RoSE
Research on Steiner Education

Volume 8 Number 2
pp. 33-50
Januar 2018
Hosted at www.rosejourn.com

Using a constructionist reading of Steiner's epistemology in Waldorf pedagogy

Martyn Rawson

Waldorfseminar Kiel / Deutschland
International Masters Freie Hochschule Stuttgart / Deutschland
Plymouth University / UK

ABSTRACT. In this paper I establish an epistemology for illuminative practitioner research that is based on a constructionist reading of Steiner's theory of knowledge. The paper starts by exploring what kind of epistemology practitioner research needs if it is understood as action based on practical reason or pedagogical wisdom, what Aristotle called *phronesis*. The tradition of action research has moved from more positivistic origins to hermeneutic, phenomenological, post-structuralist, post-colonial and feminist positions, often outside the academy. Practitioner research has professional, personal and political dimensions and therefore needs a theory of knowledge that provides an ethical perspective, generates local knowledge, develops ability and can engage with issues of emancipation. I then develop a constructionist reading of Steiner's theory of knowledge, which is understood as a productive, iterative process of learning and development that expands the horizon of knowing into ever wider contexts. Everyday acts of knowing bring perceptions together with concepts that have their source in a pre-linguistic realm of reality and these are then expressed in language, which is culturally embedded. These aspects of the knowledge process show affinities to forms of social constructionism as developed by thinkers such Ernst Cassirer, John Searle and Kenneth Gergen. Such an approach has implications for the development of Waldorf pedagogy by practitioners in very different cultural settings, in that they no longer have to seek 'equivalents' to standard, Eurocentric versions of curriculum, but can based curriculum on locally generated knowledge, whilst relating to general Waldorf principles.

Keywords: epistemology, illuminative practitioner research

ABSTRAKT. In diesem Aufsatz versuche ich eine Erkenntnistheorie für verstehende Praxisforschung zu begründen, die auf einer konstruktionistischen Interpretation von Steiners Erkenntnistheorie basiert. Der Aufsatz beginnt mit einer Untersuchung darüber, was für eine Erkenntnistheorie diese Praxisforschung braucht, wenn man sie als Handeln auf Grund von pädagogischer Weisheit oder praktischer Vernunft versteht, die Aristoteles als *phronese* bezeichnete. Die Tradition der Aktionsforschung hat sich von ihren positivistischen Wurzeln entfernt und hat zunehmend hermeneutische, phänomenologische, post-strukturalistische, post-koloniale und feministische Züge angenommen, die oft außerhalb der akademischen und wissenschaftlichen Community existieren. Praxisforschung hat professionelle, persönliche und politische Dimensionen und braucht deshalb eine Erkenntnistheorie, die eine ethische Perspektive anbietet, lokale Erkenntnis generiert, befähigend ist und sich mit Fragen der Emanzipation auseinandersetzt. Der Aufsatz bietet eine konstruktionistische Lesart von Steiners Erkenntnistheorie an, die diese als produktiven, iterativen Prozess des Lernens und der Entwicklung versteht, in dem Erkenntnishorizonte in immer umfassenderen Zusammenhängen erweitert werden. Im norma-

len, alltäglichen Erkenntnisprozess werden Wahrnehmungen durch Begriffe ergänzt, die ihre Quelle in einem vor-linguistischen Bereich der Realität haben, die aber in verschiedene sprachliche und kulturelle *Gewänder gekleidet* werden. Dieser Erkenntnisprozess zeigt Affinitäten zu Formen des sozialen Konstruktionismus, der von Denkern wie Ernst Cassirer, John Searle und Kenneth Gergen vertreten wird. Dieser Ansatz hat Konsequenzen für die Entwicklung der Waldorfpraxis in verschiedenen Kulturkontexten. Waldorfpädagog*innen müssen nicht mehr nach Äquivalenzen zu vorgegebenen Standards der oft eurozentrischen Lehrpläne suchen, sondern sie können ihren Lehrplan vor Ort entwickeln, auf Grundlage der Erkenntnisse, die sie lokal erlangen, und mit Bezug zu allgemeinen Waldorfprinzipien.

