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Title   The Epistemological Relevance of Case Studies as Narratives in Design-Based Research

Author   **Tina Emmler**
University of Paderborn
Germany

Petra Frehe-Halliwell
University of Jena
Germany

Abstract   In the context of empirical-phenomenological research various text products are created. Practitioners develop concepts, methods, techniques, etc. to solve certain problems that have arisen in their workplace. Actors of science accompany these problem-solving processes and support them by developing materials or scientific inputs. In addition, they strive to understand the field of practice and to grasp its structures and (interpretation) patterns. In order to make this possible a knowledge management is necessary with the help of which the text products resulting from the research and development process are produced and interpreted (Emmler 2015). Here, the importance of the case study[1] for the development of (new) knowledge is analysed. Normally, case studies are only considered to be by-products created during DBR. However, we believe that case studies do not only serve as an instrument for communicating project content to others, but are a medium for the researchers themselves to ascertain their own learning processes that take place in the exploration of the field of research.

This paper aims to be the initial point for a methodological discussion on the thesis that (a) case studies as narrative text products contribute to an understanding of phenomena as underlying structures of the field of practice and that (b) they are one part of a two-fold research process in which they are the basis for the reflection of experiences.

[1] The article is situated in the context of DBR. Against this background it is very likely that our readership would associate the term 'case study' with a *scientific method*. That is why we would like to clarify about this introducing part of the article that we are focussing on didactical case studies from a *methodological* point of view. Specifically, we assume a learning potential of case studies for those *writing* them. Whereas the didactical potential of case studies is usually focused on the question what the reader of the case study can make of them, we will concentrate on the learning potential from the writer's point of view. To be clear: We do not intend to develop a recipe for the writing of case studies. We rather think about the requirements of writing a case study as part of a complex process of understanding and describing phenomena.

Therefore, we invite you to follow us on a journey to the discipline of arts, especially to Walter Benjamin, a famous writer and translator who, in the year 1923, discovered the differences in writing a poem and translating into another language. Both processes ask for writing competences which at first glance seem to be very similar, but at the second reveal their diametrical opposition. We suggest to adapt Benjamin's explanations to the writing processes in DBR. In DBR it is the world of science on the one hand and the field of practice on the other that make a translation necessary: the languages applied in both fields differ, although the people working there might all belong to one and the same nationality which might allow them to communicate with the people from the other "world". However, this does not mean that researchers *understand* the practice and the emerging phenomena per se. A translation between the worlds is necessary. For this, the case study is the first step.

The Epistemological Relevance of Case Studies as Narratives in Design-Based Research

Tina Emmler, Petra Frehe-Halliwell

1.0 Introduction: The Relevance of Art for understanding Phenomena

Obviously, researchers have always been dealing with text products. Accordingly, this applies to researchers within Design-Based Research (DBR) projects and in particular to those, who conduct research in the tradition of a paradigm consistent to the humanities. DBR projects provide various text products deriving from both practice as well as researchers (Sloane 2014; Emmler 2015). Researchers' text products are based on scientific criteria, strongly linked to the underlying research objective and methods. Hence, the researcher tends to illuminate possible irrelevancies, uses supposedly precise language and keeps necessary distance. Members of the scientific community constitute the main target group of those scientific texts usually published in journals or book chapters and are then read and (mostly) understood by the scientific community who is familiar with the complex scientific terms, methods and concepts (Sloane 2018, 358). However, further stakeholders of the research project are usually not considered to be relevant recipients of these texts although they are expected to be able to read these texts and apply them in their daily routines. In DBR projects, it is (among others) often teachers and school administration, who are interested in the project's results. They are hoping for advice, suggestions, alternatives etc. to cope with the practical problems faced by the project. In addition, DBR projects might provide valuable knowledge that is worth being included into teacher training and education. Sometimes, researchers generate special text products for this (non- or not yet scientific) target group like manuals and case studies, which they use in university courses. Often, these kind of text products are considered as 'by-products' of DBR projects with highly practical but apparently low scientific value or outcome. This paper aims to turn the spotlight on these 'non-scientific' text-products[2].

The writing of a case study needs additionally to be and is different from the usual way of the researcher's writing (and thinking) and therefore allows one to get a grip on the phenomenon under consideration from a different angle. It may uncover invisible and/or unconsidered details, perspectives and so on. However, we do not believe that developed case studies contain *the* knowledge, findings or practical solutions. We rather believe that the process of writing them might be of relevance for a deeper understanding of phenomena situated in

[2] Due to the theoretical background of this paper, elsewhere we not only use the term 'case study', but, more generally, 'original', 'narratives' or '(original) narrative'. This implies that other text products may also be of relevance.

the field of practice. In order to be able to use the case study's potential as part of the knowledge-making process it is necessary to ensure certain writing conditions. By this we do not mean to focus on the circumstances of writing, for example on a pleasant atmosphere of writing. We are looking at the case study as a writing product itself, as a partner in the research process, as a learning object that has something to share. This provokes the question of when a case study is important to the researcher and, more generally, what it means to write meaningful texts as such. This is not about applying external standards to a text, but about the subjective experience of the writer, which allows him or her to recognize his writing as being meaningful. The challenge of meaningful text production is addressed in chapter two. The main part follows in chapter three where we differentiate between a narrative form of writing, like writing a case study, and its translation into a scientific language style. For this, we outline Walter Benjamin's thoughts on writing poems ('originals') and its translation. We will then argue that the case study in DBR is structurally the same as Benjamin's poem and that its understanding on a higher reflective level relies on a translation. Referring to Benjamin the writing of the narrative and the translation imply different competences, which we will outline and apply to the competences of researchers who use the DBR (part four). The result is the acknowledgment of case studies as a medium of reflection for the DBR researcher. In this way, they get another impetus in the process of DBR, changing their status from a by-product of research to a main product *in* research (chapter five).

