they have to do. The big difference in comparison to the Austrian course books is, however, is that they do not prescribe the format or progression of the task in the way the *Do it in English-Geography* series does. As already mentioned earlier, learners in the German series are free to do what they regard as appropriate for arriving at the defined result, since they do not have to stick to one particular worksheet with a defined format, or rely on the single figure which contains information that merely has to be extracted. Of course, the *Diercke Geography for bilingual classes* books also contain figures, maps and text which carry vital information for task fulfilment, yet the learners are free to work with the extracted

information, only limited by a defined aim and the social form of the task. Thus, it can be concluded that to some extent there is indeed learner autonomy provided by the various tasks.

1.5.5. What are the implied aims and principles behind the materials?

Now that an analysis on levels one and two in Littlejohn's (1998:195) suggested method of analysis was made, it is time to draw a few conclusions about what is implied by the teaching materials analysed. In other words, it will be discussed "[...] what appears to be the *role of the materials as a whole* in facilitating language learning and teaching" (Littlejohn 1998:201). Of course, as was also the case with the other levels, this has to be enhanced by the component of the content-subject in order to fit the CLIL context of the books. Therefore, the discussion will also involve aspects dealing with the content-subject.

When recapitulating the structuring of content on the whole, as well as in the respective chapters in combination with the nature of tasks and the way access is provided into the actual subject-specific content and language required significant differences between the two course book series occur.

If we look at the Austrian course book series, it becomes apparent that it puts its main emphasis on providing subject-matter for geography and economics, while considering any other aspect of bilingual education, or CLIL in general (such as development of skills, communication etc.) as secondary. This is because, as was already discussed, the Austrian course books do not provide any tasks within the textbook-sections, save the seven tasks discussed above in volume four. Even these do not aim at any form of communication, productive skills, or engagement with the respective topic, apart from rather simple matching-exercises or basic issues of topography. The worksheets are not very different. Although each volume of the series provides several sheets with tasks, there is actually no real progression with regard to the requirements for the learner noticeable. This is most obvious in tasks which basically only involve copying from a predetermined figure, for example in Worksheet 1 of the first volume (Sonnenberg 2007:64). There is no form of cognitive progression or understanding the figure required, just a mere copying of the text. This is quite different from the tasks found in the German books which, at the most simple level, require the learners to describe or even explain certain processes or issues. The task design in the Austrian course book almost triggers an association with drill-exercises, where learners are asked to repeat

certain phrases and sentences until they have learned them. Here, basically the same happens with a chunk of content.

Apart from this, admittedly rather extreme example, there are few tasks which actually challenge the learners to use or practice skills or respectively reflect on certain insights acquired in the course of dealing with the content. If the author intended to put more emphasis on other aspects than merely providing content, there would have to be more tasks overall, or at least a greater variety of worksheets at the end of each volume. This results in the books containing a huge amount of content that remains mainly not reflected upon by the learners, since they have no incentive on part of the materials to deal with it in any other way than reading trough the sections.

Another indication supporting the impression that the *Do it in English-Geography* series is in principle a collection of subject-matter is the structuring of the chapters. As was already pointed out in the analysis earlier, very often the materials apply go in medias res, without providing a thoroughly introduction. Of course, it may be argued that this is not a necessary step at all, since the course books are neither a literary text nor some kind of essay or any related genre. Yet, it has to be pointed out that large part of the books rather read like glossary entries put together than an actual book text which present issues of the topic consecutively. A good example of this is provided by the first page of the chapter *Weather and Climate* (Sonnenberg 2007:9). Here, the learner is immediately confronted with definitions of the various technical terms, followed by a rather technical description of climate graphs, before continuing to list climate factors and a classification of climates. In-between these steps, there is little cohesion provided, apart from one sentence, namely "Different areas of the world experience different climatic conditions" (ibid.). Otherwise, the text is split into short paragraphs, which are characterised by listing classifications and definitions. In comparison, the German course book presents a more consistent text, which is not dominated by lists of categories and definitions (c.f. Dreymüller et.al. 2007:32f.). Of course, there are also sections where the learners are introduced more gradually into an issue, for example in volume three (cf. Sonnenberg 2009:19). Here, the text is supported by a few figures added to the text. However, even in this section, the presentation of content and facts is the main - if not the only - focus. There are no suggestions to think about the presented facts or deal with them in any way.

The implications for the teacher as well as the learners within the classroom are rather obvious. Since *the Do it in English-Geography* course books are apparently mainly concerned

with the presentation of content, they are most likely to be used as a reference or as a collection of texts and figures rather than an interactive and richly featured course book. If a teacher uses the Austrian course books in class and wants to assure that the high standards of CLIL are actually met, he or she has to provide extra materials, which provide tasks that go deeper than the ones provided by the books.

The German course books, on the other hand, clearly intend to be fully-fledged CLIL course books. This becomes immediately apparent by features like an alternative table of contents in volume 1, which allows teachers and learners alike to view the content presented to them in a more integrated and overall interrelated way. An even stronger indication is the section on skills at the end of each course book, which explicitly deals with a wide range of graphs, media and social form and how learners can apply them.

If we recall the five principles of CLIL, (c.f. 3.1.2.) as well as the functions of language within the CLIL paradigm (cf. 3.1.3.), the German course books indeed try to achieve most of them to some extent. This can be seen in the diverse task design, which was already analysed. In this respect, especially the communicative use of the target language is a major concern, since basically all task-types that have been identified involve some kind of communication by the learners. Even the category where learners are asked to describe or explain certain parts of the content are basically an encouragement of the learner to articulate himself or herself, because the tasks imply that the respective learner has to reformulate an observed circumstance in his or her own words. Yet, the most obvious tasks that mean to stimulate communication among students are the ones involving role-playing or discussions in groups or pairs. This reveals the interactive intentions of the German course book series, which is not really noticeable with its Austrian counterpart, since the latter exclusively focuses on the learners working on their own.

Another very prominent aspect promoted by the German books is the development of skills. From the point of view of the content-subject geography and economics, basically all important media as well as figures and map-types are introduced and explained through a (model) text. Additionally, the access into these is made relatively easy by supporting the learners with phrases, important words, or even detailed instructions of how to produce a certain text or interpretation in connection with the respective media or figure - as was already analysed under 5.1.3. (for an example cf. Dreymüller et.al. 2007: 174).

Due to the diverse and differentiated presentation of the topics and, more importantly, a broad range of different tasks, the German course books can thus be characterised as

applying a rather holistic approach to the content-subject, which is in the spirit of the CLIL paradigm, since there are indeed several focal points beyond the mere content. Especially the communicative task-design, compared with the great variety of subject-relevant content is one outstanding feature, which indicates that the authors are not only concerned with either language or content.

Therefore, as an overall impression, it is legitimate to conclude that the two book series indeed fulfil different roles in the classroom. While the Austrian course books primarily provide content and treat skills and language as rather secondary, the German course books try to cater to both components of the CLIL paradigm, namely language and content. Thus, the Austrian books mainly function as a collection of subject-specific content (i.e. facts and figures), which have to be greatly complemented by additional material, which focuses of the development of language and professional skills. The German course books, on the other hand could indeed function as a profound basis for teaching geography in the sense of CLIL, since they offer a broader package to both teachers and learners in terms of content, language and professional skills.

As a conclusion, the analysis has revealed major differences between the two course book series, which will be a relevant issue for the evaluation conducted below. After having discussed the most important features of the teaching materials in terms of their organisation, task-design, sequencing of chapters and overall underlying principles and implied roles, it is now time to evaluate to what extent they actually meet the requirements and features which are demanded by the theory. This will allow a basic judgement if they are indeed materials which apply the principles and criteria postulated by CLIL or if they are merely carrying its label.

5.2. An evaluation of the *Do it in English-Geography* and *Diercke Geography for bilingual classes* series

After the analysis has unearthed interesting differences between the Austrian and the German course books, the next step is to draw conclusions and finally judge to what extent the respective course book series meet the requirements of CLIL in the categories introduced above (cf. 4.3.2.). Where it is necessary, short explanations of the respective categories will be provided in order to avoid ambiguity concerning what is evaluated in the respective section. In the course of the evaluation, references to examples already provided in the analysis will be made, along with allusions to new examples which may illustrate particular arguments more clearly.

5.2.1. To what extent does the organisation and presentation of the topics account for the aims and demands of the Austrian national curriculum?

Since one of the series under examination is the only approbated course book series for bilingual education in Austria, one interesting aspect is to investigate whether the materials cover all the subject-matter the national curriculum deems necessary, as well as to what extent they foster competences which are required of learners per definition. While the former is precisely listed in the section concerning the subject-matter, the latter is described under 'Didaktische Grundsäze' and 'Bildungs- und Lehraufgabe' respectively. Yet, since aspects falling under these two categories are discussed at other points of the evaluation, our primary concern now lies with the dimension of content and thus only general evaluations in connection with principles of didactics and education will be made.

Obviously, the German course books will not be evaluated in this section, since Germany has its own national curriculum, which shows significant differences compared to Austria.

The question whether the course books contain all necessary topics is closely linked to the overall structuring of the books, which was already analysed above, as well as to the functions of a book, namely the *Strukturierungsfunktion* (i.e. the materials as support to organise and manage the classroom and subject-content; cf.4.1.3.).

As shown in the course of analysis, the Austrian books show a very hierarchical structure, which is characterised by rather short sections and no inherent recognisable pattern with regard to sub-sections or even sub-sub-sections. Yet, if we compare the table of contents

of the respective books with the structuring of the national curriculum for upper-secondary education, it becomes apparent that the author very closely follows its organisation. Thus the reason for an inconclusive result in the analysis is finally revealed, since the books do not follow an inherent logic based on didactical aims, but rather an externally prescribed structure, namely the national curriculum.

Obviously, volumes one and two of the *Do it in English-Geography* series cover the subject-matter of grades five and six of the AHS, while volumes three and four correspond to grade seven and eight respectively. So, there is a strong indication that the overall structure of the books is primarily guided by the general topics demanded by the curriculum rather than by pedagogic or didactical principles. This becomes apparent if we look at the names of the chapters and compare them to the topics prescribed by the national curriculum. For example, the first chapter of volume one, *One World - Different Perspectives* (Sonnenberg 2007:2), is basically a literal translation of the topic-area *Gliederungsprinzipien der Erde nach unterschiedlichen Sichtweisen* (cf. BMUKK 2004:2). This is basically true for all chapters in volume one, apart from their almost exact sequence in accordance with the curriculum. Interestingly, the other volumes follow the same pattern, for example in volume three, the chapter *Austria's Position in Europe* precedes *Natural Geography of Austria* (cf. Sonnenberg 2009:2), while the curriculum lists *Veränderung der geopolitischen Lage Österreichs* before *Naturräumliche Chancen und* Risiken (cf. BMUKK 2004:3). The only volume showing a slightly different and more integrated structure of topics is volume two, where the topic-areas suggested by the curriculum rather integrated in broad topics, which are centred around the EU (cf. Sonnenberg 2008:2). So, topic-wise it is safe to say that the Do it in English-Geography is indeed a realisation of the topic-areas suggested by the curriculum, since their organisation is based on its very sequence of topics.

However, the big 'but' becomes evident if we dig one level deeper than the actual headlines of the topic-areas defined in the curriculum and look at the aims of the respective content. If we stick to the first chapter in volume one and its corresponding topic-area in the curriculum, there are two explicit aims which a learner is supposed to achieve:

> *Gliederungsprinzipien der Erde nach unterschiedlichen Sichtweisen*
> -Gliederungsmöglichkeiten der Erde nach naturräumlichen, kulturellen, politischen und ökonomischen Merkmalen aufzeigen
>
> -Einsicht gewinnen, dass Gliederungen immer einem bestimmten Zwecken dienen, dass Grenzen Übergangszonen und die so abgegrenzten Gebiete meist nicht einheitlich sind (BMUKK 2004:2)

If we take a closer look at the corresponding section in the book, the first aim, illustrating different possibilities to classify our planet according to various variables is realised by confronting the learners with different thematic maps, ranging from plate boundaries to the division of countries as classified by the United Nations (cf. Sonnenberg 2007 3-8). Thus, the course book illustrates different possibilities of looking at the earth. Yet, the second aim, realising that these classifications are imprecise and the resulting regions are basically rough sketches which serve a certain purpose, is not even tackled peripherally. The reason why the book misses to help the learners realise the interrelations required to achieve second aim is that it confronts the learner with the different maps without ever commenting on their purpose or intention. The most obvious maps in this respect are figures 4.1, 5.1 and 5.2, where not even a single sentence is provided in order to make explicit the interrelations between the three classifications. In the case of figures 8.1 and 8.2, the book eventually points out the relativity of actually measuring global disparities, yet the text again does not explain the underlying difference between the two thematic maps. Interestingly, figure 8.2. occurs again in volume four (cf. Sonnenberg 2010:7) in the chapter on globalisation. Again, the course book fails to mention what the map actually depicts, apart from its title. The only information the learner gets is that "[...] today the countries of the world are mostly classified according to the division of the **UN**, which uses a combination of economic and social indices" (Sonnenberg 2010:6, original emphasis). This is rather vague and does not support a deeper understanding, as demanded by the learning aims.

These examples show a symptom which is rather prominent within the Austrian course book series, namely the lack of support of learners when it comes to abstract thinking and linking several issues to one converging whole. This is, however a problem, since the national curriculum explicitly demands this via the *Synthesekompetenz* and *Wirtschaftskompetenz* (cf. BMUKK 2004:1). In addition, if we continue to evaluate the current example, severe mistakes concerning the reference are made. At the end of the chapter, a reference to chapter 5.6 in the volume is made (cf. Sonnenberg 2007:8). However, if we follow this reference, it appears that chapter 5.6 is concerned with the global division of labour and not socio-economic indicators at all (cf. Sonnenberg 2007:39). The respective indicators are presented in section 5.7, two pages further in the book (cf. Sonnenberg 2007:41-43). Of course, this is an unintended mistake which was missed in the course of edition, yet it is indeed confusing for the learners and is even more unlucky if we take into consideration that the particular pages indeed explain and point out the problem of measuring development.

To be fair, there are also several chapters which rather successfully present a topic in a more differentiated and explicit way. For example, despite the above criticised thematic map, the chapter *Globalisation: Chances and Risks* in volume four indeed picks up a great variety of issues connected with the topic and presents more than one view on the topic and thus provides a sound basis content-wise.

As a conclusion it can be said that the Austrian course books do indeed present all the subject-matter which is demanded by the national curriculum. However, there is a strong impression that the book series considers this as its primary objective, even neglecting teaching and learning aims which are related to the content. This supports the impression from the analysis conducted above, which concluded that the apparent underlying principle of the Austrian books is that they are mainly a collection of content. So regarding the extent to which the presentation and organisation of the topics account for the aims and demands of the Austrian curriculum it is safe to say that the course books' basic content covers all areas of the defined subject-matter, while performing rather weak in the area of supporting the achievement of the defined aims. For the teacher this means that the *Do it in English-Geography* series in suitable for presenting a profound amount of content and suggest an organisation of topics which are very close to the curriculum. Yet, beyond that they do not do much more, which means that in order to support his or her learners, a teacher would need to provide extra materials and additional support in general.

5.2.2. To what extent do the materials make the learning intentions and process visible by highlighting relevant aspects within the units?

According to Mehisto (2010), CLIL materials of high quality explicitly set learners learning goals which on the one hand are supposed to show them what they may achieve by dealing with a particular unit, while on the other hand increasing effort and motivation. "Further, quality CLIL materials draw links between planned short and long-term language, content and learning skills outcomes. It is also expected that learning outcomes are realistic, but challenging" (Mehisto 2010 http://www.ccn-clil.eu/clil_criteria_web/index.php?page=1 25 May 2011). This concept is very interesting, because it indeed, in the sense of learner autonomy, empowers the learners to constantly monitor their progress along the scale of gradually achieving knowledge and competences. Furthermore, it perfectly supports the demands on part of subject didactics regarding the opportunity for learners to assess their own

progression (i.e. *Übungs- und Kontrollfunktion* under 4.1.3.), which should be provided by a course book. The final variable of the equation, namely that learners are meant to be challenged immediately evokes associations with Krashen's '+1 hypothesis', just enhanced by the content component as well (cf. 2.1.1.). Thus, Mehisto's claim for making the learning process visible follows indeed the CLIL logic and should classify as a feature of quality with respect to the learning materials.

However, as has become apparent in the course of working through all course books, none of them actually shows any signs of making the learning process explicit. Neither the Austrian, not the German books show remotely any intention to provide the learner with any kind of possibility to recognise implied learning outcomes, or to monitor any kind of progress autonomously. This is very striking, because, due to the reasons already pointed out, a feature at least resembling Mehisto's postulated criterion would give the authors of both series to meet many of the demands and requirements on behalf of the curriculum (in the case of the Austrian books), as well as the CLIL paradigm.

One obvious reason for the missing of explicit waypoints of learning may be that, at the time of production, this had not been considered and was thus not part of the academic discourse. This is suggested by the years of publication, which would be between 2007 and 2008 for the *Diercke Geography for bilingual classes series* and between 2007 and 2010 for the *Do it in English-Geography series*. Although the publication of volume four of the Austrian books overlaps with Mehisto's postulation (i.e. 2010), the book was probably written and produced earlier, since process approbation takes a very long time.

Thus, in conclusion, the course book series in question lack one criterion of quality as far as the latest academic opinion is concerned. However, in this respect it could be a potential starting point for further research, since it would be interesting to see if the course book series add this feature to revised editions in the future.

5.2.3. To what extent do the materials foster the development of academic language proficiency?

Obviously, this issue is closely connected to the areas of vocabulary development and language competence in general. A few features have already been discussed briefly in the course of the analysis where the access which learners are provided with was under examination. However, was has not been tackled so far is in how far this is done effectively and whether this actually qualifies as fostering academic language proficiency.

According to Mehisto, fostering academic language proficiency means that "[s]cientific language is drawn to the attention of students by identifying various forms of it in the learning material [...]" (Mehisto 2010, 25 May 2011). This is a very general statement, since it is not really defined what forms are implied or in what ways the materials are intended to refer to them. Yet, another possibility of fostering academic proficiency is "[...] by asking students within the materials to identify: characteristics (tone, unemotional and factual [...]); connectors [...]; functions (separating and explaining causes and consequences); subject specific vocabulary [...]; words with different meanings [...], and other vocabulary and discourse patterns" (ibid.).

So Mehisto in addition provides concrete categories, which makes a precise evaluation easier. Quite similar to the first postulation concerning making the learning process visible, the categories presented above very much refer to a meta-level which is supposed to show learners something about their own learning. In this respect, the materials are basically required to 'reflect upon themselves' by foregrounding the principles which underlie their respective content. Additionally, as can be recognised, the function of language rather than the form is in the foreground..

If we again start with the Austrian course book series, one encounters language (competence) on the very cover of the book. Although people are not supposed to judge a book by its cover, this is exactly what will be done here as a first step. As was shown by Cunningswoth (1986:2ff.), looking at 'what textbooks say about themselves' is a good starting point to interpret their intentions. Concerning language competence, the back of each volume of the *Do it in English-Geography* books claims that " 'Do it in English-Geography' misst dabei der Sprachkompetenz der Lernenden besondere Bedeutung zu" (Sonnenberg 2007:81). So there is apparently a focus on the language competence of the learners within the series.

Interestingly, apart from the features which were already mentioned in the analysis (i.e. glossary entries and the highlighting of key vocabulary), the course books do not show

any sign of attempting to raise the language awareness of the learners, or to point out different functions or characteristics of (academic) language. The only noticeable feature which slightly indicate a fostering of language proficiency are some of the glossary entries:

> **climate (climatic) graph**: a graph showing average rainfall and average temperature for each month of a year for a specific point of the earth (Klimadiagramm).9 (Sonnenberg 2007:76)
>
> **oceanic crust (sima)**: the oceanic crust forms the floor of the deep oceans and is thinner (5-10 km) than the continental crust. [...] (Sonnenberg 2007:78)
>
> **net deficit (of a state)**: the expenditures exceeding the revenues without the repayments of government debts (Nettodefizit). **29** (Sonnenberg 2009:93)
>
> **resources (scarce)**: all things which can be used to produce economic satisfaction. [...] (Sonnenberg 2007:79)

As can be seen, some glossary entries provide synonyms for the respective terms, which potentially enlarges the repertoire of subject-specific vocabulary. Additionally, although probably coincidental, a few entries show what could be interpreted as collocations (e.g. scarce resources). Yet, since there is this is no recognisable pattern or any kind of system, which indicates that collocations are a concern of the glossaries, this is very likely unintended.

With regard to Mehisto's suggestion that materials should make explicit words with different meanings, the glossary basically provides rather precise and comprehensible explanations in the target language. Yet, it has to be remarked that especially learners who do not possess a very broad and solid vocabulary in English may get confused by the actual explanations. Of course, there is a German translation, but this does not necessarily help the students understand a certain technical term, since the respective explanation is given in English. Thus, learners who find the target language challenging may miss to fully understand the subject-matter of geography as well.

Apart from this, there are no features which would indicate to serve the purpose of somehow fostering language proficiency in any way. This is very surprising, especially with the glossary entries, because they would have provided a suitable format which could have been used for additional information about the vocabulary presented, such as collocation or register. Within the chapters, there are also no features which deal with the language component of the CLIL-duality, putting the subject-content at the very centre of the books. Of course, it can be argued that the Austrian books provide plenty of subject-specific vocabulary and make it explicit to the learner. However, what is indeed missing is the attention to language function and consequently language competence.

Thus, judged by its cover, the *Do it in English-Geography* books very poorly foster academic language proficiency, if they do it at all. This is because the learners are exclusively confronted with vocabulary items which are explained in English, but are not connected to the learner's overall mental concept of academic language proficiency. The reason for the materials failing to achieve this, is simply because they do not provide any support which assures that the learners definitely add the language to their pool of knowledge, based on a deep understanding of its (linguistic) functions. As a result, the books provide merely more than an English version of geography and economics, while completely neglecting the language component of CLIL, which is nevertheless equally important.

In the course of analysing the course books, it became apparent that the *Diercke Geography for bilingual classes* series provides a variety of features which help the learners to get access into the subject-specific maps, figures and graphs, as well as into different kinds of media. This is achieved by providing model texts, as well as phrases, or making explicit certain moves within a text. This however, does not necessarily imply that the materials actually make the very function of language explicit to the learner.

If we look through the chapters of the German books, the only feature which obviously deals with language is the foregrounding of key terms by the already mentioned orange boxes (e.g. Dreymüller et.al. 2008:105), which are translated in the word list at the end of each volume. Obviously, this feature is intended to help the learners with vocabulary development and thus intends to enhance the learners' (subject-specific) lexicon. So, one of the points mentioned by Mehisto (i.e. technical vocabulary) is indeed tackled by the course books. Yet, what is not provided is an explanation of the respective terms, which basically neglects the component of securing knowledge and competence in the content-subject. Of course, learners encounter the key terms within a text and thus can draw their conclusions from the context where the respective term occurs. However, there again may be a disadvantage on the part of learners who are not yet entirely proficient in English, since they might not understand the text fully and thus are not able to link the key term to its context.

The remaining chapters at the back of the books, which focus on skills, do so in terms of technical skills rather than language skills. This is quite well illustrated by the section of 'skills' which deals with the method of role-play (cf. Dreymüller et.al. 2008:160f.) The section is introduced by the headline 'Dealing with problems', the very subject of any academic discipline. Within this paragraph, it becomes apparent that the section on skills obviously has a focus other than language:

> Topics in geography lessons often focus on problems in specific regions. [...] Flow charts can be used to make the problems of coal mining in Appalachia more comprehensible. *These show the cause and effect chains related to mining*. [...] If you want to present *cause and effects* only based on facts, using flow charts is an appropriate *method*. (Dreymüller et.al. 2008:160; own emphasis)

If we look at the example, the text does not tell the learner that academic language can be used to communicate cause and effect chains (i.e. function) and that it applies arguments based on evidence (e.g. its characteristics), but rather how this can be illustrated by a specific technique (i.e. using flow charts). This is a clear focus on presentation skills and not on language competence. Although the paragraph has an archetype of academic reasoning as its subject (i.e. cause and effect chains), it does not point to it explicitly. As a result, there is a heavy undertone which indicates the functions of academic language, but it remains hidden. It requires a very abstract thinking on part of the learners to deduce from the text that the function of (academic) language is indeed to communicate and make explicit causal chains. Thus, it can be concluded that the authors of the German course books do not intent to highlight the function of language and its characteristics, although they provide a range of model texts and phrases relating to particular kinds of media or texts in general.

Overall, as was illustrated, both course book series do not foster academic language proficiency to a very high extent. This is rather unfortunate, since they thus more or less neglect the 'language of learning' (cf. 3.1.3.) within the CLIL triangle to a high degree. This is another missed opportunity, especially for the German course books since they indeed provide several features raising awareness for the form of language (e.g. phrases that help the learner to write a specific text) and are thus just one step away from incorporating the other aspect, namely its function. The Austrian books, on the other hand, contrary to their claim on the cover, do not consider language in any way as particularly important, because providing subject-matter in English in not really fostering language competence and, consequently, academic language proficiency.

5.2.4. To what extent do the materials foster the development of learning skills and learner autonomy?

Apart from language and competences in the content-subject, CLIL also aims for the development of professional and learning skills in order to qualify the learners for the flexible global age. (cf. 3.1.2.) Thus, when investigation on whether or not the materials support learning skills and learner autonomy, we are dealing with a very distinctive feature of the CLIL paradigm that is part of its innovation. In this sense, learning skills can be considered as very important for the quality of the respective books.

According to Mehisto (2010), the feature of fostering learning skills is apparently supposed to help the students cope with challenging exercises and texts or the whole subject-matter respectively. This can be assumed by looking at his suggestions:

- A book chapter can, right at the beginning include an initial exercise that asks the students questions about the given chapter's subheadings or diagrams [...].
- Instead of simply giving a research assignment to students, learning materials can have students first plan for undertaking and writing up the research report.
- Materials can also include learning skills tips on how to efficiently complete an assignment.
- Materials can seek to help students determine what they think and feel, as well as provide some level of choice.
  (Mehisto 2010 http://www.ccn-clil.eu/clil_criteria_web/index.php?page=3 27 May 2011, bullet points added)

Again, there is a very strong sense of demanding the materials to make the learners aware of their very features and thus encouraging the reader to think on a meta-level. Yet, what seems to be of secondary concern is the learner autonomy. Apart from suggesting that the learners should be provided with a level of choice, the latter is not very prominent in Mehisto's list. Another critical remark which has to be made is that learner autonomy in the list presented above is regarded as a concrete feature, rather than a result of good support by the materials. This is interesting, because if learner autonomy is regarded as a result of support, fostering learning skills becomes a requirement of learner autonomy, since they indeed empower the students to acquire knowledge and competences on their own.

As was already indicated by the analysis of in how far access into the subject-matter is provided by the materials, the *Do it in English-Geography* books are not very competent in fostering learning skills. Since there are no tasks or exercises in the textbook-part of the series (save the seven examined under 1.5.4.), basically of Mehisto's suggestions or any form of

fostering related to them is not applicable. The big problem of the Austrian books is simply that they have almost no means of communicating with the learners due to their scare incorporation of tasks. Of course it could be argued that the actual content may induce deeper understanding of a certain topic by the learners. Yet, leaving all the necessary steps to the learners and hoping that they will draw conclusions and interrelations on their own is not a very pedagogical way - and even less a didactical way - of guiding them to achieve their learning aims.

If we consider learning skills as teaching learners to deal with specific texts and other media, there is one worksheet in the whole series which might qualify as an attempt to foster the acquisition of skills and competences. If we look at worksheet four in the first volume (Sonnenberg 2007:67), we once again encounter a climate graph. Similar to the section in the German course book, which was used to illustrate how access is provided into the content (cf. 5.1.3 or Dreymüller et.al. 2007:174), the learners are provided with an explanation of the various elements of a climate graph. Yet, the explanations of the respective element are very short and are not related to any illustration. Thus, if a learner tries to do the worksheet, he or she would have to browse to the section where climate graphs are introduced in the textbook-part. The next step for the learners to take is drawing the graph, based on the data presented in the table, in the scheme provided. Here, a problem occurs, namely that the author leaves out the element of altitude, which is part of every climate graph. So learners fail to produce a totally correct graph on their own. However, a very positive aspect is that the worksheet links the graphs which are supposed to be drawn as further practice to the corresponding chapter in the textbook-part (e.g. the task relating to Yuma) and tries to raise the students' awareness of certain distinct features of each climate type (e.g. the task relating to Buenos Aires).

Yet, this is basically the only instance where the Austrian course book series deals with a particular skill (i.e. drawing and interpreting climate graphs) which can be acquired by learners. All other worksheets focus on repeating the content of the textbook-section or working with blank maps. This is very unfortunate, since thus learners do not really get support from the materials when it comes to acquiring new skills and competences related to the content-subject.

Opposed to the Austrian course books, providing the learners with means to develop certain skills is a very prominent feature within the *Diercke Geography for bilingual classes* series. As was already analysed, each of the course books features a section on skills, which deals with a wide range of texts and other media.

One example which resembles Mehisto's approach to learning skills is to be found in volume two in the section 'working with films' (Dreymüller et.al. 2008:150f.). Here, the course book suggests that learners should organise their approach to film into three distinct steps, namely 'pre-watching', 'while-watching' and 'post watching'. Very similar to some language teaching tasks, learners are encouraged to think a priori to their actual tasks, while also conducting a follow-up exercise.

If we look at the table which indicates the specific steps which a learner may take (cf. Dreymüller et.al. 2008:151), especially the first two points, 'brainstorm on the topic' and 'write down your expectations' very much aim at making students aware of their own perceptions and world view while at the same time encouraging them to think about a film as one form of media. This is rather similar to Mehisto's suggestion that materials should ask questions about certain heading of a chapter. The only real difference is that in the example discussed here, the students are confronted with the title of a movie.

Additionally, as also suggested by Mehisto, the course book provides the learners with a detailed scheme which helps them to organise their research question in connection with the film. Thus the students are supported with efficiently completing a certain task related to the genre of movies.

Also the parts dealing with the 'post-watching' phase of a potential movie project are very much in the spirit of the criteria suggested above. The key feature here is that the book encourages the learners to create a mind map which reflects their personal thoughts (and thus giving them the opportunity to determine their feelings and thoughts), while, at the same time, stimulates to critically reflect on what they have learned. This highly engaging process is then finished by a presentation, which is basically a product where everything is wrapped up and brought to a final conclusion. In order to make the communication easier, useful phrases are provided at the bottom, which probably creates a safe communicative environment for the presentation, especially for weaker students, since they have a set of structures to which they can relate.

The example discussed is representative of all the sections that deal with skills in the German course books. Of course, there are a few differences when it comes to introducing learners to the respective text or media, yet overall each section provides a very clear and supportive structure, which indeed fosters the development of skills and competences.

What the course book series does not do, however is to provide this kind of support for within the actual chapters of the book. Thus the development of skills is treated separately

rather than in an integrated way, which is probably also one of the intentions behind Mehisto's postulations. Yet, the 'skills'-sections constitute a very rich and engaging feature which can be used in manifold ways within the classroom.

As a conclusion, it has to be said that the German course books are much more advanced and provide a far greater variety of supportive elements which help learners to acquire learning skills and thus empowering them to act and think autonomously. The Austrian course books, however, again lack a very important feature of the CLIL paradigm and are not likely to help learners in any ways to acquire skills and competences. The general problem in this respect is that they leave the learners alone and require of them to have the intrinsic motivation and competence to extract skills merely on the basis of content-focused texts and worksheets.

5.2.5. To what extent are the materials likely to motivate learners to deal with the content? Is their design motivating and engaging from a learner's perspective?

Many of the examples which have already been discussed in the course of analysing and evaluating the Austrian as well as the German course book series can be considered as representative of the overall layout and design of the respective publications. Yet, so far it was not at the centre of attention whether they provide any incentives to the learners that may actually motivate them to get involved with the content and geography as a subject on the whole. This however is a very important issue, especially for subject didactics, since a course book in geography and economics is supposed to motivate learners to actively deal with the content - ideally on their own account (cf. *Repräsentationsfunktion* under 4.1.3.).

Regarding motivation in terms of design and layout, the Do it in English-Geography books are difficult to finally evaluate, since there are rather positive as well as fairly negative examples of overall layout and design.

One significant feature in the area of design throughout the whole series is that chapters either have rather little text while a lot of additional figures are provided for illustrating certain facts, or chapters feature very long passages which are dominated by the text-corpus of the chapter. For example, the section illustrating regional disparities indeed only provides very little textual interpretation, while the issues in connection with disparities are mainly depicted by thematic maps (cf. Sonnenberg 2009:42f.). On the other hand, in the very same volume, there are passages where the text is the sole carrier of content and the

figures provided just peripherally deal with the respective subject, like the section on the future development of the European Union (cf. Sonnenberg 2008:23). The problem with both of these examples is basically that while the first one insufficient grounds for textual interpretation, the second one could make the facts and developments of the EUs enlargement clearer to learners if it added a thematic map. Thus, the learners are a little bit lost in both cases.

Apart from these differences in the weight of textual and graphical elements, one very common feature within the entire series is the use of bullet points. One typical example is found in the first volume in the section on the different ecosystems in the world (e.g. Sonnenberg 2007:21). Here, the bullet points basically substitute connectors and other cohesive devices and thus make the text rather a list than a coherent entity. This is used rather often and does not really present an engaging and motivation layout, since the learners are confronted with a sermon of facts which are quickly dealt with without going into very much detail or trying to engage the learners in any way.

Sometimes, the materials use reprints of newspaper articles or comments (e.g. Sonnenberg 2010:8), yet most of the time these features remain uncommented and there are also no tasks which may engage the learners to further deal with them. Therefore, they are hardly more than further information on a specific topic and may remain unattended at all.

The layout of the worksheets is also very problematic. As was already illustrated by various examples in the course of our discussion, they are all printed in black and white and have a very sober design, which does not really invite the learners to deal with them. Apart from that, as was also already mentioned, they ask learners to basically repeat or reproduce corresponding section of the textbook-sections of the respective volumes. Therefore, the worksheets do not give learners the opportunity to further explore and learn on their own, but just ask them to plainly repeat what they already know. Furthermore, they almost exclusively force the learners to remain within their restricting format characterised by grids, tables or blank maps. This does not really encourage creative or out-of-the-box thinking.

As a consequence, the Austrian course books do not really motivate the learners to further deal with their content, since they offer little incentives to do so. This is because they often present learners with facts and figures which are not thoroughly explained or illustrated and often remain of the surface, due to the heavy use of bullet points. Also the tasks are not very engaging and soon become a routine rather than a means to develop competences and achieve learning aims. Additionally, this has negative consequences for other functions that a

course book is supposed to fulfil, for example the *Übungs- und Kontrollfunktion* (cf. 4.1.3), which is intended to provide learners with the opportunity to validate whether or not they have achieved their aims. Thus, overall the Austrian books do not really motivate the learner, since it probably costs a lot of effort to work through the books without further support by additional materials of the teacher.

