UNDERSTANDING READING DEVELOPMENT:
A PHENOMENOLOGICAL PERSPECTIVE

Abstract. The starting point of this article is a challenge presented to the research community in recent reviews of reading research and practice (Alexander & Fox 2004, 2008; Fox & Alexander 2009). That challenge is twofold in that it argues for the need for a unifying theory of reading that not only entails an expansion of the concepts of "text" and "reading" but is also capable of accounting for reading development throughout life. The present article compares and contrasts Alexander's own attempt at taking up this challenge – the Model of Domain Learning (MDL) – with a general model of skill development – the Skill Model – which is rooted in a phenomenological understanding of being-in-the-world. The MDL is based on concepts that are generally accepted in the dominant reading-research community, meaning that the choice of concepts and dimensions to be included in the model represents a characteristic cognitive bias despite its explicit rejection of traditional expertise research. The Skill Model is put forward as a meaningful and promising framework based on an alternative understanding of "expertise" and "expert performance" in general that might provide fruitful answers to this and other challenges of current reading research.

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1.   INTRODUCTION

In their review article "A Historical Perspective on Reading Research and Practice", Patricia Alexander and Emily Fox (2004) describe dominant and rival views over 50 years of reading research and practice[1] as well as pointing out key challenges for future research. The most important challenge, they say, is to obtain a far better idea of the complexity of reading development. Such an idea should be anchored in an overarching theory of reading and reading development that makes it possible to see different aspects and perspectives of reading research as complementary rather than solely conflicting. Specifically, they argue that the initial stages of reading acquisition (*learning to read*) should not be investigated in isolation from the issues emerging when comprehension (*reading to learn*) becomes the focus (Alexander & Fox, 2004; cf. Chall, 1983). The authors call for a "grand theory" of reading development "that looks broadly at the nature of reading across the lifespan" (Alexander & Fox, 2004, p. 58). This call for a theoretical reconceptualisation is further emphasised in an article by the same authors on text-comprehension research (Fox & Alexander, 2009), where they address the rapid expansion of what counts as texts and reading in our digital age. Their answer is partly general in that they suggest that, rather than expanding existing models, we should reframe text comprehension; and partly specific in that they state that a better understanding of reading development would be an appropriate starting point.

Alexander's and Fox's own contribution to a better understanding of reading development is the *Model of Domain Learning* (MDL) (Alexander, 2000, 2003a, 2003b), which concerns text-based learning, in which reading is obviously an essential part. More recently, this model has also been more heuristically attributed to reading as a domain in its own right (Alexander, 2006; Fox et al., 2005). The MDL is based on expertise research, but with important reservations: Alexander claims that, by including motivation as a dimension in her model, she has at least taken a step towards addressing the limitations of the "coldly cognitive perspective" (Alexander, 2003b) of traditional expertise research and its division of readers into categories from "novice" to "expert". Those limitations and ways of overcoming them are the core topic of the present article. The MDL may represent the most comprehensive answer from the heart of traditional reading research – but given that it comes from that position, it is bound to move only in small steps away from paradigmatic bonds and boundaries.

In their general challenge to the research community, Fox and Alexander mention phenomenological perspectives as a promising frame of reference for text comprehension. The main objective in what follows will be to try to answer this challenge by adapting a phenomenological model of skill acquisition to reading. The *Skill Model* as presented by Hubert and Stuart Dreyfus (1986) is a general model of learning and skill acquisition which is rooted in a phenomenological understanding

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[1] *The five eras identified by the authors are: the Era of Conditioned Learning (1950–1965); the Era of Natural Learning (1966–1975); the Era of Information Processing (1976–1985); the Era of Sociocultural Learning (1986–1995); and the Era of Engaged Learning (1996–present).*

of our being-in-the-world. This model was originally designed as an example to demonstrate the inadequacy of early expertise research – more specifically, to illustrate the naivety underlying the ambition of creating artificial intelligence. It is thus not intended as a corrective to certain ramifications of the strong cognitivist dominance in expertise research – or, for that matter, in traditional reading research.[2] Rather, it represents an alternative framework for understanding the same phenomena. As such it might be an appropriate basis for the kind of fundamental reconceptualisation that Fox and Alexander call for.

In what follows, I will present and comment on the two models as a starting point for a discussion on what the phenomenological perspective might offer to our understanding of reading development. The MDL as applied to reading is a successful model, with several characteristics of the good model: it is based on existing knowledge about expertise, learning and reading; it is reasonably easy to understand; and it seems able to facilitate our understanding of real readers in practice. The Skill Model, on the other hand, derives from a seemingly complex framework of philosophical reasoning and is primarily a defence of human judgement as fundamentally different from the calculative rationality of the computer. It has not yet been validated as a model of reading and reading development; this will be a matter for future research. Nevertheless, it does provide valuable critical and constructive perspectives on a potential grand theory of reading development. First of all, it is based on a general theory about how we interact with our environment and how this interaction develops with experience. Second, it gives thought-provoking answers to questions of crucial importance to future reading research, for example "What and who is a reading expert?"; "To what extent is strategic behaviour the hallmark of reading expertise?"; and "How should we conceive of engagement – or involvement – in the study of reading?". I will return to these questions in the discussion below.

2. THE MODEL OF DOMAIN LEARNING (MDL) AND READING DEVELOPMENT

The MDL is explicitly related to the more general study of expertise (Alexander, 2003a). The most interesting part of the relationship between traditional expertise studies and the MDL, however, is in fact the *differences* compared with traditional expertise studies on which the MDL's creators place special emphasis. Those differences concern the following: "1) overarching purpose, 2) targeted domains, 3) factors considered, 4) nature of comparisons made, 5) underlying assumptions, 6) beliefs about schooling, and 7) process/product perspectives" (Alexander, 2003b, p. 4f.).