2.0 Let´s face it: The Challenge of Meaningful Text Production in Design-Based Research (DBR)

Design-Based Research, which is based on a scientific attitude understood as empirical-phenomenological (Emmler 2015), examines daily narratives via reflection on the one hand and offers inspirations for changes in the "storytelling" on the other hand. These changes normally result in the development of so-called prototypes which are meant to handle problems evolving in daily routines, for example in schools or companies. Prototypes can be bound to technical or methodical interventions, but are not necessarily so. In contrast to those disciplines developing technical devices the prototypes we are speaking about are primarily connected to human behaviour as they concentrate on the question how people can learn or can be taught in their vocational environment (Frehe 2015, 59 ff.). In this way, we deal with highly sensible data as the people, their well-being and their way of living marks the centre of our interest. With this in mind, as researchers we have always had to cope with the reciprocal characteristic of human relationships. This means that it is not only other people who are under observation, but that it is us as researchers who are always entangled with those whom we offer our advice, ideas, and knowledge. In other words: We as researchers are able to learn from those who are experts in their working environment. In order to do

this we need to discover and understand what we call the daily narratives. These are the stories that mostly implicitly organize the daily life and offer the structure for the effective handling of the day-to-day communication and problem solving. Interestingly, as long as daily routines are not disturbed, these stories fulfil their function of offering supposed safety and the illusion that everybody speaks about the same thing and works on the same tasks as every day. The occurrence of something unexpected such as a profound change of action due to a problem that has never been there before or changes in the management culture as it can be caused by megatrends such as digitalization leads to the (mostly implicit) understanding that the daily narratives do not help any longer to cope with the emerging problem. Very often this causes distress and dissatisfaction among the staff as it is unclear what to do and how to solve the problem. In this situation the design-based researcher comes into action. His interest lies in the discovery of the narratives and what they tell you about the people who live with them. As Hannah Arendt says: It's all about

> „[…] die Enthüllung der Person auf der einen Seite und das Hervorbringen von Geschichten auf der anderen, die zusammen die Quelle bilden, aus der sich in der Menschenwelt selbst ein Sinn formiert, der dann wiederum als Sinnhaftigkeit das menschliche Treiben zu erhellen und zu erleuchten vermag" (Arendt 2019, 413 f.).

In order to work with the (implicit) daily narratives, the researcher himself or herself has to deal with at least two different kinds of textual transformations. We hereby neither talk about a linguistic – semantic, syntactical or else – nor an approach of communication theory. We think that the analyses of how artists voice their experiences, how they find words for what most of the time is not to be said, how they picture their view of the world, might offer an insight into what design-based researchers have to do when developing narratives out of their experiences in the field of action and turning them into knowledge about the field's underlying structure. Concretely, we turn to Walter Benjamin, well-known writer and translator in the discipline of theatre and arts from the 20th century. He differentiates between the work of the poet on the one hand and the work of the poem's translator on the other hand as two working cycles bound together, but each for itself with its own value. This idea of bringing together an original poem – this is why Benjamin also speaks of the text as "the origin" – and its transformation, which we will state is more than a one-to-one translation of mere words and therefore be understood as a transfiguration was something very unusual in the 20th century: Usually the poet was seen as the creative genius and the translator as the one working on behalf of the genius. In contrary, Benjamin realizes that both types of working are connected to each other, and even more, that they are entangled with one another in a certain way. In the context of research this is highly relevant when keeping in mind that the development of knowledge is based upon the narratives that the researcher turns toward in order to form his or her mind about

what is not only relevant for the prototype's development in the single case, but also inhibits a broader meaning in the sense of a general knowledge that can be formulated as a theory independent of the single case. It becomes obvious that we assume a certain understanding of DBR which we would like to summarize in the following:

a) DBR based upon an empirical-phenomenological attitude needs to recognize the relevance of expressive skills which go beyond a close understanding of language and instead enclose all kinds of human behaviour that enable the human body to formulate one's experiences. This leads to a broad understanding of language which includes singing, dancing, painting and so on, and in the end, also poetry and creative writing as such.

b) DBR gets started with problems that are derived from the world of (daily) work and aims at developing solutions for these problems in a practical sense of mind. This, what causes the problem, but at the same time is not obvious and only affectively noticeable, can be understood as the *phenomenon* under observation.

c) Just as important as the development of practical problem solution is the development of structural knowledge, which goes beyond the single case in the sense that the single case is a sample for what is formulated as general theory (Sloane 2014). The approach here is to recognize and understand phenomena for which the researcher needs to be involved in the working environment („Lebenswelt"). This refers to the *empirical* part of what we understand as the researcher's empirical-phenomenological attitude in DBR.

d) Working with different kinds of texts is one of the competences at the core of the DBR (Krakau & Sloane 2018; Emmler 2015; Frehe 2015, 492 f., Zoyke 2012, 413; Gerholz 2009). In this article the documentation of the researcher's experiences in the field of action as well as its processing in the view of developing generalized knowledge is of interest. In this context, the meaning of didactical case studies for theorizing is focused. Normally, didactical case studies emerge as a by-product during the design process and are used to inform the stakeholders of a project about the prototype's state of development or to allow students of the discipline to gain an insight into the project status so that they can use the case study as a learning tool.

This article develops the thesis that case studies are also of relevance for the researchers themselves as they use them to formulate a narrative, which is the basis for their theorizing process. We will further show that the narrative is entangled with a second text format, which on a daily basis may be described as a translation, but, in the end, is more than the replacement of words and has to do with the capability to discover what Benjamin (1991) calls the 'shared meaning in different languages'. In this way, the case study becomes a medium for the researcher to connect himself or herself to the experiences in the field and which formally can be described as a process of mimesis in the sense of productive text reception and receptive text production (Emmler 2015). The two-fold process of developing a narrative as an origin based on your experiences in a field and of translating it into

another language is defined as 'transfiguration' (Arendt 2019, 203 f.). We therefore want to point out that a change in its *meaning* goes along with a re-formulation of an experience.

In this way, we also conclude that design-based researchers who feel obliged to the empirical-phenomenological approach also need to become experts in expressing their observations from the field of action. This also means that they need to be able to adapt to the language (in the wide sense) that is used in this field as well as to develop their own expressive skills. Experts in observing (human) behaviour, sensing its underlying atmospheres and subtexts and picturing this in all kinds of (non-)verbal actions are artists in general. Design-Based Research relies on exactly their capabilities, at least on the capabilities of poets and translators as will be shown. In this way, DBR always includes **art as the necessity to gain knowledge** out of your experiences in the practical field context. The old and apparently natural dualism of science and art (Adorno 1981, 13) is obsolete. This implies a profound discussion in the scientific community of Design-Based Researchers about the education of the scientific offspring and the meaning of art for didactical situations and their handling in general. As Busch states:

> „So unzulässig es ist, den Künsten die Arbeit an der Wissensproduktion abzusprechen, so verkürzend ist es, das Ästhetische aus der Theoriebildung verbannen zu wollen. Denn die heutigen Künste bringen sich nicht mehr nur im Element des Sinnlichen und Subjektiven zum Ausdruck, und das Denken erweist sich grundlegend durch Kriterien bestimmt, die landläufig den Künsten zugeschrieben werden" (Busch 2009, 142).