The German course books on the other hand, provide several incentives to further deal with their content. The first strong point is, as was already indicated by the analysis, the task design, which is quite varied, and the skill-sections provide learners with a profound basis to start their own projects:

> Find other situations where religion plays an important role for you or people you know (e.g. classmates). (Dreymüller et.al. 2007:61)
>
> Make a speech on the development of the EU. (Dreymüller et.al. 2008:93)
>
> Project: Make a poster showing evidence of immigration and integration in your hometown. (Dreymüller et.al. 2008:123)

These tasks grant the learners to further investigate in a particular topic, while allowing them to add a personal touch to the finished product or do some research in their everyday life. Thus the course books relate to the world outside the classroom and therefore make the relevance of a certain topic explicit to the students. Additionally, linking the tasks to the world of the learner probably encourages curiosity, because they have the opportunity not only to learn something about geography, but also about their own life.

Apart from the tasks, as was already shown, the sections which deal with skills offer plenty of ideas which are practically illustrated and can therefore be rather easily adapted by the learners. Due to their organisation on the basis of genre, learners can quickly look up the most important features of their method of choice, which keeps up the workflow.

The overall layout and design of the course books shows a convenient balance between pictures, graphs, maps and text. The headlines printed in bold provide a clear structure, while at the same time allow to quickly skim through the chapters for particular information. Along the way through the chapters, learners are occasionally provided with cartoons or a text relating to their everyday life, which adds to the variety and activates students' mental representation of a certain topic (e.g. Dreymüller et.al. 2008:64). Additionally, this avoids routine like in the Austrian course books, where learners encounter similar layouts (e.g. the bullet points) or tasks (i.e. the worksheets) and thus more likely stimulates curiosity.

The only thing that might be criticised is the slight surplus of tasks which ask learners to describe and explain a certain process or facts in general. This might cause learners to get annoyed with this kind of tasks, especially if they encounter them in two consecutive chapters.

However, overall is can be concluded that the German course books to a very likely to motivate learners to deal with the subject-matter and the course books in general, since they offer a wide range of tasks and features which keep the users interested and surprised. Thus, the *Diercke Geography for bilingual classes* series clearly supports the teacher in introducing interesting aspects of the subject-matter to the learner and provide a good basis for a varied form of education within the classroom.

5.2.6. To what extent do the materials foster cooperative learning and a communicative use of language and knowledge?

When it comes to cooperative learning, the issue of communication is inevitably attached to it, since cooperation without communication is simply not possible. Therefore, when judging the extent of cooperation which is fostered by the teaching materials, one also has to look at the kind of communication which is associated with the respective form of cooperation (e.g. do the learners communicate orally or in written form, do they communicate with a partner or a group or do they have to give a talk, etc). Furthermore, it also has to be evaluated whether or not the intended communication is indeed meaningful or not.

This catalogue of issues is not applicable to the Austrian course books, because not a single task or worksheet in the entire series explicitly states that the learners are supposed to work with a partner or group. There is also no task that requires learners to prepare a talk or text or asks them to present any results or thoughts to other persons. In other words, the Austrian books do not foster cooperation and communication among learners in any way. This is very surprising, given the fact that they promote language competence as one of their major concerns. Yet, from a contemporary academic perspective one has to ask how this is possible without incorporating communicative tasks that allow learners to actually *use* the language. Filling-in blank worksheets is not using language at all, but merely reproducing preset chunks of input and does not connect the subject-matter to the actual world.

In terms of the CLIL paradigm, this is very problematic, because not only is CLIL obviously rooted in a communicative background as far as its language component is concerned, but it also explicitly considers meaningful communication among learners as a central aspect of learning and acquisition (cf. 3.1.2.). Ironically, as was also illustrated in the theoretical part of the thesis, this very feature is often brought forward as a main argument in favour of CLIL. By missing to support this very feature in the Austrian course book series, both the publisher and the author basically undermine one of the purposes for the very product they have developed.

As was repeatedly indicated in the course of discussion, the German books, on the other hand, offer various tasks that stimulate cooperative learning, as well as meaningful communication among learners:

> Prepare a round table talk about the problems linked to transporting goods across the Alps (c.f. pages 160/161). (Dreymüller et.al. 2008:97)
>
> Explain to your partner how the tropical circulation system works. (Dreymüller et.al. 2007:39)
>
> Explain to your partner how the tropical circulation system works. (Dreymüller et.al. 2 2007:39)
>
> In a role play discuss the pros and cons of generating electricity from wind. (Dreymüller et.al. 2008:47)

All of the examples provided involve at least one addressee or require communication between at least two persons. Admittedly, the percentage of tasks which explicitly mention groups or pair-work is far less than half of the overall tasks. Yet, even tasks which do not explicitly imply another person could easily be adapted for a communicative purpose. For example, the task "Design a leaflet to create an awareness of the problem of hunger" (Dreymüller et.al. 2008:29), which was already introduces earlier, could easily be enhanced by a follow-up exercise which involves two students talking about their ways of raising awareness. The reason why most tasks can be arbitrarily enhanced is that they always have a clear goal or a concrete product as their aim. Thus it is fairly easy to have students talk about their findings or products, since they have a common basis and thus can communicate meaningfully about their perceptions of a particular issue.

By incorporating the communicative aspect, the actual subject-matter becomes immediate to the learners and thus is of higher relevance to them. This makes the German books far more interactive than their Austrian counterparts, because within the latter, the

actual subject-specific content remains rather abstract and never really becomes a vivid subject of the immediate classroom discourse. Students who use the Austrian books never actually work with the subject-matter in a productive way and thus experience geography as something predetermined. In contrast, the German books take geographical issues and make them relevant to the students, as well as a part of active classroom discourse, which can be influenced and experienced by the learners.

In this respect, the German course books foster both meaningful communication as well as the actual application of knowledge and competences to a very large extent. The Austrian books, on the other hand, completely fail to achieve any of this at all. Thus, the impression that the latter are a mere collection of translated geographical texts without an underlying basis in accordance with CLIL is further supported.

5.2.7. To what extent do the materials foster critical thinking and thus provide multiple perspectives on one topic?

When it comes to critical thinking, CLIL and subject didactics overlap significantly. As was postulated under 3.2.1., subject didactics in geography and economics consider the basis of the subject to be a 'Handlungskonzept' oriented towards society. As a consequence, geography and economics encourages learners to act based on their own critical thinking, which is characterised by linking interrelated issues to a converging whole. Closely connected to the basis of the subject are the different levels of learning aims, which are characterised by an increasing complexity. The most complex aim in this respect is the critical-emancipatory aim, which should encourage learners to act responsibly based on a critical assessment of the world and its problems and implies a sense of looking through the surface and unearthing underlying motives and intentions of a particular issue.

If we compare this to the claims made by Mehisto, parallels become apparent. According to Mehisto (2010), fostering critical thinking is characterised by the fact that

> [t]he majority of questions and assignments in CLIL materials avoid asking students to report back on fact-based questions, but instead focus on having students apply, analyse, evaluate and create something based on the information presented in the materials. (Mehisto 2010, http://www.ccn-clil.eu/clil_criteria_web/index.php?page=8 29 May 2011)

These criteria are very similar to the different levels of learning aims postulated by subject didactics in geography and economics, since they also consider merely reporting back facts as the lowest and least complex level of learning aims.

Unfortunately, as indicated by the analysis of tasks, the Austrian books do not really encourage the learners to produce, analyse or deal with any issue on their own behalf. As was already discovered repeatedly, the worksheets do not provide a new or different angle on the content of the textbook-sections of the respective volume, but are rather simple repetitions of the content already presented to the learner. This once again becomes apparent if we look at examples like worksheet 14 in volume four of the series (c.f. Sonnenberg 2010:103), which is nothing but a blank version of an identical figure in the chapter on global finance (c.f. Sonnenberg 2010:79).

Also in the area of presenting problematic issues, the Austrian books show some severe flaws. Although the materials most of the time cover a few pros and cons of the respective topic, they do so in a very generalising and often simplified way. For example, the negative and positive aspects of globalisation are tackled within the quarter of a page (c.f. Sonnenberg 2010:5), or the highly relevant process of the ageing society, which is indeed a controversial topic, is soberly mentioned and not discussed at all (c.f. Sonnenberg 2009:17). Thus, although the actual content seems to be the major concern of the course book series, the presentation of the subject matter is insufficient with regard to complex teaching aims and the raising of awareness for controversial problems. As a consequence, the *Do it in English-Geography* series apparently fails to go beyond the sheer representation of facts and figures concerning a particular topic area. Although they cover basically all topics demanded by the national curriculum they do so in a very basic and unsatisfying manner. This is very problematic, because in order to achieve teaching aims which are in accordance with recent views of both CLIL and subject didactics, teacher who work with the Austrian books have to provide a vast amount of additional materials as well as further supervision for the learners.

A very interesting way of fostering critical thinking is illustrated by an example found in the first volume of the *Diercke Geography for bilingual classes* series. In a section dealing with the conflict between Israel and Palestine, the views of a Palestinian citizen and an Israeli citizen are brought forward (c.f. Dreymüller et.al. 2007:69). As a result, the conflict between the two states is tackled on a very personal level, which emphasises the human aspect instead of remaining on the rather abstract level of a conflict between two political entities. However, what is even more important is that the course book provides tasks which encourage the

learners to further deal with the issue presented, thus fostering them to deal with the topic in an increasingly complex manner. The latter is illustrated by the sequence of tasks, which first ask the learner to sum up the information provided by the materials, before continuing to relate this information to the problem illustrated and finally concluding with a project which stimulates further engagement on the students' own behalf. Thus, as demanded by Mehisto as well as subject didactics in geography, the learner apply, analyse and evaluate a particular problem based on information provided.

However, the German course books do not always treat controversial topics with so much care. For example, the section on India and the Green and the White Revolution (c.f. Dreymüller et.al. 2007:86), the course book presents a structure similar to the Austrian course books, where the respective topic is tackled rather superficially.

Yet, overall the German course books indeed foster critical thinking to a much greater extent than their Austrian counterparts. This again shows how problematic the inaccurate and, quite frankly, uninspired task-design of the *Do it in English-Geography* books is. Therefore, it can be concluded that although not every topic is treated with the same attention regarding the fostering of critical thinking, the German course books provide a rather elaborate basis of tasks and texts which allow teachers and learners alike to achieve teaching or learning aims respectively more easily and sustainably.

5.2.8. To what extent do the materials foster cognitive fluency by providing means of scaffolding language, content and (learning) skills?

Due to the challenging context of learning a content-subject in a foreign language, scaffolding may not only foster cognitive fluency on part of the learners, but may also keep up the motivation to carry on dealing with a particular topic. The basic idea behind scaffolding within CLIL materials is to help learners to acquire skills and competences without sacrificing workflow. Mehisto (2010) postulates three main areas which can be scaffolded by materials:

> **Language can be scaffolded by**: repeating new nouns as opposed to using pronouns; shortening sentences and paragraphs; [...] providing explanations of some key vocabulary and expressions in the margins; asking students to first brainstorm related language [...]
>
> **Content can be scaffolded by**: helping students in an introductory paragraph or assignment to access their tacit knowledge and connecting topic[sic!] to their lives [...] using [...] graphic organisers such as [...] diagrams, tables and charts; [...] highlighting or underlining key ideas or facts; using plenty of subheadings [...]

> **Learning skills can be scaffolded by**: providing a sample correct answer at the start of an exercise; including samples of well done student work; [...] including planning, monitoring and evaluation tasks [...] (Mehisto 2010 http://www.ccn-clil.eu/clil_criteria_web/index.php?page=9 29 May 2011)

If we again start with the Austrian course books, there are indeed a few features of scaffolding, which occur in the series. The most obvious one is related to language, namely the explanation of key vocabulary. As was already mentioned, each volume in the series provides a glossary where key terms are explained in English. Additionally, yellow boxes providing an explanation of the respective terms are sometimes featured in a section. However, these are not regularly provided and do not follow a recognisable pattern. Nevertheless, the glossary entries allow learners to quickly look up the words highlighted within the text. Interestingly, learners are provided with both an English explanation, as well as the German translation of the respective word:

> **agglomeration**: here: a concentration of economic activities in related sectors in a certain geographical area (Ballungsraum).**37** (Sonnenberg 2009:91, original emphasis)

This guarantees that also students who do not understand the English explanations are likely able to understand the word, which prevents potential frustration and thus supports the learners' workflow. One feature criticised above that could be interpreted as a means of scaffolding similar to the shortening of sentences is the significant use of bullet points. Yet, as already pointed out, they do not really work, because they do not really stimulate learners to further investigate on the respective topic. Hence, the bullet points do not really help learners but are rather barriers which they have to overcome, since they have to deal with a lack of thoroughly presented content. Apart from these features, there are no such things as a noticeably more frequent use of noun phrases or a significant underrepresentation of pronouns.

One feature related to the scaffolding of content is the heavy use of subheadings, which is indeed a prominent feature in the *Do it in English-Geography* books. As was already analysed, the course books are characterised by a strict numerical structure with a lot of sub-sections. What is also frequently used are graphs and maps, yet they are often the only real content and are sometimes scarcely commented on (e.g. Sonnenberg 2009:15). Thus the graphs which are supposed to illustrate the content cannot fulfil their intended purpose and consequently do not provide any scaffolding at all. Additionally, this probably will be a

problem for the (cognitive) processing of the subject-matter, since the lack of explanation may cause confusion among the learners.

The third area of scaffolding postulated by Mehisto, namely skills, is not featured in the Austrian course book series, simply because it does not focus on fostering particular skill at all. Apart from one worksheet dealing with climate graphs (c.f. 5.2.4), there is no recognisable attention to skills. Yet, the respective section does not show any features that could be described as scaffolding the acquisition of (learning skills).

When it comes to scaffolding learning skills, the German course books offer the most diversity of features. As was already mentioned above, each section focusing on skills provides a range of suggestions, model texts and other useful features which obviously support the learners and thus foster workflow and consequently cognitive fluency. Furthermore, the respective sections very often provide tasks which function as a practical application of the skills introduced to the learners. Thus the students can quickly relate to the materials and are probably not overwhelmed by a challenge that is too demanding.

Concerning the scaffolding of content, the German course books clearly use a lot of subheadings as well, which also makes it easy for learners to quickly get the information they need in order to complete a task or project. What is also sporadically used is the technique of linking the content to the lives of the students, which is illustrated by the figure, is a first introduction to globalisation (cf. Dreymüller et.al. 2008:6). Here, the topic is clearly related to the learners' everyday life, which breaks the otherwise abstract subject of globalisation down to a concrete level which can be immediately experienced and understood by students. At the same time, the learners' tacit knowledge is activated, since they are made aware of the relevance of the topic and can thus activate their mental concepts associated with the global world. Additionally, each volume provides a great variety of graphs and figures, which illustrate the topics rather well and do not cause any confusion at all.

The potentially weakest area regarding scaffolding within the German course books is probably language. Although each section provides an orange box listing key terms of the respective passage, all that learners are provided with is a literal German translation at the end of each volume. This does not give the learners the opportunity to fully understand the concept behind a certain term and thus may have a negative influence on the development of language competence in the target language. This is because, in comparison to the word list in the German books, the glossary entries in the Austrian books provide learners with some kind of model text which may help them to paraphrase certain technical terms and thus potentially

add to the language repertoire. Yet, on the other hand, once again within the skills-sections, there are a few model texts which highlight certain structures in order to illustrate to learners how the new vocabulary of the respective section can be used (cf. Dreymüller et.al. 2007:161).

To sum up, both course book series show several features of scaffolding. The Austrian series is rather strong in the area of language, since it provides a glossary and highlights key vocabulary, while the German books may also list key vocabulary in each section, but just provide a word list at the end, which lacks depth. Yet, scaffolding content and especially scaffolding skills is solved well within the German books. The great advantage in comparison to the Austrian books is that they do not confuse the learners with too much figures while at the same time successfully link certain topics to the everyday life of the students. Thus, they create a convenient pace as far as cognitive fluency and the overall workflow are concerned. The latter may at some points be disturbed by the Austrian materials due to the problems already discussed.

5.2.9. To what extent do the materials try to incorporate an authentic language (engagement) by the learners?

Very much in the sense of Widdowson's reasoning of authentic language in a classroom setting (cf. 4.1.2.), Mehisto (2010) suggests that language used in CLIL is supposed to be relevant for learners, aiming for an authentic goal as well as using the language of recent media. This, in other words, implies the following:

Materials incorporate language currently in use in the media, and seek to create a relationship between the reader or listener and the passage or electric clip.

Materials incorporate language used in everyday speech in different social and work contexts (genres, domains, registers).

Materials seek to lead students to other sources of language through the internet, music or other media.

Assignments in materials seek to use language and content for authentic purposes [...] [such as] for a debate about an issue touching the students' lives. (Mehisto 2010, http://www.ccn-clil.eu/clil_criteria_web/index.php?page=7 30 May 2011).

As can be seen, authenticity in the sense of high quality CLIL materials does not meant that an original, unabridged or generally not (didactically) manipulated text (in its broadest sense) is used, but rather a text which is appropriate for the overall learning situation.

One feature associated with authenticity which is sporadically included in the *Do it in English-Geography* books, is the reference to the internet or online sources respectively. One good example of encouraging learners to conduct further research via the internet is found in volume one (cf. Sonnenberg 2007:54), where at the end of the chapter a link is provided in case the learners are interested in further information. Another very good example is found in volume three (cf. Sonnenberg 2009:14), where a link to a particular website is provided. Yet, here one potential weakness of referring to internet sources becomes apparent, since not all of the links provided actually work (e.g. the link provided for Lake Neusiedl is not working). Nevertheless, the materials repeatedly suggest links to follow and thus seek to lead students to external sources.

However, the most common feature within the whole series is the use of internet sources for the actual content of the volumes. For example, the section 'The causes of flooding - a changing environment" (cf. Sonnenberg 2007:60) in the first volume of the series is apparently taken from a website by the BBC. Since there are no indications of any simplification or any other form of manipulation, the learners are probably confronted with an original text.

Another very common feature is the reprinting of newspaper articles (cf. Sonnenberg 2008:49) or occasionally of figures taken from reports (e.g. Sonnenberg 2008:59) in order to provide further information on a particular topic. Thus, the course books absolutely show some variety in terms of relating to different kinds of media as well as providing students' with further external sources in general.

What the series is lacking though is the establishment of a real connection between the reader and the respective text, since there are not incidents where the books explicitly try to connect a particular topic or issue to the lives of the learners. Closely connected with establishing a relationship with learners is the issue of providing authentic assignments. Since there are rather few tasks which are designed not very communicatively, there are no examples where learners are actually encouraged to work with a particular medium. As a result, the Austrian materials also fail to provide authentic assignments or a communicative goal which could be classified as authentic. This is very unfortunate, because in the end this leaves the actual content of the books in a very abstract state, as far as the learners are

concerned and prevent them from interacting productively with the materials. Thus, although the Austrian course books refer to authentic sources and provide different examples of different media, they do not have the opportunity to get engaged authentically, which adds a certain artificial flavour to the subject-matter.

If we once more look at the German course books, references to the internet are rather common as well. However, the *Diercke Geography for bilingual classes* books do not always contain a reprinted version of a particular text, but also unaltered reproductions, for example a short leaflet taken from the internet (cf. Dreymüller et.al. 2007:50). This, of course allows a more detailed analysis of aspects related to moves, layout and other relevant features within the classroom as if it was reprinted and edited.

Concerning the tasks, the German materials include explicit assignments which ask learners to conduct research on the internet:

Use the internet to find the latest HDO rank data. Compare it with your findings in task 1. (Dreymüller et.al. 2007:57)

For experts: Use the Internet to select information on the present state of reducing digital divide. (Dreymüller et.al. 2008:15)

Thus, the materials explicitly lead students to use the internet and thus get them involved with this particular medium. Apart from tasks, the course books every now and then suggest links to certain websites connected to the respective section, for example in volume two in the section on world population (cf. Dreymüller et.al. 2008:26).

Similar to the Austrian books, the Diercke Geography for bilingual classes series also features newspaper articles (cf. Dreymüller et.al. 2007:89) or passages from reports (cf. Dreymüller et.al. 2008:23) as additional illustrations of a topic. Thus, the learners are also confronted with a range of texts which illustrate language use, yet without highlighting their actual features.

One area where the German course books are more successful than their Austrian counterparts is the establishment of a relationship between the text and the reader. As was already mentioned in the previous section, the materials are trying to connect the content to the world of the learners by making explicit the relevance to the students' lives of a certain topic. Furthermore, as can be seen in the examples provided above, the tasks give learners a clear goal to achieve and thus make the engagement with the respective media more authentic, since it thus becomes part of the actual classroom environment.

One aspect which is missing in both course book series is the incorporation of different registers of speech in diverse (working-) contexts. The books almost exclusively contain formal language, apart from a few quotations made by famous people. Yet things like dialects, the differences between written and oral communication, or certain domains of language are not really tackled. The only thing which can be classified as providing insight into different genres are the sections on skills in the German books, since they show the move-structure or other particularities of the respective kind of text.

Thus, as a conclusion, both course book series achieve to incorporate authentic language, especially with regard to the internet. However, the Austrian course books miss to actually get the students involved with the language presented and do not encourage them to productively work with external sources, due to a lack of tasks. Additionally, they fail to make explicit the diversity of registers and other issues related to the use of language as a social tool. The German books, in comparison, achieve most of the goals postulated by Mehisto (2010), yet do not incorporate features which draw attention to the social function of language. Therefore, there is still room for improvement as far as the features which deal with language are concerned.

5.2.10. To what extent do the materials apply an approach of functional bilingualism?

The final aspect that has to be evaluated is connected to the very form of realisation of the CLIL paradigm which the course books claim to be, namely bilingual education. If we recall Otten and Wildhage's (2007:31) fifth thesis, an integration of content and language has to be based on a functional concept of bilingualism (c.f.3.2.2.). This means that *bi*lingual education is supposed to indeed involve two languages which are used in connection with specific learning aims.

In this sense, it is even more surprising that both course book series, which claim to be materials for bilingual education, do not incorporate any kind of functional bilingualism. The only instances where the German language is used within the materials is for translating isolated terms, like in the case of the glossary entries, or the word lists. Not a single task asks the students to read an article in German and present it in English, or vice versa. Furthermore, there are no German passages or texts provided within the materials.

As a result, the materials are actually not bilingual, but rather monolingual with a few German translations. Thus both series fail to provide any kind of functional use of both languages. With regard to Otten and Wildhage's postulation, this constitutes a severe disregard of basic principles which are necessary for an effective concept of converging didactics. in other words, strictly speaking the claim of being bilingual is very misleading and to a certain extent simply wrong.

However, the intended purpose of the course books is apparent, namely to support teachers and learners alike in dealing with the English component of bilingual education. Nevertheless, it would be interesting to investigate on opportunity to enhance both series by adding some German texts to them, since the teacher, due to the current concept of the course book series, will have to provide any material dealing with the German part of bilingual education, which may disturb the didactic principles which the authors have in mind. The obvious advantage of incorporating texts in the native language, however would be the support of content-subject-teachers who are not expert in language teaching and may therefore find it very challenging to provide a well-balanced amount of German input.

Thus, functional bilingualism is an aspect which both the *Diercke Geography for bilingual classes* as well as the *Do it in English-Geography* books have yet to consider as a potential addition.

6. Conclusion

After having conducted an analysis and evaluation, based on theoretical principles, it is now time to conclude and sum up the results and findings which were discussed in the course of the thesis.

As a starting point, a theoretical framework of the CLIL paradigm was established in order to provide an informed and solid basis for the practical part of the thesis, where an analysis and evaluation was conducted. This derivation of theory unveiled that CLIL was heavily influenced by theories of second language acquisition (especially the Monitor Theory postulated by Krashen) as well as theories of Communicative Language Teaching. However, as was also illustrated, the CLIL paradigm constitutes an evolution of the two, since it breaks new ground due to treating language and content as equal variables of the overall equation of teaching and learning.

In order to provide a more comprehensible and well-grounded framework, ideas and demands of subject didactics from geography and economics were added to the discussion, which lead to the insight that several aims postulated by the current paradigm are perfectly compatible with CLIL. As a final step, the two backgrounds were brought to a convergence, based on the concept of Otten and Wildhage (2007), who suggest an establishment of a modified model of subject didactics.

Thus, the theoretical foundations, to which the consecutive evaluation and analysis were related, were established. In another step, the criteria which constitute the basis of the actual method of analysing and evaluating the teaching materials under examination were defined. For the analysis, the approach suggested by Littlejohn (1998) was modified and applied, while the claims made by Mehisto (2010) were adapted and applied in the course of evaluation. As a result, the practical part of the thesis presented constitutes a very specific and context-sensitive discussion of the course book materials and do not claim to be a generally valid evaluation and analysis of the respective materials. However, based on the defined principles, the thesis has provided a representative catalogue of samples as well as criteria, which grant interesting insights into the materials under examination. The final conclusion of the whole process is that the course book series significantly differ with regard to their usability for teaching according to the CLIL paradigm and overall quality.

The *Do it in English-Geography* series, which is indeed the only approbated series available on the Austrian market, shows severe deficits in a range of areas. Although they basically provide a fully-fledged coverage of the subject-matter demanded by the national

curriculum, they scarcely do anything that is actually characteristic of CLIL or bilingual education. The biggest issue in this respect is the poor tasks design which is uninspired, simple and overall not meaningful at all. One wonders what the author intends by only providing seven tasks in the textbook-section of volume three, while not including any in the remaining volumes. Of course, there are worksheets at the end of each volume, but they are, first of all, not very well designed either, while secondly preventing the learners from interacting intensively with the materials, due to their isolated positioning.

Unfortunately, these deficits in task design have immediate consequences for basically all other aspects which were analysed and evaluated. This is because tasks are at the end of the day the primary means by which course books can communicate with learners and thus support or guide them. As a result, the Austrian books also perform poorly in terms of communicative teaching and hence in almost all aspects which are supposed to distinguish CLIL from traditional teaching. Consequently, the *Do it in English-Geography* books are merely more than English translation of Austrian geography books. However, if we keep in mind the teaching aims of subject didactics, the series even there fails to provide materials of high quality, since the lack of tasks and the sometimes confusing presentation of graphs neither motivates learners, nor helps them to develop the competences which are defined by the national curriculum. This is very unfortunate, because due to the lack of CLIL-materials on the market, the Austrian course book series could have marked a first start for changing this suboptimal situation of market-supply. Instead, the books disregard many of the important principles pursued by CLIL and thus cannot be recommended for using in a bilingual setting, unless the teacher is prepared to severely improve and enhance the content with self-made materials.

The German books, on the other hand, outperform the Austrian course books in almost every aspect. They provide a wide range of tasks, try to connect the content with the lives of the learners and encourages communication between students. This makes the *Diercke Geography for bilingual classes* course books much more interactive and, most importantly, more communicative than their Austrian counterparts. One particularly outstanding feature is the focus on skills at the back of every volume, where learners are really supported to acquire and practice skills and consequently competences. Of course, there are a few issues which could be further improved, like the scaffolding of key vocabulary or the illustrating of different registers. Yet, compared to the Austrian books, the German volumes are far ahead when it comes to the actual realisation of the CLIL paradigm within the classroom.

Thus, as a conclusion, it is legitimate to say that the Austrian course books do not really constitute teaching materials which competently support an effective teaching and learning in the CLIL classroom, which rather reveals them as a false friend which may carry the label of CLIL, but does not apply its principles. The German course books, on the other hand, are basically materials of high quality which actually try to incorporate a wide range of principles derived from CLIL. Thus, although they may not cover all aspects of subject-matter which are demanded by the Austrian national curriculum, the *Diercke Geography for bilingual classes* is useful even for an Austrian setting, since it far more competently supports effective bilingual education in the classroom.

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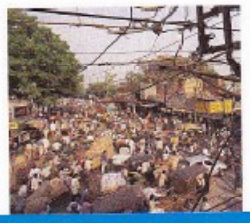
Appendix I (Scans of the Diercke Geography for bilingual classes books)



74 Living and Working in Asia

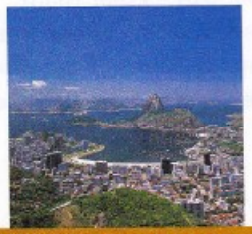
76 China – Changes in Industry
78 China – Changes in Agriculture
80 China – Growth of the Population
82 The Three Gorges Dam – A Big Step Forward?
84 The Monsoon – Hope and Despair in Bangladesh
86 India – The Green and the White Revolution
88 India – Tradition and Progress
90 Japan – A Country in Need of More Space
92 The Japanese Car Industry
94 The Tiger States – An Economic Miracle?

96 Living and Working in Russia

98 Moscow – The Capital of Russia
100 Two Russias
102 Fossil Energy Resources
104 Russia's Taiga in Danger
106 Social Changes in Russia

108 Living and Working in Northern America

110 Contrasting Nature – Relief
112 Contrasting Nature – Climate and Vegetation
114 Extreme Weather Conditions
116 The US Population – Melting Pot or Salad Bowl?
118 The US-American City
120 USA – Farming
122 From the Manufacturing Belt to the 'Rust Belt'?
124 The Sunbelt – Combining Jobs with Pleasure
126 Oil Sands in Alberta
128 The Inuit – Living in the Freezer?



130 Living and Working in Latin America

132 Latin America's World Cultural Heritage
134 Bananas – A Cash Crop
136 A Day in the Rainforest with Ecology TV
138 Traditional Life in Brazil's Rainforest
140 Opening up the Amazonian Rainforest
142 São Paulo – City of Contrasts
144 Mexico City's Water Supply
146 Living on the Mexican-US Border

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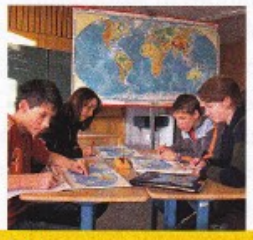
148 Living and Working in Australia

150 Australia's Uniqueness
152 The Australians
154 Sheep Farming
156 Mineral and Energy Resources



158 Skills

160 Working with Physical Maps
162 Working with Thematic Maps
164 Working with Photographs
166 Working with Aerial Photographs
168 Working with Tables
170 Working with Line Graphs
172 Working with Bar Charts
174 Working with Climate Graphs
176 Working with Pie Charts
178 Working with Flow Charts
180 Working with Texts
182 How to Prepare and Give a Talk or a Presentation

184 Appendix

184 Indicators
186 Climatic Data of the World
188 Words
208 Sources

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Natural Forces, Living and Working in Different Regions

10 What does our Earth Look Like Inside?
12 Wegener's Theory of Continental Drift
14 The Shaping of the Earth at Plate Boundaries
16 Earthquakes – The 1995 Kobe Earthquake in Japan
18 Tsunamis – The Indian Ocean Catastrophe of 2004
20 Volcanoes – A Curse or a Blessing?
22 The Water Cycle
24 Living on a River – Living with a River
26 Tilted Axis
28 Polar Day – Polar Night
30 The Global Wind and Pressure Belts
32 Climatic Zones of the World
34 The Earth's Vegetation Zones
38 Africa – A Tropical Continent
42 The Many Faces of the Sahara Desert
44 Water Means Life – In an Oasis
46 The Savannas
84 The Monsoon – Hope and Despair in Bangladesh
100 Two Russias
110 Contrasting Nature – Relief
112 Contrasting Nature – Climate and Vegetation
114 Extreme Weather Conditions
128 The Inuit – Living in the Freezer?
136 A Day in the Rainforest with Ecology TV
138 Traditional Life in Brazil's Rainforest
150 Australia's Uniqueness

Living and Working under Different Political and Cultural Conditions

40 Many Peoples, Many Cultures
44 Water Means Life – In an Oasis
52 Oil – Nigeria's Lifeline?
54 South Africa – The Changing Country
56 What is Development?
60 The Islamic World – Dominated by Religion
62 Oriental Towns – Mecca and Damascus
68 Tensions between Neighbours – Israel and Palestine
70 Israel – Limited Water Resources
72 Turkey – A Country of Contrasts
76 China – Changes in Industry
78 China – Changes in Agriculture
80 China – Growth of the Population
86 India – The Green and the White Revolution
88 India – Tradition and Progress
92 The Japanese Car Industry
94 The Tiger States – An Economic Miracle?
98 Moscow – The Capital of Russia
106 Social Changes in Russia
116 The US Population – Melting Pot or Salad Bowl?
118 The US-American City
120 USA – Farming
132 Latin America's World Cultural Heritage
134 Bananas – A Cash Crop
138 Traditional Life in Brazil's Rainforest
142 São Paulo – City of Contrasts
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152 The Australians
154 Sheep Farming

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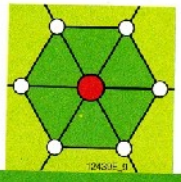

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Dreymüller et.al. 2007:7

What does our Earth Look Like Inside?

Going for records – who drills the deepest hole?

Every year newspapers report about projects to drill deep down into the crust. So in the 1990s Germany, too, started such a drilling project near Windischeschenbach in Bavaria. When they had drilled for about four years and had reached a depth of about 9 100 m, they finally had to stop the drilling because the temperature had risen so much that the drilling device stopped working. In the course of these four years they collected a lot of information about the structure of the crust.

However, even the deepest hole drilled by man on a continent, a drilling on the Kola Peninsula in Russia with a depth of about 12,000 m, could not reach down to the bottom of the crust.

To find out more about those inner parts of our Earth which you cannot drill into, scientists analyse seismic waves and how they 'travel' through the Earth. Just look at the following page and see what they have found out.

M1 Drilling near Windischeschenbach

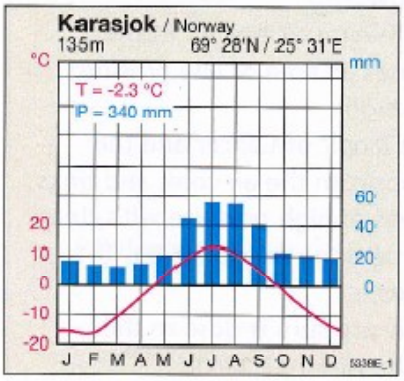
Dreymüller et.al. 2007:10

Climatic Zones of the World

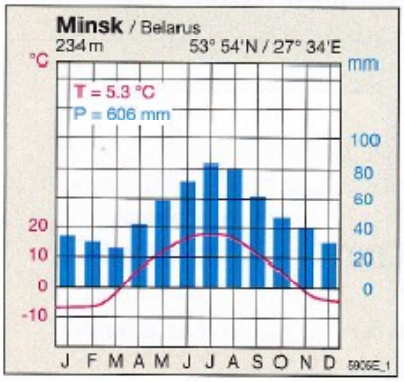
The world climatic zones show differences in temperature and rainfall from one area to another. The Polar Zones, north and south of the Arctic Circles, are cold with an average annual temperature of around or even below 0 °C and snowfall mainly in winter. Between the Arctic Circles and around 45° south and north there is the Temperate Zone with relatively mild winters and cool summers. The average annual temperature is around 8 °C. The temperate climate can have precipitation throughout the year or seasonal rainfall. Subtropical Zones are dry with little, often seasonal, or even no rainfall. The average annual temperature is about 18 °C with mild winters and hot summers. These zones lie between the Temperate Zone and the Tropics. The Tropical Zone, which lies approximately between the Tropic of Cancer and the Tropic of Capricorn is warm throughout the year. There is no frost and the average annual temperature is about 25 °C in the Tropical Zone. It has got high amounts of rainfall the closer you are to the Equator.