The nature of these differences can be summed up as follows. First, the overarching purpose of the MDL is making smarter students rather than smarter machines. Second, the MDL targets text-based learning in academic domains rather than fun-

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[2] *To obtain an idea of this tendency, see the "state of the art" issue of Applied Cognitive Psychology – Advances in Text Comprehension: Model, Processes and Development (Verhoeven and Perfetti, 2008). Finn Egil Tønnessen also addresses this tendency more comprehensively elsewhere in this issue.*

damental principles of problem-solving. Third, the MDL represents "at least a step toward" addressing motivational and sociocultural factors along with the traditional "coldly cognitive perspective" (Alexander, 2003b, p. 6). Fourth, the MDL concerns itself with the developmental journey from acclimation to expertise rather than with the contrast between novice and expert performance. Fifth, where traditional expertise researchers seem to assume that all students have the ability and desire to become experts, the MDL is based on the more realistic assumption that few will ever move beyond the level of competence. Sixth (in part as a consequence of the assumption just mentioned), the MDL accepts that the K-12 system is not equipped to create experts, but an understanding of expertise development is seen as important for teachers performing their role as guides for learners at different levels. And seventh, the focus of the MDL is on the process of change and the causes of differential performance just as much as on expert performance as the ultimate product of that process.

The MDL has gone through several revisions and refinements since it was first presented in 1994 (Alexander, 2003b). In its current, mature state it is based on three stages of development (acclimation, competence and proficiency/expertise) and three dimensions (knowledge, interest and strategic processing) with subcomponents to each. The three dimensions are rooted in the heart of reading research and psychology, and they have been thoroughly reviewed and refined for the purpose in question (cf. Alexander, Schallert & Hare, 1991; Alexander, Graham & Harris, 1998).

When it comes to the three stages of development, the middle one – competence – is subdivided into early, middle and late competence. Development through these stages is defined by reference to the three dimensions. Knowledge is divided into more general *domain* knowledge and more specific *topic* knowledge. Interest is divided into *individual* interest (where motivation stems from an internal drive towards mastery of a domain) and *situational* interest (where motivation stems from the external stimulus of the actual situation). Strategies are divided into *surface-level* strategies (those giving readers access to the message of the text) and *deep-processing* strategies (those involving a personalisation or transformation of the message, for example by relating the text to prior knowledge).

These dimensions are used to demarcate the three stages of development, in the following manner. At the *acclimation* stage, the student has little domain knowledge. Acquiring such knowledge is a central task which demands a great deal of mental effort, meaning that mainly surface-level strategies will be used. Situational interest (i.e. external motivation) is quite important at this stage, where everything seems new to the student. At the *competence* stage, the student will have a growing amount of principled knowledge, i.e. knowledge with a more coherent structure. At the same time, the student's ability to use deep-processing strategies will grow as problems and tasks typical of the domain become increasingly familiar. With fluency in performing tasks that seem difficult at the acclimation stage, it becomes possible for students, "if they so choose, to delve into such tasks and reach beyond the surface elements or requirements, through the application of deep-processing strategies" (Alexander, 2003b, p. 14). The MDL links this change in knowledge and strategy use to a concomitant increase in individuals' interest in the

domain as such and a decrease in their dependence on what might be interesting in the current situation. Consequently, competent performers are more motivated from *within* than from *without* (Alexander, 2003b, p. 15).

Development in relation to any one of the three components may propel a student from acclimation to competence, according to Alexander. The transition from competence to proficiency/expertise, however, requires a synergy of forces. What is needed is "[…] highly rich and principled knowledge, effective and efficient use of strategies, particularly deep-processing strategies, and a personal identification and investment in the domain" (Alexander, 2003b, p. 15).

On the basis of the three dimensions and three stages of the model, Alexander suggests six learner profiles[3] – instead of the common categorisation into "good and poor" or "successful and struggling". These profiles represent varying *degrees* of success or difficulty, rather than a simple dichotomy, and students have different needs depending on their profile. For teaching purposes, those profiles seem to offer a very promising approach when it comes to providing each student with adequate challenges.[4]

An even more valuable aspect of the MDL as a whole is the underlying ambition of conceptual simplicity and consistency. It is a model which seems to have immediate relevance to the field of practice, and at the same time it is a model which is based on a thoroughly considered selection of precise and stringent concepts that have explanatory power in the field of theory as well. It is not a pragmatic frame of reference which has value simply because it works. Rather, it is a tight theoretical framework which has been popularised and adapted to practical usage in an exemplary manner. What we have here is a large degree of consistency between theoretical assumptions and practical implications: theory and practice co-operating.

I find the MDL to be a highly consistent and transparent approach to understanding academic development in general and reading development in particular. Nevertheless, the model rests on assumptions to which attention must be brought in order for us to progress on the path towards a unified theory of reading development. In fact, even with its reservations towards traditional expertise research, the MDL remains highly intellectualistic. The Skill Model to be presented here might offer a contrasting view on central aspects of such an overall theory. Starting from our being-in-the-world, it represents another approach to understanding how we develop our skills and abilities. In this model, knowledge is regarded as more contextualised, and the terminology used is less biased in favour of the mind: it is acknowledged that being in the world is more than just calculative rationality.

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[3] *The learner profiles are: 1) highly competent learners, 2) effortful learners, 3) knowledge-reliant learners, 4) non-strategic processors, 5) resistant learners and 6) seriously challenged learners (Alexander, 2003b, pp. 17ff.). In the MDL as applied to the domain of reading, "learners" is simply replaced by "readers" (cf. Alexander, 2006).*

[4] *In a Norwegian context, while we do talk about meeting the individual student and acknowledge that all students should have reading challenges, we largely trust that situational motivation will be the key to progress for all students; to the extent that reading strategies are part of instruction, they are taught to all students. Alexander's profiles imply a more selective and probably far more precise use of different approaches compared with the typical Norwegian way.*

3. THE SKILL MODEL

The Skill Model has a great deal in common with the MDL, at least when applied to the field of practice. Both models are concerned with, and based upon, an understanding of expertise and the path towards it. Both emphasise the simple yet crucial realisation of the significance of experience with representative tasks within a given domain. Experience is a precondition for advancement, and motivation and personal interest are crucial in the process of gaining such experience. Both models show how independence and steadiness of performance in a domain develop from the novice's first encounter with the domain to expert performance. The similarities between the two models are thus quite obvious – but so the differences prove to be when we have a closer look. In the following, we will first consider the Skill Model and its phenomenological foundation.