Using a constructionist reading of Steiner's epistemology in Waldorf pedagogy

Introduction

This paper is the second of two that explore ways in which Waldorf teachers can research their pedagogical practice using Waldorf foundational theory, what is referred to in German as *Menschenkunde*. The first paper defined Waldorf pedagogy as art, craft and science and made the point that these activities cannot be separated in practice. In order to justify its claims to autonomy and to develop the pedagogy in changing conditions and within new cultural settings, it is necessary to have a systematic, valid and reliable method of researching practice as a basis. The first paper suggested that illuminative practitioner research (IPR) can be modified for use with Waldorf theory and contemplative methods (Rawson, 2012; Rawson & Stöckli, 2007) to serve as a way of researching Waldorf practice. Assuming that the quality and validity of research is based on an alignment of epistemology, ontology, methodology, theoretical perspective and research methods (Crotty, 1998), I seek, in this paper, to establish an appropriate research epistemology that offers a basis for research into Waldorf practice using Waldorf theory. IPR mainly uses qualitative social science methods, such as participant observations, interviews, hermeneutic analysis of images and texts, typical of case studies. Such methods are usually based on a constructionist epistemology(Bassey, 1999).

The paper first questions what kind of epistemology is required by a research approach based on actions founded on practical reason. It then develops a constructionist reading of Steiner's epistemology and then outlines the epistemological options for practitioner research. Following, this I outline key aspects of a social constructionist epistemology and then show the ways in which this aligns with and differs from the epistemology informing Waldorf practice. Finally, the paper outlines some research implications for developing Waldorf practice.

What kind of epistemology is needed?

What kind of epistemology does practitioner research need? The emphasis in IPR, which is a form of action research (Elliott & Lukes, 2008), is on doing and reflection on doing. It is not primarily concerned with generating new scientific knowledge or theory, though it can contribute to this (Noffke & Somekh, 2013). Rather than having a nomothetic approach aimed at identifying general truths or principles, practitioner research aims to understand specific pedagogical situations ideographically and to inform action accordingly (Hitchcock & Hughes, 1995). Its primary concern is coming to better understandings of pedagogical situations and how they have arisen in order to improve practice (Elliott 2007). It can be used by individuals to examine their own practice and develop quality and provide accountability (McNiff & Whitehead 2010), it can focus on specific aspects of classroom work but can also link practice to wider social visions(Robinson & Soudien, 2013).

Noffke (2013) understands the epistemology of action research as having three dimensions of knowledge; the professional, the personal and the political. Since all forms of social science are social constructions within existing frameworks of power, the focus of this epistemology can be extended from accounting for how knowledge is generated, to "examining assumptions about 'who can be a knower'?, about what strategies

count as 'means to be legitimated as knowledge'? and about 'what kinds of things can be known'?"(2013, p. 7). These are pertinent questions in relation to Waldorf pedagogy. As pointed out in the first paper (REF), academic educational science takes the view that Waldorf foundational theory is unscientific and unworthy of serious academic consideration (Schieren, 2016a). Added to this, educational action research ,has a low status in the German speaking academic world (Altrichter & Posch 2007; Fichten & Meyer 2006). Thus given that the power in research is distinctly asymmetrical, the questions as to who can be a researcher, what kind of knowledge can be generated and what status it has, are very relevant for research in Steiner education. Furthermore, Noffke (2013) draws attention to Appardurai's argument that people, particularly those outside the academy, have a right to research, which he defines as "a specialised name for a generalised capacity, the capacity to make disciplined inquiries into those things we need to know, but do not know yet"(Appadurai 2006, p. 167). He argues that academic knowledge tends to marginalize different kinds of locally produced knowledge, often narrative in style. Therefore, I would suggest that practitioner research within Waldorf practice should align itself to post-colonial, post-structuralist and feminist perspectives, especially if it is to be a tool for the developing of that practice in different social and cultural settings. That will undoubtedly be a challenge.