Climate – What is it?
The average weather conditions over a period of time (at least 30 years) at a certain place.

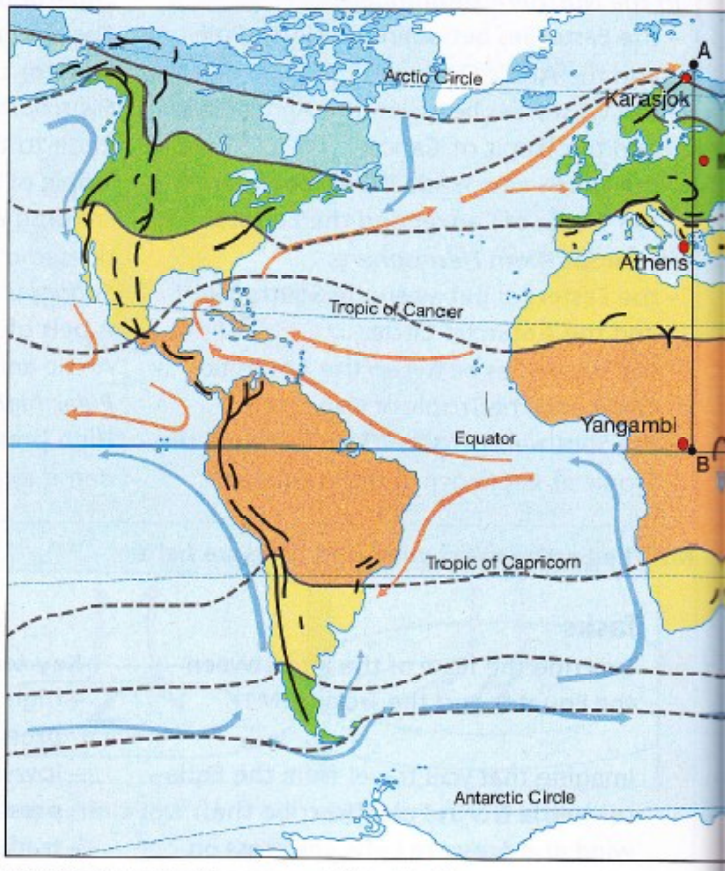
Climate – What are its elements?
The elements that make climate are temperature, precipitation, prevailing winds, atmospheric pressure, moisture of the air, and sunshine.



M1 Climate graph of Karasjok



M2 Climate graph of Minsk



M3 Major climatic zones of the Earth

Dreymüller et.al. 2007:32

What influences climate?

The Earth's climate is influenced by certain climate factors.

As the solar energy heats the Earth unevenly, the climatic zones are like belts around the Earth which generally follow the lines of latitude.

In some areas these belts are irregular, because the climate is influenced by the distribution of landmasses and bodies of water. Land and water heat up and cool down differently. Additionally there are warm and cold ocean currents that have a strong impact on climate.

Mountain ranges can act as barriers to the movement of air. Prevailing winds, such as the Westerlies, are then forced in different directions.

When you climb a mountain, you can feel the temperature falling the higher you go. On mountains the climatic zones depend not only on latitude but also on elevation.

Tasks

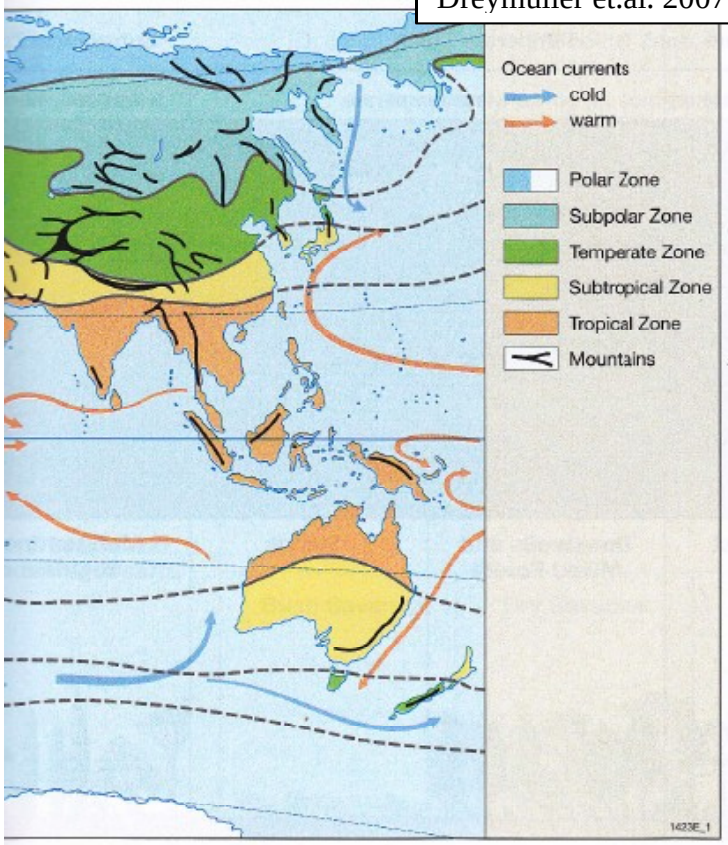
1. Imagine you are flying from North Cape (A in M3) to the Equator (B in M3). Describe typical features of the main climatic zones you pass through. Consider: name of the climatic zone, location, temperature, precipitation.

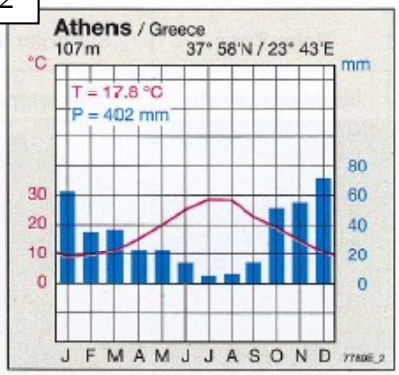
2. For experts: What are the reasons for the uneven distribution of temperature and precipitation on Earth?

Key terms:

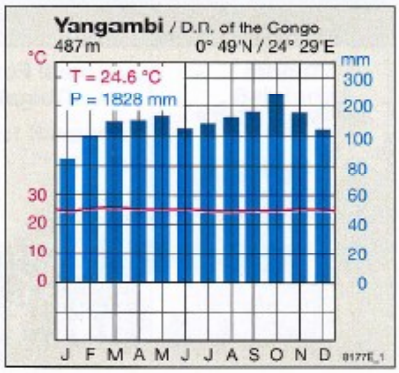
- Polar Zone
- Tropical Zone
- Subtropical Zone
- Temperate Zone
- prevailing winds
- precipitation
- average annual temperature

Dreymüller et.al. 2007:32





M4 Climate graph of Athens



M5 Climate graph of Yangambi

Dreymüller et.al. 2007:33

Kenya – National Parks and Tourism

M1 Holiday brochure from the Internet

Kenya's economy

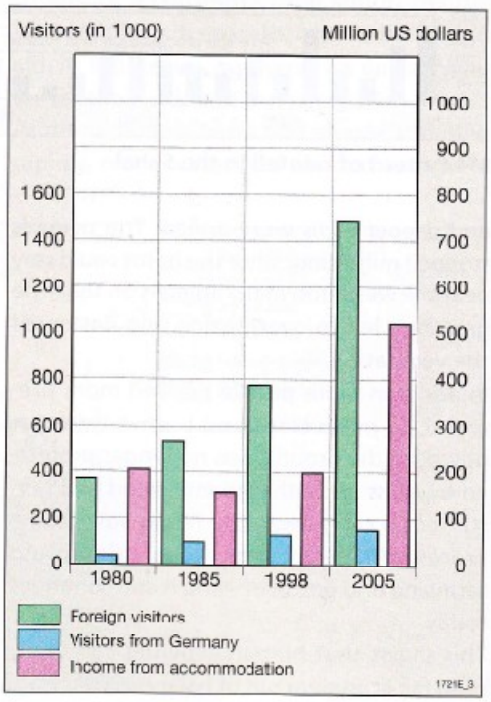
Traditionally Kenya's economy has been based on agriculture – subsistence farming (food for the people's own needs) and the production of tea, coffee, and other crops for export. Today still more than 75 per cent of the working population lives from farming and growing crops. Industrial production in Kenya has been growing slowly. This sector employs only 10 per cent of the working population. Unemployment is very high in Kenya.

Tourism – positive and negative effects

The tourist sector has become a keystone of Kenya's economy. Kenya receives more than one million tourists each year and tourism has become a major source of foreign currency. Tourism in Kenya is primarily based on wildlife safaris. The wonderful national parks, about 10 per cent of Kenya's area, attract tourists from all over the world. Many jobs have been created in parks, hotels, and lodges. In some of these regions the infrastructure has been improved.

However, many people say that too much land is reserved for parks and game reserves and that more farmland is needed for the growing population.

Tourism has changed the traditional way of life for people such as the Masai, who live in the south of the country. The large number of tourists has negative effects on the natural environment.



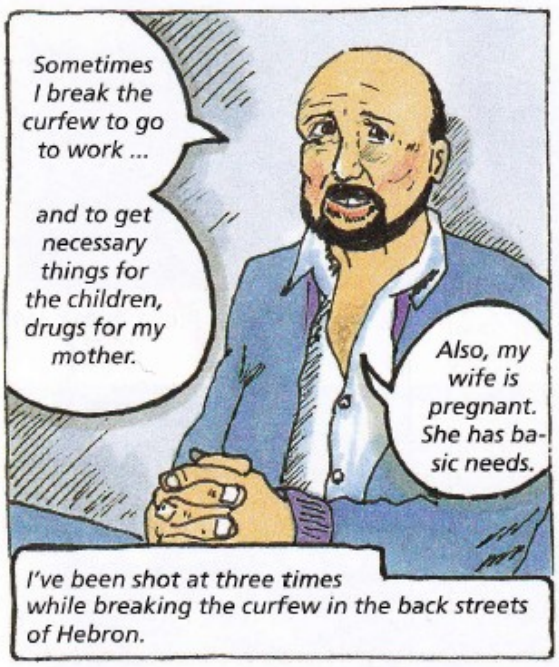
M2 The development of tourism

Dreymüller et.al. 2007:50

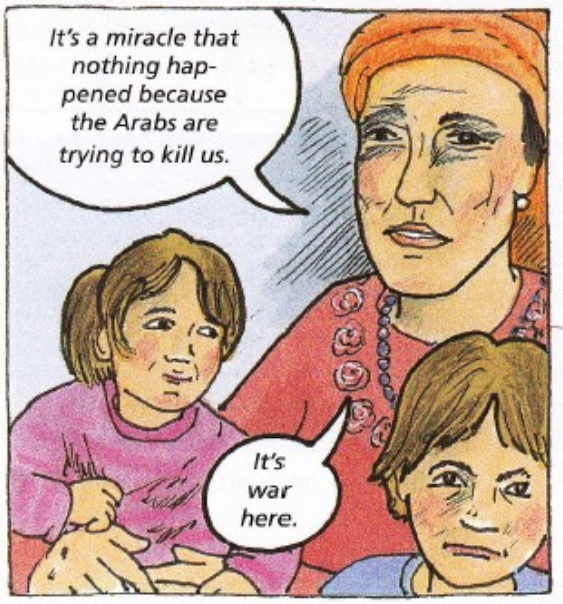
Life in Hebron – two views

Curfew
Whenever the tension between Palestinians and Israelis increases too much, the Israelis impose a curfew in the occupied territories. That means that people there cannot move about freely until the curfew is lifted.

Majed Natshe
Majed Natshe is a Palestinian citizen of Hebron, who owns a small shop. When the Israelis impose a curfew to avoid trouble, he cannot go to his shop. This is what he says:



Bracha Ben Yitzhak
Bracha Ben Yitzhak is an Israeli mother with four children, who also lives in Hebron. In one of the many fights between Israelis and Palestinians one bullet entered the bedroom where her children were sleeping. This is what she says:



Tasks

1. Describe the changes in the Israeli territory between 1948 and the end of the 1960s.

2. Explain in what way the conflict influences the lives of Israelis and Palestinians.

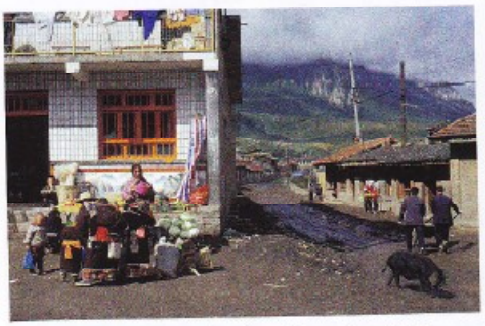
3. Project: Collect information from newspapers, television, and the Internet to find out more about the present situation in this region. Present your findings in class and discuss them with the other students.

Key terms:
- curfew
- to impose/lift a curfew
- occupied territory
- autonomous
- territory
- international status
- UN resolution
- basic needs

Dreymüller et.al. 2007:69

China – Changes in Agriculture

M1 Traditional farmer's house



M2 First steps to better housing in a Chinese village

The Development of Agriculture

Phase I (before 1949)

Before the People's Republic of China was founded in 1949, the farmland was owned by landlords. Tenants rented small pieces of land and worked on it. However, they stayed poor as they had to pay high rents to the landlords.

Phase II (1949–1958)

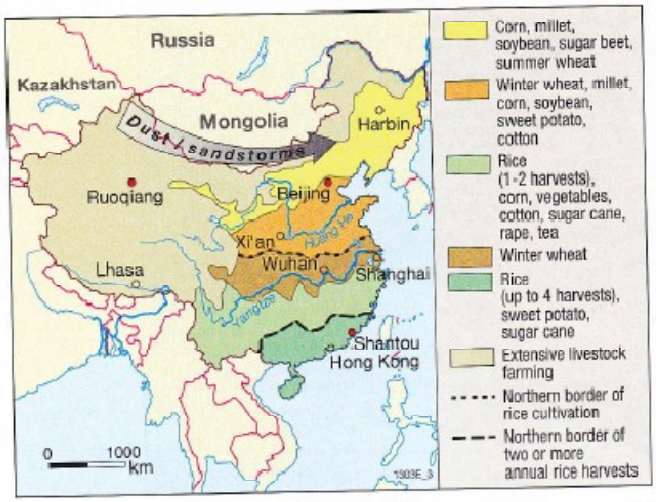
In 1949 the Chinese Government started a land reform. The land was taken away from the landlords and given to peasants, who could then work on their own piece of land. As the pieces of land were very small, the farmers could live on the yields, but productivity was low.

Phase III (1958–1979)

The Chinese Government began to convince the farmers that cooperation helped to achieve higher yields. As a result 'cooperatives' and 'communes' (M5) were founded. Some farmers were even forced to join. The Ministry of Agriculture told the communes what to do, so farmers were no longer independent.

Phase IV (since 1979)

As this system did not fulfil the high expectations of the State, the policy was changed. Today, farmers are given land and can work on it being fully responsible. They do not have to pay a rent, but they have to deliver a fixed part of their yields. Any surplus can be sold on the local markets.



M3 Main agricultural regions in China

'Comrades, again our government in Beijing has increased taxes and the quota of rice. They say this is because they need more rice to feed the growing population.
So, our brigade must find ways to increase the yields even further, so that we still have enough to sell, and to make profit for our brigade.
You know that we urgently need a new threshing machine, new barns, and the old tractor must be repaired ...'

M4 From a brigade leader's speech

Dreymüller et.al. 2007:78

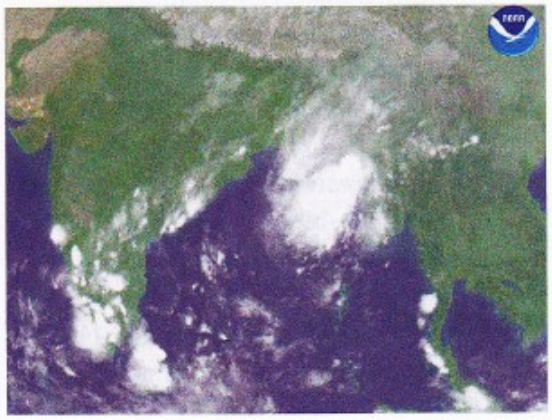
M5 Too little rainfall in Bangladesh

M8 Street in a flooded town

Monsoon floods in Bangladesh leave 2 000 homeless
18/07/2005 - 08:35:28

Floods caused by heavy monsoon rains claimed two lives and washed away hundreds of flimsy huts, leaving nearly 2 000 people homeless. Rain-fed rivers burst their banks, swamping more than 200 farming villages, relief officials said. Up to 200,000 people have been affected, many of them losing rice crops, said the officials, adding that many residents were relying on small boats for transportation after roads were flooded.

M6 Bangladesh news on the Internet



M7 A typhoon off the coast of Bangladesh

Typhoons

Typhoons are tropical cyclones which form over the warm water of the Indian Ocean.

Very strong winds and heavy rainfall occur. If these winds blow towards the coast, they cause high waves and push masses of water onto the beaches. This is called a storm surge.

If the coast is flat, the water may be driven far into the hinterland, so that large areas of land are flooded. Rivers may push the water even further inland, thus increasing the size of the flooded area.

The government of Bangladesh has built concrete shelters which protect the village people against the high tidal waves.

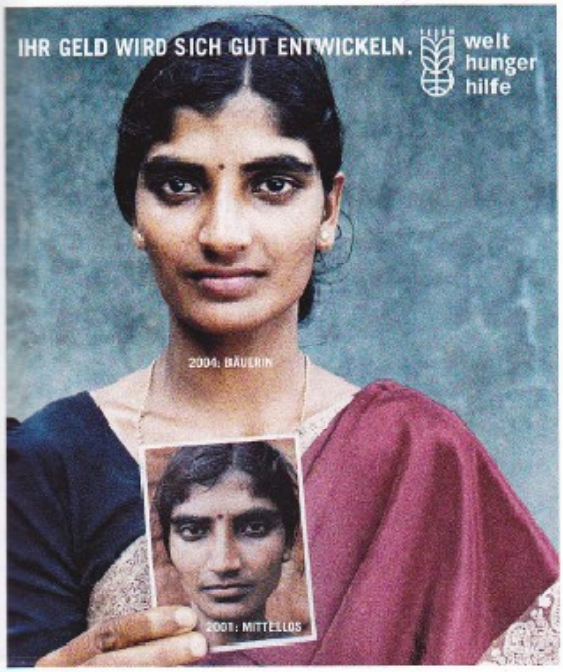
Key terms:

- flooding
- water level
- rain-fed river
- storm surge
- monsoon
- typhoon
- melt water
- tidal wave
- hinterland
- cyclone

Tasks

1. Find reasons for the regular flooding in Bangladesh. Use your atlas and the material on both pages.
2. Sometimes the flooding is extreme. Explain.
3. Describe and explain the effects of the flooding on the population.

Dreymüller et.al. 2007:85



M3 Advert

M3: On her small piece of land Shantamma could not grow enough food for her family. To buy seeds she had to borrow money at interest rates which were much too high for her. So 'Welthungerhilfe' helped Shantamma to buy a cow. She now sells the milk, and the money she gets for it is enough to support the whole family.

M4 A smallholder's wife milking her cow

The White Revolution
What does it mean?
- Farmers are encouraged to keep two or three cows for milk production.
- Milk which is not used for their own needs is sold to a cooperative.
- Cooperatives sell dairy products at nearby markets.

Positive results:
- reliable income for the farmers
- Money can be used for the education of the farmers' children.
- Especially women, who normally look after the cattle, gain more independence.

Problems:
- In 1995 the WTO made India open its import barriers for dairy products. This opening of the market led to competition with other countries.
- When trying to export its surplus production India met with heavy resistance, e.g. from the EU.

Producing milk

The White Revolution stands for a remarkable increase in India's milk production. It was started in 1965, but had its major breakthrough when the EU and the World Bank decided to support 'Operation Flood', the production of a great flood of milk by thousands of poor Indian farmers. The production of milk in India (80 million tonnes) is higher than the production in the USA.

Tasks

1 Point out the pros and cons of the Green Revolution.

2 Comment on the text of the advert with special regard to the White Revolution.

Key terms:
- Green and White Revolution
- high-yielding varieties (HYV)
- arable land
- fertilizer
- pesticide
- crops
- dairy farming
- smallholder

Dreymüller et.al. 2007:86

M3 Tradition and progress

M4 Call centre in Bangalore

High-tech in India

Today India ranks among the leading industrial nations with regard to bio- and IT-technology, the pharmaceutical, and the space industry.

In spite of this, India is still a less economically developed country, where 22 per cent of the population lives below the poverty line. These people have not got enough money for their basic needs, such as food, housing, clothing, and transportation.

	1994	2005*
GNP (billion US-$)	222	719
Share of agriculture (%)	30	19
industry (%)	28	28
services (%)	42	53

M5 India – Selected data (*estimate)

Tasks

1 Study the material on page 88 and point out in which way the Indian caste system influences the life of the people in rural India.

2 In how far does the ground map of the Indian village (M2) reflect the caste system?

3 What does the material on page 89 show about the economic development and progress in India?

Key terms:

- IT technology
- high-tech job
- call centre
- data-processing industries
- caste
- social class
- 'Untouchables'

Published on Thursday, November 13, 2003 by the Knight-Ridder Newspapers

Millions of High-Tech Jobs May Follow Hundreds of Thousands Already in India

by Aaron Davis

BANGALORE, India – On a dirt road leading away from Bangalore, thousands of India's 20-something technology graduates stream at dusk toward the future – past construction sites, around mud puddles, in faded blue buses and white SUVs – until they reach four silver towers that rise high into the bug-filled sky.

Here, they enter the realm of the call center '24/7 Customer', where in nine-hour shifts they help hundreds of Americans sort out bank card problems, order new phone services and install software on their home computers.

This is the new India ...

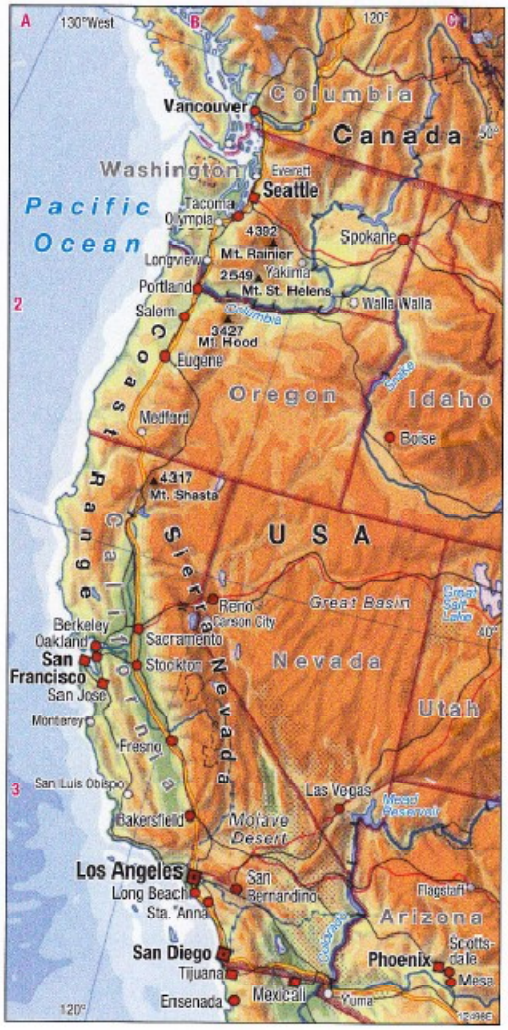
M6 Newspaper article

Dreymüller et.al. 2007:89

Working with Physical Maps

When working on the different chapters in your book, you often find tasks which ask you to use your atlas. There you find many different maps which are either physical or thematic maps.

M1 Western part of North America



Physical maps show the location of settlements, the relief (mountains and valleys), the height of the land and the depth of the sea, the drainage systems (rivers and lakes), major transportation routes, and borders.

The title of a map gives you a first orientation.

How to find places using maps of an atlas

Quite often you are asked to locate a certain place on a map. Let's take e.g. Mount Rainier. The first step is to find a map which shows this mountain.

Each atlas has got an ***index*** or a ***register*** which gives you the page and a combination of a number and a letter to find a place (e.g. ***Mount Rainier 190, B2***). So, you find Mount Rainier on page 190 in ***grid square B2***.

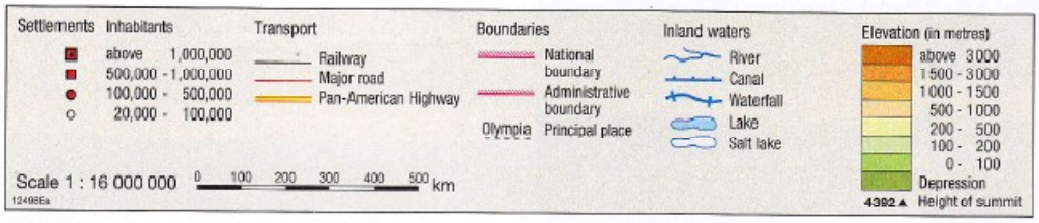
How to locate places in a map

If you want to describe the location of a place you may use well-known nearby cities, mountain ranges, rivers, and other places (e.g. Mt. Rainier is located south of Seattle). However, geographers often prefer to give the longitude and latitude (e.g. Mt. Rainier is located at about 47 degrees north and 122 degrees west).

The scale (1 : 16 000 000) and the ***scale line*** help you to measure distances

The key or legend of a map

Each map has got a key. You must study it carefully because it explains the colours, lines and symbols on a map.



Dreymüller et.al. 2007:160

Imagine, your task is to locate California and San Francisco and, using a physical map, to describe the region.
This is what you could tell your class:

Model text

California is a state ***in the west of*** the USA, bordered by the state of Oregon ***in the north*** and the country of Mexico ***in the south***. ***In the west*** there is the Pacific Ocean. The Coast Ranges ***run parallel to*** the coastline of the ocean. The mountains ***reach an average height of*** about 1500 to 2000 metres. ***In the east there is*** the Sierra Nevada with ***heights of*** over 3000 metres. One of the highest mountains is Mt. Shasta. Its peak is 4317 metres high. Between the two mountain ranges Central Valley ***is located***. ***It stretches over*** 800 kilometres ***from north to south***. ***The width varies*** between 50 and 100 kilometres ***from west to east***. There are two major rivers, one coming from the north and the other ***coming from*** the south, ***which flow through this valley***. ***They*** meet at the gap near San Francisco and ***drain into*** the Pacific Ocean.
Along the eastern slope of the Sierra Nevada a canal follows a valley from north to south, ***leading*** to Los Angeles.
San Francisco is one of the main cities in California. It ***is located*** on the Pacific Ocean in California, at about 38 degrees north and 122 degrees west. San Francisco is a big city with 500,000 to 1 million inhabitants. Other big cities ***nearby*** are Berkeley ***in the north-east*** and Oakland in the ***east*** of San Francisco. Each of these two cities has got about 100,000–500,000 inhabitants. San José, which is about the same size as San Francisco, ***lies south-east*** of it.
A railway line ***connects*** these cities with each other and with Los Angeles (more than 1 million inhabitants), which ***is located about*** 600 kilometres ***south of*** San Francisco.
A major road, the Pan American Highway ***follows the course*** of the rivers in the valley and connects main cities, such as Sacramento, Stockton and Fresno with each other.

Useful words and phrases

Describing the location of a place

A place is located/situated/lies
- in a country, region, ...
- east, west, south-west, north of ...
- on the eastern side of the mountains.
- in the west of California.
- in the centre of/at the edge of ...
- on a river/on the Pacific Ocean, ...
- near/close to/nearby a city/border.
- at about 38° N and 122° W.
- at about 600 km south of ...

Describing transportation routes

A road/railway line
- runs/leads from Fresno to Stockton.
- runs/leads along a river.
- runs parallel to a river.
- follows the course of a river.
- comes from the north/San Diego ...
- connects/links Fresno with Stockton.
- meets at San Francisco.

A river
- flows from north to south ...
- flows through a region, a valley ...
- joins another river.
- drains into a lake/an ocean.

Describing the size/extent/height

A region
- is 20 km wide and 30 km long.
- has got a size of 200 sq km.
- covers an area of 50 sq km.
- stretches over 30 km from east to west.
- extends for 50 miles into the desert.
- extends as far as the river.

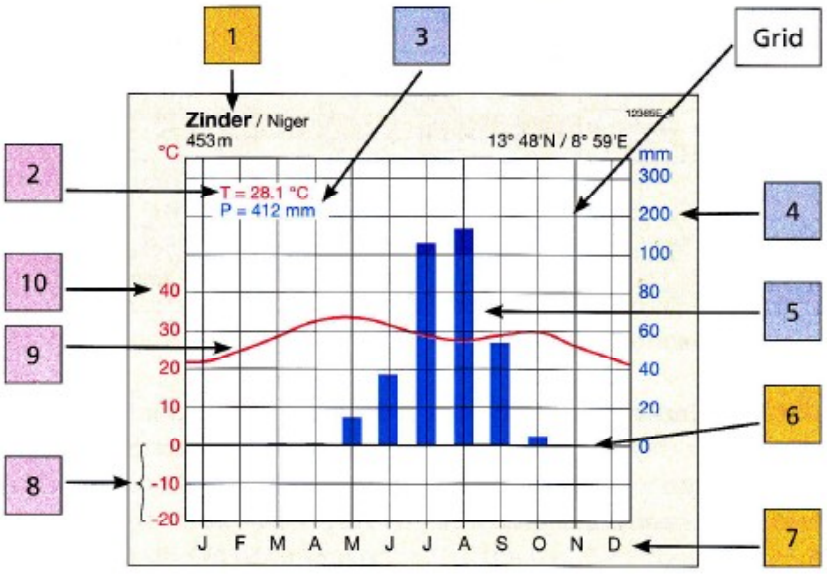
The peak of a mountain
- is 4421/up to 2000 m high.
- reaches a height of 4421 m.

The elevation of the mountain range
- is between 1000 and 1500 m.
- reaches 3000 m.

Dreymüller et.al. 2007:161

Working with Climate Graphs

A climate graph helps to describe and analyse the average climatic situation of a place. It cannot forecast the weather conditions, but it makes it easier to imagine the typical climate of that place. Besides, if the drawing of climate graphs follows fixed rules, you can easily compare the climate of different places.



1	Name, geographical location, and elevation	6	Zero line
2	Average annual temperature	7	Months from January to December
3	Total annual precipitation (sum of the precipitation for the whole year)	8	For temperatures below 0 °C
4	Precipitation in mm	9	Temperature line (colour red)
5	Precipitation bar (colour blue)	10	Temperature in °C

	J	*F*	*M*	*A*	*M*	*J*	*J*	*A*	*S*	*O*	*N*	*D*	*Year*
°C	21.9	24.7	28.8	32.5	33.3	31.7	28.9	27.6	29.0	29.7	26.1	22.8	28.1
mm	0	0	1	1	15	37	131	168	54	5	0	0	412

M1 Data and climate graph of Zinder/Niger

Dreymüller et.al. 2007:174

Different Types of Numbers

1. Reading and writing numbers

.	**point** (for decimals, e.g. 2.54). See decimals.
,	Use a comma or a blank for groups of three numbers. (Do not read commas.) See below.
0	**zero**, "0", nought (UK)
1–10	In a text write **one** to **ten** as words.
>10	In a text write numbers **larger than** 10 as numbers, e.g. "56", not "fifty-six".
123	a/one **hundred** (and) twenty-three
234	two **hundred** (and) thirty-four
5,678 (5 678)	five **thousand** six hundred (and) seventy-eight
93,000,000	ninety-three **million**
6,000,000,000	six **billion** (milliard = UK-old form)

2. Different types of numbers

Ordinal numbers

1st	first	7th	seventh
2nd	second	8th	eighth
3rd	third	9th	ninth
4th	fourth	10th	tenth
5th	fifth	11th	eleventh
6th	sixth	12th	twelfth

Fractions

Fraction	We say ...	Decimal	Per cent
1/2	a/one half (of)/ one out of two	0.5	50 %
1/3	a/one third (of)/ one out of three	0.33	33 1/3 %
1/4	a/one fourth (of)/ one out of four	0.25	25 %
1/5	a/one fifth (of)/ one out of five	0.2	20 %
1/10	a/one tenth (of)/ one out of ten	0.1	10 %
1/20	a/one twentieth (of)/ one out of twenty	0.05	5 %
1/100	a/one hundredth (of)/ one out of a/one hundred	0.01	1 %

Decimals

0.5	(zero) **point** five
3.14 (π)	three **point** one four (pi)

Powers/Exponents

10^2	ten **squared** ten **to the power of** two ten **to the** second	100
10^3	ten **to the power of** three ten **to the** third	1000

The Earth is **93 x 10^6** miles from the sun.
(ninety-three **times ten to the sixth**) – 93 million –

3. Arithmetic

= Proportions

=	is, is **equal to**, **equals**	≠	is **unequal to**, is **not equal to**
>	is **more**, is **larger than**	<	is **less**, is **fewer**, is **smaller than**
4:1	four to one	**4 x**	four **times as large as**

+ Addition → Sum (to add ... and ...)

12	+	4	=	16
Twelve	**plus**	four	equals	sixteen.

– Subtraction → Difference (to subtract ... from ...)

12	–	4	=	8
Twelve	**minus**	four	equals	eight.

X Multiplication → Product (to multiply ... by ...)

12	x	4	=	48
Twelve	**times, multiplied by**	four	equals	forty-eight.

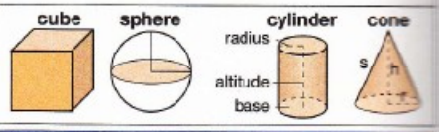
÷ Division → Quotient (to divide ... by ...)

12	÷ /	4	=	3
Twelve	**divided by**	four	equals	three.

4. Geometry

	parallel lines
90°	**right angle = 90°** A right angle has got ninety **degrees**.
M d r	**circle** A circle is **round** or **circular**. It has got a **middle point (M)**. The line from the middle point to the circle wall is the **radius (r)**. The line from one side of the circle through the middle point to the other side is the **diameter (d)**.
x x ≠ y y	**rectangle** A rectangle is **rectangular**. It has got two parallel equal sides on two sides at right angles.
x x = y y	**square** A square is **square**. It has got four equal parallel sides at right angles.
	triangle A triangle is **triangular**. It has got three sides.

3-d figures



5. Time

1 minute	= 60 seconds	**a.m.**	from midnight to noon
60 minutes	= 1 hour	**p.m.**	from noon to midnight
24 hours	= 1 day	**In the year 2007 ...** two thousand (and) seven twenty 'o' seven	
365 ¼ days	= 1 year		
100 years	= 1 century		

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Different Types of Measurement

Besides the standard metric system, the UK and the USA also use a non-metric system. Some important basic measures are often more than the metric ones: 1 inch > 1 cm, 1 mile > 1 km, 1 gallon > 1 litre.