The Skill Model describes five levels of skill development guided by instruction:[5] novice, advanced beginner, competent, proficient and expert. Skill development according to this model may be displayed in a matrix with reference to skill levels and four aspects determining the level of skill: components, perspective, decision and commitment. This way of representing change is reminiscent of Alexander's three empirically rooted dimensions, but we should bear in mind that the aspects used here are more heuristic in nature.

Skill level	Components	Perspective	Decision	Commitment
Novice	Context-free	None	Analytical	Detached
Advanced beginner	Context-free and situational	None ["experienced"]	Analytical	Detached
Competent	Context-free and situational	Chosen	Analytical	Detached understanding and deciding. Involved in outcome *[Risk]*
Proficient	Context-free and situational	Experienced	Analytical	Involved understanding. Detached deciding
Expert	Context-free and situational	Experienced	Intuitive	Involved

(Dreyfus and Dreyfus, 1986, p. 50.)

Components here refers to all the parts constituting the domain, from the smallest to the largest ones, and the values of "context-free" and "situational" refer to the nature to the person's relationship with those components. A novice at chess must first learn to recognise the pieces, which are the most elementary components of the

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[5] *The model is universal, typically explained with examples from chess and car driving. The transfer to the domain of reading is my responsibility.*

chess domain, in order to be able to use them in different situations. When it comes to the reading of alphabetical writing, it seems reasonable to conceive of the letters as the most elementary components of the domain. It is possible in theory, and with certain obvious reservations it is also meaningful, to imagine a student encountering letters without prior experience of them. In such a hypothetical – or even archetypal – case, the novice reader must learn to recognise each letter as a context-free component in order to be able to make or understand meaningful combinations of them. Very quickly, though, and in most real cases even before the start of explicit literacy education, letters will be associated with the specific contexts of texts, reading, writing and so on. At this point of the argument, however, any discussion of whether we can say that the letters may be regarded as context-free elements will lead us astray. I think the model allows a pragmatic view to be taken of the significance of pre-reading experience, and it is compatible with a balanced approach to literacy education (cf. Presley, 2002).[6] What the Skill Model describes is a common guided path towards expertise. Given that explicit teaching of each letter is also very often the first step into the school domain of literacy, it should be possible, with some reservations, to conceive of letters as being relatively context-free components at a certain point of the learning process.[7]

The situational components of written language can be viewed on a continuum ranging from the word through the word limit, the phrase, the sentence, the paragraph and the text, towards extra-textual phenomena such as genre, discourse and writing culture. However, the most fundamental change as regards the component aspect of skill development is the leap from context-free to situational components. Further development here means expanding experience with meaningful situations. We thus see that, applied to reading, the model acknowledges the importance of code mastery as a leap from being outside writing to being inside it. At the same time, it links issues of coding to the processes of understanding in a way that suggests a developmental connection: the acquisition of code mastery is probably one of the most important events in reading development, but this is true only *in the first phase* of the learning process. The Skill Model thus includes and contextualises reading research focusing on phonology and code issues, which means that it allows the best ideas from the Phonics and Whole Language approaches to co-exist in a common frame of reference.

Perspective is about a person's position in relation to the situation – a synonym could be "point of view". The novice has not yet acquired a perspective on the domain in question. Instruction for the novice involves the presentation of simple rules that will enable him or her to identify the components of that domain. The advanced beginner will have gained experience enabling him or her to recognise whole situations – in the case of reading, say, short and highly frequent words. At that point, students can be given instructions that would be incomprehensible to persons without such experience. Dreyfus and Dreyfus use Polanyi's concept of *maxims* (Po-

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[6] *Goodman's idea of reading as a psycholinguistic guessing game is worded in ways that are surprisingly close to the Skill Model; e.g. Goodman, 1967.*
[7] *Alexander's term "acclimation" is a good metaphor for this early phase of literacy acquisition.*

lanyi, 1974, p. 30f.; Dreyfus, 2001, p. 34) for complex rules that presuppose a certain familiarity with the domain, as opposed to *rules*, which are completely explicit. Such familiarity or *tacit knowledge* is an essential part of *experience* and is what makes it possible to understand meaning which is not fully explicit.

The advanced beginner gains a great deal of experience with situational components of the domain, and the tasks that he or she is able to perform grow increasingly complex. At a certain point, however, the relationship between experience with situational components and the tasks at hand will become too complicated and messy. At this point it is necessary to find ways of organising the accumulated experience, which has now become overwhelming. The student must learn to make choices, to focus on the most important aspects and to organise his or her understanding of the situation accordingly: he or she must learn to *choose* a plan or perspective in order to grasp the complexity of the situation in the most adequate way. Practice with making choices will enable the student to recognise situational entities of a new order and to discriminate between them based on his or her experience with choosing perspective. In the case of reading, this could be, say, a matter of text complexity. A student who can read, with fluency and comprehension, texts that are adapted to his or her age and ability will have to work more methodically – or according to a plan – in order to understand more difficult texts in unfamiliar genres and about unfamiliar subjects. Explicit instruction could enable a student who had never seen a drama text to figure out how it works by identifying components such as stage directions, the list of characters and the indications as to which character is supposed to say what lines. This means seeing beyond texts as mere content and seeing genre as a way of organising the world of texts. By contrast, a more experienced reader will immediately, without having to read any words, recognise a drama text from its characteristic layout.

Decision is best conceived of in its connection with perspective. If perspective relates to the situational input, then decision relates to some sort of output, to what is done. The Skill Model leads to an understanding of the expert as someone who, under normal circumstances, because of his or her experience immediately does the right thing at the right time. This is the meaning of *intuitive* in the matrix above, and there is nothing mystical about it. It is simply a way of emphasising that experience makes it possible to act without thinking because of the connections that have formed between situations experienced and responses to them that have proved to be adequate. Where the expert recognises the situation as a whole and identifies the most adequate response, the proficient performer still needs to deliberate his or her decision. The proficient performer recognises situations and discriminates between them, but does not yet have enough experience with decision-making – with what works and what does not – to be able to act intuitively like the expert. The competent performer also recognises the situation by means of deliberation, on the basis of a chosen perspective or plan.