Practitioner research is ethically informed practice (Elliott, 2013). Practical ethics is about becoming better at what you do in the service of the social good. It therefore needs a practical philosophy of practice, which is at the same time, an ethics of practice, since the aim of pedagogy is to do the right thing at the right time, in the right way to enable a 'good' outcome for all involved and, obviously, it needs an ethical foundation to identify what the 'good' may be. As Carr (Carr, 2006) suggests, the best model of practical philosophy is Aristotle's (Aristotle, 2009)ethics, which is also the basis for Gadamer's hermeneutic phenomenology. What Aristotle called *phronesis* has been translated as practical philosophy, practical reasoning or pedagogical wisdom (Biesta 2012). *Phronesis* is reasoned or deliberative action directed towards human flourishing. It is always embedded in and relates to *praxis*, which for Aristotle meant action that was directed towards realizing a morally worthwhile form of the 'good life', as opposed to *poiesis*, which is making directed towards a specific outcome, what today would be called an instrumental application of knowledge (Carr & Kemmis, 1986). *Phronesis* is not only meaningful doing, it is also a quality of being. It is living out a morally good idea towards an overall better situation. In contrast to techne, which involves applying general principles to specific cases, *phronesis* means understanding action in context. This requires judgement "because its outcome is a reasoned decision about what to do in a particular situation, that can be defended discursively and justified as appropriate to the circumstances in which it is being applied" (Carr, 2006, p. 427). Practical wisdom is on the one hand concerned with knowing in a particular field of practice, such as teaching (pedagogical wisdom), but is also concerned with what the practitioner brings with her and her capacity to 'read' situations in the light of what has happened in other situations. The skilled practitioner, when confronted by unexpected situations, can also respond by envisioning what might be possible, what might work. So there is an anticipatory aspect to the skill. As Kemmis (Kemmis, 2005) puts it, we can think about knowing practice in two senses; in the sense that the "person comes to know what a particular kind of practice is, and in the sense of being 'knowing', which means being aware and self-aware about how things are- a sense that one knows what one is doing when one engages in a practice, and reflexively becomes more knowing as one continues to practice" (2005,p. 408).

The nature of illuminative practitioner research (Elliott & Lukes, 2008) is that it brings the specific case into a relationship with general principles, but this relationship is neither one in which the case demonstrates the general rule, nor that the general rule explains the specific case. Instead of seeking to identify generally valid rules that can be transferred to other situations, engaging with the specific case enables the teacher to become more experienced and learn new dispositions (or extend existing ones) to reading pedagogical situations. Instead of transfer, we have learning as becoming through transformation (James & Biesta, 2007). Gadamer (2014) calls this process of becoming more experienced and expanding one's horizon of understanding, *Bildung*. Knowledge gained about a specific case may be considered true in this case and thus may be considered local as opposed to general knowledge. However, such local knowledge and the skilled practitioners who embody it can develop through a cluster of such cases into a body of common knowledge or a tradition of understanding (Elliott & Lukes, 2008). Elliott (2013) argues that such a consensus of

judgements might constitute "both a knowledge of particulars and of universals, and express a clear and systematic (unified) view of the practically relevant, and enable practitioners to anticipate if not infallibly predict future occurrences and to recognize unanticipated ones when they occur" (2013, p.34.). The problem is, many practitioners (and academic researchers) don't trust their own judgement because anything less than a general rule doesn't seem to be scientific. Many would rather have the certainty of facts proven by scientific evidence. Though understandable, this view is naïve.

Biesta (Biesta 2002) argues that what counts as a general knowledge is often really only the dominance of particular form of local knowledge. An example he cites is the dominance of medical techno-science that denies the validity of complementary medicine. He suggests that we should rather see the world as a plurality of local practices, some of which have been more successful than others in transforming the world and "what appears to be general or universal, is, from this point of view, nothing more (and nothing less) than an extension of a particular local practice" (2002, p. 387). This says nothing about the intrinsic quality or epistemological difference between the forms of knowledge. Applied to the question of practitioner research in Waldorf pedagogy, practical knowledge generated through practitioner research at the local level can be considered valid knowledge if it meets the appropriate criteria for practitioner research (Heikkeinen , Huttunen , Syrjälä , & Pesonen 2012; Kvale, 1995). Why should understandings of learning as the acquisition of competences, for example, that have the full authority of government policies be any more valid than more subtle and holistic understandings that see learning as transformation in the whole person embedded in social practices, as elaborated by researchers such as Jean Lave (Lave, 2009)or Peter Faulstich (Faulstich, 2013)?

The crucial difference between action research and much professional research is the location of knowing. The living link between the specific case and the general principle is the researcher herself. In becoming experienced both in practice and in general theory, she moves between specific pedagogical situations and the general principles and becomes transformed by both and, over time, has the potential to change both practice and the general principles. The general principles themselves do not remain fossilised but evolve. Furthermore, practitioner research is frequently participatory and collaborative (Bergold & Thomas, 2012) and is located in communities of practice (Wenger, 1998). Through reflective practitioner research the practice itself evolves within the community, thus overcoming the mere reproduction of that practice. Practitioner researcher can thus be emancipatory and can contribute to a "cohesive, and resistant social movement" (Noffke, 2013, p.18). Thus the kind of epistemology we need as practitioner researchers is one that allows for embodied knowing-in-practice or knowing-in-action, that is, an epistemology of intelligent action, in action.