Precipitation – Depth – Length – Distance

Non-metric		Metric	Uses
1" (inch)	=	2.54 cm	• amount of precipitation • map scales
1' (foot)	12 inches	30.5 cm	• elevation above sea level • depth below sea level • width
1 mile	5,280 feet	1.6 km	• distance

Metric	Non-metric
1 cm	**0.4 inches**
1 m	**39.4 inches**
1 km	**0.6 miles**

Speed

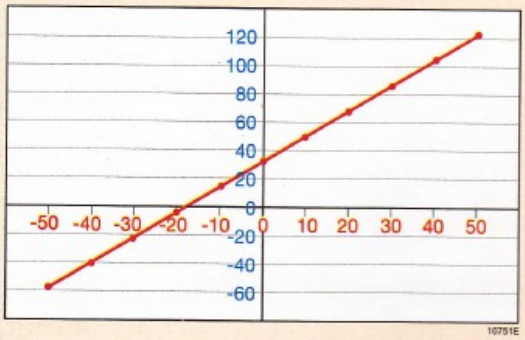
100 miles per hour = 160 km/h
100 kilometres per hour = 60 mph

Temperature

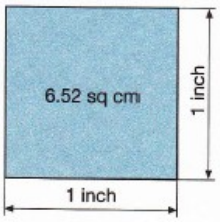
°C = (°F – 32) / 1.8
°F = 1.8 x °C + 32

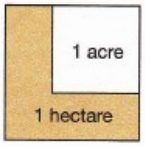
The temperature in degrees Fahrenheit is equal to 1.8 times the temperature in Celsius plus 32.

Celsius – Fahrenheit



Area

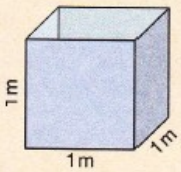




1 acre = 0.4 ha
1 ha = 2.5 acres

1 square mile = 2.6 sq km
1 square kilometre = 0.38 sq miles

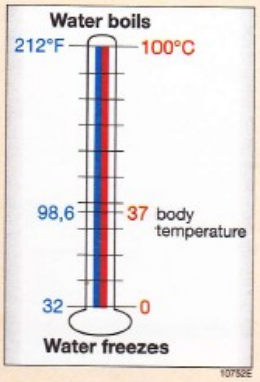
Volume



1 m x 1 m x 1 m
1 metre by 1 metre by 1 metre =
1 cubic metre (m^3)

1 gallon is
4.6 litres (UK),
3.8 litres (USA).

One barrel of oil contains 159 litres (42 US gallons).



www.convertit.com

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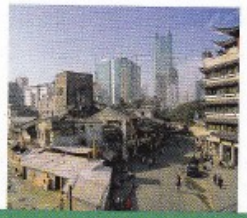

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Globalisation of the Economy

The "global toothbrush"

The electric toothbrush "Sonicare Elite 7000" is made of 38 components. They are manufactured by 4500 employees in ten countries and in five different time zones. Before the final assembly of the toothbrush and the packaging near Seattle (USA), the single components have travelled about 27,800 kilometres around the globe.

M1 Production locations of the "global toothbrush" (Source: Spiegel Special 7/2005 Int. Ed.)

As the example of the global toothbrush shows, the internationalisation of production and services characterises economic globalisation. Thus, Dutch, German, or Japanese products are more and more replaced by "global products".

Economic globalisation leads to a world-wide market for companies and a rapid flow of goods and capital.

The new dimension of an old process

The process of globalisation is not a new one. For thousands of years, people have bought and sold products from and to other countries. It is, first of all, the volume and speed of the flow of goods, services, and capital around the globe that makes the difference to the past. Since the 1950s, the volume of world trade has increased by about 20 times.

Today globalisation also includes the spread of ideas and concepts. Therefore, it leads to fundamental changes in human society.

Driving forces

The globalisation of production has been driven by different factors. After the political changes at the end of the 20th century many countries have adopted free-market economic systems. This has led to new opportunities for companies to construct factories in foreign countries. At the same time these changes put an end to trade barriers.

Advances in communication and information technology make it easier to use international networks of production and services. New means of transportation and modern technologies in transport have accelerated the exchange of goods.

> Globalisation is a process of increasing interconnection of different regions and cultures of the world. One of its striking elements is the growing economic interdependence of countries.

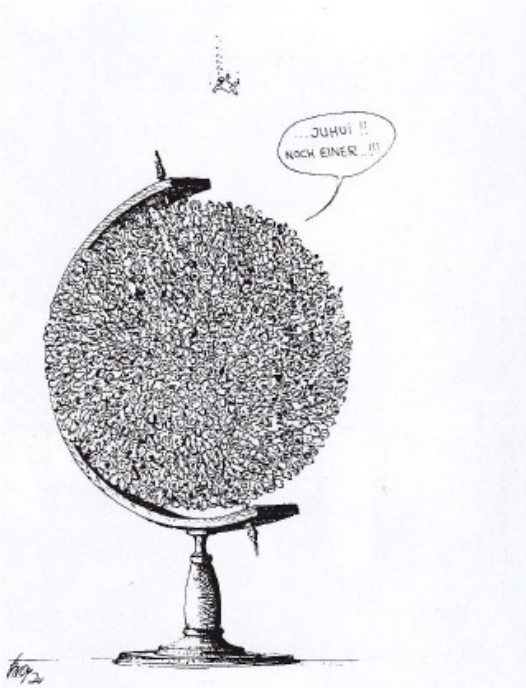
Dreymüller et.al. 2008:10

World Population

Growth of world population

The fast growth of the world population is a relatively recent phenomenon in the history of the world. Two thousand years ago the population of the world was about 300 million. For a very long time populations did not grow significantly because of high death rates. Periods of growth were followed by periods of decline. It took more than 1 600 years for the world population to double to 600 million. Population increase picked up in Europe in the 19th century following health and hygiene improvements in the course of the industrial revolution. The very rapid growth of world population started with a sharp reduction in mortality and higher birth rates in less developed regions.

With the decline in fertility in most parts of the world, the rate of global population growth has been decreasing since its peak of 2.0 per cent in the 1960s. Today, the world population is growing at a rate of 1.3 per cent per year, with an annual net addition of 76 million people. By 2050, the annual population growth rate is expected to decrease gradually to about 0.3 per cent.

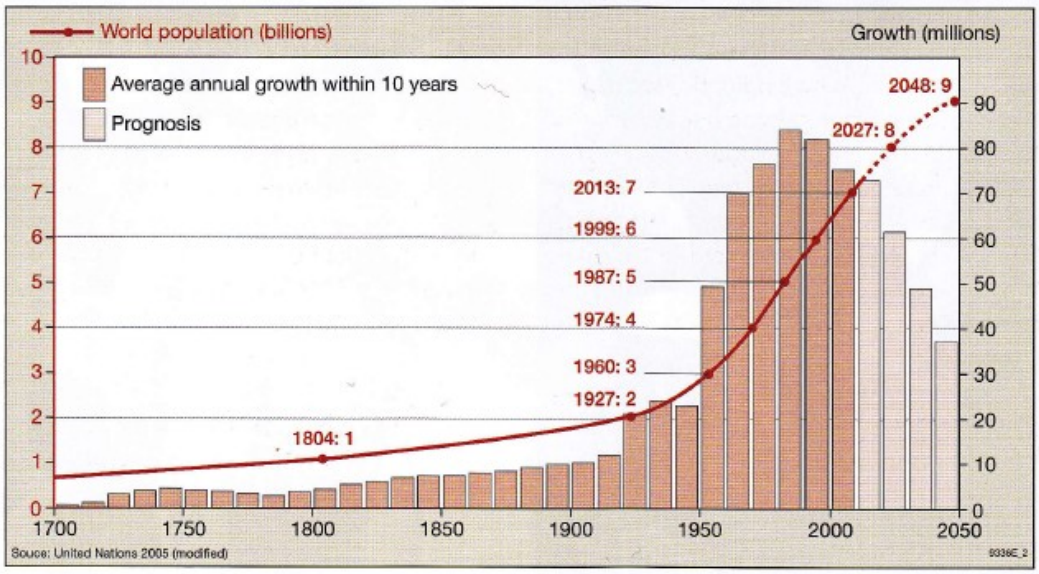


M1 "Wow! Here come another one!"

Internet:

www.unpopulation.org

www.census.gov/ipc/www/popclockworld.html



M2 World population growth

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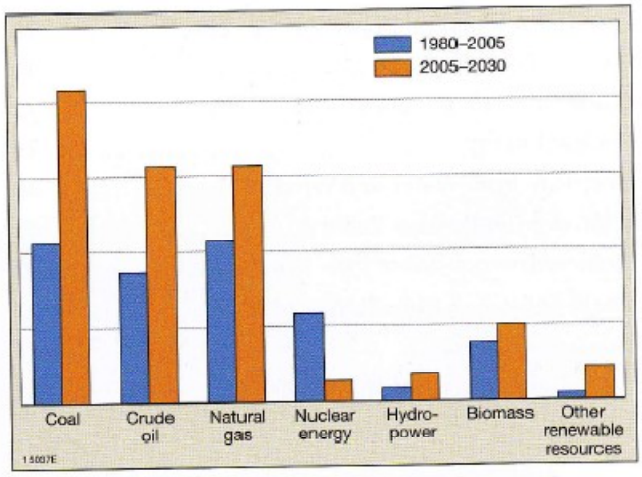
Energy – A Vital Component of Our Life



M1 Trends in global energy supply (million TOE)

Ton of oil equivalent (TOE)
The amount of energy which is released by burning one tonne of crude oil. The value of one TOE is defined by convention. A commonly used conversion factor is: 1 TOE = 42 GJ

Increasing demand

Energy is vital for life on Earth. Industrial processes, farming and other economic activities require an energy supply. Therefore, access to energy is fundamental to economic and social development.

The rapidly growing population of the Earth and the economic growth lead to an increasing demand for, and use of, energy resources. The world's energy demand will double by the year 2050. Solving this challenge will be complicated due to some additional problems:

- There is an uneven distribution of energy resources.
- The demand for energy resources differs greatly among the countries of the world.
- Transport and conversion of energy resources may create logistical and even environmental problems.
- Energy resources are often mined in regions of the world with unfavourable natural conditions or which are marked by political tensions.

Energy resources and reserves

To solve the energy demand of the world it is necessary to gain enough information about the quantities and qualities of energy resources such as coal, crude oil, and natural gas. While estimating the size and quality of the deposits, one should take into account the differences between energy *resources* and energy *reserves*.

Due to improvements in recovery techniques and mining technologies, the quantities of accessible reserves have changed. Besides this, the world market prices are influencing the use of mineral resources. If demands increase, the prices increase, too. Therefore, for countries like Germany it may be economically worthwhile, to reopen closed coal and metal mines, e.g. copper, instead of importing these resources.

Huge gas field found off Brazil
Petrobras, Brazil's oil company, believes that the new field could match Tupi oil field, which is one of the largest fields discovered in the past 20 years.

22 January 2008, Sao Paulo

M2 News report

Energy resources
In general, deposits that are estimated or recovered but may not be used yet.

Energy reserves
That part of energy resources that is economically useable, i.e., which can be mined with current technologies.

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The Ecological Footprint

Experts assume that at present rates of consumption mankind would need 1.39 Earths to ensure that future generations are at least as well off as we are now.

Important questions ...

Thinking about the problem mentioned above, leads to a number of questions.

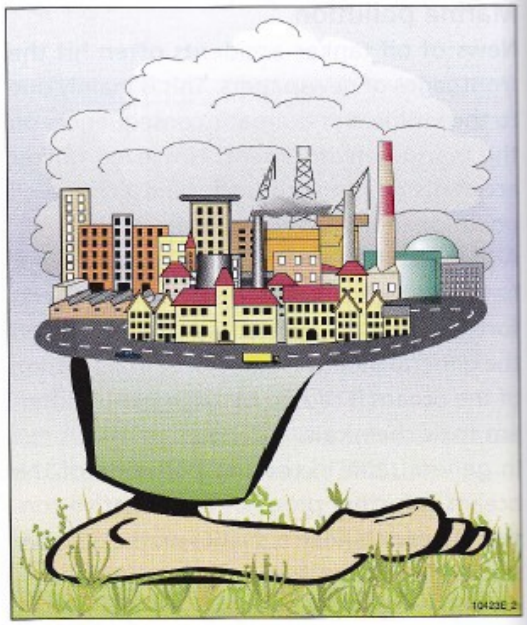
- What is the size of your home?
- What energy sources do you use in your home?
- How many kilometres do you travel per year for each mode of transportation, automobiles, bus, rail, air travel (estimated)?
- Which energy saving features and habits do you have in your home?
- Where do you obtain most of your food?
- Which water saving features and habits do you have in your home?
- How often do you buy new things to replace old ones?
- How many standard size garbage bins does your household fill each week?
- How often do you select cleaning products that are biodegradable or non-toxic?

(http://www.myfootprint.org/en/)

M2 Footprint test (excerpt)

... and the significance of your answers

If you answer these questions, you will get information about your impact on the environment, or your ecological footprint. Since each person consumes resources from all over the world, the ecological footprint measures how much land and water area of the total Earth's surface is required to produce the resources you consume and to absorb the wastes under prevailing technology and understanding.



M1 People leave their marks

Biocapacity

In order to ensure its existence, human society has to use different natural resources. Economic activities have an impact on various ecosystems. The capacity of an ecosystem to produce all the goods used by humans and to absorb waste materials is named biological capacity or, in short, biocapacity. It is calculated for all biologically productive land and sea areas of the world. Non-productive areas, for example, deserts, ice shields, and open oceans, are excluded.

The ecological overshoot

As long as the use of natural resources does not exceed what the Earth can supply or regenerate, there is little need for concern. However, when the demand surpasses the Earth's capacity we move into what is named ecological overshoot.

Examples are the growing demand and depletion of non-renewable resources such as crude oil, natural gas, and minerals and the pollution of renewable ones. At present, it is estimated that the global ecological footprint exceeds the Earth's biocapacity by 25 per cent.

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Biofuels supported by the EU

One way to ensure jobs in agriculture is to concentrate on profitable crops, e.g. growing oil seeds.

BioMotion aims at increasing the use, knowledge, and acceptance of biofuels by information, motivation, cluster building, and supporting regional implementation strategies for biofuels.

M3 EU project affecting agriculture

In order to help farmers to fulfil these demands, an advisory service was installed. If farmers do not meet these standards, EU payments will be reduced or not granted.

The CAP and globalisation

The European agricultural policy aims at improving the conditions for farmers and consumers in Europe. However, all measures have to take into account that the European agricultural market is part of the global market. Thus European farmers will have to be prepared to compete against farmers from all over the world.

Higher European Dairy Prices Sign of More to Come

Swelling demand for dairy products, especially from booming economies such as India and China, has coincided with a drought in key exporters Australia and New Zealand, which has squeezed supplies and pushed farmgate prices higher. From Germany to Spain and Britain, top food producers, which are also facing higher prices for everything from grains to fruit, have lifted dairy prices.

Source: Reuters, 12 Oct. 2007

M5 Internet news article (adapted)

EU fallow rule for farmers could be scrapped

The European Commission proposed today to scrap the rule requiring EU farmers to leave 10 per cent of their land fallow, which would enable them to grow more grain and offset recent poor harvests and soaring food prices. British and other EU producers and retailers have recently announced jumps in the prices of staple foods because of rising commodity prices, grain shortages, and the heavily subsidised switch to crops for biofuels such as maize.

Ms Fischer Boel urged the EU's 27 governments and MEPs to fast-track her proposals into law, allowing farmers to release up to 2.9 million hectares of the 3.8 million hectares now under obligatory set-aside and produce 10 – 17 million tonnes more grain.

Environmental groups fear Ms Fischer Boel's plans could devastate the bird and insect life, but the EU said, farmers would remain free to leave land fallow and adopt eco-friendly schemes.

Source: The Guardian, 13 Sept. 2007

M4 Newspaper article (adapted)

Tasks

1. Explain the cartoon using the information on the first phase of the CAP.
2. Describe the CAP today and comment on problems connected to it (M4, M5).

Key terms:

- Common Agricultural Policy (CAP)
- competition
- consumer
- internal market
- overproduction
- set-aside system
- subsidy
- (milk) quota

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cultural Policy (CAP). If they are able to adapt to the new situation, Romanian agricultural products may soon become competitive on the European market. The main crops are cereals, sugar beets and potatoes. At present, the yields are comparatively low, because traditional ways of farming are still practised. Large parts of Romania are covered with forests, and thus timber production is a fast developing industry. Agricultural products and wood, however, do not play an important role in exports.

Modern development

Ever since Romania became a full EU member state, significant new developments are visible in agriculture. One example is a Dutch advisory company, which is helping to improve the milk production with regard to supply, quality and quantity. This company plans to increase the number of milk collection centres and train advisors and dairy farmers.

Traditional ways of farming are partly being replaced by modern ways of ecological farming. Thus, Romanian farmers may be able to escape poverty, because the demand for organically-grown products is rapidly increasing in the western European markets.

M5 Dutch advisers giving assistance

Traditional ways of farming

"Small-scale agriculture is the lifeblood of Romanian farmers, whether for pocket money, home consumption or survival. In the countryside women patiently sit in their front garden selling piles of shiny aubergines and pyramids of melons as well as jars and bottles of varying shapes and sizes filled with garden products.

When Romania joined the European Union at the beginning of 2007, the question came up, whether this way of life will survive. A farmer pouring fresh milk into a churn may not be seen much longer, because milking by hand is not allowed under EU law. Thus, traditional agriculture will inevitably clash with EU values like the standards of farm hygiene and safety."

(adapted)

M6 A travel report

Tasks

1. Describe the natural conditions for agriculture in Romania and draw a sketch map showing the main location of the farmland.
2. Point out the economic development in Romania since the end of the 1990s.
3. Write down a possible interview with the Romanian farmers in M1 focussing on their work.

Key terms:

- advisory service
- ecological farming
- employment structure
- European market
- period of transition
- traditional/ modern agriculture

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Working with Films

Once in a while, you will come across films dealing with geographical topics. They are mainly documentaries. The following technique will help you make the most out of watching a TV documentary or a film about geographical or even political issues.
Watching a film you should have a pen and a sheet of paper ready.

Pre-watching

Before you actually watch the film, brainstorm about the title. What comes to your mind? Write down your ideas in a structured form.
What do you expect to see in the film? Try to sum up your expectation in one sentence. You might start with: "In this film, I expect to see ..."
Alternatively, watch the film without any preparation. Take notes when you are watching the film a second time.

While-watching

Now it is time to watch the film. While you are watching, take notes. Focus on the following aspects like key terms, names, places, figures, as well as questions. Write down everything you find interesting or surprising.
To make it easier to take notes, turn your sheet of paper, and fold it down the middle. On the left side, write down your key terms, names, etc. On the right side, write down the observations that you find interesting or surprising. Often just a keyword will do. If you have any questions on something specific, write down your keywords and add a question mark to trigger your mind later on.

Post-watching

Watching a film with someone else is much more fun. It can also help you to understand the film better. After you have watched the film with someone else or in a group, encourage them to exchange their thoughts with you about the film.

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Look at your notes and check out the places mentioned in the film by looking them up in an atlas. You can also use the Internet or books to get more information.
Check out the facts on your sheet of paper. Are there any key terms that are new to you or you are not sure how to use? Look them up in a dictionary of geographical terms, an encyclopaedia, or use the Internet.

Now review the results of your brainstorming and your expectations. Here are some helpful questions:
- Has the film satisfied your expectations?
- What is missing?
- What was new and interesting for you?
- Has the film had an impact on you? In what way?
- Have you learned anything new?
- Have you changed your opinion?
- Do you intend to change your behaviour?

Create a mindmap after having completed the research and talked about the film topic. This technique will help you to remember the topic and facts. Don't forget to write down what you think about the film. Finally, you may present your conclusions.

How to get the most out of films on dealing with geographical topics.

1. Brainstorm on the topic of the film.
2. Write down your expectations.
3. Take notes: key terms, names, figures.
4. Discuss your first impressions.
5. Look up the places that are mentioned in the film in an atlas.
6. Check out unknown key terms in a dictionary or a reliable source on the Internet.
7. Compare your expectations with your impressions of the film.
8. What have you learned?
9. Create a mindmap. Include your thoughts about the film.
10. Present your mind map to your fellow students.

Useful phrases

The film is about ...
The film shows ...
The film is set in ...
In one shot/scene, we could see ...
The scientist(s)/expert(s) said that ...
The filmmaker stresses the fact that ...
I agree with ...
I disagree with ...
I would argue that ...
It is true ... but ...
This argument/fact is convincing/ not convincing because ...
We need to know more about ...
The topic is controversial because ...
The film concludes that ...
I expected that the film would deal with ...
The film leaves the following questions ...
We have learned that ...

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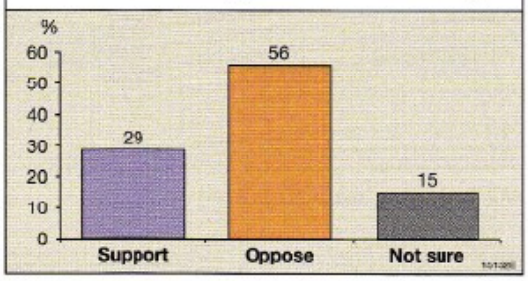
Role-play

M1 Appalachia – mountaintop removal

As you may know, coal companies in West Virginia mine coal from mountains through a process called mountaintop removal mining (MTR). Do you favor or oppose mountaintop removal mining or are you undecided?
Source: www. appalachian-center.org



M2 Results from an internet opinion poll

Dealing with problems

Topics in geography lessons often focus on problems in specific regions. Let us take a closer look at the problems caused by the mountaintop removal due to coal mining in Appalachia, USA (c. f. pages 72/73).

Flow charts can be used to make the problems of coal mining in Appalachia more comprehensible. These show the cause and effect chains related to mining. Computer simulations are sometimes used to help illustrate the processes involved.

If you want to present cause and effect chains only based on facts, using flow charts is an appropriate method. If, however, various viewpoints have to be taken into consideration, as is the case in Appalachia, it is difficult to integrate them into flow charts or simulations.

The situation in class

After you have talked about human activities which lead to severe problems in a region, such as those caused by mining in Appalachia, your teacher may propose a round table talk. The participating pupils must each slip into the role of a person who represents a real person in the region and must try to adopt his or her viewpoint.

Taking part in a round table talk

For this round table talk you will need:

- a chairman, who is responsible for the order of events,
- representatives from
  - the mining companies,
  - environmental groups,
  - the local government,
  - the workers of the mining companies,
  - the trade unions,
- parents having young children from the area,
- a family doctor,
- people representing the audience, and
- representatives from the media.

If you deal with different problems in other regions, the list of people involved in the round table talk will vary.

First step: Finding your role

Each pupil in your class has to decide which of the persons mentioned above she or he wants to be. The number of pupils who decide for each group may vary, but there should be at least two to avoid problems in case somebody is absent.

Your teacher may have already prepared the role-play cards. All pupils have to draw a card

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Do keep in mind
Deciding for a role does not mean that you have to be convinced of the view of the person you represent. If so, it will be easier for you. If not, do have in mind that you have just slipped into this role and only pretend that you are convinced. So, there is no reason to feel e.g. embarrassed.

which tells them what part they will play. You will also find information about the viewpoint of this specific person. All pupils representing the same group of people taking part in the round table talk form a group. Since they represent the same viewpoint, they can co-operate amongst each other.

Second step: Finding information

Each group should start with a brainstorming session, based on the following questions:
- Who are we actually?
- In what way are we affected?
  - Directly?
  - Positively?
  - Negatively?
- What do we want to achieve?

Doing so you will see that you need much more information than you have at this point. A very important phase is to collect as much information as possible before the talk can begin. Split up into subgroups and share your work. Use any available source of information to get texts, photos, tables, or graphs.
The Internet is very helpful. Using a search engine, the entry "Appalachia MTR" will list many sites you can visit, e.g. http://www.appalachian-center.org/poll_results/wv_mtr_poll_files/frame.htm. Look for sites showing different aspects. Select your information from the homepages of interest groups carefully, because each group presents their information subjectively. Discuss the findings in your group to ensure that everybody is well informed and can use the information. Do not forget to list your sources.

Third step: The round table talk

This phase is rather similar to discussions in class. Check whether you can answer the following questions with a "yes":
- Do I know who I am?
- Do I know what I am aiming at?
- Am I well informed about the facts?
- Can I make a short, clear speech about my issue?
- Do I know the other persons' arguments?
- Do I know how to react on them?
- Do I have figures etc. at hand in case I need them?

During the talk listen carefully so that you can react to other arguments. Do not start a new idea as long as another one is discussed. Be strict but stay fair and polite. Follow the rules of the chairperson.

Fourth step: Documenting the results

There are different ways to document the results of a round table talk:
The representatives of the media will have to write an article about it, summarising all the different viewpoints. You may discuss in class whether these articles cover all ideas, whether they are objectively presented, etc. ...
Each group may prepare a report for the people they represent, to inform them about the different viewpoints they were confronted with. People sitting in the audience may write letters of protest or approval to the people participating in the round table talk.

Useful phrases
In my opinion .../I'm convinced that ...
I expect there are /It seems to me that ...
What I actually meant is ...
The way I see it .../Above all we must ...
I beg your pardon .../I didn't quite get it.
Are you seriously suggesting that ...
That's not quite right./Oh no, that ...
I think you got that wrong ...
I'm against the idea of ...
This doesn't convince me at all.
Perhaps you're right, but ...

Dreymüller et.al. 2008:161

Appendix II (Scans of the *Do it in English-Geography* books)

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1. ONE WORLD – DIFFERENT PERSPECTIVES

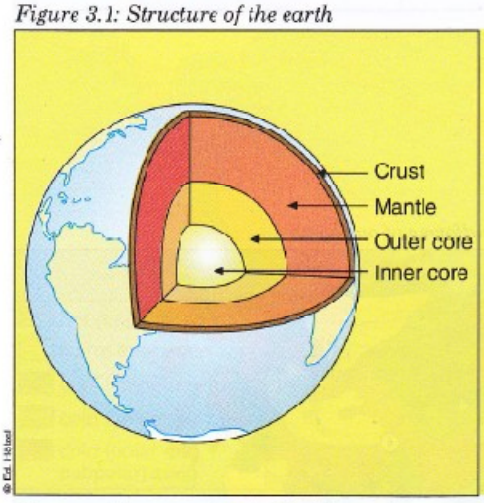
1.1 THE STRUCTURE OF OUR EARTH

The diagram below shows the structure of the earth. In geography, to slice through a structure to see inside is called a cross section.

There are two different types of crust: **continental crust (sial)**, generally known as the lithosphere, and **oceanic crust (sima)**, consisting mainly of basalt.

The crust is made up of **tectonic plates** which are in constant motion. So earthquakes and volcanoes are most likely to occur where these different plates meet.

Figure 3.1: Structure of the earth



The earth is made up of 4 concentric layers:

1. **The inner core** is the centre of the earth and its hottest part (6 371 km below the surface of the earth). The inner core is solid. It is made up of iron and nickel with temperatures of up to 5 500 °C.
2. **The outer core** is the layer surrounding the inner core. It is a semi-molten layer also made up of iron and nickel. It is also extremely hot with temperatures similar to those of the inner core.
3. **The mantle** is the widest section of the earth. It extends to approximately 2,900 km. The mantle is composed of semi-molten rock called magma. In the upper parts of the mantle the rock is hard, but deeper down, nearer to the inner core, the rock is soft and begins to melt.
4. **The crust** is the outer layer of the earth. It is a thin layer, between 0–60 km thick. This means that the crust – compared to the whole earth – is as thin as the skin of an apple in comparison to the whole fruit! The crust is the solid rock layer upon which we live.

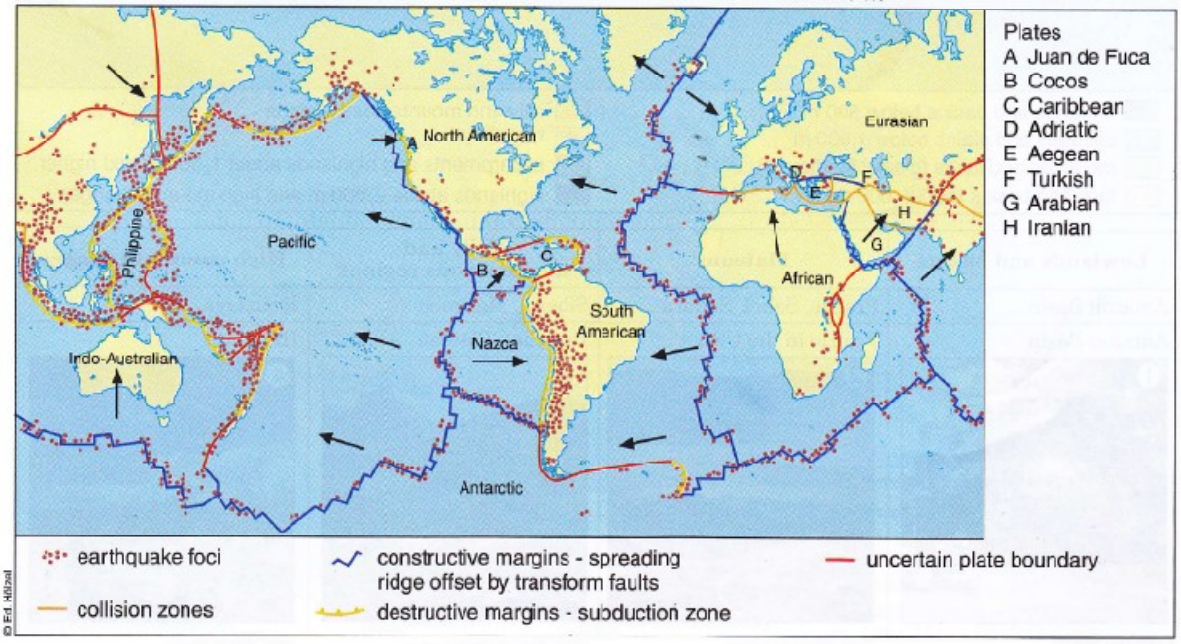
© Ed. Hölzel

1.2 THE PLATES OF OUR EARTH

The earth's crust is divided into pieces. These pieces are called plates. The rising and falling of heat inside the mantle creates **convection currents**. The convection currents move the plates. The movement of the plates and the activity inside the earth are referred to as **plate tectonics**.

The movement of tectonic plates causes earthquakes and the eruption of volcanoes. The point at which two plates meet is called a **plate boundary**.