Decision is one of the more difficult aspects of the Skill Model to apply to reading.[8] However, if we relate it to the degree of analytical deliberation and control necessary for action, it seems to make sense. The fighter pilot does not double check his or her instruments, and the expert chess player has no need to explicitly calculate moves further ahead. Both of them immediately know what to do.[9] The reader who immediately recognises a text as a drama also acts like an expert. The proficient performer would also recognise the characteristics of the genre, but would probably be more inclined to check methodically whether he or she was right. The competent performer would have to determine the genre on the basis of an analysis. The advanced beginner might in fact have seen a drama quite recently, and thus behave like an expert on a single occasion. However, over time the lack of experiential breadth and depth would make it impossible for the advanced beginner to perform consistently with the accuracy of the expert.[10]

The last aspect – *commitment* – is important since it represents the most explicit link to the underlying theory of the model, and also since it provides a link to current reading research in what Alexander calls the Era of Engaged Learning. Commitment here relates to the nature of the performer's presence in the ongoing event. *Involvement* means being immersed in the moment of the situation while *detachment* means relating to the present moment from an analytical distance. One way of illustrating the difference between involvement and detachment could be to use an analogy with a car. What makes a car move is the interconnection between engine and driving shaft. We can have any degree of engagement from disengagement via riding the clutch to full engagement. The engine and the driving shaft are connected at an interface, similar in a sense to that between an individual person's experience and the situation around him or her. A person who suddenly finds him- or herself in a situation that is fundamentally unfamiliar and incomprehensible will experience being totally disengaged, while a person doing everyday trivialities, such as getting out of bed or brushing his or her teeth, might be fully engaged. Riding the snowboard might feel terribly strange the first times you do it, whereas experts are able to be fully engrossed and simply be in the flow of the moment. The history professor will examine and evaluate a new textbook in no time, while the history student might

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[8] *There are, however, suggestions to be found elsewhere. Consider, for example, Roland Barthes's understanding of writing as a general performative act, also related to the reader's understanding of the text (Barthes, 1988, p. 170f.).*

[9] *Post-rationalisations often blur this picture. Experts interviewed about their performance seem unable to make explicit the true nature of their ability. What is at hand is what is in the head: when explaining their involved action of the moment, their explanations tends to include linear chains of processes; the space of the body is thus transformed into the time of the mind. It is therefore very likely that an expert will confirm assumptions of rational deliberation and planning. Even non-experts will be likely to understand their own performance in terms of what they know about such performance. This simple insight is also very important for the field of reading research, where the use of think-aloud protocols remains a common method for gaining knowledge about the reading process.*

[10] *In the matrix above I have added "experienced" in quotation marks as characteristic of the advanced beginner's perspective. This is intended as a reference to this kind of "quasi-expert" behaviour.*

spend a year grasping the contents of that book. A major point of the Skill Model, then, is that skill development is a movement away from laborious and slow analytical processing towards smooth, efficient and effortless action; from detached calculation and planning towards involved, immediate response; from the explicit knowledge of the mind to the tacit knowledge of the body.

Maurice Merleau-Ponty's understanding of our bodily being-in-the-world is the theoretical frame of reference for the Skill Model and thus for understanding the link between the individual performer of a skill and the specific situation (Dreyfus & Dreyfus, 1986; Dreyfus, 1996, 2001; Merleau-Ponty, 2006). *Biologically*, the body is oriented towards self-preservation. In *physical space*, we position ourselves with certainty and we acquire the ability to manoeuvre in and manipulate our surrounding environment. As we grow in experience we acquire motor skills which become habits that require no cognitive effort. The use of tools is a way of extending the reach of the body into a *cultural world*. On all these levels – biological, physical and cultural – the individual being is linked to his or her environment. According to Merleau-Ponty's phenomenology, the individual is thus essentially rooted in his or her manifold interfaces with the world. This theory is often referred to as an *ecological ontology*, and in my view it constitutes a promising framework for the ambition of bridging gaps and combining the best from different eras of reading research.

Hubert Dreyfus describes the relationship between individual and environment using the concept of *affordance* (Dreyfus, 1996). Different situations entail different possibilities and thus solicit certain kinds of behaviour (involving more or less active or conscious responses from the individual depending on his or her level of experience): a steep hill calls for adjusting the angle between the body and the ground; a trained carpenter has acquired a sensitivity for how the hammer should be used in various situations; ice on the water calls for skates rather than dancing shoes for those familiar with the phenomenon. Different situations and physical surroundings thus have different affordance, and the more experience you have as a proficient performer in a domain, the more adequately you are able to respond to situational solicitations within that domain. As already mentioned, our use of tools as extensions of our body can be said to create a cultural life-world, and it can be claimed that our use of speech gives rise to a life-world of language or discourse. It would not seem unreasonable to conceive of written language as another life-world, and of reading as responding to the solicitations of texts.[11]

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[11] *Cf. Don Ihde on relationships between humans and technology in his book Technology and the Lifeworld. From Garden to Earth (Ihde, 1990), where he describes three kinds of relationships: 1) technology as an extension of the body (embodied); 2) technology as a thing that must be interpreted (hermeneutic relationship); and 3) technology appearing to us as an Other (technological alterity). Ihde regards spoken language a part of the natural human since it can be imagined to have existed even in the Garden [of Eden], and writing as a technological extension of the world. At first, writing must be translated, interpreted, because there is nothing in the written signs themselves to indicate the meaning of what we are reading. We can, however, become so familiar with the technology of writing that the human–technology relationship concerned is better described as embodied. A further interesting question here is whether spoken language does not in fact also possess the characteristics of a technology as a result of its being between humans and something else – a represented world.*

Experience with similar situations is thus important for the ability of our body to respond adequately to situations we encounter. The experienced performer may be totally engrossed in what he or she is doing. Athletes often refer to "flow" when they are describing such cases of full immersion in the moment, or to "full involvement". The novice will neither be able to recognise the possibilities of the situations, nor be able to respond to them. He or she needs explicit rules specifying what is what in the situation he or she is facing. The advanced beginner may *feel* experienced but will soon be overwhelmed by the complexity of this growing experience. Between the levels of advanced beginner and proficiency, the performer develops competence as well as the characteristic ability to chose a perspective and to follow a plan in determining what is most important. These are analytical procedures leading to a decision. With the making of a choice, however, comes responsibility for the outcome of this choice. According to the Skill Model, experience with the *risk* inherent in making a choice is decisive for further development: responsibility for the choice made entails anxiety over having made a bad choice and joy if the choice turns out to be a good one.