A reading of Steiner's epistemology for Waldorf pedagogy

By calling what follows a 'reading', I wish to imply that not only is this an idiosyncratic interpretation but also involves an application of Steiner's epistemology that is not explicit in his original works, though I believe it aligns with it. I think this is a legitimate way of taking up Steiner's ideas, though purists may find it unacceptable to modify Steiner. A number of authors agree that Steiner's pedagogy, anthropology and social theory (which cannot really be separated) are based on his monistic theory of knowledge, ontology and philosophy, as developed in his early philosophical publications (Steiner, 1963a, 1963b, 1968)and that this has consequences for understanding learning, development and the tasks of education (da Veiga, 2016; Gabriel, 2014; Schieren, 2012; Schneider, 1982; Wagemann 2016). Therefore, any research into Waldorf practice has to start with this epistemological aspect. As Wiehl (Wiehl 2015) points out however, Waldorf teachers tend to draw on Steiner's specific recommendations for teaching, curriculum and methods and secondary literature that summarize these. They are less concerned with epistemology and indeed this aspect may not necessarily feature much in teacher education, or it may be experienced as difficult and inaccessible. It is also significant that very few texts on Waldorf pedagogy in English make this important connection between Steiner's theory of knowledge and Waldorf pedagogy. In this reading, I also draw on Barfield (Barfield, 1988) who himself developed an epistemology based on Steiner.

Steiner's theory of knowledge has the primary aim of providing human beings with a sound basis for action, so that they can progressively emancipate themselves from all forms of social and cultural determination and act freely out of insight. As an epistemology, it is both ethical because it is concerned with how people act and it is ontological, since it has to do with human becoming. The knowledge process is iterative, expansive and involves the whole human being, offering the knower a progressively wider context for her concepts. Thus knowing is learning. What we learn changes us and changes our relationship to the world and so knowing and learning are a form of becoming. This is an idea resonant with Dewey's (Dewey, 1938)notion of the continuity of experience. Steiner's epistemology also assumes that human beings are embedded in and are part of a continuously changing world with a history, which they embody. Our evolution as a species (Rawson, 2003) and our development as individuals is characterised by changes in consciousness over time. Steiner's epistemology and ontology thus also constitute a phenomenology of consciousness (Wagemann, 2016), according to which the human mind engages with the world in various states of consciousness; full waking consciousness in thinking cognition, dream-like consciousness in feeling and unconsciousness in willing. In the mental act of everyday thinking, the human being is most separated from the world, whilst in her will, the human being is fully embedded in the world (Steiner, 1996a). In both states the 'I' as core of being, as agentic subject, is active.

Barfield (1988) describes people as being in a state of 'original participation' in the world, though our sense experience and everyday consciousness produces the illusion that we, as knowing subjects, are separate from the objects we perceive. This separation has major consequences for the way we relate to the world because it tends to encourage us to see the world as Other, as something that we do not belong to and for which we are not directly responsible. This has led to an attitude in which we can use knowledge to conquer, capture, and master the world and to take it apart and use it as we please to serve our needs. Following Barfield, this is the mentality that has come with scientific thinking since Francis Bacon, Galileo Galilei, John Locke and Rene Descartes. In earlier cultures, Barfield explains, people experienced themselves as embedded in the world in a unity of spiritual and material dimensions, to which they naturally belonged. In modern times, this relationship to the world changed and the separated subject-object consciousness that has emerged, which is taken as reality.