The questions about what we make of it and how we want to cope with the consequences mark an open desideratum in the vocational education system.[3]

3.0   Walter Benjamin: Considerations on Poetry and (its) Translation

It is Benjamin's merit that he succeeded in applying Aristoteles's idea of „mimesis" as an active process of those who intend to imitate something or someone in the context of writing and text production processing. "Mimesis" means that an imitated behaviour is not a one-to-one translation in the sense that the imitator does what he can observe in the other's behaviour. Instead, the imitated behaviour is just inherited to the extent that it has sense for the imitator. To connect the behaviour with sense indicates a certain effort, in other words: a learning process. From a didactical point of view, it is Bandura with his model of learning who actually describes in a very detailed way what in his opinion are the conditions to make this kind of learning work that can be identified as Aristoteles's mimesis.

[3] This desideratum refers to the research project of Dr. Tina Emmler examining the connections between art(s) and social sciences and being understood as an empirical-phenomenological approach (Emmler 2015).

Benjamin now is the one who, in the early 20th century, recognizes that neither poetry nor the transliation of a poem can be seen as a mere translation process, but that verbalizing an observation always means shaping something unsaid and maybe even unnoticed by others. Here, it is not of interest to transcribe the exact words of a poem, but instead to get a grip on its meaning which, in a different language, might be expressed in other words and pictures as the ones that are part of the original poem. The question of what the author's intention with this or that poem or text might have been characterizes the usual way of dealing with texts. In contrary, Benjamin's idea was to ask what your understanding of the text is, what it means to *you*, and that this indicates an act of communication you lead with the text itself. This enables the text to unfold his own authority. Interesting questions here are how a text as such, Benjamin speaks of poems or originals, evolves and what are the challenges of its translations. His thesis is that even though the original and its translation are bound together in a certain entanglement, they are two text products of its own kind. Therefore, also the challenges and competences underlying their production need to be differentiated.

3.1 Benjamin´s Differentiation between Original (Narrative) and its Translation

Directly at the beginning of his foreword to his translation in the „Tableaux Parisiens", Benjamin points to the mutual reference of the original narrative and its translation. This is done with the underlying question of how a good translation is characterized. His answer is unambiguously direct: **The translation always points back to the original, and, conversely, the original already implies the potential structure of its translation.**

> „Übersetzung ist eine Form. Sie als solche zu erfassen, gilt es zurückzugehen auf das Original. Denn in ihm liegt deren Gesetz als in dessen Übersetzbarkeit beschlossen " (Benjamin 1991, 9 f.).

This note is the beginning of a dialectical movement of thought. It leads to Benjamin's conclusion that not only the original narrative is a piece of art which in itself has meaning, but that the translation is to be seen as an equal piece of art. Although the original narrative is finite in itself, it is reliant on the translation to be kept alive: Only the translation allows the original narrative to become part of a certain society in a certain historical, ecological, economical, and cultural state. The meaning of a narrative needs to be activated and can differ from time to time and society to society and so on. For this, the translation is a core principle. It is based on the narrative and activates its already underlying meaning which can only be brought to light because of the translation's language differing from the original.

> „Übersetzbarkeit eignet gewissen Werken wesentlich –
> das heißt nicht, ihre Übersetzung ist wesentlich für sie

selbst, sondern will besagen, daß eine bestimmte Bedeu-
tung, die den Originalen innewohnt, sich in ihrer Über-
setzbarkeit äußere" (Benjamin 1991, 10).

The activity of translation is therefore to be understood as mimetic
(Emmler 2015). This means that the original and the translation are
interrelated, but at the same time independent, each producing its
own results. Likewise, the activity which underlies each one of them is
different:

> „Daß eine Übersetzung niemals, so gut sie auch sei, etwas
> für das Original zu bedeuten vermag, leuchtet ein. Den-
> noch steht sie mit diesem kraft seiner Übersetzbarkeit im
> nächsten Zusammenhang. Ja, dieser Zusammenhang ist
> umso inniger, als er für das Original selbst nichts mehr be-
> deutet. [...] So wie die Äußerungen des Lebens innigst mit
> dem Lebendigen zusammenhängen, ohne ihm etwas zu
> bedeuten, geht die Übersetzung aus dem Original her-
> vor." (Benjamin 1991, 10 f.).

The latter quotation once again makes two things clear: On the one
hand, Benjamin explicitly states that a **translation is not to be under-
stood as an imitation in the sense of a one-to-one reproduction of
the original.** On the other hand, he refers to the relationship between
the original and the translation as a "natural" one, showing that the
original narrative's aim is not the translation and can well exist –in the
world as such – without the translation, but that the translation up-
dates the original. The author's language enables the original narrative
to get a new voice, which then evokes the potential to be of relevance
for the people whose language the narrative is translated to. It is im-
portant here that the language of the translator differs from that of
the original. The difference between the original and the translation,
which is reflected in a linguistically distinguishable form, is therefore
considered by Benjamin to be a condition of the continuity of an orig-
inal and also of its inherent potential to pass on knowledge, interpre-
tation patterns, and so on:

> „Um das echte Verhältnis zwischen Original und Überset-
> zung zu erfassen, ist eine Erwägung anzustellen, deren
> Absicht durchaus den Gedankengängen analog ist, in de-
> nen die Erkenntniskritik die Unmöglichkeit einer Abbild-
> theorie zu erweisen hat. Wird dort gezeigt, daß es in der
> Erkenntnis keine Objektivität und sogar nicht einmal den
> Anspruch darauf geben könnte, wenn sie in Abbildern des
> Wirklichen bestünde, so ist hier erweisbar, daß keine
> Übersetzung möglich wäre, wenn sie die Ähnlichkeit mit
> dem Original ihrem letzten Wesen nach anstreben würde.
> Denn in seinem Fortleben [...] ändert sich das Original"
> (Benjamin 1991, 12).