Risk and the associated emotional engagement is thus an important prerequisite for building experience with situational entities. Experience of this kind enables us to recognise different situations and discriminate between them on the basis of tiny contextual differences. Rather than being a static stage, competence thus seems more like a transitional phase from having a skill based on cognitive processing of explicit rules and detached analytical procedures towards a qualitatively new way of handling domain-specific situations. There is a change of perspective, from having a chosen plan to using experience-based recognition and discrimination. Eventually, a performer may be able to act intuitively, simply doing the appropriate thing at the appropriate time in an appropriate way. Emotional involvement deriving from responsibility is the key to this transition from detached analytical thinking to involved action.

The MDL and the Skill Model, and their underlying theoretical frameworks, both concern themselves with expertise and the developmental path towards it, but there are major differences between them. If the concept of expertise is to provide a common framework for a unified theory of reading development, those differences should be sorted out. The discussion that follows will address three central aspects: different conceptions of expertise, different perspectives on rules and strategies as cognitive support, and finally different conceptions of engagement or involvement

4. DISCUSSION

Who and what is an expert?
Most people will have an opinion about what expertise is and will probably mention experience, knowledge and *fingerspitzengefühl* as characteristic features. It would also not be surprising if expertise were associated with being able to do something that not anybody can do. The MDL reserves the term "expertise" for specialists and specialised readers such as professors of comparative literature or history, or indeed reading researchers, meaning that their use of the term is compatible with the every-

day understanding of it. The Skill Model builds on another conception of expertise, where the flow and mastery of everyday coping constitute a frame of understanding.

The MDL's conception of an expert is as the endpoint of development, a level of performance that most school students will never reach. From Alexander's pragmatic perspective, the aim of school should instead be to bring as many students as possible to higher levels of competence. Insofar as we are talking about practice and practical ramifications, it is impossible to disagree with this way of thinking. Insisting on calling the students "experts", or claiming that competence is nothing but a transitional phase along the path towards proficiency and expertise, would amount to playing silly word games. What we are discussing here, however, is the theoretical framing of such practical considerations. And from this perspective, there appears to be not just a superficial difference in the use of certain words but a "paradigmatic gap" between the MDL and the Skill Model. A closer look at the ramifications of being on either side of that gap shows some interesting differences.

Even if the two ways of using the term "competence" are not directly comparable, the difference between them is strikingly symptomatic. Whereas the cognitive frame of reference of the MDL is comfortable with the competent performers' behavioural strategies, the Skill Model stresses the need to reach beyond competence in order to be able to work with ease. This difference also affects the conceptions of "expertise", in which the Skill Model sees the possibility of effortless action based on experience and familiarity whereas the MDL sees even more advanced strategies and more explicit knowledge. The expert of all experts in the field of reading, from the perspective of the MDL, is thus the reading researcher (Fox et al., 2005), because of his or her knowledge about reading as such. At this point we should beware of the danger of going full circle: theoretical experts define the structure and features of what reading is, and then go on to define an expert at reading as someone who *knows* what the theoretical experts know. Considering how deeply dominated the field of reading research is by cognitive theories of representation, models and flow charts where cognitive processing is described as a temporally ordered sequence, and also considering the prevalent assumptions about the great importance of meta-knowledge about all this, we definitely seem to have a circle. Against this alleged cognitive circle it could be argued that, with time and experience, strategies are automatised and knowledge is chunked and thus made easily available. Nevertheless, however, the concepts in use do reveal a cognitive bias in the theoretical frame of reference of the MDL. Where the Skill Model suggests a transition from knowing to doing and adds the dynamic of a fundamental change taking place on the way towards familiarity and the ability to cope without strategic reasoning, the importance of strategies and theoretical knowledge binds the MDL to cognitive processing and to the logic of the calculating mind.

The Skill Model challenges the widespread assumption that problem-solving and analytical procedures are distinctive features of expertise. Where the MDL explains the beginning of development with an ecological metaphor – *acclimation* – and ends up in cognitive self-containment, the Skill Model starts with detached individual cognition and features a development towards *involvement* in the outside surroundings. The MDL thus conceives of development as a movement from the beginner's dependence on the social environment towards the autonomy of the expert, whereas

the Skill Model instead sees development as a process where the links with the situational context grow stronger. Where the MDL touches upon an ecological logic by choosing the term "acclimation", the Skill Model is in fact consistent at a deeper level with such a logic.

The Skill Model, with the phenomenology of body and senses underlying it, represents an alternative approach to understanding expertise, one that is not elitist nor myopically rationalist. The Skill Model provides us with a perspective that is democratic in the sense that it builds on an understanding of our everyday coping, and it includes body and emotions alongside the conscious mind. What we do as naturalised inhabitants of everyday situations, rather than outstanding performance, is highlighted as constitutive of expertise. Standing things on their heads like this should at least make us think things over once more. In my opinion, though, the Skill Model is also a promising alternative in the field of reading research because it builds on a consistent theory of being-in-the-world that applies to reading and explains all levels of skill as links of a dynamic chain of development; and, moreover, it is sympathetically democratic in that it associates top-level performance with everyday coping rather than stressing the uniqueness of such performance. One particularly important aspect is how the Skill Model enables us to contextualise early literacy development – the acquisition and mastery of the code – as part of a lifelong journey into the world of written language.