Figure 3.2: Plate boundaries and plate movements



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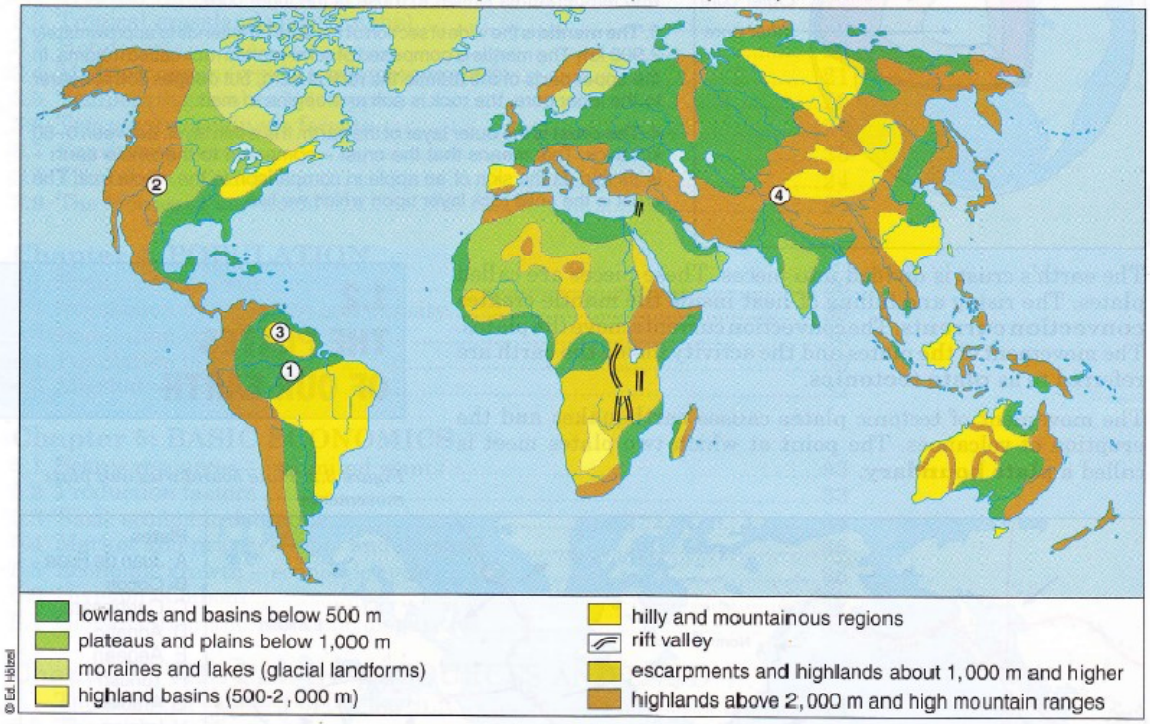
Kind of plate boundary	Activities	Examples
1. Constructive or divergent plate boundary	Two plates move away from each other and as a result, new magma appears and forms mid-ocean ridges (islands) with volcanoes	Mid-Atlantic Ridge Southeast-Pacific Ridge
2. Destructive or convergent plate boundary	Two plates move towards each other. a) If one plate sinks, deep sea trenches and island arcs are formed. b) If both plates collide and neither can sink, fold mountains are the result.	a) Nazca sinks under the South American Plate (Andes) b) The African Plate collides with the European Plate, forming the Alps
3. Conservative or transform plate boundary	Two plates move/slide past each other.	San Andreas Fault in California

1.3 THE TOPOGRAPHY OF OUR EARTH

Figure 4.1: The major landforms of our earth



Lowlands and basins	Plateaus	Hilly and mountainous regions	High mountain ranges
Amazon Basin ...	Prairie, Sahel, Sahara ...	Siberia, Mongolia ...	Himalaya ...
Amazon Basin	Prairie in the USA	Brazilian Plateau	Himalaya

Jason Weimer, Waterloo

Corbis, Wien/Layne Kennedy

Corbis, Wien/Joel Creed/Ecoscene

Helmut Wagner, Mautern

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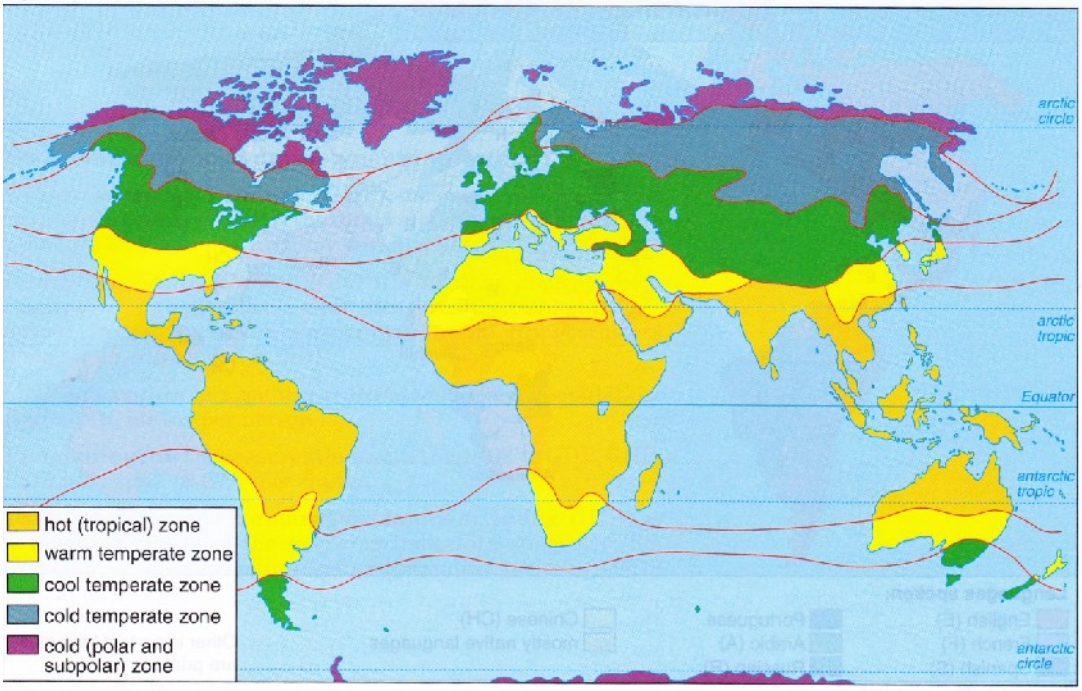
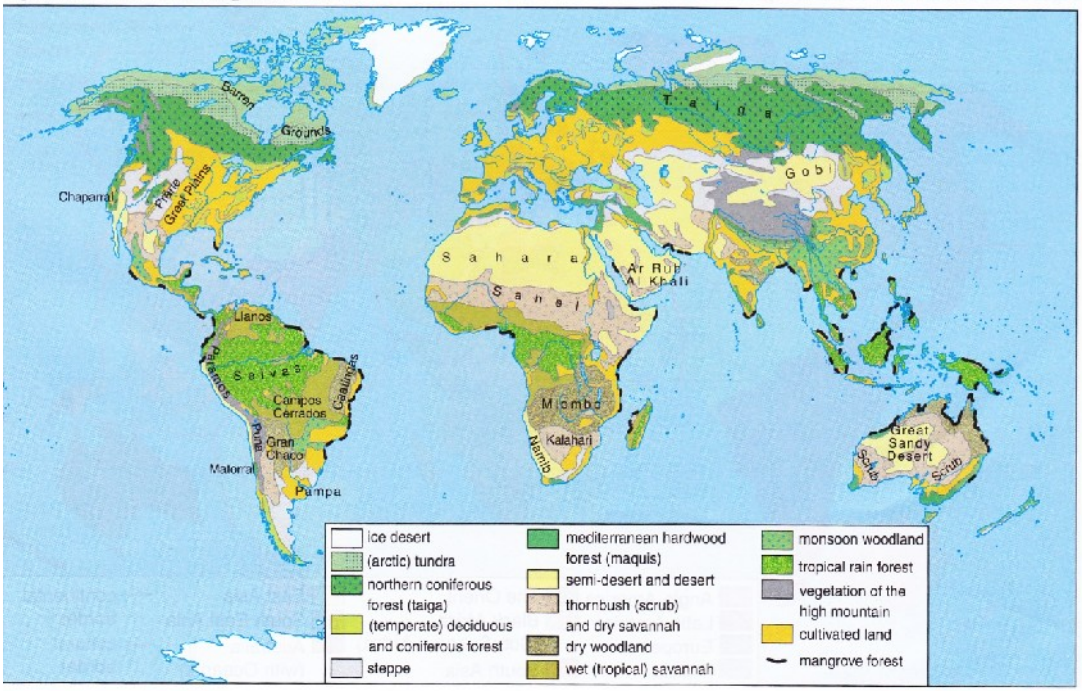
1.4
THE CLIMATIC ZONES OF OUR EARTH

Figure 5.1: The world's climatic zones



1.5
THE VEGETATION ZONES OF OUR EARTH

Figure 5.2: The world's vegetation zones



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1.6
THE CULTURAL MAKE-UP OF OUR EARTH

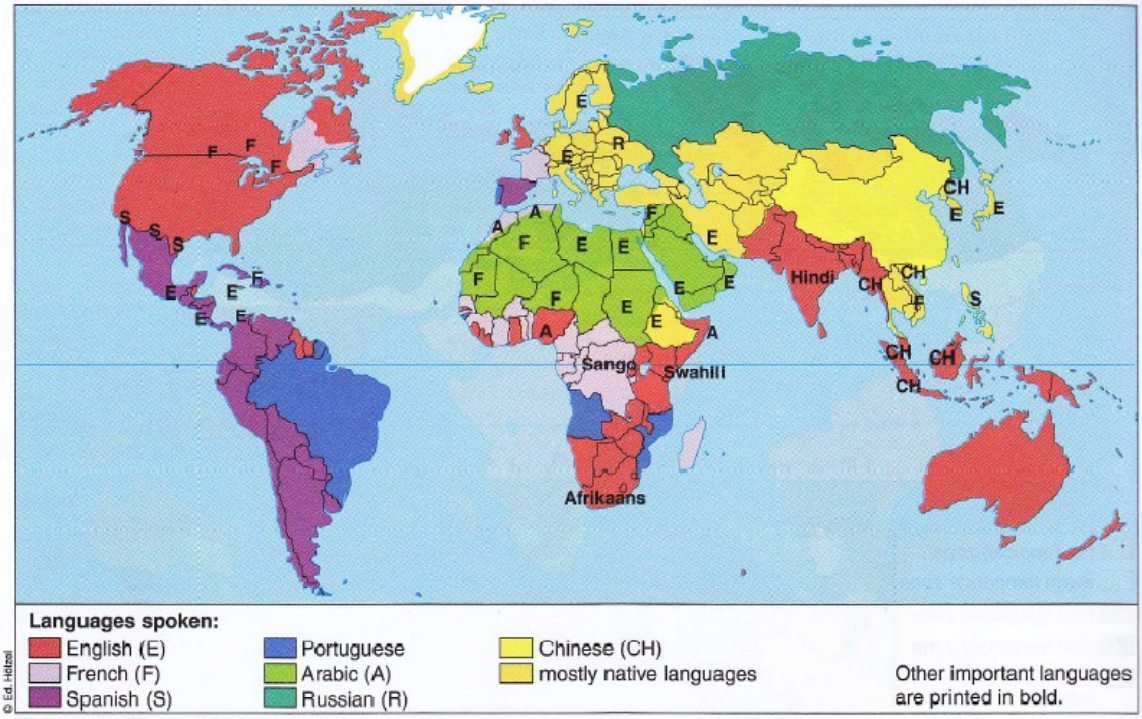
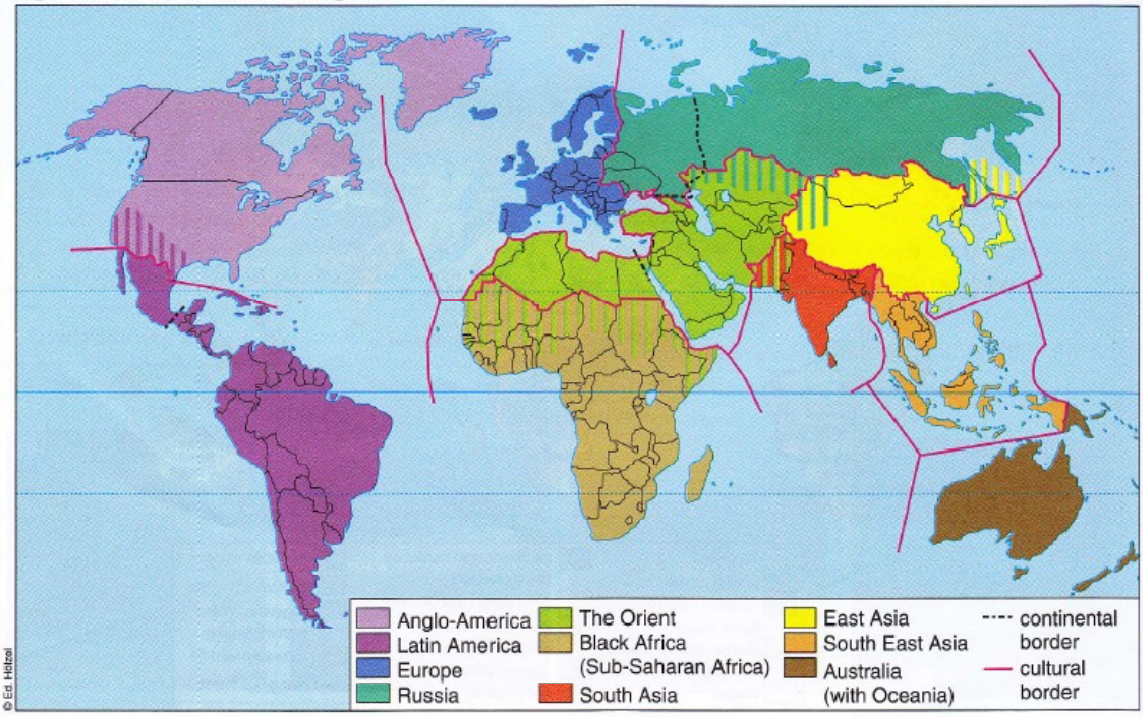


Figure 6.1: The world's languages

Figure 6.2: The world's cultural regions



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1.7
THE SOCIO-ECONOMIC AND POLITICAL MAKE-UP OF OUR EARTH

Economic and social development indicators:

Gross Domestic Product (GDP) measures the wealth or income of a country. GDP is the total value of goods and services produced by a nation's economy within a year.

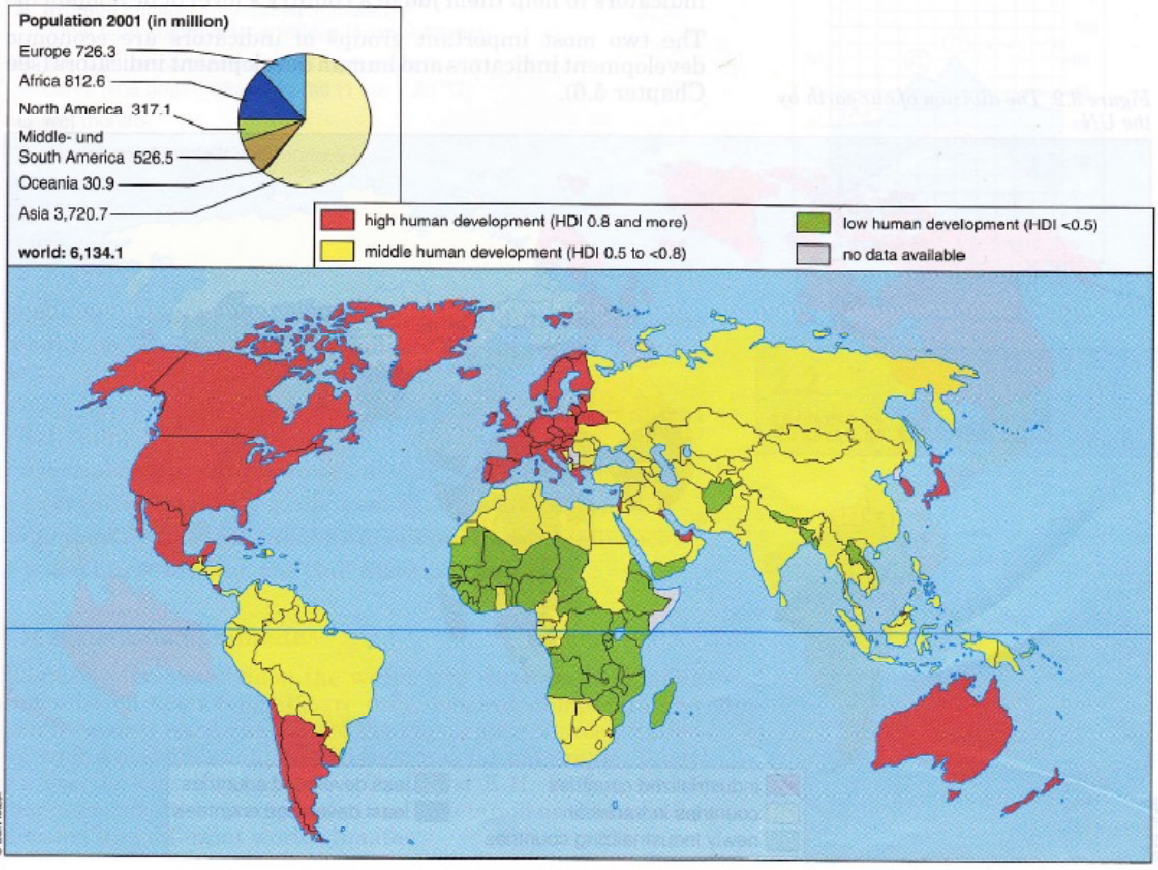
Gross National Product (GNP) is another measure of a country's wealth or income. GNP measures the total economic output of a country, including earnings from foreign investments which are not included in GDP.

GNP per capita is a country's GNP divided by its population. (Per capita means per person.)

Economic growth measures the annual increase in GDP, GNP, GDP per capita or GNP per capita.

The United Nations **Human Development Index (HDI)** is a weighted mix of of the following indicators: longevity (life expectancy), literacy, education and standard of living (GDP per capita).

Figure 7.1: The Human Development Index (HDI)



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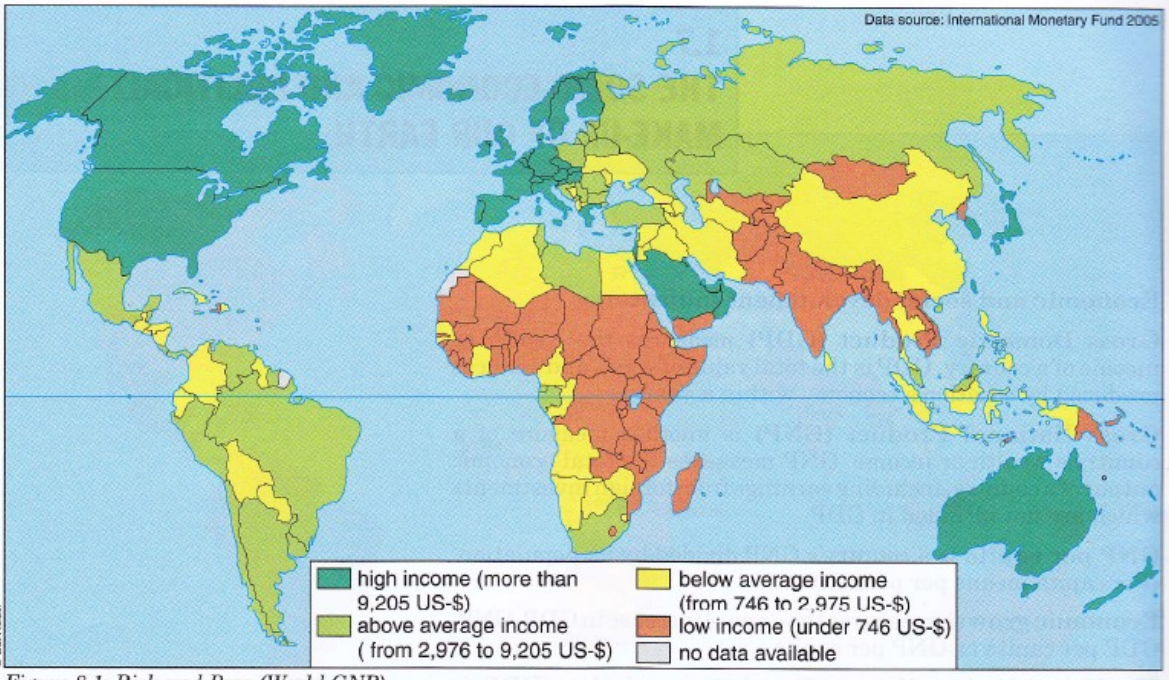


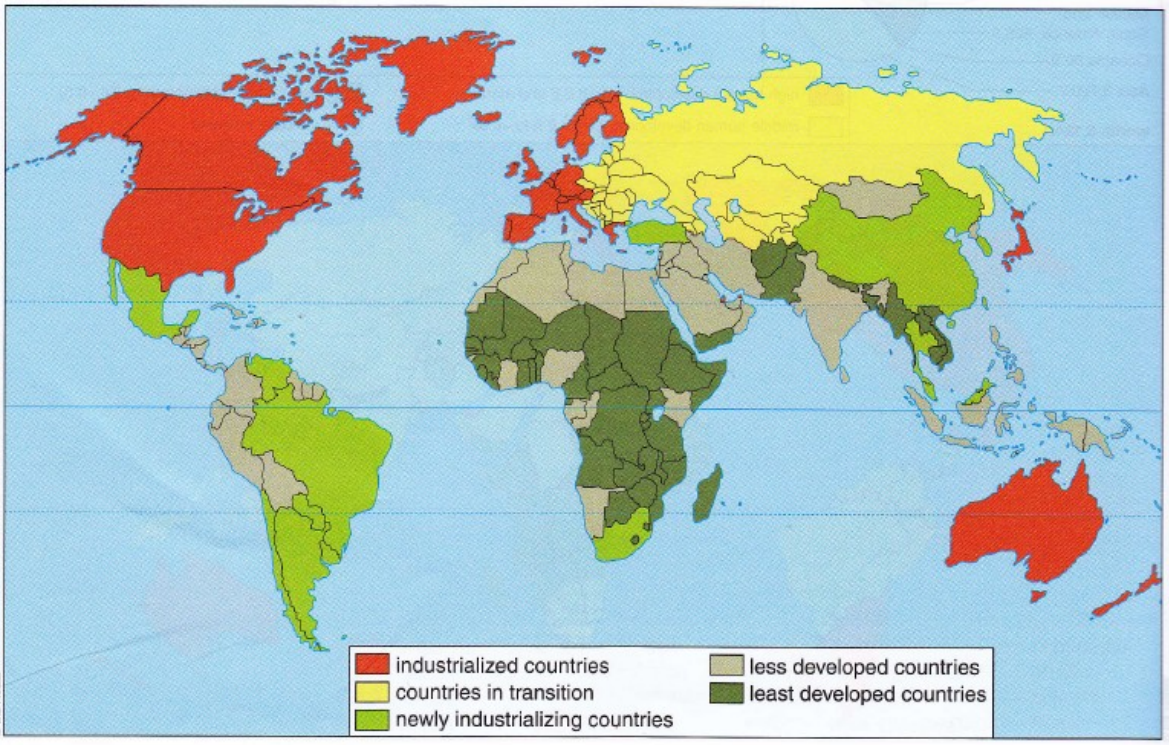
Figure 8.1: Rich and Poor (World GNP)

Measuring development

Studying development is essentially about measuring how developed one country is compared to another country, or to the same country in the past. There is no simple (and no single) way to calculate the level of development of a country, region, or people because countries and economies, cultures and peoples differ so much. Instead, geographers use a series of development indicators to help them judge a country's level of development.

The two most important groups of indicators are economic development indicators and human development indicators (see Chapter 5.6).

Figure 8.2: The division of our earth by the UN



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2. WEATHER AND CLIMATE

Weather is the condition of the atmosphere at a specific point of the earth at a certain time. When you look out of the window, you will see what the weather is like today. It might be sunny, hot, windy or cloudy, raining or snowing.

The weather refers to the condition caused by what's called meteorological elements:

temperature, **precipitation** (rainfall), **humidity** and **atmospheric pressure** of the part of atmosphere (air) closest to the surface of the earth at a specific point in time (e.g. today).

Climate is the sum of all weather conditions across a larger area of the earth (e.g. Austria) and over a longer period of time (over 30 years or more)

- Therefore, climate describes the average condition of the meteorological elements like temperature, precipitation, humidity and atmospheric pressure over a longer period of time.
- Climatic conditions in an area can be affected by landscape, topography and both human and natural activities. Climate can change over time (e.g. global warming)
- Within a climatic region, the climate may vary from place to place, e.g. mountain top/valley or inner city/countryside. Areas like this, with small variations, have so-called **microclimates**.

2.1 How to draw a CLIMATIC GRAPH

One of the best ways to characterize climatic zones is to look at the **climatic graph** – a graph showing the average rainfall and average temperature (usually shown in **line graphs**) for each month in an average year.

The combination of the average amount of rainfall and the average condition of the temperature within a year for a certain location defines the climatic condition for this specific point of our earth. When we compare different climate graphs from different regions of our earth, we get a good explanation for the different climatic zones of our earth (see figure 5.1).

A average rainfall in mm (in each month) – curve (line graph) always in blue (1 cm ≙ 40 mm)

B average temperature in °C (in each month) – curve (line graph) always in red (1 cm ≙ 20 °C)

C wet months

D maximum of rainfall/ temperature

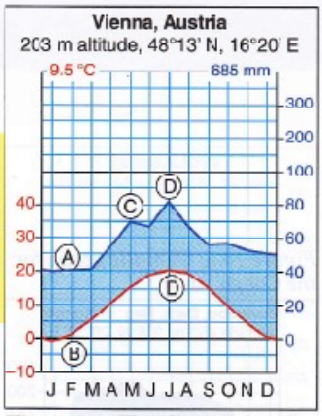

Figure 9.1: The climatic graph for Vienna

2.2 WORLD CLIMATES

Different areas of the world experience different climatic conditions. The main factors influencing the world climates are:

- proximity to the equator or the poles (geographical **latitude**)
- atmospheric **pressure zones** (low or high pressure)
- **prevailing winds** (e.g. the west wind zone in Europe)
- distance from the sea (**oceanic** or **continental** influence)
- ocean **currents** (e.g. the Gulf Stream in Europe)

Classification of climates

The early Greeks divided the world into three basic climatic zones based upon temperature only: tropical, temperate and polar. As they were unaware of the importance of precipitation for such a classification, this division was far too simple. Today we use the classification by C. Troll and K.H. Paffen, which takes temperature, precipitation and vegetation as the basis for division into different world climates.

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The characteristic features of these hot deserts are:

- extreme changes in temperature (extreme hot day time temperatures, extremely cold nights, sometimes even below 0 °C)
- hardly any rain, although there may be unexpected thunderstorms
- deserts have the lowest organic productivity of any biome
- many plants, like cactus and thornbush, can store water in their tissues (succulents)
- soils cannot absorb organic material, therefore they are alkaline, with a high concentration of magnesium, sodium and calcium; the grey colour results from the lack of moisture (figure 21.1)

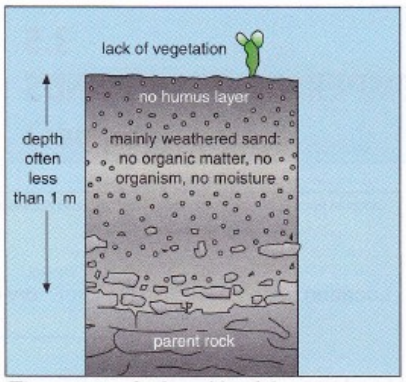
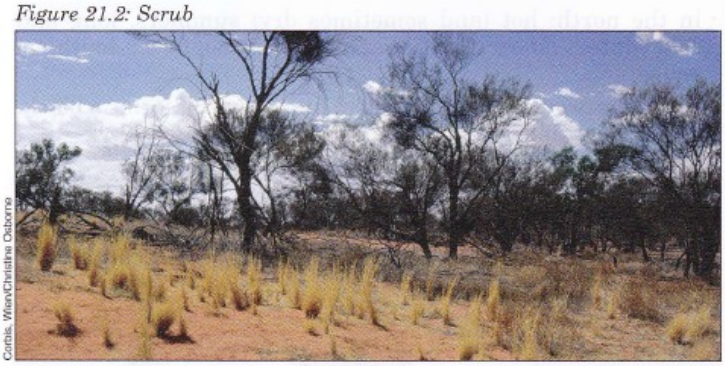


Figure 21.1: Soil profile of deserts

3.4 MEDITERRANEAN (warm temperate region)

This biome is found along the western coasts, mainly between 30° and 40° north and south of the Equator. Examples are Mediterranean Europe, California, central Chile, the coasts of South Africa and parts of South Australia.

Figure 21.2: Scrub



Corbis, Wien/Christine Osborne

The characteristic features are:

- hot, dry summers and warm, wet winters
- the natural vegetation is dominated by broad-leaved, evergreen trees (corkoak, conifers, oil trees) and scrub (Maquis, Garigue, Chaparral); in California giant redwoods (sequoia) are frequent
- plants must endure the summer drought and have therefore developed small, waxy leaves, thorns and protective barks
- **deforestation** is a large problem (in ancient times for ships and buildings, today for farming or settlement/tourism) as it causes the soil to be washed away by winter rains; forest fires are a common occurrence

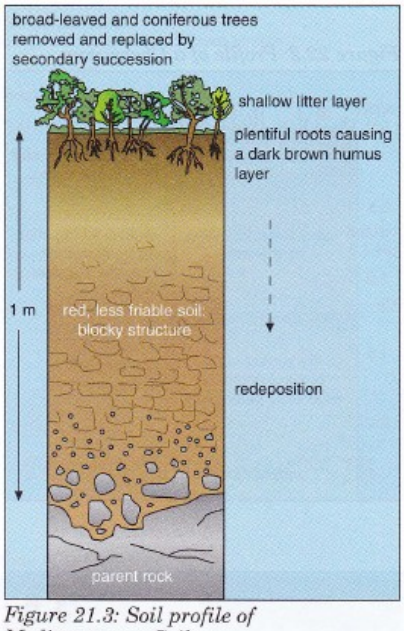
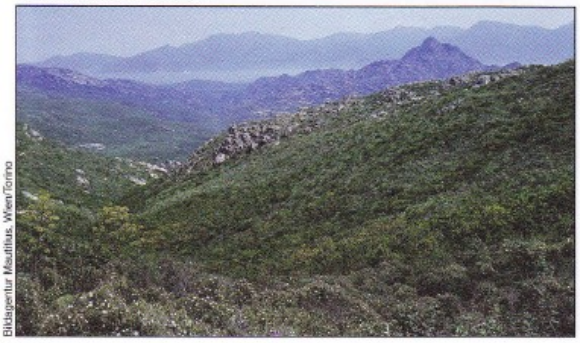


Figure 21.3: Soil profile of Mediterranean Soil

Figure 21.4: Maquis



Bildagentur Mauritius, Wien/Torino

Figure 21.5: Redwoods in California

Sebastian Kurfürst, Dresden

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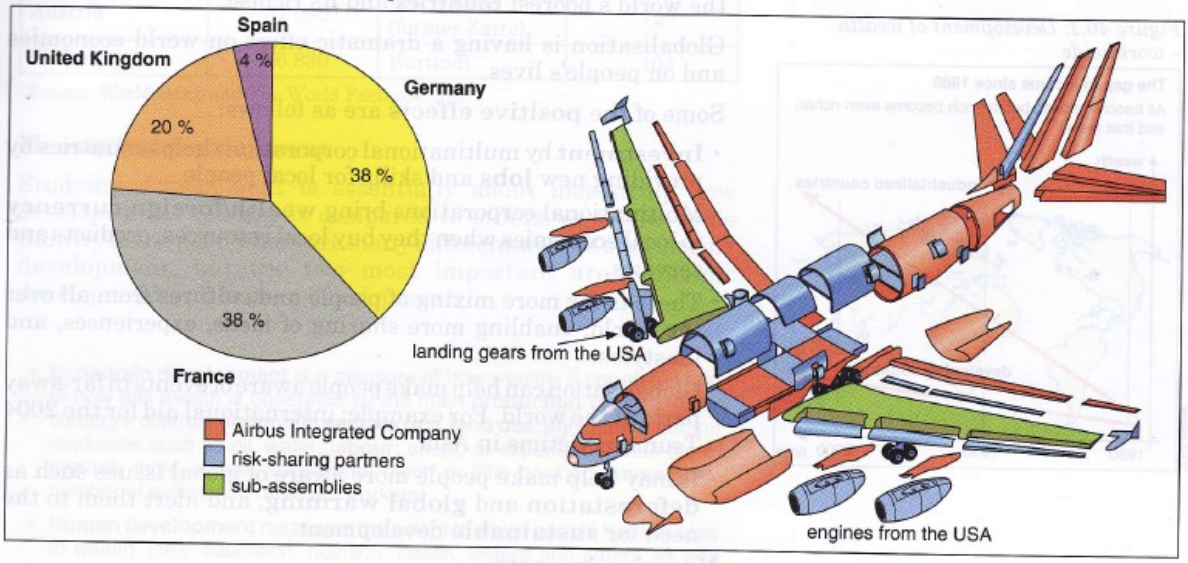
5.6 DIVISION OF LABOUR

The division of labour is a system whereby workers concentrate on performing a small number of tasks and then exchange their production for other goods and services.

National: On a small scale, take the production of a glass of jam as an example: the jam is produced by a company that specialises in the manufacturing of fruit products. The glass, the label and the shipping are provided by other companies that specialise in these fields. They all work together to sell ONE product.

International: Certain countries benefit from producing certain goods. They may have different natural resources, better trained or skilled workers, or they may be able to produce goods more cheaply.

Figure 39.1: Airbus production in Europe



Advantages of division of labour	Disadvantages of division of labour
for companies • specialized workers become quicker at producing goods. • production becomes cheaper for certain goods because of this. • production levels increase. • each worker can concentrate on what he is good at and build up his expertise.	for companies • greater cost of training workers. • quality may suffer if workers become bored by the lack of variety in their jobs.
for workers • higher pay for specialised work • iImproved skills at a certain job	for workers • boredom when doing the same job all the time • quality and skills may suffer. • workers may eventually be replaced by machinery.

5.7 GLOBALISATION AND ECONOMIC DISPARITIES

What is globalisation?

Globalisation is the process by which the world is becoming increasingly interconnected as a result of massively increased trade and cultural exchange. It is the result of:

1. **technological changes** that enable people, goods, money and, above all, information and ideas to travel the world much faster – and cheaper – than ever before, and
2. the **liberalisation** of world markets, greatly increasing levels of trade between different parts of the world

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Economic disparities – rich and poor in our world

Table 1: The ten richest and the ten poorest countries in the world (GDP per inhabitant in US $)

The ten richest countries		The ten poorest countries	
Luxembourg	73 960	Niger	245
Norway	61 480	Rwanda	240
Iceland	50 950	Eritrea	225
Switzerland	49 180	Sierra Leone	215
Ireland	47 320	Guinea-Bissau	190
Denmark	46 950	Liberia	170
USA	42 000	Malawi	160
Sweden	39 240	Ethiopia	155
Austria	37 090	D.R. Congo (former Zaire)	120
Finland	36 830	Burundi	105

Source: World Bank and The World Factbook 2006

Measuring development

Studying development is essentially about measuring how developed one country is compared to others, or to the same country in the past. There are many different ways of considering development, but the two most important are economic development and human development.

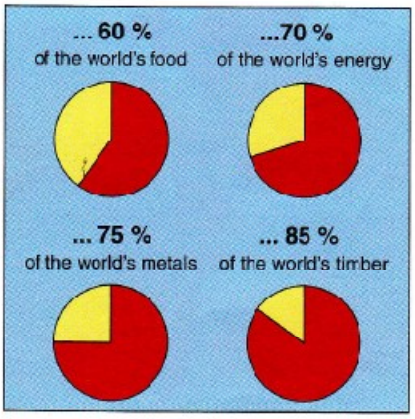
- **Economic development** is a measure of how wealthy a country is and of how this wealth is generated by the main **production factors** in the country's different **economic sectors** (e.g. **land use**: agriculture, natural resources such as oil, water; **labour:** cheap or expensive labour force; **capital:** more or less investment, much or little banking; **know-how:** number of skilled and unskilled workers).
- **Human development** measures the extent to which people have access to wealth, jobs, education, nutrition, health, leisure and safety, as well as political and cultural freedom. The more material elements in this list, such as wealth and nutrition, are often grouped together under the heading **standard of living**. The less material elements, such as health and leisure, are often referred to as **quality of life**.

a) Economic development indicators

In order to assess the economic development of a country, geographers use economic indicators. The most important of these indicators are listed below:

- **Gross Domestic Product (GDP)** measures the wealth or income of a country. GDP is the total value of goods and services produced by a country in a year.
- **Gross National Product (GNP)** is another measure of a country's wealth or income. GNP measures the total economic output of a country, including earnings from foreign investments that are not included in GDP.
- **GNP per capita** is a country's GNP divided by its population. (Per capita means per person.)
- **Economic growth** measures the annual increase in GDP, GNP, GDP per capita, or GNP per capita.
- **Inequality of wealth** is an indication of the gap in wealth and income between a country's richest and poorest people. It can be measured in many ways (e.g. the proportion of a country's wealth owned by the richest 10 % of the population, compared with the proportion owned by the remaining 90 %).

Figure 41.1: The richest 20 % of mankind use ...



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Success came sooner than expected! Already one year after the erection of the stone walls, they were covered with grass and small bushes. The soil was no longer washed away and the water remained in the basins for quite a long time. Just two years later, a dried-up well, known only to the oldest villagers, could be used again as it began to produce clean water.

Due to this, agricultural production could be taken up again. Hilfswerk Austria provided the necessary seeds and soon groundnuts (peanuts), corn, millet, manioc, sorghum and water melons could be grown again. Educational programmes in agriculture were organised and emphasis was put on training women to enable them to earn their own money through the production and selling of vegetables and chicken farming.

Figures 54.1 and 54.2: agricultural production

Foto: Hilfswerk

Foto: Hilfswerk

Today, the Hilfswerk Austria project has reached its aims (which are part of the MDGs of the UN, see the yellow box below)

- The families of Kissane can produce their own food again and no longer need outside help to survive any more (MDG 1).
- Women are able to earn their own money and equally participate in all project activities (MDG 3).
- The protection of the environment is guaranteed, the fight against desertification has been successful and future development follows the principles of sustainability (MDG 7).

For further information contact: www.hilfswerk-austria.at

The UN Millenium Development Goals (MDGs)

1. Reduce hunger and poverty by half by 2015.
2. Achieve universal primary education by 2015.
3. Promote gender equality.
4. Reduce child mortality by 2015.
5. Reduce maternal mortality by 2015.
6. Eradicate HIV/AIDS and other diseases.
7. Ensure environmental sustainability.
8. Develop a global partnership for development.

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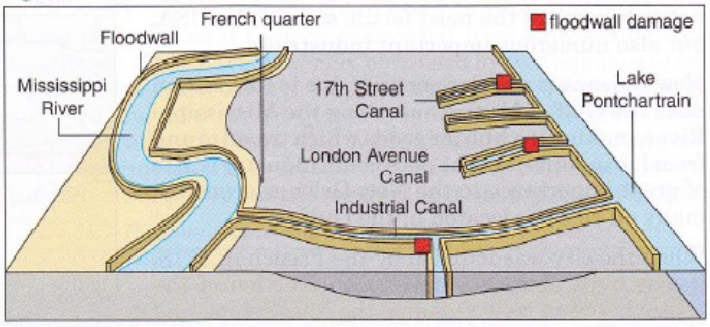
The causes of flooding – a changing environment

NASA-GSFC, data from NOAA GOES

Figure 60.1: Hurricane Katrina on August 28, 2005

Flood control engineering, inspired by the need for a major city and port in the oil- and gas-rich Mississippi delta, has changed the natural landscape of the region enormously. A very sophisticated system of **levees and canals** has dried up the once swampy delta of the Mississippi. The regular river floods used to feed this delta landscape with silt and nutrients, and as a result, the coastal wetland vegetation could cope with the powers of a hurricane much better than the new concrete buildings. Many scientists therefore call the wetlands a "natural buffer" in a high-risk area like the Mississippi delta. This buffer has been lost.