It becomes clear that the original owes its survival to translation. At
the same time, the translation only exists on the basis of the original

narrative. This is the "natural" relationship between the original and the translation that Benjamin states. Continuing this idea leads to Benjamin who claims that each translation actually establishes a new original and insofar is more than a communication process informing the recipient about a given content. The task of the translation is rather to re-shape the content offered by a narrative and thus allows a new meaning to emerge:

> „Übersetzungen, die mehr als Vermittlungen sind, entstehen, wenn im Fortleben ein Werk das Zeitalter seines Ruhmes erreicht hat. […] In ihnen erreicht das Leben des Originals seine stets erneute späteste und umfassendste Entfaltung" (Benjamin 1991, 11).

Benjamin is fully aware of the active effort necessary to understand the original narrative and to bring forward what is understood; in other words: to picture and verbalize what strikes you when connecting to a piece of art. Before pointing out what Benjamin describes as the actions of a narrator and a translator in the next section, we want to summarize what has so far been stated about the original narrative and its translation as text products in the following chart:

Table 1
Original narrative and translation as text products

Format / Characteristics	Original narrative	Translation
Linkage of original and translation	An original always implies more than its mere words: It is involved in a meaning that is potentially infinite, but can only be activated via translation	A translation is always a new original
(Philosophical) Implications	Language creates „Wirklichkeit"[4]	A translation allows the original to survive in a new shape
		The translation's existence is based on the original
Indirectness	It refers directly to the experiences made by somebody in the living environment	It refers indirectly to the living environment to which the original narrative is connected; it serves as a medium between the translator's living environment and the original's environment
Linkage between inside and outside	Is situated within a living environment	Refers to an already thematized relationship between original and lifeworld and therefore looks from the outside at the original and its embedding in the world
Linguistic reference	The language of the original is the language of the environment to which the original refers	The language of the translation is (necessarily) a different language than the original language (otherwise it would not be a translation!)

[4] „Wirklichkeit" is a German term indicating the idea that an objective reality is not existent, but is always connected to a subject's construction of what is and what is not. As neither "reality" nor "truth" actually matches the intended meaning, we stick to the German term.

3.2 Capabilities of Narrating and Translating by Benjamin

So far we have understood that Benjamin recognizes the original (narrative) as well as its translation as two types of texts which are both of equal relevance for one another and thus entangled in a close textual relationship. The original is the basis for the translation's existence whereas the surviving of the original is ensured by the translation which allows the original to be adapted to current questions and considerations of interest. We found out that Benjamin even takes this further to the thesis that each translation actually forms a new original. In this way we refrain from the idea of translation as a process of communicative mediation in which a text would include a somehow definite message and, instead, we face the multidimensionality of texts as such. This does not mean that a translation can take on any form. It is still bound to the original and it is the translator's task to find those words that reflect best the original's *meaning* in today's context:

> „Wie nämlich die Übersetzung eine eigene Form ist, so läßt sich auch die Aufgabe des Übersetzers als eine eigene fassen und genau von der des Dichters unterscheiden. Sie besteht darin, diejenige Intention auf die Sprache, in die übersetzt wird, zu finden, von der aus in ihr das Echo des Originals erweckt wird." (Benjamin 1991, 16).

In other words: The original's content is newly shaped, it is transfigured. This transfiguration is not a linear process of writing in which you find a word in language X for the same word in language Y. The translation offers to the original the space to unfold. The translator as the one creating this space needs to be engaged in the original narrative, meaning that the original as a whole needs to be considered, not only single words, sentences or textual sections. This does not mean that single words and so on could not be of high importance for the transfiguration. But a transfiguration will never be achieved, **if the translator does not have the courage to leave the status in which he or she sticks to single words, sentences, and so on, and instead goes beyond to ask what their message could be. And this entails asking what the message is to the translator himself or herself, what it is that strikes him or her when reading the original.** In this way, the translator and the original become sparring partners. This partnership is characterized through a mutual openness. The translator turns to the original having a lot of questions in mind, most of the times even not knowing what it actually might be that fascinates him or her when reading or thinking about a text. But sticking to his or her fascination, disgust or whatever it is that affects him or her at some point allows the text to answer. The more answers you get the closer you come to an idea of the text's meaning. However, you can come to a conclusion about what is meant although (or just because) the way of saying something differs:

> „Dieses Gesetz, eines der grundlegenden der Sprachphilosophie, genau zu fassen, ist in der Intention vom Gemeinten die Art des Meinens zu unterscheiden. In >Brot< und >pain< ist das Gemeinte zwar dasselbe, die Art, es zu meinen, dagegen nicht. […] Während dergestalt die Art des Meinens in diesen beiden Wörtern einander widerstrebt, ergänzt sie sich in den beiden Sprachen, denen sie entstammen. Und zwar ergänzt sich in ihnen die Art des Meinens zum Gemeinten" (Benjamin 1991, 14).

Whereas the translator's challenge is to listen to the text's echo in his or her body, it is the original that testifies about the narrator's experiences in his or her daily life. The original (narrative) documents a certain part of daily life and implicitly constitutes a phenomenon which otherwise would not have been witnessed at all. Language here captures a narrator's "naïve, first, visualizing […] intention", whereas the translator's intention is always bound to the original and therefore is understood as "derived from" the original (Benjamin 1991, 16). This is the reason why Benjamin directly links the original (narrative) to the daily life whereas the translation is just indirectly linked to it. Instead, the translation has the possibility to look at the references *between* the original (narrative) and daily life. This is a turn that the original itself is not able to do as it is so closely entangled with the daily life that there is no space to get the distant view needed.

> „Die Übersetzung aber sieht sich nicht wie die Dichtung gleichsam im innern Bergwald der Sprache selbst, sondern außerhalb desselben, […]. Ihre Intention geht nicht allein auf etwas anderes als die der Dichtung, nämlich auf eine Sprache im ganzen von einem einzelnen Kunstwerk in einer fremden aus, sondern sie ist auch selbst eine andere […] " (Benjamin 1991, 16).