The Skill Model does also explain problem-solving and the use of strategies, but not as features characteristic or constituent of expertise. Quite the opposite: What is characteristic of expertise is the natural coping with situations and tasks *as opposed to* solving problems. Under the Skill Model, problem-solving is in fact a less advanced, more laborious procedure involving methodical and analytical work, which is characteristic of the competent level. Dreyfus & Dreyfus thus oppose a general tendency to focus on problem-solving and to see this as the typical activity of proficient or expert skill performance. This tendency is widespread in reading research as well, most evidently in the strong emphasis placed on reading strategies.

Strategies and rules
Strategies for learning and reading seem to be a mandatory part of the pedagogical tool kit of any up-to-date teacher of literacy and mother tongue,[12] and it would indeed seem odd to deny the practical usefulness of such strategies to support readers in their process of building experience in the domain of reading. What is missing from most pedagogical recipes for supporting reading development (i.e. practical tools available to classroom teachers), however, is an understanding of the provisional character of these supporting structures. In fact, it would not be an exaggeration to say that becoming a strategic reader seems to be a goal in its own right. The MDL is compatible with such a point of view. And even if both the theorists behind the MDL and the wise teachers at the chalkface should claim that such strategies are

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[12] *In Norway, this focus is likely to come across as a novelty, following the new curriculum of 2006 which is based on five basic skills (we could call them reading literacy, oral literacy, writing literacy, mathematical literacy and digital literacy).*

used more intuitively as the reader develops, the very concept of *strategy* remains there to demand attention. As in the case of the conception of expertise, we will have to delimit the discussion of strategies by excluding pragmatic arguments and concentrating instead only on the internal theoretical logic that follows from the choice of this term.

As we have already seen, the Skill Model as applied to reading challenges the idea that reading development is a journey towards strategic behaviour. Instead of supposing that the developing reader's strategies will become faster and more powerful, the Skill Model represents a shift away from dependency on rules, maxims and plan-making towards holistic recognition and discrimination. Strategic processing must be conceived of as consisting of a sequence of procedures with an extension in time, whereas holistic understanding is immediate and instead has an extension in space.[13] This is consistent with the fact that as the reading activity we are studying becomes more advanced, there will be greater variation in reading practice and it will be increasingly difficult to give an exhaustive account of what is actually going on. This is a core insight of the Skill Model: the better we are at doing something, the less we know about what we are doing and, hence, the less exhaustively we are able to account for what we are doing.

The transition to holistic recognition of situations is thus not the same thing as high-speed automatised strategies at work. The very concept of *automatisation* implies that *the same* processes gradually come to be carried out automatically, which means doing the same things faster and more accurately without any conscious interference.[14] The Skill Model describes and explains a *leap* in development from rule-based to experience-based or intuitive behaviour. Most people – among practitioners and researchers working on literacy issues – would probably agree that a fundamental change or a leap does indeed take place as the child who is *learning to read* stops spelling out letters and learns to read whole words. When it comes to reading strategies in the process of *reading to learn*, however, it seems more problematic to claim that there occurs such a change towards a different way of relating to the text; reading is generally conceived of as problem-solving "at the growing edge of expertise"

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[13] *Studies of eye movements correct the assumption of a straightforward dichotomy of immediate visual perception of space on the one hand and temporally extended perception of a sequence such as a written text on the other hand. In fact, taking in a picture or scene as a whole requires a great deal of focusing on different parts of it, and the fixations of the gaze needed to focus on them necessarily follow each other in time. It is also the case that understanding or imagination may have the character of an epiphany during the slow reading of a book rather than be the result of an accumulation of meaning during the process of reading. Regardless of this, though, it is meaningful to discuss whether one of these dimensions – extension in time or in space – is dominant.*

[14] *If we follow this logic ad absurdum we arrive at a contradiction in terms, or at least an oxymoron. The use of a strategy by definition includes deliberation and calculation. If the strategy is fully automatised, there can be no deliberation or calculation. Paradoxes and oxymorons can sometimes be valuable metaphors for phenomena that are hard to grasp, but there are no signs of this being the case as regards the use of the term "strategy" in reading research and practice.*

(Scardamalia & Bereiter, 1991[15]), and strategies are seen as a prerequisite for solving problems adequately.

How, then, could we make the conception of holistic recognition operational beyond word recognition, in relation to higher-level reading skill? In this context we must necessarily move into the borderlands between reading and understanding in general – but so must any approach to a grand theory of reading and reading development. One example of holistic recognition at a higher level could be the not uncommon experience of suddenly becoming aware of a connection of some kind during reading. It is rare to fully understand *how* (say, through what steps or even strategies) you became aware of such a connection, which could indicate that it is a case of holistic recognition. The ability of a literary text to set its readers' associations in motion during reading is a sign of quality, and as benevolent readers of, say, a novel we see possible connections in relation to persons, action and plot, such that a novel is in fact seldom quite the same novel to us if we read it again. However, it should be pointed out here that this view of reading is not restricted to literary texts but applies to all texts. Even the reading of works on reading theory may produce sudden insights resembling the epiphanies of literature.