Figure 60.2: New Orleans canals



The causes of the natural disaster in New Orleans

- the city lies below sea level, like in a bathtub
- the leveeing of the Mississippi River
- the pumping of ground water from under the city
- the drainage of the Mississippi delta that caused the city to sink about half an inch per year
- environmental damage caused by oil and gas production
- the failure to upgrade the levee and flood wall system despite the fact that many studies had warned of a disaster
- global warming causing more and stronger tropical storms (hurricanes) and the rising of the sea level

The heavy rains of hurricane Katrina did not hit the wetlands of the delta, but the concrete streets of New Orleans. They filled the levees and canals, swelled the Mississippi and filled up Lake Pontchartrain. Soon the pressure of the water was too much to take; two of the levees broke and the water of the Lake and the Mississippi started pouring into the city.

The city's extensive levee system was built to withstand a strong category 3 storm. When Katrina appeared on the weather maps, it was a category 5 storm – the strongest Atlantic hurricane ever.

The broken levees allowed the water in, but the dozens of barriers that had remained intact prevented the floods from moving out again. Two days after the hurricane, the water levels in the lake and in the river had fallen, but the city itself was still filled with water.

Much of New Orleans lies below sea level. The city has a system of canals and levees topped with concrete floodwalls to keep water out. These are designed to withstand a category 3 hurricane, but when Katrina, a category 4 storm, hit, the canals were quickly overwhelmed. Within 24 hours, 80 % of the city was flooded.

(from: BBC News, www.news.bbc.co.uk)

Figure 60.3: New Orleans in the aftermath of Hurricane Katrina

AP Photo/U.S. Coast Guard, Petty Officer 2nd Class Kyle Niemi

Figure 60.4: The operation to drain the city began nearly a week later.

Associated Press, Frankfurt a. Main/Steven Senne

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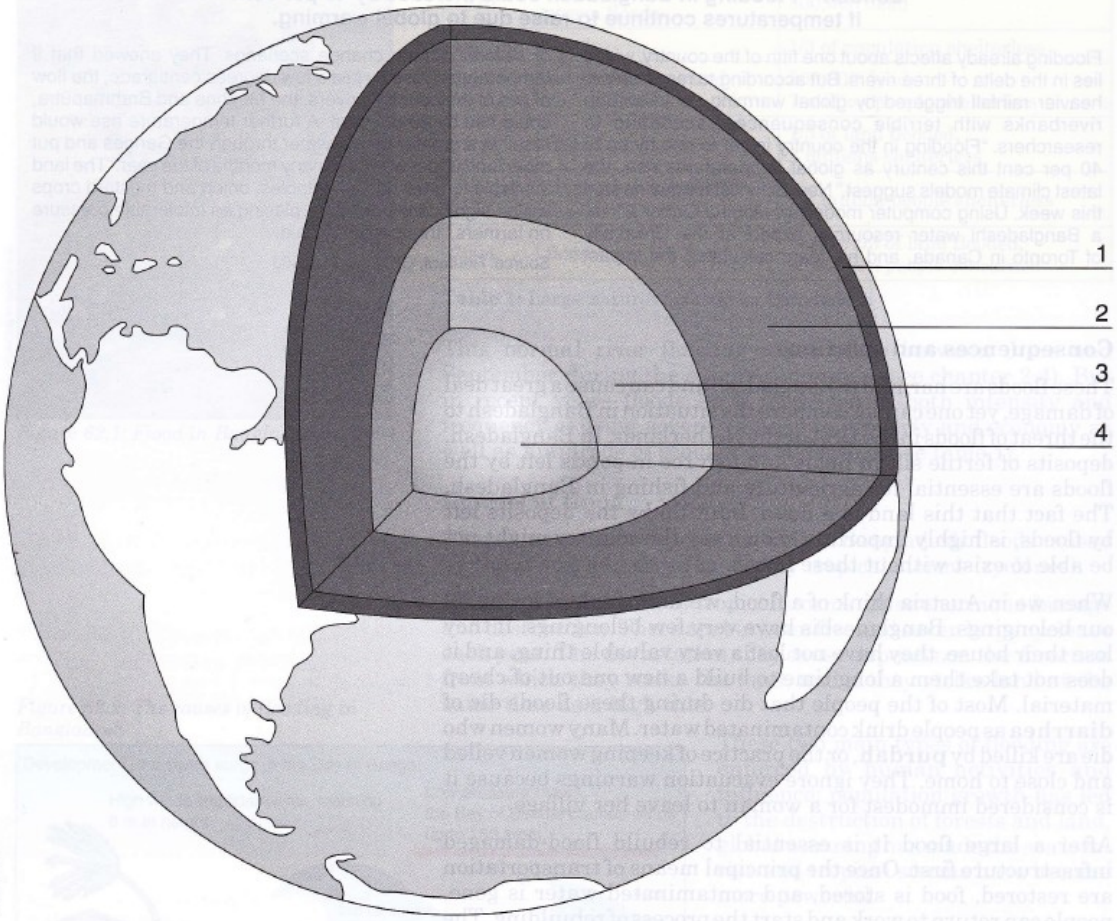
WORKSHEET 1 **THE STRUCTURE OF OUR EARTH [1.1]**



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✎ Name and describe the four layers of the earth's structure

1	
2	
3	
4	

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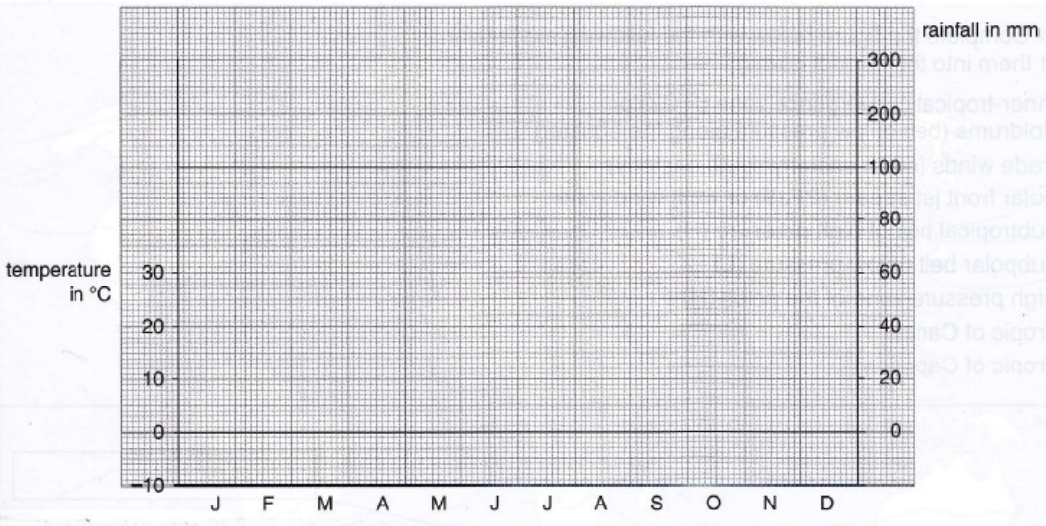
WORKSHEET 4 HOW TO DRAW A CLIMATIC GRAPH [2.1]



1. A climatic graph consists of a bar graph (Säulendiagramm) to show rainfall and a line graph (Kurvendiagramm) to show temperature.
2. On the left side of this graph you will find the temperature (1 cm = 10 °C), on the right side there is the rainfall (1 cm = 20 mm rainfall). At the bottom of the graph you have the months of a year.
3. Blue bars show the average amount of rainfall and a red curve shows the average temperature of a month.
4. If the red line lies above the blue bars, the graph shows an arid period (Trockenperiode). If the bars are above the red line, it shows a humid period (Feuchtperiode).

✎ Now use the box below and draw a bar in blue for the amount of rainfall in every month of the year in the scheme above.

Then mark the temperature for every month of the year with a dot in the middle of the month-scale and connect these dots with a red line to get a climate graph for Graz.

Graz	J	F	M	A	M	J	JL	A	S	O	N	D	year
Temp. (° C)	–4	–2	3	9	14	17	19	18	14	9	3	–1	9,5
Rainfall (mm)	30	40	30	50	80	130	110	90	80	80	60	50	840

✎ Now do some further work. Try to turn these climate statistics from around the world into climate graphs.

1. Yuma, Arizona – a desert climate. What is a desert?

Yuma	J	F	M	A	M	J	JL	A	S	O	N	D
Temp. (° C)	13	15	18	21	25	30	33	33	30	23	17	13
Rainfall (mm)	10	10	8	2	0	0	5	15	10	8	5	13

2. Penang, Malaysia – an equatorial rainforest climate. Note the very small temperature range.

Penang	J	F	M	A	M	J	JL	A	S	O	N	D
Temp. (° C)	27	27	27	28	27	27	27	27	27	27	26	26
Rainfall (mm)	100	75	125	180	280	180	225	330	480	410	280	125

3. Beijiing, China – a city of dramatic contrasts between summer and winter

Beijing	J	F	M	A	M	J	JL	A	S	O	N	D
Temp. (° C)	–5.1	–1.7	5.0	13.9	20.0	24.4	26.1	24.4	20.2	12.2	3.3	–2,8
Rainfall (mm)	3	5	5	15	36	76	239	160	66	15	8	2

4. Buenos Aires, Argentina – there is something strange about the temperature line. Why is it so low in June, July and August?

Buenos Aires	J	F	M	A	M	J	JL	A	S	O	N	D
Temp. (° C)	23.5	22.7	20.6	16.7	13.3	10.4	10.0	11.1	13.2	16.0	19.3	22.0
Rainfall (mm)	93.0	81.3	116.9	89.9	76.6	63.7	59.1	65.0	78.3	96.6	88.8	95.6

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✎ Which categories do the following terms belong to?

drainage basin – steep slopes – gentle slopes – river banks – V-shaped valley – meander oxbow lake – deltas – beach – cliffs – headlands – bays – shore – spit – moraine – glacier peak – corrie – waterfall – plateau – range – ridge – rift valley – fold mountains – plains – dunes – marshland – dike – creek – tide – barrier – riff – cove – landslide – avalanche – mudflow – rock formation – hilly – vast land – tide

mountains	lowlands	rivers	coasts

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2.4. THE FUTURE OF THE EU

The EU countries account for an ever smaller percentage of the world's population. They must therefore continue working together if they are to ensure economic growth and be able to compete on the world stage with other major economies.

Enlargement of the Union to 27 member states has gone ahead, keeping to the timetable set by the EU institutions. As a politician from one of the new member states put it: "Europe has finally managed to reconcile its history with its geography". The period 2007 to 2015 should see further enlargements of the European Union. In the meantime, its leaders – listening carefully to public opinion – will have to decide where, ultimately, to draw the Union's geographical, political and cultural frontiers.

The enlarged EU of 27 countries and 495 million people will expand even further in the future, if all goes according to the plans agreed at Copenhagen. The European Council decided already in 2004 to move ahead with the procedures related to possible membership of Croatia, Turkey and Macedonia (2005).

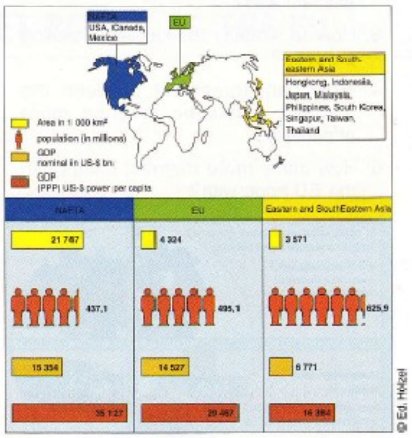

Figure 23.1: The three big trade blocs

How many more members for the EU?

Already in 1999 the Helsinki European Council had decided that "Turkey is a candidate State destined to join the Union on the basis of the same criteria as applied to the other candidate States." Turkey is a member of NATO and the Council of Europe. It has had an association agreement with the EU since 1964 and has been an applicant for EU membership since 1987.

But Turkey lies on the very edge of the European continent, and the prospect of its joining the EU raises questions about where to draw the ultimate boundaries of the European Union. Can any country anywhere apply for EU membership and start negotiations provided it meets the political and economic criteria laid down in Copenhagen? No, because Morocco, for example, was denied membership to the then European Community when it applied for it in 1987. The reason was that it was clearly not a country of Europe. Certainly, the countries of the western Balkans such as Albania, Bosnia and Herzegowina, the Former Yugoslav Republic of Macedonia, Montenegro and Serbia could apply, they are definitely part of Europe. They only have to achieve political stability and meet the Copenhagen criteria (see the yellow box "The Copenhagen Criteria").

Indeed, it is in the EU's interests to promote stability in the regions that lie on its doorstep. Enlargement pushes back and lengthens the Union's borders. It now has Belarus, Russia and Ukraine as its next-door neighbours and its border with Russia is longer. It will have to step up cross-border co-operation with them on transport and environmental policy as well as on issues such as internal security and the fight against people smuggling and other forms of international crime.

If it is a success, could this same strategy be applied to the EU's relations with countries on the southern shore of the Mediterranean? Questions like these open up the whole debate about what it means to be European, what is the ultimate purpose of European integration and what are the EU's interests in the world at large. Many believe it is time to redefine and reinforce the EU's relations with its near neighbours, and to do so in the most wide-ranging terms possible.

„A day will come when all the nations of this continent, without losing their distinct qualities or their glorious individuality, will fuse together in a higher unity and form the European brotherhood. A day will come when there will be no other battlefields than those of the mind – open marketplaces for ideas. A day will come when bullets and bombs will be replaced by votes."

(Victor Hugo, 1849)

The Copenhagen Criteria: Who can become a member of the EU?

In Copenhagen on 22 June 1993, the European Council stated for the first time that "the associated countries in central and eastern Europe that so desire shall become members of the European Union".

The European Council laid down three major criteria that candidate countries must meet before they can join the EU:

- First, a political criterion: candidate countries must have stable institutions guaranteeing democracy, the rule of law, human rights and respect for and protection of minorities.
- Second, an economic criterion: candidate countries must have a functioning market economy and be able to cope with competitive pressure and market forces within the Union.
- Third, a criterion of legal obligation: candidate countries must adopt the entire body of EU law and apply it in practice in their countries.

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EU, Africa seek ways to cut illegal migration

22 Nov 2006 17:44:57 GMT

Source: Reuters

by Salah Sarrar

TRIPOLI, Nov 22 (Reuters)

European and African countries sought on Wednesday to strengthen cooperation to stop a flood of illegal migration and narrow a wealth divide that has turned Europe into a promised land in the eyes of poor Africans.

Illegal migration is a thorny issue in Europe, where politicians have made election capital with pledges to stamp it out, while economists say more immigration is needed to make up for falling birth rates.

„No single state is able to tackle the migration question alone. We need cooperation," Libyan Foreign Minister Mohammed Abdel-Rahman Shalgam told Reuters at the start of an international conference on migration in Tripoli.

He said Libya was paying a heavy price for its position as a transit country for migrants.

„We have an estimated 2,0 million illegal migrants living in the midst of about five million people. That illegal migrant presence is a threat to our social fabric and a cause of rising crime and diseases," he added.

Shalgam said Libya needs European help to secure its land borders and coast against illegal immigrants.

„Our joint approach must be based on tangible and active solidarity. This solidarity should be deep enough for it to reach out to migrants and their families," EU Migration Commissioner Franco Frattini told the meeting.

He said the bloc intended to provide African countries with information on job opportunities in Europe and support initiatives on so-called labour matching, which provides workers in places where employers need staff.

The EU would also try to ensure migrants learned host country languages.

But return of migrants to Africa „should remain a part of the efforts of all states to manage migration," he said, adding voluntary returns should be encouraged as far as possible.

Governments in Europe and North Africa have in the past two years stepped up security measures but thousands of Africans are still moving north to flee poverty.

Many fall prey to conmen who pose as people-smugglers, and hundreds have perished after setting sail in fragile boats.

The United Nations says 10 000 foreign migrants may be trapped in Morocco after the kingdom made illegal migration across the Strait of Gibraltar almost impossible by beefing up radar detection and coastguard patrols.

The focus has now shifted to the southwest – where more than 26 000 West Africans have crossed dangerous Atlantic waters to the Spanish-owned Canary Islands – and to the east.

Moroccans are increasingly heading for Libya with the aim of reaching Italy, said Mohammed Khachani of the Moroccan Migration Study and Research Assocation.

„The situation is now dramatic as the Libyan authorites were not ready for this. Now they are taking measures to deal with it," he said.

The first European Union-African Union conference on migration is intended to send a signal that the two regions can improve security cooperation on land and sea borders and address the poverty that is forcing Africans northwards.

Shalgam said the conference would make clear that Africa and the EU would join forces to crack down on people-smugglers and create development opportunities for Africans to stay and work at home.

„The solution is to launch development in the countries of migrant origins," he said.

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Today agriculture is privatized again, most of the arable has been returned to their former owners and slowly productivity is on the rise again. But old machinery and lack of money are still a big problem. Dairy farming, sheep and cattle farming and the export of timber for furniture and chipboard are most important for Romania's agriculture. The modernization and restructuring of Romania's agriculture will remain one of the biggest challenges for Romania within the European Union.

Although Romania is well supplied with mineral fuels such as petrol, natural gas and coal, they are slowly decreasing and today petrol has to be imported to meet the needs of a rising economy. The majority of raw materials for industry have to be imported, too.

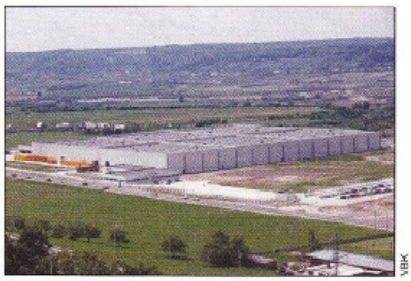
The biggest changes have taken place in industry: In the 1960s and 1970s much emphasis was placed on the manufacturing sector, dominated by heavy industry (machine building and metal processing). These big, state controlled industries were privatized in the second half of the 90s. Today much smaller industrial units have specialized in producing consumer goods like clothes, shoes and electronic equipment, designed for the export into the EU. Low wages, highly qualified workers and a big, steadily growing market have drawn the attention of many foreign investors to Romania.

The new investments of Renault, building a small-budget car (Dacia) for the new markets in eastern Europe, Asia and Latin America in Mioveni and Pitesti, and the take-over of PETROM, the former state-owned oil company of Romania, by the Austrian OMV are only the latest examples of the restructuring of Romania's industry. In 2008 Nokia, the world's largest handset maker will open a cell phone plant and a research center in Jucu near the city of Cluj-Napoca, that will employ 15 000 people. The German industry has also started to invest in Romania and many small companies have become suppliers for well-known firms like Siemens, VW and many more.

The main problems of the industrialization of Romania are corruption and legal insecurity. Both problems should be exterminated through the accession to the EU and with the help of the EU.

VBK

Figure 59.1: Old Dacia Factory

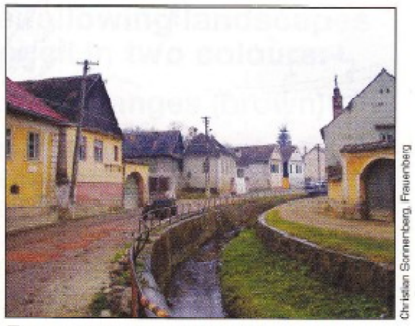


VBK

Figure 59.2: New Renault Logistic center in Romania

Economic growth	7,8%, second quarter of 2006
Inflation rate (2004)	8,6% in 2005
Unemployment rate	5,1% in July 2006
Currency	Lei (plural form for Leu) 1 leu = 100 bani. Romania switched to "new leu" as from 1/7/05. Symbol of new currency: RON Average exchange rate in October 2005: 1 EUR = 3.6503 RON
General Government balance	1,5% of GDP , second quarter of 2006
Current account balance	Second quarter 2006: -9,8% of GDP
Debt	15,9% of GDP in 2005
Trade with EU25 (2003)	Exports to the EU: 74% of the totalImports from the EU: 68% of the total (Source: EU bilateral trade and trade with the world, DG TRADE, 29. 04. 2005.)

Source: European Commission, Candidate Countries' Economies Quarterly(CCEQ), 3rdt quarter 2006



Christian Sonnenberg, Frauenberg

Figure 59.3 : Rural life in Romania (near Sibiu)

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2.3 CLIMATE AND VEGETATION

Task 1:

Match the nine climatic graphs in figure 2 with the nine points marked in the cross-section. What are the main climatic differences between these locations?

Austria belongs to the central European transitional climate zone of the cool-temperate climate. The relief of the Eastern Alps and the variety of Austria's landscapes create a lot of micro-climatic zones:

- Alpine climate in the central Alpine regions,
- Central European transitional climate in the northern Alpine foothills,
- Highland climate in the Granite- and Gneiss Highlands,
- Pannonian, continental climate in the eastern lowlands and
- Illyrian climate in the south-eastern Alpine foothills.

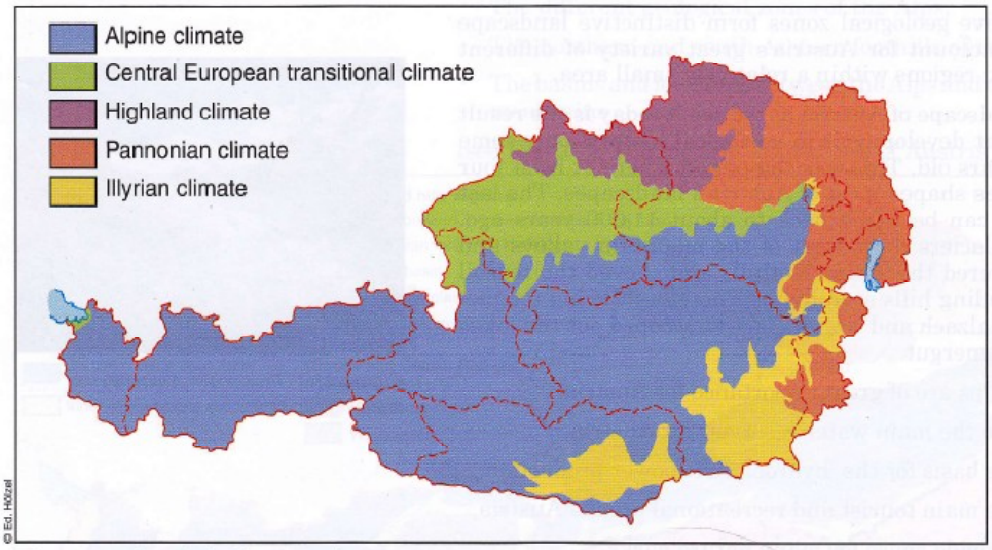
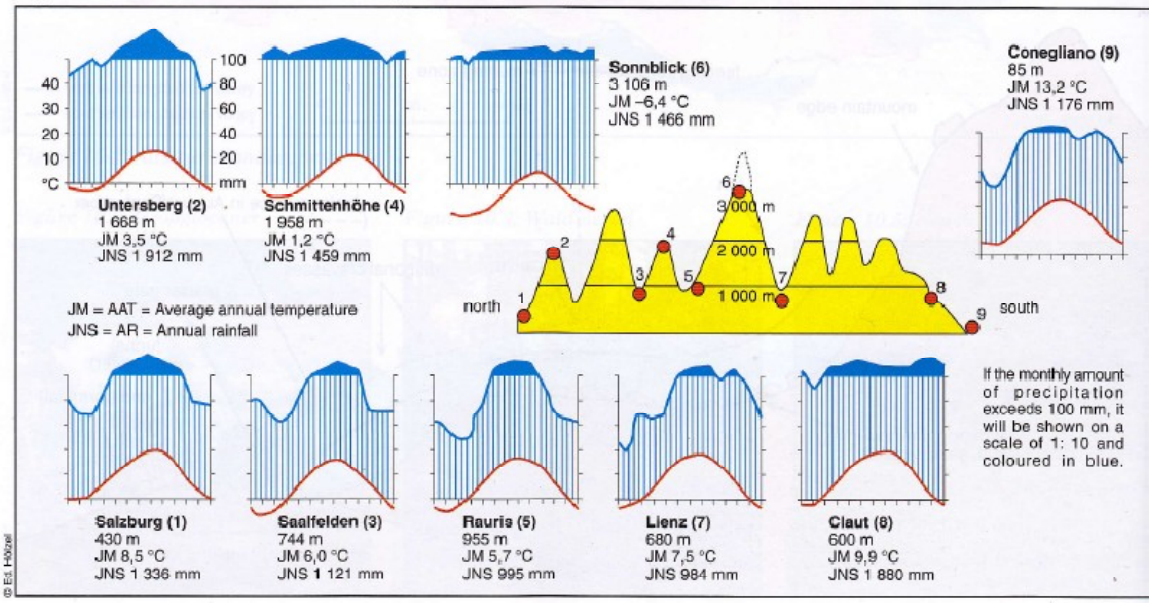


Figure 12.1: Austria's climate regions

Figure 12.2: Climatic cross-section through the Eastern Alps



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2.4 NATIONAL PARKS IN AUSTRIA: NATURAL RESOURCES AND ENVIRONMENTAL PROTECTION

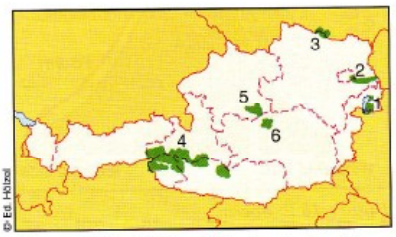

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Figure 14.1: National Parks in Austria

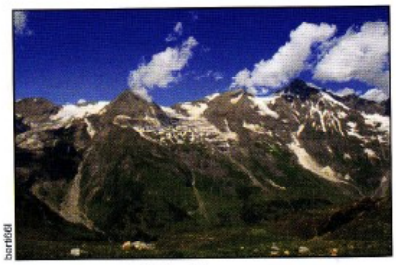

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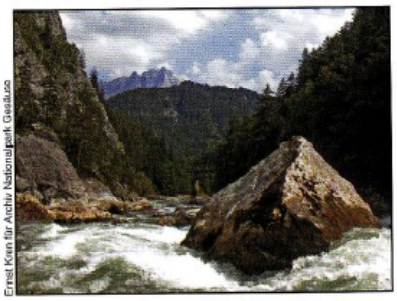
Figure 14.2: Hohe Tauern



Ernst Kren für Archiv Nationalpark Gesäuse

Figure 14.3: Gesäuse National Park

The conservation of natural resources is highly esteemed in Austria as everyone wants to enjoy clean drinking water, clean air and untouched nature today. It is seen as a social obligation to maintain natural resources and to protect them against the needs of farming, industry and tourism. Therefore six national parks have been established in Austria. According to the IUCN (= International Union for Conservation of Nature and Natural Resources) the following criteria must be met to establish a national park:

- a certain area (at least 100 km2),
- untouched ecosystems,
- only light and controlled tourism,
- no exploitation of natural resources like water (no hydroelectric power stations), wood (no felling) or minerals (no mining activities),
- legal and financial protection/aid by the government

1. Lake Neusiedl – Seewinkel National Park

Central Europe's only National Park set within the landscape of the steppes is strongly reminiscent of the unique charm of the puszta with its salt ponds, its meadows and pastures.This National Park is best-known as a sanctuary for thousands of migrating birds in spring and autumn. (www.nationalpark-neusiedlersee.org)

2. Danube Meadows National Park

Central Europe's largest continuous landscape of riverside meadows serves as the ideal habitat for some 5,000 animal species.The National Park authorities offer various excursions, on foot and by boat.(www.donauauen.at)

3. Thaya Valley National Park

The River Thaya has dug its course up to 150 metres deep in the hard rock of the Waldviertel, creating a valley landscape of great beauty. It was declared a National Park at the beginning of 2000. The meadows, wooded hillsides, cliffs and stretches of grassland provide a habitat for numerous rare animal and plant species like the eagle owl, the black stork, the green lizard, fraxinella and the coloured iris. (www.np-thayatal.at)

4. Hohe Tauern National Park

Central Europe's largest area of protected landscape extends over three Austrian provinces: Tyrol, Carinthia and Salzburg. It is a region of ancient forests, lush green alpine pastures, rugged mountainsides and spectacular waterfalls. The park contains more than a hundred peaks over 3,000 metres high and a great diversity of alpine flora and fauna. www.hohetauern.at

5. Limestone Alps National Park

The Limestone Alps National Park in southern Upper Austria covers the region of the Sengsengebirge and Reichraminger Hintergebirge mountains and encompasses the largest unpopulated stretch of wooded mountains and the longest untouched system of mountain torrents in the Eastern Alps. Forests and streams, cliff faces and alpine pastures are the predominant natural features of this beautiful landscape. (www.kalkalpen.at)

6. Gesäuse National Park

The latest addition to the national park family is located in northern Styria in the Ennstal Alps. On approximately 12,500 hectares rare fauna (such as the wood grouse and the groundhog) and flora (e.g. orchids) are still found there. (www.nationalpark.co.at) (Quelle: www.austria.info)

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3. POPULATION AND SOCIETY IN AUSTRIA

3.1 POPULATION DEVELOPMENT IN AUSTRIA

Year	in 1,000 s	Change against previous figure in 1,000 s	Change against previous figure in %
ca. 1600	1,800	-	-
ca. 1700	2,100	-	-
1800	3,046	-	-
1913	6,767	-	-
1920	6,455	-	-
1925	6,582	+127	+2.0
1930	6,684	+102	+1.5
1935	6,761	+77	+1.2
1940	6,705	-56	-0.8
1945	6,799	+94	+1.4
1950	6,935	+136	+2.0
1955	6,947	+12	+0.2
1960	7,048	+101	+1.5
1965	7,271	+223	+3.2
1970	7,467	+196	+2.7
1975	7,579	+112	+1.5
1980	7,549	-30	-0.4
1985	7,565	+16	+0.2
1990	7,678	+113	+1.5
1995	7,948	+270	+3.5
2000	8,014	+66	+0.8
2005	8,233	+219	+2.7
2010	8,417	+184	+2.2
2015	8,555	+138	+1.6
2020	8,668	+113	+1.3
2025	8,767	+99	+1.1
2030	8,852	+85	+1.0
2035	8,916	+64	+0.7
2040	8,959	+43	+0.5
2045	8,985	+26	+0.3
2050	8,990	+5	+0.1

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Figure 15.1: Population since 1600

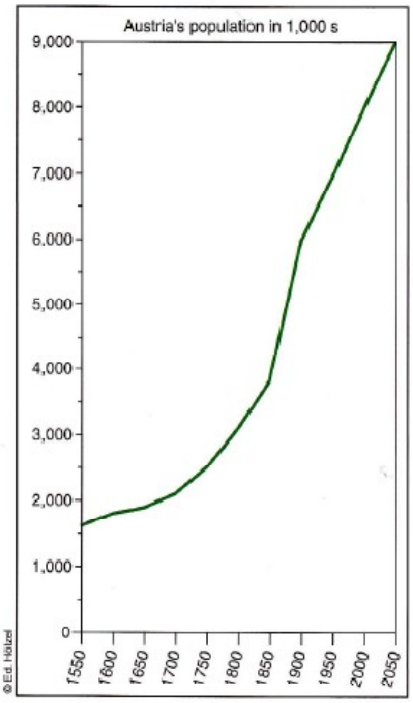


Figure 15.3: Development of population since 1550

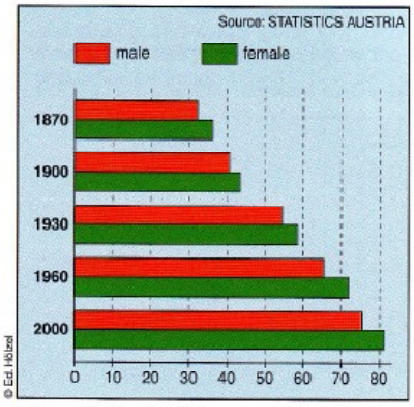
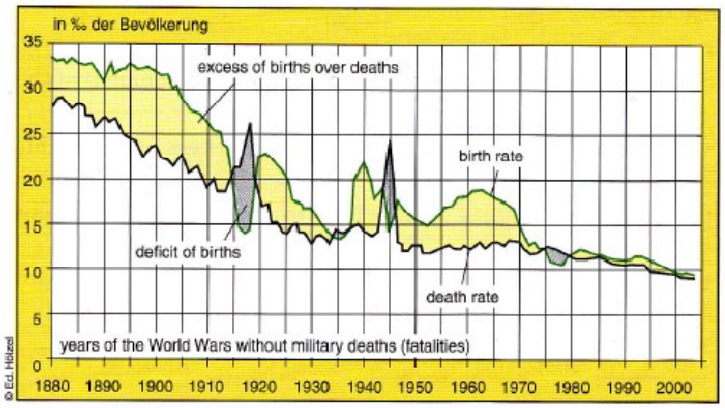


Figure 15.4: Life Expectancy in Austria (at birth in years)

Figure 15.2: Birth and death rates 1880-2008



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3.2
AUSTRIA'S POPULATION STRUCTURE: THE AGING SOCIETY

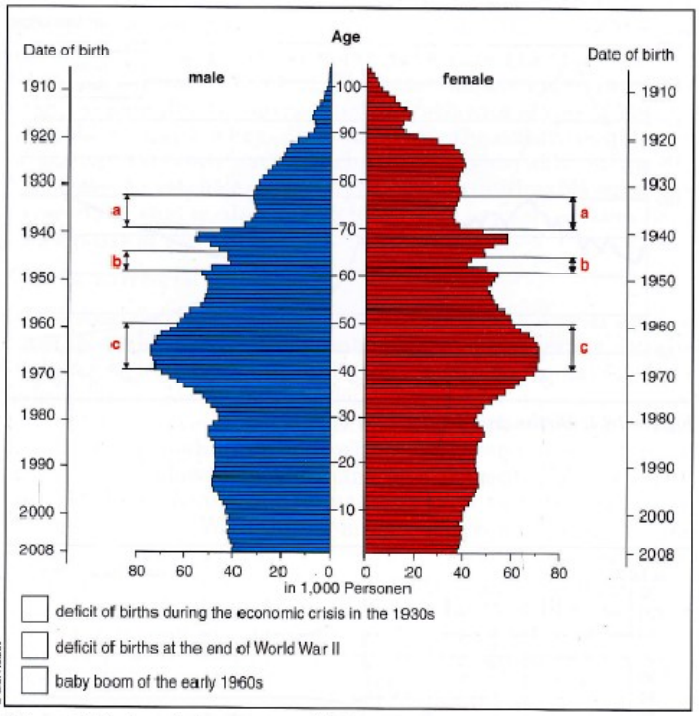


Figure 17.1: Austria's age pyramid 2008

The age pyramid of Austria shows the number of Austrians, males and females, in different age groups for the year 2008.

This reflects not only the historical development of Austria's population (see a, b and c in Fig.1), but also the main problems for Austria's society in future:

- fewer (young) people in the lower age groups,
- more (older) people in the higher age groups,
- a growing number of old-age pensioners and
- a declining number of working persons to pay for old-age pensioners over even longer time spans.