The so-called translation which we already have identified as an indefinite ongoing transfiguration is of a didactical relevance insofar it composes a new perspective on what has been said in the original narrative. In this way, the transfiguration is a medium: not in the way that one definite meaning can be derived from the original narrative, but in that it opens a space of interpretation. The transfiguration is a process going on „ between the original and education" (Benjamin 1991, 17[5]). It shows that there is a difference, a non-filled, empty space between the original narrative and its expressiveness. This, by the way, is where Kremer and Sloane position the concept of the „implicite learner" which allows us to understand differences in the reception of learning material (Kremer & Sloane 1998). Whereas this concept focuses on the reception of texts, the transfiguration is concerned with the production process and the idea that in DBR the researcher must be able to conduct a two-fold text production process. The original in this process seems to be an interpretation of "reality", but actually is a precondition in order to be able to realize what the experienced re-

ality *could* be or *could mean*. The translation then enables one to connect the non-textually fixed daily life with the language of the original and the 2nd language which is the language of the translation and necessarily has to be different from the original's language (otherwise a translation would not be necessary).

> „So ist die Übersetzung zuletzt zweckmäßig für den Ausdruck des innersten Verhältnisses der Sprachen zueinander" (Benjamin 1991, 11 f.).

Here, the relationship between the languages becomes relevant, but is far from easily determined. It is also worth remembering at that point that it was previously claimed that we apply a wide understanding of what a text is, including the idea that language is nothing restricted to the written or spoken word, but includes gestures, singing, dancing, and embodiment as such. In a transfiguration the relationship between the languages is at the core of the researcher's doing and thinking, but it is not openly addressed. Consequently, the transfiguration is potentially infinite, always including the empty space that is important to keep the original (narrative) alive.

> „Sie [die Übersetzung, T. E.] kann dieses verborgene Verhältnis [der Sprachen untereinander, T. E.] selbst unmöglich offenbaren, unmöglich herstellen; aber darstellen, indem sie es keimhaft oder intensiv verwirklicht, kann sie es." (Benjamin 1991, 12).

With this quotation Benjamin shows that he understands the usual status of daily life as being one of linguistically unfixedness, but that we can get a grip on it via producing texts, namely the original (narrative), and that in the end its translation offers a meaning about the original which normally is not thought about in everyday life situations. He acknowledges the experimental attempt of lending the original a meaning being totally aware of its openness. Benjamin is not concerned with reversing this incompleteness of linguistic constitution or the like. Incompleteness is rather to be accepted as a sign of the embodiment of meaning as such (Benjamin 1991, 14). Instead, what Benjamin highlights is the attempt of presenting something that is at least considered so relevant that it is (linguistically) named or pictured. Here communication is not understood as transporting a fixed meaning, information from person A to person B. Instead, it means to be in contact with the subtext, to realize what makes you stunned about an observation or whatever it is that is shaped into form via the original (narrative). It is the text, the original narrative, that you as a translator get into communication with. The basis for this is the translator's attitude of intending to get in touch with the original. "Intention" here does not mean to plan an act of communication or to aim at it, as is often understood in day-to-day interaction, but to take the initiative and to assume the lead in the intra-action with the original (narrative). This idea of "intention" goes back to Hannah Arendt's understanding of action as "agere" in the sense of making yourself comfortable with a situation

in which you put an idea into action without knowing what the outcome will be and in which the action in itself is received as meaningful. To "translate" here means exactly this: to connect yourself with the original (narrative) not *in order to find a certain meaning, but because the process of connecting in itself already is meaningful.*

The attempt to verbalize what otherwise is unsaid leads at best to irritations and at worst to a reaction of defence or denial, even though the recipient might not know why he or she shows a re-action. This what accompanies the original (narration) as the subtext is of importance for Benjamin because this is what reveals the meaning of the verbalized text. The *way of saying* or telling something is of importance, maybe even more important than the words themselves. A translation needs to get a grip on the tune of an origin and less on what the "sense" might be as the existence of "that one single sense" is an illusion. Keeping this in mind, Benjamin not surprisingly considers the discussion on faithfulness to the original as no longer being of relevance.

> „Denn was kann gerade die Treue für die Wiedergabe des Sinnes eigentlich leisten? Treue in der Übersetzung des einzelnen Wortes kann fast nie den Sinn voll wiedergeben, den es im Original hat. Denn dieser erschöpft sich nach seiner dichterischen Bedeutung fürs Original nicht in dem Gemeinten, sondern gewinnt diese gerade dadurch, wie das Gemeinte an die Art des Meinens in dem bestimmten Worte gebunden ist. Man pflegt dies in der Formel auszudrücken, daß die Worte einen Gefühlston mit sich führen." (Benjamin 1991, 17).

How then, asks Benjamin, can we agree upon a shared meaning between the original and its translation if we cannot rely on the same words but always on a shared tune, a way of saying something, which, in the end needs the language to be expressed? Here, Benjamin turns to the idea of one universal language which not only symbolizes what is real, but which in itself already is a realized symbolization. **In the translation he recognizes the possibility of turning to the language and its symbolizing potential itself: Translation then means to free a text from a given meaning and, instead, allows another meaning to emerge, one which is only temporarily accepted until the context changes and other (historical) times long for another, a new translation**:

> „Es bleibt in aller Sprache und ihren Gebilden außer dem Mitteilbaren ein Nicht-Mitteilbares, ein […] Symbolisierendes oder Symbolisiertes. Symbolisierendes nur, in den endlichen Gebilden der Sprachen; Symbolisiertes aber im Werden der Sprachen selbst. […] Jene reine Sprache, […] die im Werk gefangene in der Umdichtung zu befreien, ist die Aufgabe des Übersetzers" (Benjamin 1991, 19).