If we accept the theoretical implications of viewing reading as a *meeting* between a reader and a text, and thus as a real event, we must acknowledge the possibility that something unexpected may happen, as it may in conjunction with any event taking place in the flow of time. Hence, holistic recognition and discrimination should be conceived of as a connection, non-predicted as a matter of principle, forming at the time of the reading event. This understanding is not compatible with theoretical accounts of reading where it is assumed that meaning accumulates in a sequential manner as the reader progresses through the text.[16]

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[15] *Scardamalia's and Bereiter's contribution to finding common ground for a general theory of expertise (cf. Ericsson & Smith, 1991) shares the cognitive bias of expertise research in general (Ericsson et al., 2006). What makes it difficult to fit literate skills into the framework of expertise, however, is that having literate expertise seems to mean that you have to perform more demanding cognitive work rather than read with ease; hence the idea of literacy as primarily tied to problem-solving. A closer look at this and similar arguments reveals the danger of affirming the consequent: if P, the Q/ Q/ then P. P here represents "reading is primarily a process of problem-solving", and Q is the observation of time spent on reading tasks that require problem-solving. The same critique applies to Ronald Kellogg's contribution about writing to the general theory of expertise (Kellogg, 2006). The crucial point there is that it is taken for granted that problem-solving is the most representative type of task in the domain of reading and writing. Bereiter and Scardamalia pursue the challenge of understanding expertise in their book Surpassing ourselves. An Inquiry Into the Nature and Implications of Expertise (1993). A central theme of their discussion in this book is the difference between being experienced and pursuing an expert career. As they admit themselves, the argument seems to dilute the concept of expertise, but nevertheless their discussion contains interesting perspectives.*

[16] *The underlying logic of an open event is at odds from the point of view of principle with the inescapable mechanic and sequential logic of models of text comprehension such as the construction–integration model (Kintsch, 1988), the landscape model (van den Brook et al., 1996) and the resonance model (Gerrig & McKoon, 1998). These models all assume mental representations as the result of the interaction between prior knowledge and information from*

Another example of holistic recognition is when you make an immediate association to another text during reading. Where does such an association come from? If we give the matter some thought, we may well find a few clues allowing us to "legitimise" the intertextual connection. However, it would be impossible to render explicit the entire interface between the texts involved. This is well known to teachers of literature. Such connections are made possible by reading experience, not by our having learned how to make them. It takes experience, and this experience must be involved in the act of reading. Even young students may experience sudden insights into connections like this, and sometimes these are very qualified insights. At other times we may see students associating too freely on the basis of too meagre an experience, with rather poor accuracy. Children in primary school sometimes express a great deal of wisdom in connection with their reading, while adult students of Norwegian language and literature may seem helplessly lost as they beg for a recipe telling them how to read and understand texts. The wise child may be an advanced beginner, but he or she trusts his or her experience and sometimes strikes lucky. The frustrated student, on the other hand, would seem to lack experience with making choices of his or her own.

Choosing a perspective is a critical point in maturing as a reader. However, it is a great challenge to make students – at all levels of schooling – place themselves in a position as reader from where they actually make choices under their own responsibility. Further, it takes time to build the necessary experience. Reading strategies of all kinds are certainly useful tools, but according to the Skill Model they belong to the transition into the troublesome and laborious phase of being competent, where their function is as support in the making of choices. This is an extremely important step in reading development, and it would be unwise to link it to a specific age. A general point in the argument of Dreyfus and Dreyfus is that our Western culture is extremely rationalised, also in the sense that explicit logic is in most cases preferred to human judgement, which is not fully explicable. One consequence of this is that our culture often forces us to step down from the expertise level and follow the rules characterising the competence level. This general critique also seems relevant to the field of practice, with its strong belief in reading strategies; to the field of reading research, with its strong cognitive dominance; to the field of assessment, with its demands for reliability; and to the political field around literacy research and practice, with its demands for accountability.[17]

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the text. They are all oriented towards a type of understanding that can be made explicit, and hence they have a heavy semantic bias, excluding other aspects of being a reader involved in reading – such as feelings, values or ethical and ideological positions. Semantic meaning is compatible with mental models, but models that include that dimension alone must represent a reduction of something multi-dimensional to the uni-dimensionality of rational logic.

[17] Cf. P.D. Pearson's warning against a development in American literacy education towards strictly controlled curriculum content, teaching methods and assessment in his article "An Endangered Species Act for Literacy Education" (Pearson, 2007). According to Pearson, the trust in explicitness and in consistency between what is explicitly being taught and what is being tested threatens the very gold standard of all education, i.e. the *transfer of learning*.

The Skill Model characterises the higher levels as qualitatively different from the level of competence. Where the competent performer struggles and feels anxious that his or her choices will turn out to have been bad, the proficient reader and the expert manoeuvre with certainty and little effort in and across the texts, genres and discourses that we define as belonging to the domain. The path from competence to proficiency is about building experience through practice. With sufficient experience you are able to recognise and discriminate between situational components from the simplest to the most complex ones, such that you may do the right thing in the appropriate way at the right time. Involvement and responsibility – the third and final topic of discussion here – are crucial to building this kind of experience. There is also at present a widespread ambition in the community of reading research to include engagement in a theory of reading, and the Skill Model provides an interesting response as to how we should conceive of involvement.

Involvement and responsibility
In Merleau-Ponty's view, we are tied to the surrounding world by an *intentional arc* that encompasses cognitive life, the life of desire and perceptual life, and that "projects around us our past, our future, our human setting, our physical, ideological and moral situation" (Merleau-Ponty, 2006 [1945], here quoted from Dreyfus, 1996). This conception of intentionality is deeply interconnected with what Merleau-Ponty calls the human tendency to acquire a maximum grip on the world. Our body strives for a kind of balance, where our action is in accordance to the highest possible degree with what the situation demands. This is so on all levels of existence, from biology and the physical space we are situated in to the cultural world and the life-world of language.[18] Involvement is a matter of using experience in order to be engaged in the situations we encounter. Using experience is a risky matter for the competent performer, as he or she will be responsible for the outcome. As our skills develop, however, we are able to involve ourselves ever deeper and the anxiety over making choices gives way to a natural belonging in the situation.[19]

This understanding of involvement and the importance of risk and responsibility differs from the theoretical conceptions of engagement to be found in reading research and in classroom practice. Literacy programmes at school largely aim to promote positive relationships to reading and literature. In other words, they operate at the level of motivation. The goal is to make the individual reader *want* to read. Therefore it is felt that the teaching of literacy should entail positive experiences, and it should be engaging. Having positive experiences, however, is not the same as acquiring experience in the sense that I have elaborated upon above, and something may well be engaging without necessarily including involvement. With a slight exaggeration, the gist of "positive experiences" and "engaging" as used in connection with literacy programmes concerns whether the situation is stimulating or not, i.e. whether it is fun or boring. On a more sober note, we could relate these terms to the

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[18] *"Equilibrium" is Merleau-Ponty's term for this condition. Cf. also Bereiter and Scardamalia (1993).*
[19] *This understanding of involvement calls for comparison with the understanding of students' self-efficacy.*

issue of what the MDL calls situational motivation. Such external motivational forces might influence the degree of involvement in the sense of the Skill Model. However, motivation is a cause influencing the action while involvement relates to the act of reading itself and therefore constitutes a value-free description of the interaction between text and reader. It should be added that individual interest, the other motivational category of the MDL, is also a precondition for reading, not a description of the reading activity as such.