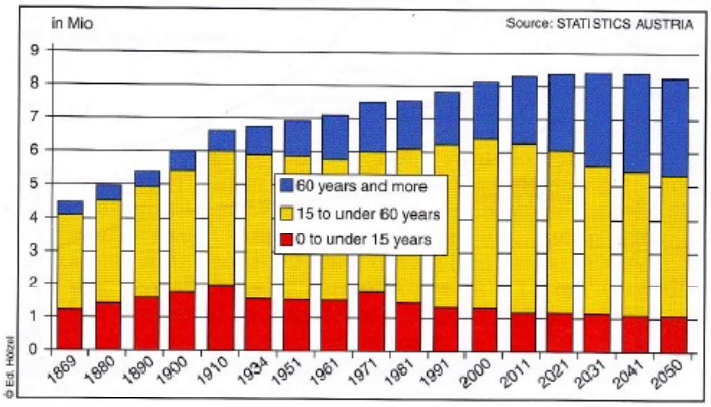
The changing shape of this population "pyramid", from the former classic pyramid form to the urn/ pillar form of today and the inverted pyramid shape of the future, indicates a clear message:

Austria's age structure has changed rapidly over the last few years.

Task:

Match a, b and c in Figure 17.1 with their correct definitions given below the population pyramid.

Figure 17.2: Different age groups 1869 - 2050



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3.4 IMMIGRATION TO AUSTRIA

By 1 January 2005, 9.6% of the residing population were non-nationals. About three quarters of these were third country nationals compared to 26% EU nationals. The largest group among EU nationals is German nationals (45.8%), followed by Polish nationals (13.1%). The most important countries of origin among third countries are the successor states of Former Yugoslavia and Turkey. At first glance, the countries of origin of foreign nationals have not changed considerably during the last years. Nevertheless, the foreign population has become more diversified; this is also due to inflows of asylum seekers from other parts of the world.

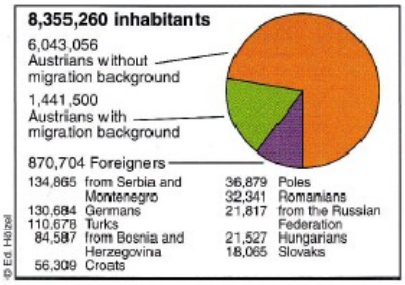

Figure 19.1: Who lives in Austria?

Guest workers

Since Austria's economic recovery after World War II started later than Germany's, the number of guest workers in Austria did not reach its peak until the 1970s. Citizens from the former Yugoslavia, predominantly Serbs, accounted for approximately 50 percent of the foreign workers in Austria. Turks were the second largest group, making up approximately 20 percent of the foreign work force, followed by Germans at 5 percent. Poles, Czechs, Slovaks, Hungarians, and Romanians made up between 3.5 and 4.0 percent each. With the opening of the Iron Curtain and the eastward enlargement of the EU, the structure of immigration has changed again, as new forms of a female „servant migration" (e.g. in social health care) from former Eastern Bloc countries and more „commuter-migrants" and seasonal workers, who are employed primarily in construction, agriculture and tourism, come to Austria today.

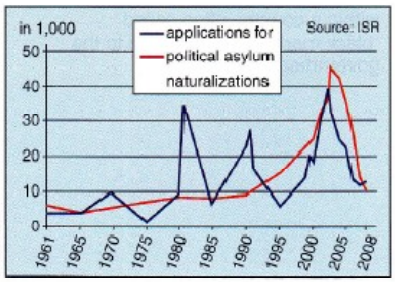

Figure 19.2: Development of asylum applications and naturalizations in Austria

Refugees and asylum seekers

Austria has had a long tradition of immigration during its Second Republic, which is manifested in the rising number of naturalisations, particularly in recent years. Due to its geographical location at the eastern border of Western Europe, Austria has always been a country for immigrants, especially for refugees from the former COMECON countries in Eastern Europe and Russia.

Since 1972, Austria has participated in an international quota agreement to accept international refugees from around the globe. The Austrian legal system concerning migration and asylum was significantly restructured with the Aliens' Act Package in 2005, introducing stricter rules and regulations for asylum seekers and refugees.

In 2005, the largest group among asylum seekers were citizens of Serbia and Montenegro, followed by citizens of the Russian Federation (mainly Chechens). Other major groups were citizens of India, Moldova, Turkey, Georgia, Afghanistan and Nigeria. These countries were among the top-10 countries of origin in 2005 (see Fig. 19.3).

Citizen-ship	Asylum applications	Positive decisions	Negative decisions
Serbia-Montenegro	4,408	462	1,042
Russian Federation	4,359	2,395	271
India	1,530	1	368
Moldova	1,210	7	217
Turkey	1,067	67	579
Georgia	953	59	505
Afghanistan	928	533	141
Nigeria	881	7	637
Mongolia	641	3	59
Bangladesh	548	0	114

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Figure 19.3: Asylum Applications and decisions 2005

Problems

Despite their essential contribution to the economy, foreign workers are generally not held in high esteem. This prejudice is caused by the generally low pay and social status of their jobs, their lower level of education, and an often limited ability to speak German. Tensions also arise because of their foreign appearance and customs. So there is the danger of creating a new ethnic lower class. Some resentment also stems from the social costs the asylum seekers cause in the educational, social and health sectors. The degree or quality of **assimilation** and **integration** into the larger society is the most serious problem presented by long-term foreign workers and asylum seekers. The Council of Europe and the EU-Commission have declared support, in principle, for closer integration and equality for immigrants and members of „third states" in the EU member states. Austria has to encourage this integration to avoid social tensions and segregation. (Quelle: IMMIGRATION AND INTEGRATION IN AUSTRIA, POLICY REPORT, NCP/ IOM Austria)

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4.1.5 The Current Account Balance and the Balance of Payments

Today goods, services, and **assets** are exchanged between countries not only within the EU but also in the international economy. Consider some of the following examples: Austrian consumers import automobiles manufactured in Japan and Germany, and clothing manufactured in China. Austrian firms export spare parts and equipment to the automobile industry in Germany and the European Union, and lumber and wood pulp to e.g. Italy. A German tourist pays for a hotel room and for restaurant meals while visiting Salzburg. The Austrian Red Cross sends millions of Euros in disaster aid to earthquake victims in Turkey. All of these transactions add to or subtract from the Austrian **balance of payments**, which can be called a "bookkeeping account" of all the international transactions between Austria and the rest of the world.

The **current account balance** is a part of the balance of payments and includes the **balance of trade**, the **balance of services**, the **balance of income** and the **balance of transfers**. If the **balance of capital** is added to the current account balance, we get the total amount of all international transactions to and from Austria, called **balance of payments** (see Fig. 25.1)

The current account balance consists of the following elements:

The balance of trade: the net difference between merchandise exports and merchandise imports. The balance of trade is the largest and most widely reported element of the current account balance.

The balance of services (exports and imports): the difference between the expenditures of foreigners in Austria and the expenditures of Austrians in foreign countries.

The balance of income: the difference in income from Austrian companies in foreign countries flowing to Austria, and income from foreign-owned companies in Austria going out of Austria.

The balance of transfers: the net difference between inflows and outflows of unilateral transfers such as foreign aid and charitable gifts.

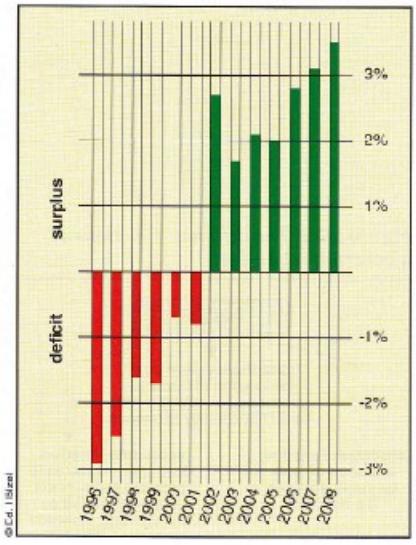
Figure 25.1: The different parts of the Austrian balance of payments

1. Balance of trade				
Import of goods	Export of goods	e.g. food, machines..	In 2006: + 506 mill.€	In .....:
2. Balance of services				
Services to Austria	Services from Austria	e.g. tourists, transport, insurances..	In 2006: + 10,313 mill.€	In .....:
3. Balance of income				
Income of Austrians from abroad	Income of foreigners in Austria	e.g. income of guestworkers	In 2006 - 1,476 mill.€	In .....:
4.Balance of transfers				
Assets coming to Austria	Assets leaving Austria	e.g. gifts, aics, credits..	In 2006: - 1,110 mill.€	In .....:
1-4 = CURRENT ACCOUNT BALANCE			In 2006: + 8,233	
5. Balance of capital				
Import of capital	Export of capital	e.g. direct investments abroad - or in Austria	In 2006: - 8,173 mill.€	In .....:
6. Balance of foreign exchange				
Decrease of the monetary reserves	Increase of the monetary reserves	e.g. buying or selling of Euros by the National Bank of Austria	In 2006: - 507 mill.€	In .....:
5+6 = Balance of capital			- 7,666 mill.€	
1-6 = Balance of payments			**+ 5,670 mill.€**	

Task 1:

Complete figure 1 with the most topical statistical data available.

Figure 25.2: Development of the Austrian balance of trade and services



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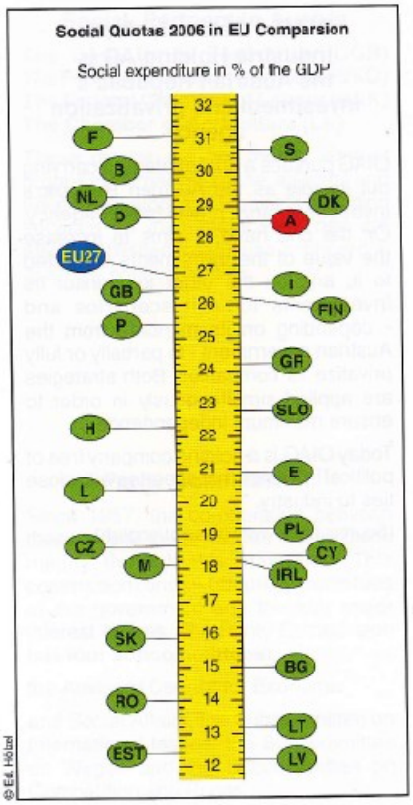

Figure 34.2: Social Quotas in the EU

4.3.4 The Austrian Social System

Quality of life in Austria is based on a highly developed system of social security. This system provides comprehensive protection against the risks of sickness, old age and accidents at work. Preventing diseases and making people aware of the importance of a healthy life-style round out the range of services the social insurance system has to offer.

Social protection systems in Austria can be divided into the following sectors:

Social insurance: in particular health, work-accident and pension insurance, and, in the broader sense, unemployment insurance;

Public assistance: family allowance, tax credit for children, child care allowance, long-term care allowance and (owing to its de facto effects) health care; victims' compensation: e.g. for war and political victims, army victims and crime victims;

Social welfare: disability benefits, retirement and care homes built by the state, state support; only available if the income is below a certain limit: e.g. minimum income under the pension insurance scheme, unemployment assistance under the unemployment insurance scheme and social assistance.

The most important part of the Austrian social safety net is the **social insurance system**.

Figure 34.1: The social safety net in Austria

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5. AUSTRIA AS A BUSINESS LOCATION

5.1 INDUSTRIAL LOCATION FACTORS

Whenever a company (or business in general) has to consider where to locate a new industrial site, some of the following factors, called **location factors**, have to be considered:

- A **suitable site**: do they need a **greenfield site** or a **brownfield site**? How much does the construction of new buildings and facilities cost?
- The presence of a **suitable workforce (= labour supply)**: how many people have to be recruited, and what skills do they need?
- **Communications**: what about the transport facilities for both goods and workers; ease of access to suppliers, to distribution networks and to markets; proximity to energy supplies; ease of links with other companies?
- **Government incentives**: are there any grants or financial aid from the government?
- **Raw materials**: do they need special raw materials and how far away are they?
- **Power supply**: do they need a lot of power and how much does it cost there?
- **Political and social stability**: are there often political unrests and strikes that might cause losses in production and money?

Not all of these location factors are of equal importance for the different kinds of industries. Unlike manufacturing industries, tertiary or services companies do not have to be near a source of raw materials, but - given good transport, energy and communications - can locate themselves virtually anywhere in the world. These industries are called **footloose**, and examples are computer software development companies, telephone sales firms and call-centres.

Another "special case" of industrial location is **agglomeration**. This is a concentration of economic activities in related sectors in a certain geographical area, brought about by a pool of skilled labour, increasing returns on sale, planning by local authorities or other economic or political advantages. Examples are the Silicon Valley in California or the Austrian Automobile Cluster in Styria.

Greenfield site:
Business site outside a town, e g. on a city edge, where there has not been any industrial activity before.

Brownfield site:
An old industrial site that is used for redevelopment, e.g. an old textile factory is redesigned for IT-companies.

Government incentives:
Benefits offered by the government to encourage companies to move to a certain area, e.g. financial rewards, less tax, low rent, cheap building sites...

Footloose industries:
Industries which are not tied to any specific geographical location, but can locate virtually anywhere in the world.

Agglomeration:
Here: a concentration of economic activities in related sectors in a certain geographical area.

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Figure 37.1: The MAN factory in Vienna/ Liesing

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5.3 REGIONAL DISPARITIES IN AUSTRIA

The second one is an indirect indicator, the real estate market and its property prices, which shows the ecological value of a region through assumed residential quality (E. Lichtenberger, p.415).

However, there are some more indicators to define regional disparities in the different political districts:

- The unemployment rate,
- The migration patterns,
- The quality of life (measured by several socio-economic indicators), and
- The average income (see figures 3 to 6)

The regional structure of Austria is largely predetermined by the following factors:

- the Alps, which cover two thirds of the country,
- the historical development of Austria's federal provinces and the recent eastward enlargement of the EU,
- the development of the population,
- the regional aid of the EU with capital, technological infrastructure, traffic infrastructure and social infrastructure.

The present day economic and ecological value of Austria's regions can be measured best by two indices:

The first one is the gross regional product (GRP), which indicates the productivity and development of a region.

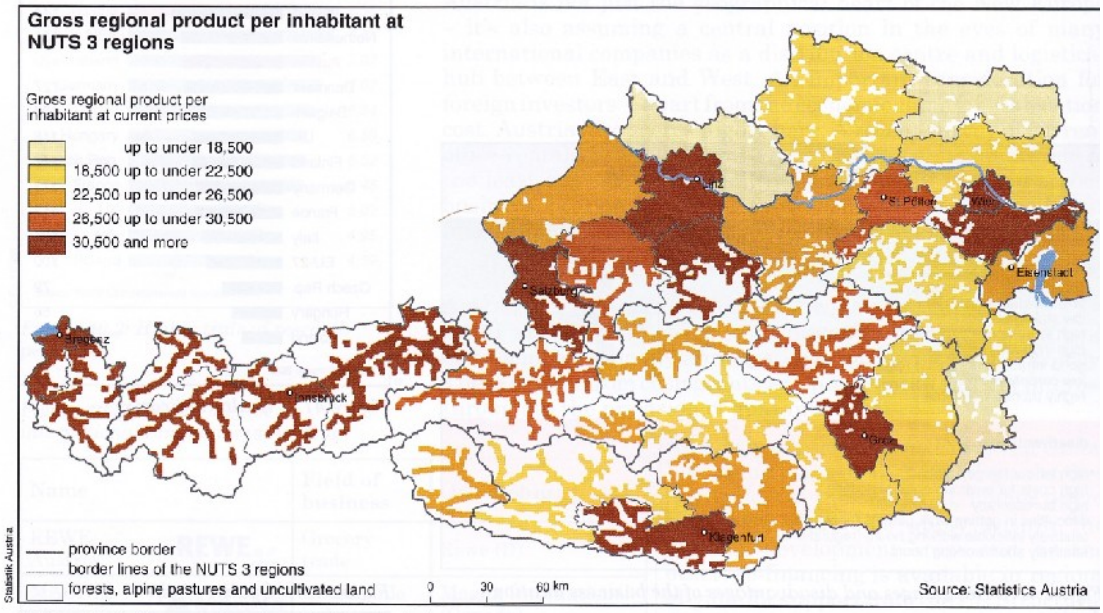
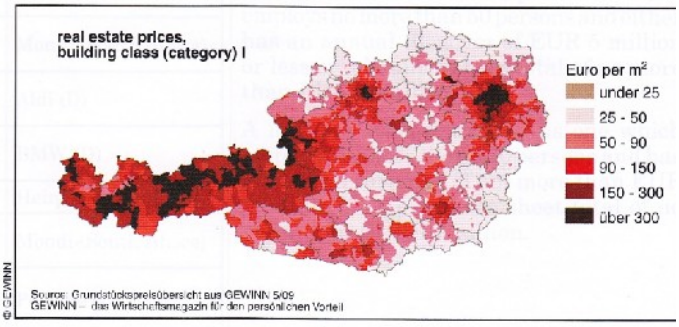


Figure 42.1: Gross regional product in Austria

Figure 42.2: Price landscape of real estate prices in Austria



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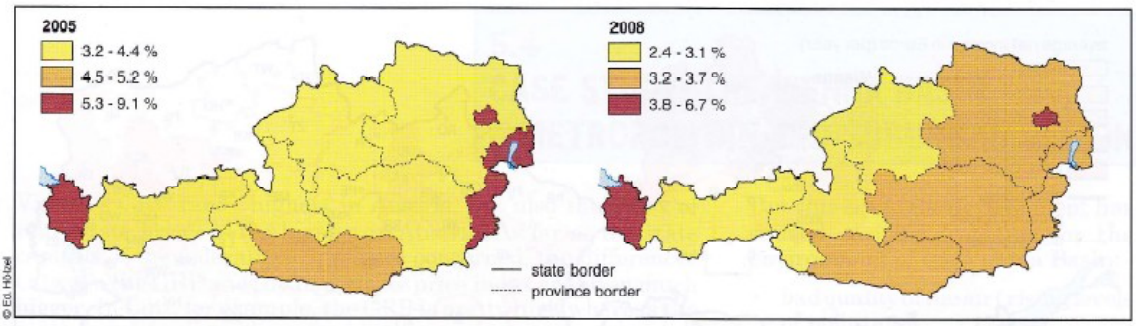


Figure 43.1: Unemployment rates in Austria

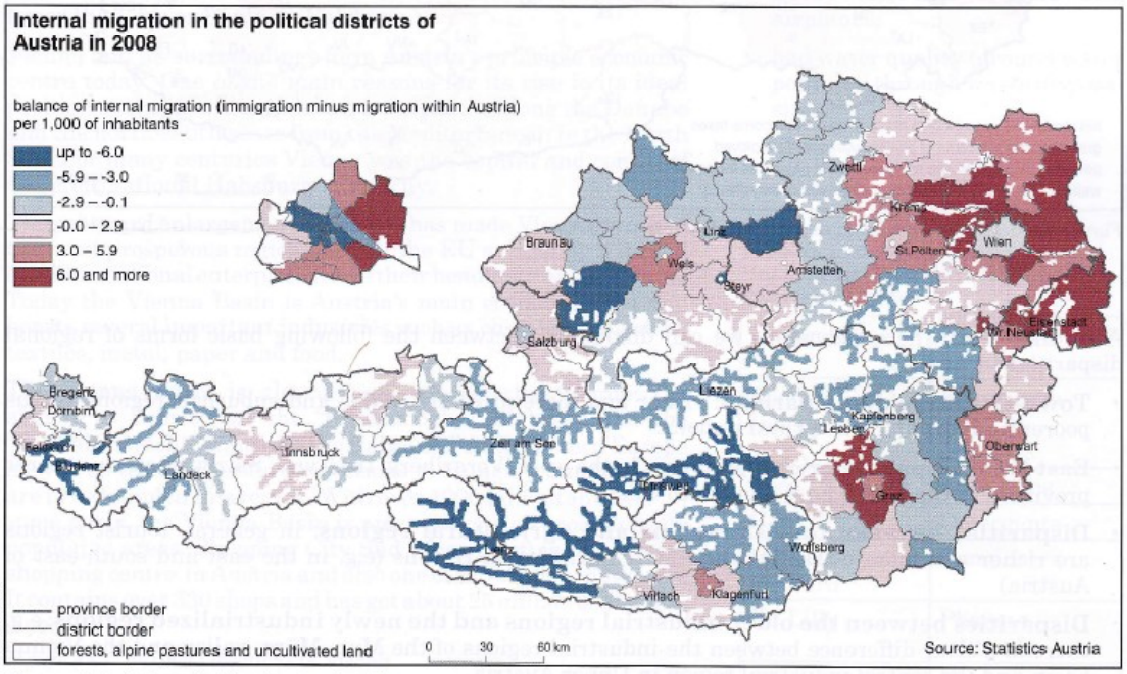
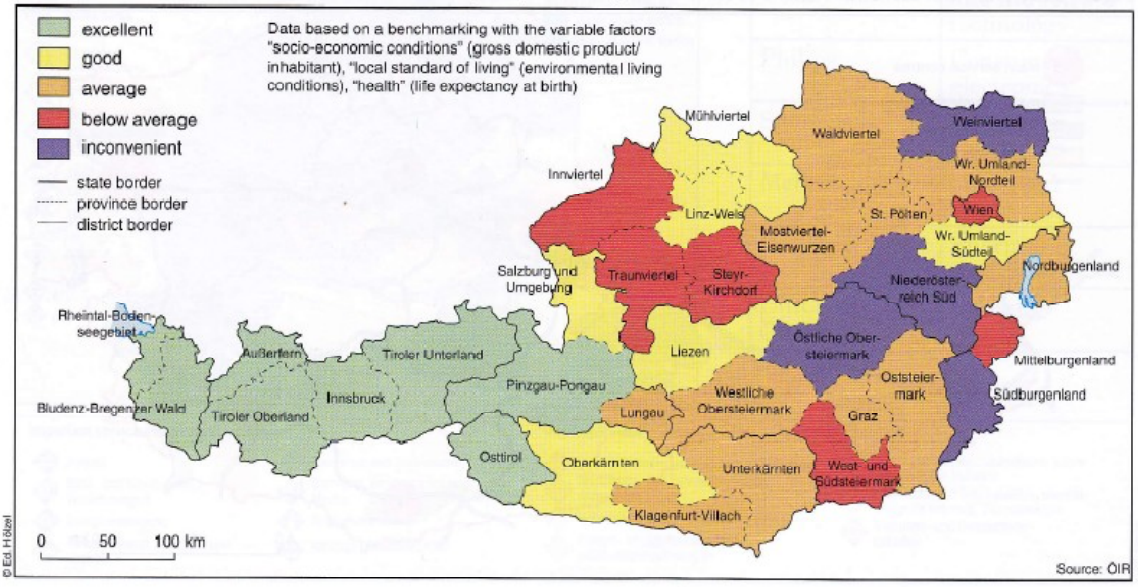


Figure 43.2: Internal migration in Austria

Figure 43.3: Quality of Life in Austria - NUTS 3 (data from 2000)



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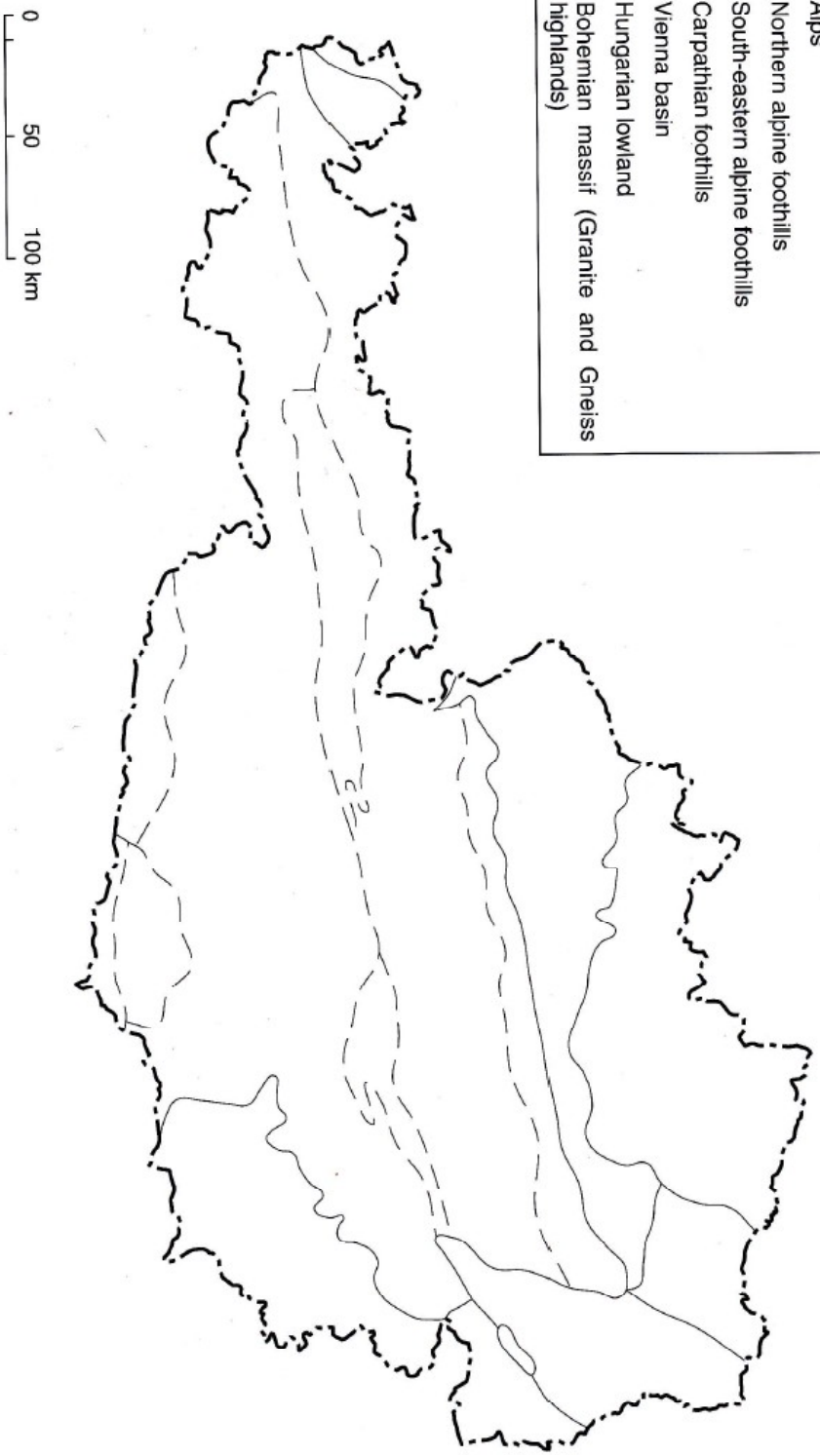
WORKSHEET 2 **AUSTRIA: LANDFORMS AND GEOLOGICAL ZONES**

TASKS:

1. Colour the geological zones of the Alps with the help of your book (page...) or your atlas.
2. Put the names of the following Austrian landforms into their correct position on the map:
   - Alps
   - Northern alpine foothills
   - South-eastern alpine foothills
   - Carpathian foothills
   - Vienna basin
   - Hungarian lowland
   - Bohemian massif (Granite and Gneiss highlands)



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Do it in English 3

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WORKSHEET 11 **ECONOMY: THE AUSTRIAN SOCIAL INSURANCE SYSTEM**

TASK: Complete the graph with the correct terms/information given in your book (p.34)

THE SOCIAL SAFETY NET IN AUSTRIA

SOCIAL INSURANCE	PUBLIC ASSISTANCE	SOCIAL WELFARE

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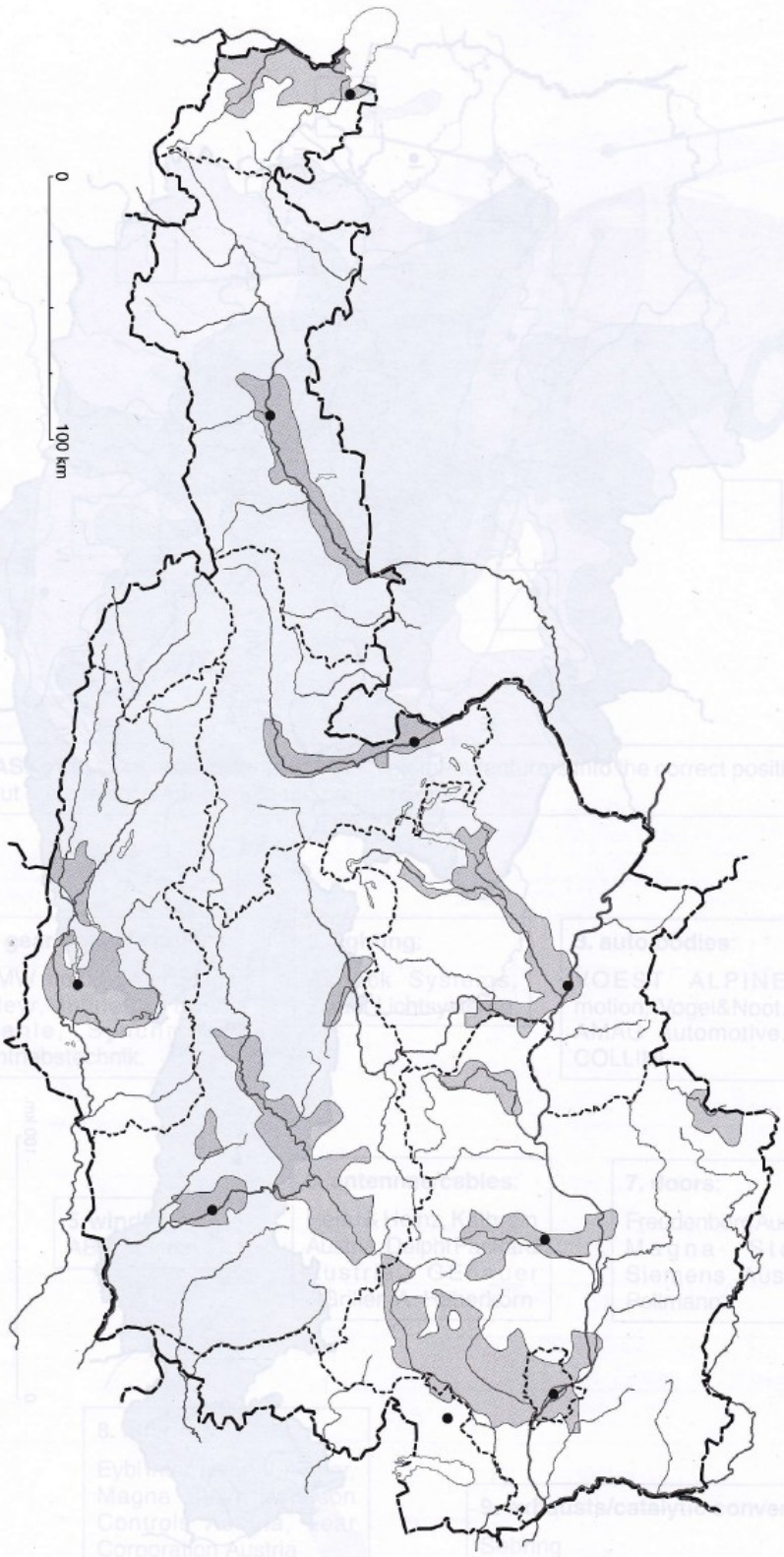
WORKSHEET 16 **AUSTRIA: INDUSTRIAL REGIONS**

TASKS:

1. Name the different industrial regions with the help of your atlas.
2. Find the most important kinds of industries within these regions with the help of your atlas. Create a table.



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1.3. THE IMPACTS OF GLOBALIZATION

Whether or not the establishment of the global marketplace will be beneficial is disputed. Proponents believe that globalization has the potential to create greater opportunities for growth throughout the world, whereas opponents of globalization state that it will merely increase the opportunities for wealthier nations to take advantage of poorer ones and, furthermore, could destroy regional diversity and lead to a standardized world culture.

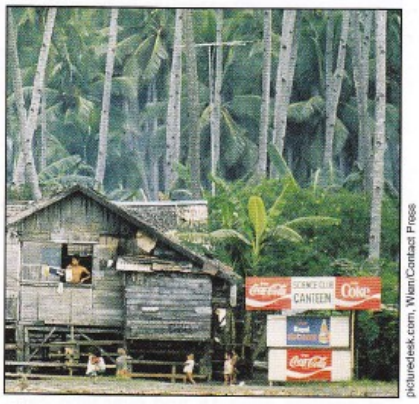
Good or bad, though, there isn't much argument as to whether or not it is happening. If you look at the positive and negative aspects of globalization, you can decide for yourself whether or not it is a good thing for our world.

Bilderberg, Hamburg/Rainer Drexler

Figure 5.1: Outsourcing of cheap labour

Positive aspects of globalization

- As more money is poured into developing countries, there is a greater chance for the people in those countries to succeed economically and increase their standard of living.
- Global competition encourages creativity and innovation and keeps prices for commodities/services in check.
- Developing countries are able to get the benefits of current technology without the troubles of developing these technologies.
- Governments are better able to work together towards common goals now that there is an advantage in cooperation, an improved ability to interact and coordinate, and a global awareness of issues.
- There is greater access to foreign culture in the form of movies, music, food, clothing, and more. In other words, the world has got more choice.



picturedesk.com, Wien/Contact Press

Figure 5.2: Coca Cola in a Philippine village

Negative aspects of globalization

- Outsourcing, while providing jobs to a population in one country, takes away those jobs from another country, leaving many without opportunities.
- Although different cultures from around the world are able to interact, TV and media encourage a loss of individuality by spreading European or American values and attitudes.
- There is a greater chance of spreading diseases worldwide through travelling and tourism.
- There is little international regulation, so large transnational companies (TNC's) can gain power over national governments, which then even lose their ability to control economic developments in their own countries.
- Large international organizations such as the International Monetary Fund and the World Bank make it easy for a developing country to obtain a loan. However, a Western-focus is often applied to a non-Western situation, resulting in failed progress.