From the previous remarks we can now summarize that narrators and translators have to face similar but still different challenges. Both have to deal with texts, with language, its meaning, affects, and consequences for "story"-telling reality as well as its limitedness, the relationship between form and content as well as certain aims connected with their processes of verbalization. What needs to be done in each case with regard to these components is different and is shown in the following table:

Table 2
The Challenges faced by the narrator and the translator in comparison

	The Narrator's Challenges	The Translator's Challenges
What kind of text is relevant?	Develops an original (narrative)	Works on an already existing narrative
Meaning of language	„naïve, first, vivid intention" (Benjamin 1991, 16)	„derived, last, imaginative intention" (Benjamin 1991, 16)
The text's affection	atmospheric	(didactical) mediating
	needs the narrator to be in contact with himself or herself	needs the translator to be in contact with the narrative
	Leads to receptive text production (as the narration is derived from the experiences in the daily life)	Leads to productive text reception (as the translation is based on the narration)
		Re-interprets the narration and in this way sets free the tune incorporated in the narration as well as in the world for which the text is translated
	mimetic	
What is at the core of "story"-telling?	(to) find something that is worth to be said/pictured	(to) discover the tune/the words that match the original's style
Relationship of content and form	To express a content/the content follows the form: primacy of form	Re-shape a given content/the form follows the content: primacy of the content
The limitedness of language	Making decisions about what to say and what not and that there will always be something unsaid	
Aims at …	…the verbalization as such	…the evocation of dis-connections between the text formats as well as between the narration and the narration's context
Is concernded with …	…the symbolization of the experiences in reality	…the language as realized symbolization itself and the textual differences between the original (narrative) and the translation
The text's infiniteness	The original is closed	The translation is infinite
		The translation not as a product but as an ongoing process

4.0 Narrating and Translating in Design-Based Research: The Transfiguration of Phenomena

It was in 1992 that Sloane developed an overview about what kind of knowledge can be developed in the context of the so-called „Modellversuchsforschung", a type of research which aimed at the co-operation between practitioners and researchers. One of the main ideas here was that through co-operation the practitioners could gain specific knowledge from researchers, which would help them to work on their problems. Research in this case did not mean just supplying the practitioners with theories, but also finding out how theories needed to be applied in order to solve a given problem. This very rough explanation about „Modellversuchsforschung" is not at all sufficient to obtain a deep understanding about the complex organisational and institutional structures, which always had to be taken into account, too. However, what Sloane realized through this kind of research was the utter importance of the researcher to get in contact with the practitioners in order to explain what and why practitioners did what they did to solve a problem. This is nothing self-explanatory keeping in mind that there is a more rational type of research, which feels responsible for the development of theory, but not necessarily for its application. So far, back in 1992, Sloane figured out that the observation of practitioners via interviewing them and analysing (text) products developed by them or via other quantitative *and* qualitative methods could lead to a deep and complex knowledge, the so-called "Regelwissen" which can be described as knowledge about facts and figures. Moreover, he systematically differentiated between knowledge explaining intercorrelations, knowledge offering reasons for explaining people's attitudes, and knowledge which explains why they make certain choices based on anticipated, final results or the reward that they get for their choice of action. It would be another 12 years until the systematization of knowledge was further developed in 2014 (Sloane 2014).

In 2014 the concept of DBR already was widely discussed in the group of researchers gathered around Sloane. Whereas in the 1990s Sloane's knowledge development was restricted to the explicable kind of knowledge, it might have also been the discussion around DBR which brought the relevance of implicit knowledge into consideration. However, in 2014 Sloane dedicated himself to the idea that at the core of knowledge development lies the capability of *understanding* the practitioner's environmental context which, from the researcher's point of view, is his field of research.

Table 3

Types of knowledge in DBR (Sloane 2014, 130; translated by T.E.)

Knowledge about Structures		Knowledge about Facts and Figures		
Story	Structure	Explanation	Reasoning	Justification
narrative context (concrete case)	pattern (general interpretation)	If ..., then	... because	in order to...
topic (topoi)		nomological	causal	final
case → pattern		cause → effect	event → reason	motive → event
understanding		explaining		
the researcher as a participant		the researcher as an observer		

Obviously, to "understand" here is not meant in a day-to-day language in a sense of harmonizing different opinions on an object of communication. It rather means to get an idea of the challenges in a given context, the basic way of dealing with tasks and problems in it and with this finding out what people are thinking, feeling, and arguing. For this, the researcher turns to the implicitly and explicitly told stories that form the cultural basis for the context. To get a grip on those stories that might be of a special interest for the research project is nothing trivial nor easy as it is not presented as a ready-made reality, which the researcher just could turn to. Nobody will ever be or actually is able to *explain* what the researcher is looking for. It is the researcher who needs to listen carefully to what people say and what not. It is the researcher who needs to be sensible to the atmosphere surrounding a context which tells him or her where it could be of relevance to dive deeper into acts of communication, relationships, or observations made by practitioners. What in this chapter is described as "story" does not mean a fictive narration which is made up. It rather refers to the narrations that on a daily basis shape the communication processes in a context and forms the unquestioned matter of course of everyday life.

For the researcher not only the forming of the concrete case which evolves from the narrative context is of interest, although it is highly relevant for the knowledge-building process as such. It is the second challenge for the researcher to reflect upon this, a reflection which entails rethinking the story in a broader context generalizing from the concrete narrative context. The idea here is that each concrete case includes fragments of knowledge that are of importance for other cases and therefore can be identified as general patterns. It means that the narrative story goes beyond the words that tell it. One could compare it to a fairy tale or fable which usually includes a credo ("epi-mythion") telling you what you can learn from the text. So characters like Little Red Riding Hood or the Wolf stand for something, and as much as the reader figures out what their meaning in his or her life

could be, the researcher has to find out what is included in the concrete case, but at the same time is of relevance beyond this case. Two questions can be derived so far: What does the researcher have to do to develop a concrete case? and: What challenges does the researcher have to deal with when generalizing the concrete case?

In order to develop possible answers to these questions, we would like to adapt Benjamin's ideas of writing an original (narrative) and translating it to the modes of research action which we outlined in the process of structural knowledge making. **In this sense the forming of the concrete case equals the production process of Benjamin's original (narrative), whereas its interpretation and thus development of structural patterns equals Benjamin's understanding of translation.**

Table 4
The adaptation of Benjamin`s understanding of the original (narration) and its translation

Benjamin's textual understanding	Original (narrative)	Translation
…and its adaptation for the DBR:	case study	…general interpretation and production of (structural) patterns
	…requires the capabilities of a narrator	…requires the capabilities of a translator
	allow the researcher the phenomena's transfiguration	

Bearing this adaptation in mind we understand DBR as a research action aiming at the transfiguration of phenomena. "Transfiguration" refers to the fact that phenomena are not obviously visible, but that they are implicitly noticeable and can be captured via two diametrically opposed movements. On the one hand researchers have to develop a case, meaning that they have to verbalize what they experience in the field of research. Important here is not only what they behaviourally observe, but what accompanies the obvious and can best be described as atmosphere or mood. So, in order to get a case, you not only need to be aware of the context, but also about the subtext what Arendt describes as "Bezugsgewebe" and happens additionally between the people when they talk to each other, usually without being explicitly noticed at all. Research portfolios can be of help here to become aware of these atmospheres by offering you the possibility of writing down your experiences (Emmler 2015; Sloane 2014). But just to write down the experiences does not make the case. In other words: The researcher needs to create a narration about his or her experiences in the field which at the same time is understood by the practitioners of the field as "their" story, as a story which is directly connected to them, which means something to them.