Involvement in reading means investing your own experience in the encounter with the text. We can consciously decide to resist such engagement – i.e. try to abstain from engaging our experience in the process of understanding – or we can be anxious about whether or not we are doing it right – i.e. acting in a way characteristic of competence. But involvement nevertheless seems to be there as the key to deep understanding, in practice as well as in theory. In reading research this is not a new idea. The idea of *natural* learning in itself signals compatibility with the ecological idea of involvement (cf. Alexander and Fox, 2004, p. 39), as does *holistic perspectives* on reading (cf. Smith & Goodman, 1971, 2008). The wide variety of *reader-response* approaches to literature (cf. Tompkins, 1980) definitely share common ground with the Skill Model as applied to reading, particularly in relation to Rosenblatt's conception of *transaction* (Rosenblatt 1995). The more aesthetically oriented German school (Iser, 1978; Jauss, 1999) is even explicitly referred to as a *phenomenology of reading* (cf. Iser, 1980).

Despite such similarities, however, the Skill Model as applied to reading also brings something new to the theory of reading: *involvement* as a value-free description of what takes place at the interface between the reader and the text, and its surrounding environment of text and discourse, cannot be reduced to any of the old ideas. Reader-response perspectives all seem to favour either the psychology of the reader (Holland, 1980; Langer, 1995) or the meaning of the text (Iser, 1980). Rosenblatt (1995) focuses on the meeting place between text and reader, but she is more concerned with the meaning coming out of the transaction taking place there, whereas Fish's idea of *interpretive communities* focuses on the status of meaning rather than on the actual reading taking place (Fish, 1980).

Involvement is thus not directly tied to meaning, neither that to be found in the text nor that emerging as the result of the reading. It is simply a concept characterising a real-time connection between an individual and his or her environment. It suggests a phenomenology of reading based on the assumption that readers relate to the textual world in different ways, similarly to how we as humans generally relate to the world around us on a biological, physical and cultural level. Being involved is thus about investing ourselves in the ongoing event of reading, with all the implications that follow; it means intentionally reaching out to the world of the text and thus responding to it cognitively, emotionally, ideologically and ethically. The novice reader must master the code to be able to recognise contextualised letters – or words. The competent reader must gain experience with responding to texts in a responsible

way by explicitly choosing a perspective, whereas the expert reader *is* a responsible reader.[20]

The classroom could be an arena allowing students to safely engage in the kind of risk-taking necessary on their path towards proficiency and expertise according to the Skill Model. In dialogues and discussions between teacher and student and between students, it should be possible to invest oneself, thereby taking the risk of losing something. An interpretive community (Fish, 1980) in which the teacher also signals presence in the openness of the moment is an ideal context for becoming involved and gaining experience and certainty. A good teacher will probably establish a classroom culture where the level of risk is acceptable to students and where taking risks is worth the effort, and the ideal class will form a community based on sound interpretive and communicative values and criteria such as accuracy, richness and reflection.

5.   SUMMARY AND PERSPECTIVE

All roads lead to Rome, it is said, and we should not forget that students find their way to reading independently of any theoretical or even paradigmatic differences that may exist in our understanding of reading and how it should be taught. Nevertheless, such differences are important for the scientific study of reading, and they also have consequences for the relationship between theory and practice. That relationship should ideally be a transparent one, in which classroom practice and the curriculum guiding it are both rooted in a consistent overall theory about reading and reading development. The MDL seems like a tool of use to the field of practice, and it is based on a consistent theoretical frame of reference. My discussion above, however, has sought to highlight the cognitive bias underlying this theoretical framework by juxtaposing it with a model of skill development based on a phenomenological understanding of being-in-the-world.

The Skill Model has not yet been empirically applied to reading. Nevertheless, it represents another way of conceiving and framing central concepts such as *expertise* and other levels of skill, *strategies* and the more recent concept of *engagement*. The Skill Model makes a sober-minded distinction between practical advice and supporting rules on the one hand, and what is going on in the head of the reader on the other hand, and it also opposes the MDL's strong reliance on strategies in both theory and practice. It allows code mastery and the most complex aspects of understanding to be conceived of as aspects of a single developmental process. It also proposes a conception of skill and expertise that is based on everyday experience and everyday coping, as opposed to the predominant focus on outstanding performance to be found in traditional expertise research and associated reading research. The Skill

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[20] *Mikhail Bakhtin's ideas have an affinity to the phenomenology of Merleau-Ponty in many ways (cf. Gardiner, 1998) and have also been shown to represent ways to a theory of the reader other than those of reader-response theory and aesthetics of reception (Shepherd, 2001). Responsibility in the dual sense – both in the sense of responding and in the sense of being responsible – is one of the most fundamental concepts of Bakhtin's dialogism (cf. Morson & Emerson, 1997).*

Model thus calls for a theory of reading that values what we normally do as readers in a world of written language, texts and discourses, rather than how we solve problems. It shifts the focus further away from the dichotomy of individual processing on the one hand and social processes on the other hand, towards the interface between these two phenomena. Individual development as viewed from the perspective of the Skill Model is thus a process towards increasing familiarity with the domain and the associated possibility of being fully involved.

The Skill Model offers new perspectives on familiar phenomena and could therefore be a vantage point for further discussion of fundamental assumptions in the field of reading and literacy research. Such clearing of the fundamental ground is an essential part of the quest for a grand theory of reading development.

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