(Abridged from: http://geography.about.com/od/globalproblemsandissues/a/globalization.htm)

Opel Austria, Wien

Figure 5.3: Headquarters of GM in Detroit

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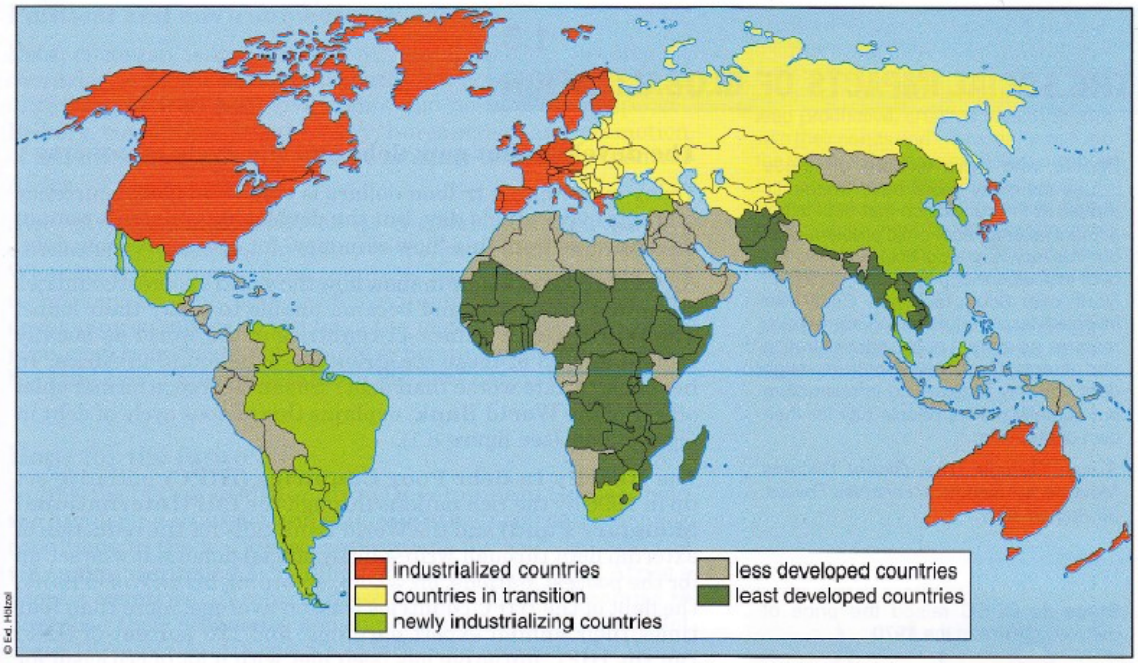

Figure 7.1: The division of our earth by the UN

The divided world today

Today global core areas include North America, Europe, Japan and Australia. The global periphery of poorer countries comprises most of the countries in South America, Africa, South and Southwest Asia.

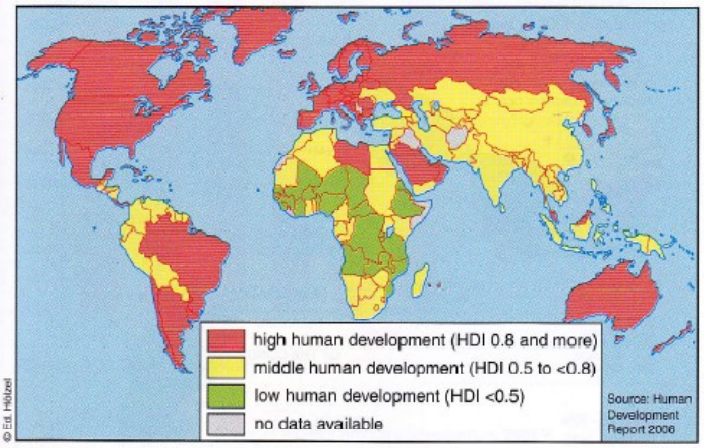

Figure 7.2: The Human Development Index (HDI)

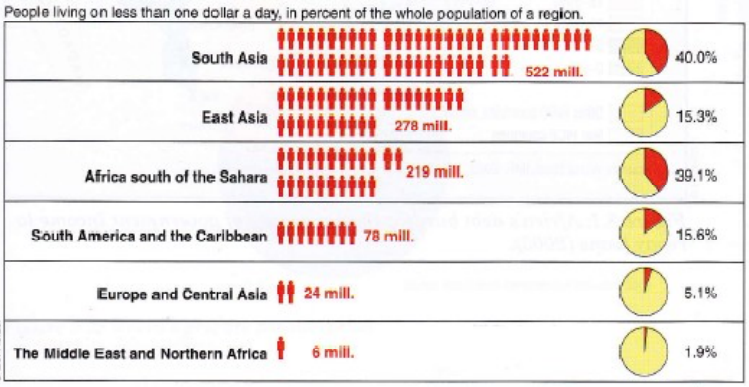

Figure 7.3: Less than one dollar a day

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1.5
THE SOCIAL IMPACTS OF GLOBALIZATION

People who have worked on these issues for many years have frequently arrived at the conclusion that debt is not a financial or an economic problem at all but in every way a political one. It is the best instrument of power and control of North over South [and now East] ever invented; far superior to colonialism which requires an army, a public administration and attracts a bad press. Control through debt not only requires no infrastructure but actually makes people pay for their own oppression.

Susan George, The Global Citizens Movement: A New Actor For a New Politics, 30 August 2001

Stage 1: OPEC raised the price of petroleum twice in the 1970

↓

Stage 2: OPEC countries put their earnings into the banks of the industrialized world

↓

Stage 3: These banks lent this money to developing countries to encourage huge infrastructure projects, e.g. for building dams, power stations, roads....

↓

Stage 4: By the 1980s, global interest rates had more than doubled – increasing the repayments on the loans of the 1970s

↓

Stage 5: Many of the developing countries could not meet their repayments any more

↓

Stage 6: To prevent a collapse of the world's banking system, the IMF (International Monetary Fund) set up the Structural Adjustment Package (SAP) = a loan reduction. In return, the governments of the developing countries had to cut spending on social programs like health and education.

↓

Step 7: Without accepting SAP no developing country in trouble would get further credit.

↓

Step 8: Compulsory IMF cutbacks on government spending affected the poorest people in these countries most, and led to the production of cash crops for export instead of food crops for the local people. The developing countries got even poorer and more dependent on international aid.

Figure 8.2: The development of debt and poverty

The development gap: debt and the cycle of poverty

Today more than a trillion dollars is traded on global currency markets every single day, but the developing countries remain disconnected from this "flow of money" for a single reason: debt.

Africa is a good example to show how the world's poorest countries got into a debt crisis and became unable to repay their loans. The **World Bank** names 41 countries of the world as heavily in debt and 33 of these countries are to be found in Africa. In her book "A fate worse than debt?"Susan George, a former chief officer of the **World Bank**, explains this vicious cycle of debt in eight stages (see figure 8.1).

The **Heavily In-debt Poor Countries (HIPC)** initiative set up in 1996 by the rich nations through the **IMF(International Monetary Fund)** and the World Bank calls for the reduction of external debt through write-offs by official donors. It was set up for the poorest nations, for whom, according to the World Bank, the debt of the HIPC countries was, on average, more than four times their annual export earnings, and 120 percent of GNP. But the HIPC initiative has been met with a lot of criticism for not actually helping the countries it is supposed to be helping (the indebted nations) while helping those it wasn't necessarily meant to (the rich nations).

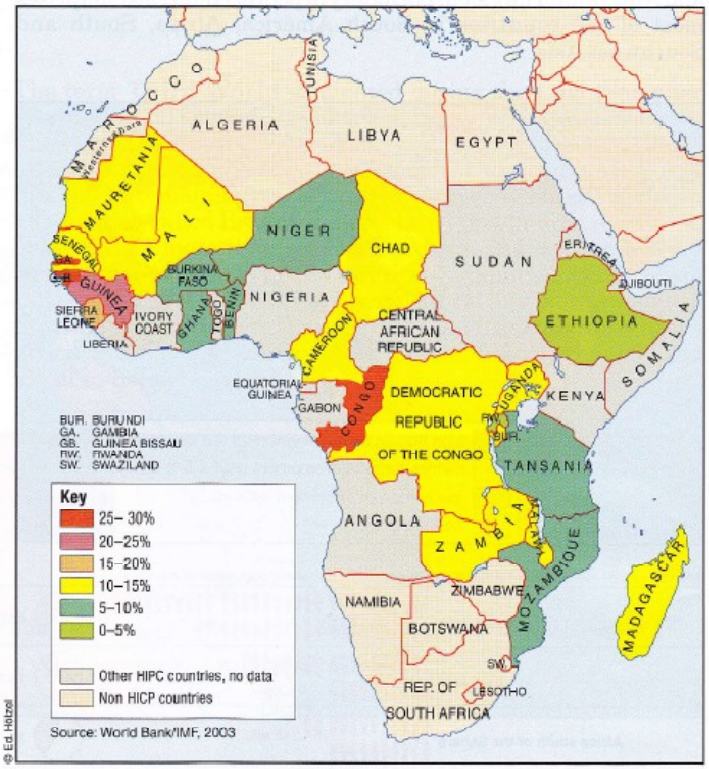

Figure 8.1: Africa's debt burden: the percentage of government income to repay loans (2005).

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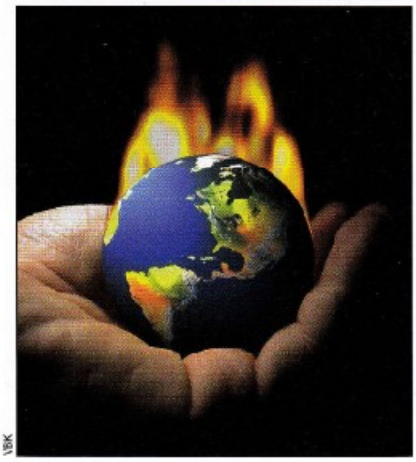
1.6 THE ENVIRONMENTAL IMPACTS OF GLOBALIZATION



In an interdependent world, actions and decisions taken in one area often have impacts on other areas. Economic growth in industrialized countries, international trade, international debt, deforestation, desertification and global warming – they are all linked. One cannot expect a developing country, which is struggling for economic survival, to protect its own natural resources first. As a result, natural resources such as wood from rain forests, fossil fuels, land and water are recklessly exploited to meet economic demands. This, in return, contributes a lot to global climate change and global warming (see figure 10.1).

But the economic growth in highly industrialized countries is destroying entire ecosystems, too. At current rates of economic growth we will need two planet's worth of natural resources by 2050 (see chapter about the ecological footprint).

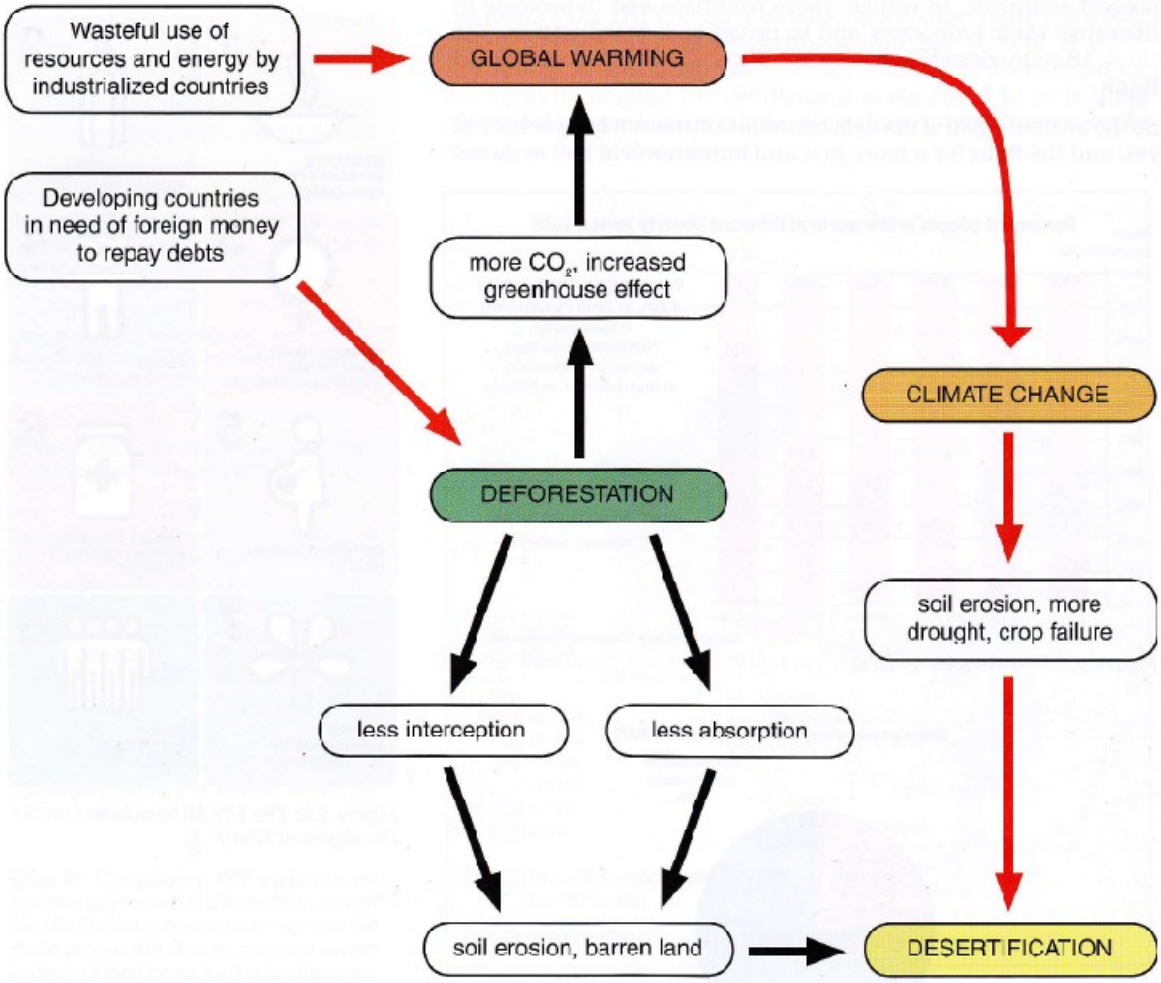


Figure 10.1: The connection of globalization, deforestation, desertification and global warming

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1.9.2 Global Governance – New International Economic Order – the Global Marshall Plan (GMP) – World Social Forum – Attac

Terms of trade

The relationship between the prices of imports and exports. The trend in this century has been for cheap primary products and expensive manufactured goods, and – with the exception of oil – most raw material prices fell very sharply from the mid-1980s. This has happened because large companies from the rich, industrialized nations can dominate and structure internal markets in a way that is denied to small, unorganized Third World commodity producers

(Source: www.answers.com)

The term **global governance** was introduced by a UN-commission in their report "Our Global Neighbourhood" in 1995. There it was suggested that the political interaction of transnational players and independent organizations should be aimed at solving problems that affect more than one state or region. Global governance should thus be a counterbalance to the globalization of the markets.

Global governance does not mean one global government, but may be defined as the cooperation of all formal and informal institutions (governments and non-governmental institutions) on our planet to solve the current problems of globalization by mediating differences and establishing rules and regulations to be observed by all global players.

This concept is a very idealistic one, but nevertheless a possible way of managing change for a better world.

The **New International Economic Order** (NIEO) was a set of proposals put forward during the 1970s by developing countries through the United Nations Conference on Trade and Development (UNCTAD) to promote their interests by improving their **terms of trade**, increasing development assistance, developed-country tariff reductions, and other means. It was meant to be a revision of the international economic system in favour of Third World countries.

The main goals of NIEO were (Source: www.wikipedia.org):

- Developing countries must be entitled to regulate and control the activities of multinational corporations operating within their territory.
- They must be free to nationalize or expropriate foreign property on conditions favourable to them.
- They must be free to set up associations of primary commodities producers similar to the OPEC; all other States must recognize this right and refrain from taking economic, military, or political measures calculated to restrict it.
- International trade should be based on the need to ensure stable, equitable, and remunerative prices for raw materials, and should provide economic and technical assistance without any strings attached.

	2001	2002	2003
oil exporting countries	94	98	107
industrialized countries	102	103	105
take-off countries	98	98	97
developing countries	95	91	94

100: exports = imports
Over 100: export returns have grown more than import costs
Under 100: import costs have grown more then export returns
Sources: UNCTAD Handbook of Statistic 2005; Bundeszentrale für politische Bildung 2006

Figure 30.2: Terms of trade in developing and developed countries

Cash crops: in agriculture, a cash crop is a crop which is grown primarily for the market and for money and not as food for the producer or for private consumption. The most important cash crops in developing countries are coffee, cocoa, bananas, cotton, jute and sugar cane.

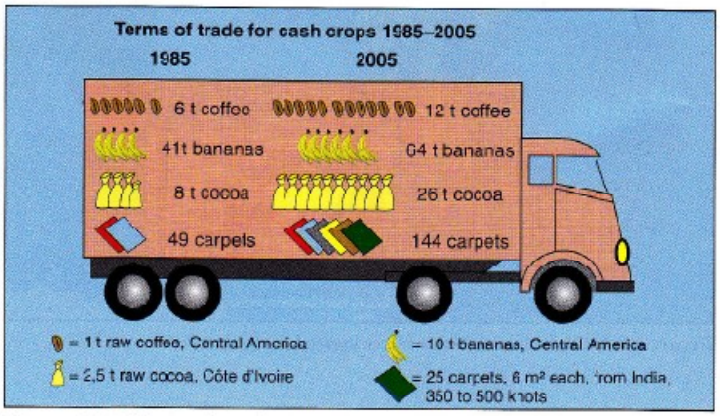

Figure 30.1: Terms of trade for cash crops 1985 and 2005

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The **Global Marshall Plan** is a plan promoted by former American Vice-President Al Gore in his bestselling book ***Earth in the Balance*** which gives specific ideas on how to save the global environment.

"The model of the Marshall Plan can be of great help. For example, a Global Marshall Plan must focus on strategic goals and emphasize actions and programs that are likely to remove the bottlenecks presently inhibiting the healthy functioning of the global economy. The new global economy must be an inclusive system that does not leave entire regions behind. The new plan will require the wealthy nations to allocate money for transferring environmentally helpful technologies to the Third World and to help impoverished nations achieve a stable population and a new pattern of sustainable economic progress."(Source: Al Gore: Earth in the Balance, page 297–301)

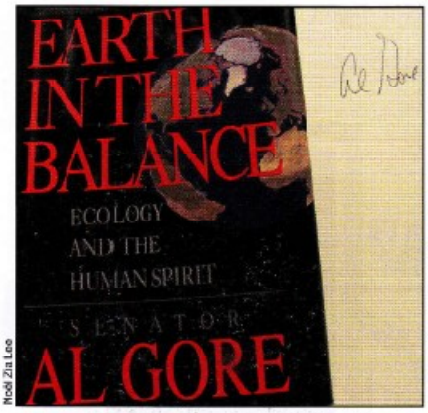
The idea is based on the Marshall Plan that saw the United States send billions of dollars to Europe to rebuild their war shattered economies after World War II.

The **World Social Forum** (WSF) was developed as a response of the growing international movement to neo-liberal globalisation and the effects of neo-liberal economic policies being pursued in most countries. The WSF is not an organisation, not a united front platform, but "...an open meeting place for reflective thinking, democratic debate of ideas, formulation of proposals, free exchange of experiences and inter-linking for effective action, by groups and movements of civil society that are opposed to neo- liberalism and to domination of the world by capital and any form of imperialism, and are committed to building a society centred on the human person". (Source: www.wsfnet.org)

So the WSF is an annual meeting of the anti-globalization (or alternative) globalization movements to coordinate world campaigns, share and refine organizing strategies, and inform each other about movements from around the world and their issues. The first meeting of the WSF was organised in Porto Alegre, Brazil, from January 25 to 30, 2001, to organize opposition to the World Economic Forum held in Davos, which, since 1971, has fulfilled a strategic role in formulating the thought of those who promote and defend neoliberal policies throughout the world.

Attac (association pour une taxation des transactions financières pour l'aide aux citoyens = Association for the Taxation of Financial Transactions for the Aid of Citizens)

In December 1997, Ignacio Ramonet wrote an editorial in Le Monde diplomatique in which he advocated the establishment of the **Tobin tax** and the creation of an organisation to pressure governments around the world to introduce the tax. ATTAC was created on June 3, 1998, during a constitutive assembly in France. While it was founded in France it now exists in over forty countries around the world. In France, politicians from the left are members of the association. Originally a single-issue movement demanding the introduction of the so-called **Tobin tax on currency speculation**, ATTAC now devotes itself to a wide range of issues related to globalisation, monitoring the decisions of the World Trade Organization (WTO), the Organisation for Economic Co-operation and Development (OECD) and the International Monetary Fund (IMF).



Nodi Zia Lee

Figure 31.1: Book cover of Al Gore's book

VBK

Figure 31.2: Scenes from the World Social Forum in Mumbai, India, 2004

Tobin tax: a form of tax on speculative transactions on currency markets, named after the American economist and Nobel Laureate James Tobin, who suggested that already 0.1% of such a tax would bring in close to $100 billion every year. Collected for the most part by industrialized countries, where the principal financial markets are located, this money could be used to help struggle against inequalities, to promote education and public health in poor countries, and for food security and sustainable development.

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5. GLOBAL FINANCE

5.1 THE MONEY MARKET

In a modern economy people, firms and government institutions need to save and borrow money, make payments to others, make investments and exchange the money used in their country to make overseas payments. Business organizations that specialize in providing all these services are called **financial institutions**.

Banks are the best known and most important kind of financial institutions in the money market. They act just like any other business, except the product they supply is money, in the form of loans and other financial products. The basic aim of banks is profit making and therefore banks are some of the biggest and most profitable corporations in the world (see figure 79.2).

Banks can earn their profits in a number of ways:

- **Making loans:** banks attract deposits and savings by paying customers interest on their money. In return they will lend money to other customers, individuals and businesses. These people and firms pay others for goods and services, and those will then deposit or save the money they have received with a bank. In this way the banking system creates money in an economy (see figure 79.1)
- **Charging interest:** the **interest rate** is the cost of borrowing money. There is one basic rule in charging interest: the higher the risk in lending money, the higher the interest rate a bank will charge. A bank will make profit from lending money only as long as loans are repaid and interest rates on loans are higher than interest payments made on savings.
- **Charging fees for bank services**, e.g. ATM cards (**ATM= automated telling machine**), bank cards, credit cards, keeping the accounts, money transfers, internet banking...
- **Investing in other companies and businesses:** dividends, profits from shares.....

The Top 10 Banks ranked in ascending order, based on their market capitalization, according to Thomson Reuters data Dec.2008 (in billions of dollars):

1. ICBC Bank
$206.0 B/ Country: China

2.Bank of America/Merrill
$198.0 B/ Country: USA

3. HSBC
$191.0 B/ Country: UK

4.China Construction Bank
$168.0B/ Country: China

5.JP Morgan Chase
$141.0 B/ Country: USA

6.Bank of China
$123.0B/ Country: China

7.Wells Fargo
$113.0B/ Country: USA

8.Banco Santander
$101.0B/ Country: Spain

9.Citigroup
$98.0B/ Country: USA

10.Mitsubishi UFJ
$87.0B/ Country: Japan

In Austria:

1. Bank Austria 7,26 B
2. Erste Bank/ Sparkassen 6,0 B
3. RZB 4,7 B
4. BAWAG/P.S.K 3,0 B
5. ÖVAG 2,5 B

Figure 79.2: The biggest banks in the world

Banks are financial intermediaries between customers who want to deposit money and customers who want borrow money

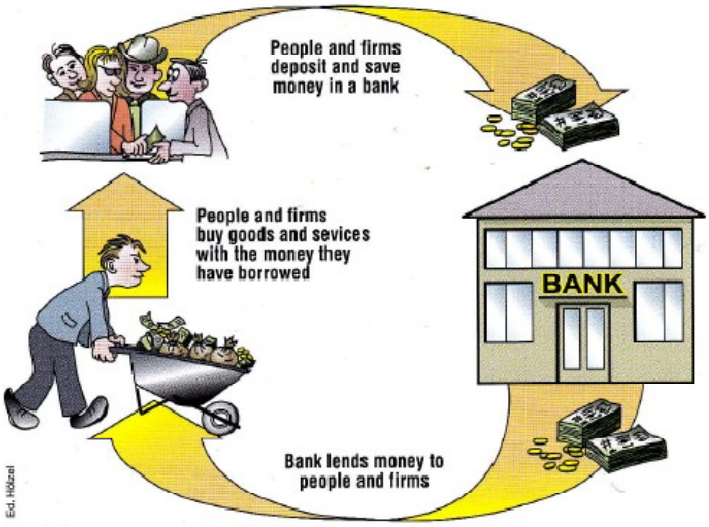

Figure 79.1: Financial circulation in banks

"A bank is a place that will lend you money if you can prove you don't need it." (US actor Bob Hope)

"Banks are to economies what souls are to human beings." (Common saying of economists)

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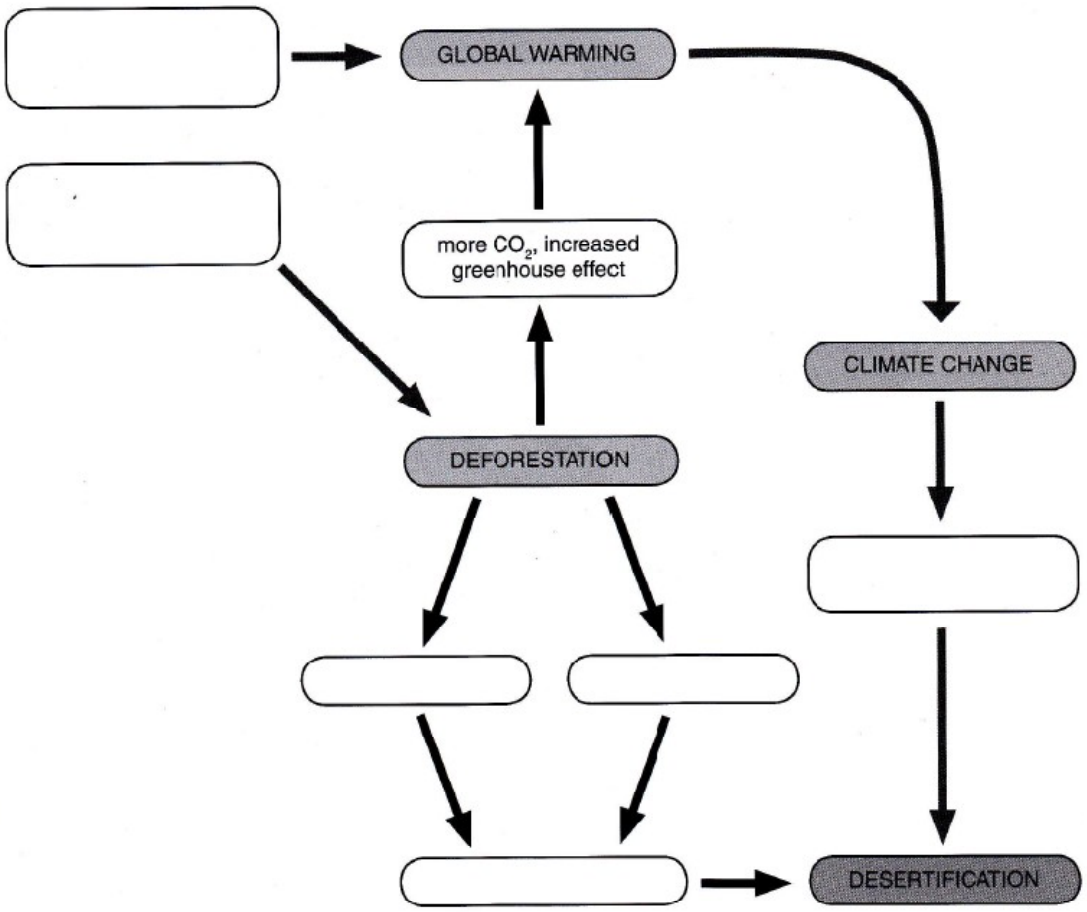
WORKSHEET 3 **GLOBAL WARMING**

TASK: Find the correct text for the boxes in the graph below with the help of you textbook (Fig. 10.1).



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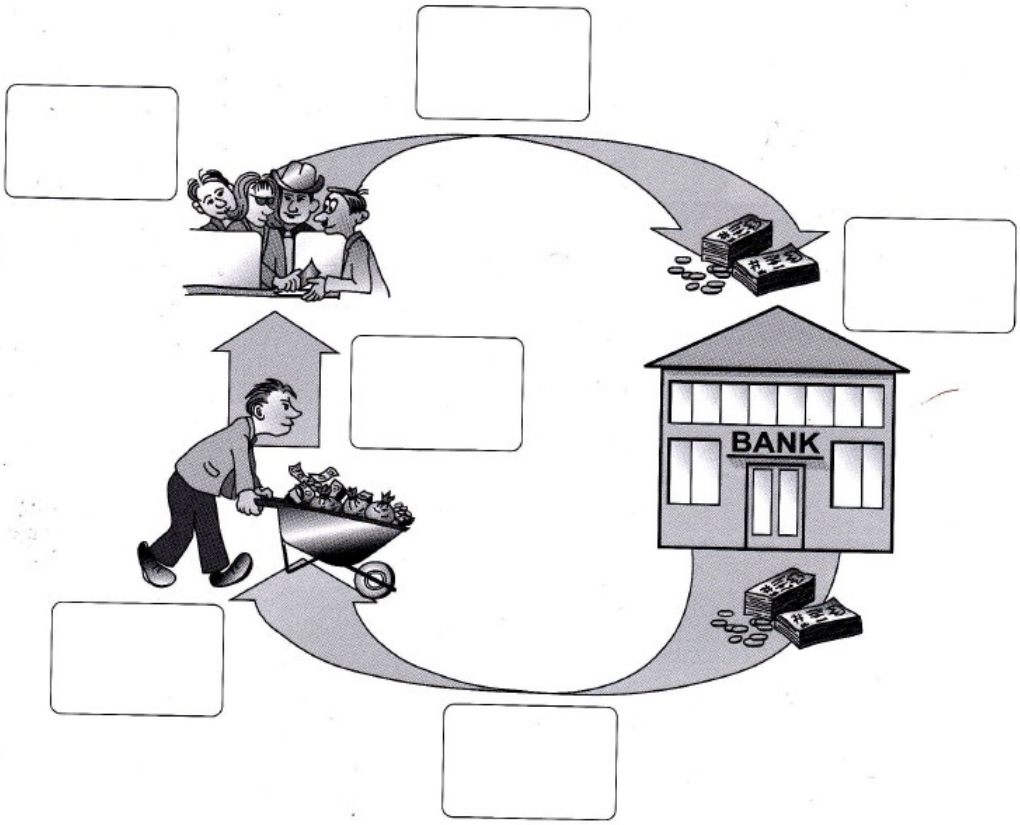
WORKSHEET 13 **THE FLOW OF MONEY**

TASK: Find the correct explanations/ texts for the empty boxes in the picture below with the help of your textbook.



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English summary

“Englisch als Arbeitssprache” (EaA) is currently a very popular concept of teaching within the Austrian education system. As a result, publishers and authors alike have realized the potential market and thus provide an increasing number of teaching materials which is intended to be used for bilingual teaching.

Concerning the Austrian market, a course book series called *Do it in English-Geography* is the only available series which is approbated for the application in Austrian upper secondary classes. The thesis analyses and evaluates this series via an in-depth analysis. In order to provide a point of reference concerning other possibilities to design materials for bilingual education, the *Diercke Geography for bilingual classes* series is also analysed and evaluated.

In a theoretical part, the thesis discusses the origins and basic principles of CLIL as well as some important foundations of subject didactics in geography and economics. In a further step the two components are brought into convergence and thus important theoretical principles are deducted. Additionally, relevant methods of analysing and evaluating teaching materials are discussed.

The practical part of the thesis constitutes an evaluation of important features of both course book series and makes explicit the differences in organisation, task-design, the structure of chapters, the access provided into the content, as well as implied principles and aims of the two course book series.

The last part of the thesis is an evaluation which is based on a catalogue of modified didactic criteria associated with CLIL as well geography and economics. In the course of the evaluation it is unveiled that the *Do it in English-Geography* series shows severe deficits in realising the high standards of the CLIL paradigm and neglect fundamental principles of bilingual education as an overall concept. In comparison, the *Diercke Geography for bilingual classes* series show a much more considerate design and are clearly superior to their Austrian counterparts, as far as the realisation of the principles behind CLIL is concerned, although there is room for minor improvements.

As a conclusion, the thesis postulates that the *Do it in English-Geography* books are a set of materials which insufficiently support effective teaching in a bilingual setting, while the *Diercke Geography for bilingual classes* series constitutes a useful basis for teaching CLIL.

German summary – Deutsche Zusammenfassung

Englisch als Arbeitssprache (EaA) ist gegenwärtig ein sehr beliebtes Unterrichtkonzept innerhalt des österreichischen Schulsystems. Aus diesem Grund erkennen Verlage und BuchautorInnen gleichermaßen die Potenziale des Marktes und produzieren eine stetig steigende Zahl an Materialien, welche für den bilingualen Unterricht gedacht sind.

Im Bereich des österreichischen Marktes stellt die Schulbuchreihe *Do it in English-Geography* die einzige für die Anwendung in der Oberstufe approbierte Serie dar. Die Diplomarbeit analysiert und evaluiert diese Buchreihe qualitativ. Um einen Orientierungspunkt für mögliche Alternativen im Bereich der allgemeinen Konzeption von bilingualen Materialien zu ermöglichen und vergleichend zu arbeiten, wird die Buchreihe Diercke Geography for bilingual classes ebenfalls analysiert und evaluiert.

In einem theoretischen Teil diskutiert die Arbeit die Ursprünge und fundamentalen Prinzipien von CLIL, sowie wichtige Grundpfeiler der Fachdidaktik in Geographie und Wirtschaftskunde. In einem weiteren Schritt werden diese beiden Komponenten zu einer Konvergenz gebracht und somit theoretische Prinzipien abgeleitet. Des Weiteren, werden relevante Methoden der Analyse und Evaluation von Unterrichtsmaterialien diskutiert.

Der empirische Teil der Diplomarbeit besteht aus einer Analyse von wichtigen Charakteristika beider Schulbuchreihen und zeigt Unterschiede in der Organisation, des Arbeitsaufgabendesigns, der Struktur der Kapitel, der Unterstützung im Umgang mit dem Lehrstoff, sowie der den beiden Buchserien unterliegenden Prinzipien und didaktischen Ziele.

Den letzten Teil der Arbeit bildet eine Evaluation basierend auf einem Katalog modifizierter Kriterien, welche sowohl mit CLIL als auch mit Geographie und Wirtschaftskunde in Verbindung stehen. Im Zuge der Evaluation wird aufgezeigt, dass die *Do it in English-Geography* Buchreihe erhebliche Defizite in der Umsetzung der hohen Standards des CLIL-Paradigmas aufweisen, sowie fundamentale Prinzipien des bilingualen Unterrichts als didaktisches Konzept vernachlässigen. Im Vergleich dazu zeigt die *Diercke Geography for bilingual classes* Buchreihe eine viel durchdachtere Konzeption und ist seinem österreichischen Pendant, soweit es die Realisierung der Grundprinzipien von CLIL betrifft, überlegen, obwohl auch hier noch kleine Verbesserungen möglich wären.

Die Conclusio der Arbeit postuliert schließlich dass die *Do it in English-Geography* Bücher Unterrichtsmaterialien darstellen welche nur ungenügend einen effektiv durchgeführten bilingualen Unterricht unterstützen, während die Diercke Geography for bilingual classes Serie eine sinnvolle und brauchbare Basis für einen Unterricht gemäß des CLIL-Paradigmas darstellt.

Curriculum Vitae

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Mai/Juni 2010	Leitung des Geographiekurses an der Danube International School
Juli 2009	Ferialjob bei der Intervet GesmbH im Bereich der Bulk Production (Selbstständige Durchführung einer Prozessanalyse)
Februar 2009	Übersetzungstätigkeit für die Österreichische HochschülerInnenschaft: Übersetzung der Broschüren „Studieren und Wohnen“ sowie „Studieren in Österreich“ ins Englische

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