On the other hand, the researcher needs to link the case with a general interpretation. This then is what Benjamin calls the "translation" and which, together with the case, enfolds the transfiguration of a phenomenon. Whereas the verbalization of the case can include any language such as music, dancing, acting, and so on, the translation is bound to the use of words as this usually characterizes the world of science.

Although we analytically divided the transfiguration into two different parts, it should be kept in mind that they are entangled, and only by allowing this entanglement to happen a phenomenon will show up. For the researcher this means that he or she might himself or herself find writing on a case which later turns out to become a writing on the general interpretation or vice versa. The better you understand the contexts and subtexts, the easier it will become to write a case; and the better you write a case, the easier it will become to understand. In other words: You can only embody what you have understood and you can only achieve an understanding by embodiment (verbalization in the broadest sense). This seems paradoxical as the narration and its translation become each other's condition. And still, this exactly is the approach researchers need to get into when interested in understanding the structures of the field of research; and they can only get a grip on it by acting for such a long time until the case tells the researcher that it is right. This actually means to find an expression for what you are experiencing. Most relevant here is that there is an immediate reference between the researcher's affection and his or her expression. This also means that, contrary to what one might expect from researchers, he or she acts because of the atmosphere that affects him or her without first analysing it. This does not mean that the researcher acts without thinking. It rather means that the researcher trusts his abilities of being able to re-act in applying all his capabilities even under the pressure of not having time to *just* think about how his or her re-action in a certain situation should or should not be. More concretely, the researcher is not asked to write an objective report, but to shape what atmospherically is experienced *as subtext* in a certain situation.

The researcher's text which implies the atmospheric expression is the text which Benjamin describes as the original (narrative). It marks a space in a certain context – the field of research – and can therefore also be understood as a space within a space. Characteristically, the narrator is entangled with the context because otherwise he or she could not connect with the atmospheric subtexts. This is a challenge concerning your attitude, as it means that you must put yourself to the test. The consequence is that you need to rely on everything you know and can and, at the same time, you need to distance yourself from everything that you think you know and you are capable of. Derrida uses the phrases that you need to close your eyes, you need to be blind in order to see, to recognize (Derrida 2017, 58).

With the inscription of the narrator's impression in an expressive text and the text being ready to be read, the work of an artist is finished. Whereas the process of art does not need anything more than the declaration of itself that it is art, the researcher is asked to produce explicit knowledge. In other words: Art is not at all dependent on science, but science needs art to be able to produce knowledge. This knowledge needs to be of a certain quality as it is not enough to recognize the structures of the single case, how in a certain situation people handle a problem. The researcher must be able to recognize the general pattern that forms the special case, but can also be transferred to other cases. Here, the idea of hermeneutics comes to mind: It is the hermeneutic circle that refers to the connection between *individual case* and *generalization*. The translation as described by Benjamin now provides us with an instrument to work on this two-fold process of understanding. Whereas the original (narrative) includes many details and is a somehow lyrical language including all kinds of human and non-human ways of expression, the scientific translation is bound to the use of either a matter-of-fact language or a mathematical language. The change of language is accompanied by a change of thinking. This allows the researcher to distance himself or herself from the context he or she was, through the original's narrative, entangled with. Out of his or her scientific context, he or she can shape into words what the original's narrative actually means *not for* the original context but *for* the scientific discipline he or she represents. The original's narrative allows us to get a glimpse on a context we would have never got to know otherwise, thus it allows us an insight. The translation moves us the other way around: It gives an outlook on what the experienced could mean in other contexts generalizing from the single case. Responsible for this is the translation's possibility to differentiate between the original (narrative) and the context in which it is produced. This is the „second" in-between which Arendt refers to and which accompanies each interaction beyond the direct language, which is used in communication processes:

> „Dennoch bildet diese unwillkürlich-zusätzliche Enthüllung des Wer des Handelns und Sprechens einen so integrierenden Bestandteil allen, auch den >objektivsten<, Miteinanderseins, daß es ist, als sei der objektive Zwischenraum in allem Miteinander, mitsamt der ihm inhärenten Interessen gleichsam, von einem ganz und gar verschiedenen Zwischen durchwachsen und überwuchert, dem Bezugssystem nämlich […]." (Arendt 2019, 224 f.).

In the second and non-objective in-between, the in-between which is not described but inscribed in the original narrative, the subtext accompanying each context materializes; but this materialization is not per se just somehow there although it always lives in the narrative. It needs special attention in the sense that the translator productively receives the original. In this way, the translation is both: a text production of its own, but at the same time bound to the original. Like in the embodiment of the original there is a mimetic movement here, too. In contrast to the original, the language of use here is another one than

the one in the context. And whereas the expression of your affection was of the uttermost importance when writing the original, now the meaning of the original (narrative) is in the focus. "Meaning" here does not imply the description of what the practitioners in the field of research think about the narration. It rather is a reflection on the implications of the original (narrative). This reflection enlightens your perspective on the way practitioners act and think and in the end also on the way you, as a researcher, act and think. You may understand why people decide on what to do and what not; not because you better know their psychological thinking processes, but because you have developed an idea of their patterns of life, their mode of belief (not in a theological but in a phenomenological way). The translation just offers this insight when the researcher is able to distance himself or herself from the original (narrative). For this the researcher can turn to the content which is embodied in the text. In the translation this content is newly shaped using another language.
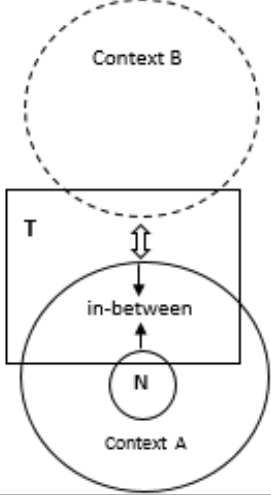
Now, we have shown once more that art and science, especially DBR based on an empirical-phenomenological attitude, form two different qualities of action which both are needed if you are interested in verbalizing phenomena. The dualism of art on the one hand and science on the other is no longer sustainable. Apart from that, the relevance of art which in the ancient Greek times was natural as Arendt tells us, is reinstalled:

> „In diesen von der modernen Gesellschaft ursprünglich so tief verachteten Virtuosentum, in den >brotlosen< Künsten des Flötespielens oder des Tanzens oder des Theaterspielens, hatte antikes Denken einmal die Beispiele und Illustrationen gefunden, an denen es sich die höchsten und größten Möglichkeiten des Menschen vergegenwärtigte" (Arendt 2019, 263).

The following graph represents our previous considerations on the meaning of the original (narrative) and the translation by Benjamin and their adaptation to the scientific context of an empirical-phenomenological research approach.

Table 5

Illustration of the adaption of Benjamin`s understanding about the original (narrative) and its translation for DBR

	Original Narrative (N)	Translation (T)
Form	Priority of the form (Content follows form)	
Content		Priority of the content (Form follows content)
Position of (N)/ (T)	Within the context („Wirklichkeit"), as space in space (N): N Context A	Outside the narrative's context: Context B T in-between N Context A
Relation between the narrative and context (A)	direct	indirect
In DBR (N)/(T) aims at…	the (single) case	the pattern/structure enclosed in the single case but at the same time exceeding it
Relation between the narrative's and the translation's language	The narrative's language is the language of context A, meaning that the translation's language is none of relevance	The translation's language is necessarily different from the narrative's language
Potential	„Wirklichkeit" is generated in the verbalization of the experienced	The differentiation of languages allows to epistemologically understand
	Verbalizing (acting) the narrator embodies action	(Epistemological) understanding occurs from the translation

5.0 Results

To sum up, the case study as an original narrative serves as a medium for the epistemological understanding of the researcher. It is characterized by two qualities of action in writing or, more generally spoken, verbalization. Therefore, the researcher has to formulate his experience in an original narrative. The narrative serves as basis for a translation into the scientific world. The writing of the original narrative together with its translation is able to generate phenomena. This is why we call this process "transfiguration" meaning that a non-visible but still noticeable phenomenon is transfigured via the use of language. With the help of Benjamin we could show that not only the text pro-

ducts of the two writing qualities are different, but also that the verbalizing processes which produce the texts differ. So far, we had a close look on the verbalizing processes themselves and especially on the structure of a case study as an original narrative. Of course, as a next step (but in another article), it would be interesting to illustrate parts of a case study produced in a DBR project.

Now, the following implications can be drawn from our systematic adaptation from Benjamin's view on the writing of narratives and their translations:

(a) The case study is a fundamental part in the researcher's epistemological understanding: Understanding needs narration.
(b) The original (narrative) and its translation are equally important for the transfiguration of phenomena. The transfiguration of phenomena consists of two qualities of action which are bound together: The 1st is the embodiment of phenomena; here different forms of embodiment or verbalization are possible. The 2nd refers to the reflective re-thinking of this embodiment. This is also called translation.
(c) The original (narrative) is a self-contained, finite text. Its creation is not dependent on the translation, but it can only survive through (one or even more) translation(s).
(d) The original (narrative) and translation are both text products, but include different characteristics. As such, the processes of action which produce these texts differ, too. These are described as the narrators' and translators' challenges. If a research process aims at the understanding of phenomena, the action qualities of both need to be applied and handled by the researcher.
(e) The embodiment of phenomena is directly linked to the „Wirklichkeit", the context, in which it is generated. It relies on all possibilities of human expression and communication: images, texts, movements, gestures, facial expressions, etc.
(f) The context is accompanied by the subtext which can only be subjectively addressed, but is nonetheless fundamental for understanding.
(g) From the researcher's perspective case studies are also used to didactically inform somebody about what is happening in the process of DBR. **But, together with its translation, the case study rather becomes a process testifying the researcher's own learning process: In the case study, the researcher shares what concerns or affects him or her in experiencing the research field. It is an attempt to express what shapes the field of research as a tangible atmosphere, but in the particular situation itself is usually not and cannot be addressed by the actors. The process of case study development is therefore characterized by a struggle for words (respectively: movements, gestures, images, etc.) which, in the final text product, only represent an atmosphere, but do not explain it.**

Bearing this in mind, the **case study is no longer seen as a by-product in the DBR, but as a central, indispensable element in the knowledge production of DBR.**

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Author Profiles

Tina Emmler is a postdoctoral research fellow and lecturer at the Department for Business and Human Resource Education at the University of Paderborn, Germany. Her research is characterized as empirical-phenomenological and focuses on designing innovations and its connection to knowledge management in the context of vocational education and training. Since she conceptualizes knowledge building processes as highly divergent and creative, Dr. Tina Emmler also conducts transdisciplinary research in which she examines the meaning of aesthetical theory for the understanding of knowledge building. Here, she draws on her expertise as actress, stage director, and coach in the field of cross-theatrical learning and teaching.

Petra Frehe-Halliwell is a university professor for vocational education and training in the field of business administration and economics at the Friedrich Schiller University of Jena, Germany. In her research, she draws on design-based research (DBR) from a qualitative-reconstructive perspective. Particularly, she focusses on contemplating the development process of prototypes as an anchor point for research, but also as an opportunity to develop research interests linked to but going beyond the prototype-development. Petra Frehe-Halliwell has been engaged in several DBR-projects together with vocational schools, especially working on prototypes to facilitate personalized learning and vocational orientation for youth in disadvantaging circumstances. Currently, she is interested in the exploration and comprehension of school-based curriculum-development within teacher teams.

Author Details

Dr. Tina Emmler
Wirtschafts- und Sozialpädagogik
University of Paderborn
Warburgerstraße 100
Germany
+49 5251 60-3292
Tina.Emmler@uni-paderborn.de

Prof.'in Dr. Petra Frehe-Halliwell
Lehrstuhl für Wirtschaftspädagogik
University of Jena
Carl-Zeiß-Straße 3
Germany
+49 3641 9-43332
petra.frehe@uni-jena.de