As Steiner (1963/1892) argued in *Truth and Science,* the human being, "is not a passive onlooker in relation to evolution, merely repeating in mental pictures cosmic events taking place without his participation; he is the active co-creator of the world-process, and cognition is the most perfect link in the organism of the universe" (1963, p. 298). Unpacked, this statement contains a number of radical ideas; we are not spectators of a reality that is complete in itself and therefore knowledge cannot be objectivist. Nor is it the result of constructivism- it is not produced by the mind alone. Knowledge has a historical or evolutionary dimension and human beings participate in the world and contribute to world processes. In the *Foundations of Human Experience* (Steiner, 1996), which documents the lectures Steiner held for the teachers in the first Waldorf School, he returned to this idea when he insists that the human mind is the stage upon which cosmic events unfold but that she is not merely a spectator but an active protagonist (1996a, p.77). The key point here is that Steiner is reiterating that reality is not simply 'out there' in a permanent and stable state and that human beings simply need to discover this given reality, and mirror it in their minds. That would be an objectivist or naturalistic and dualistic epistemology that separates mind from world, subject from object and spirit from matter. Nor is the world merely the subjective product of the human mind, which would be a subjectivist or radically relativist epistemology.

Steiner suggests that knowledge generation is a process that is both productive (i.e. bringing something forth from what already exists) and constructive (i.e. by building on existing experience). It is not a creation out of nothing. It is an epistemological position that assumes that the world really exists, but as we experience it, it is without meaning, without context and coherence and therefore incomplete and only human beings can give it meaning by relating the isolated parts to the whole. Gabriel (2014, p. 234) describes Steiner's notion of reality as a vast self-organising process in which a continuous stream of indeterminate single qualities come together into concrete shapes through the force of generalized principles and then dissolve again, a continuous process of becoming and change. The human knowledge-producing process gives

temporary (and culturally specific) meaning to this flux of life, through which life itself becomes conscious of itself. The human being is both an evolving part of this process and the human I, as core of being, is also the locus of this consciousness. Knowledge is knowing the context. The knowledge-producing process gives us a progressively more comprehensive and coherent (literally sticking together) understanding of relationships in the world- a process, which is endlessly expansive and without limits.

According to Steiner (1963), the core act of knowing involves our thinking processes intuitively matching *concepts*, derived from the world of ideas, with *percepts*, derived in the first instance from sense experience, and subsequently from experience of our own inquiring mind- as experience within the experience. The kind of thinking Steiner is talking about is applied, focused, directed consciousness that is both reflective and yet an active process in the moment of the act of knowing. As a kind of reflexive attention, it has two modes; consciousness in the object of perception and, reflection. The world, or rather, an extract from the whole, is given to us through our sense organs, which generate sensations which we apprehend as percepts *(Wahrnehmungen)*. The concepts and ideas, however, are not given to our senses, "these we must produce if we are to experience them" (Steiner, 1963, p.344). The knowledge gained in this process is immanent. What we retain from the act of knowing in memory takes the form of mental images, which are always paler representations of direct experience. Knowledge or experience of reality, must be constantly brought forth anew.

The human being is embedded in the stream of life. The world is given to our consciousness through two sources; empirically through the senses and in thinking, which is described as an organ that can experience world being and can *translate the gestures of experience* - Steiner uses the word *Dolmetsch*, meaning interpreter (Steiner, 1973). The aim of translation/interpretation is understanding. As Gadamer (2013, p.574) says, "the translation process fundamentally contains the whole secret of how human beings come to an understanding of the world and communicate with each other. Translation is an indissoluble unity of implicit acts of anticipating, of grasping meaning as a whole beforehand and explicitly laying down what was thus grasped in advance." The poet and artist John Berger wrote that "true translation is not a binary affair between two languages but a triangular affair. The third point of the triangle being what lay behind the words in the original text before it was written. True translation demands a return to the pre-verbal" (2016, 4). Thinking translates the gestures of experience by going back to the pre-verbal state of reality.

Based on our embodied experience, we organize the sensations we are given by our sense organs in a process Barfield (1988) calls *figuration*. They are configured into some 'thing' that can be experienced. In other words, they are reified as percepts. We experience the world (or that part of it we are engaging with) directly, but we experience the perception only in the act of seeing. The percept is the outcome of the process. These mental representations are distinct from the sensations that gave rise to them and which are initially without context or meaning, but appear simply as sounds, colours, movements, shapes and so on that emerge through our experience of contrast and are thus relational (lighter or darker, bigger or smaller, louder or quieter than…something else). Barfield calls these *collective representations* because they reflect the general way of seeing, specific to a time in history and to a specific culture or cultural epoch. In their original form, these concepts are given in an intuitive, immediate, pre-linguistic form that cannot be said in words. As Steiner (1963, p. 76) noted, "what a concept is cannot be stated in words. Words can do no more than draw attention to our concepts". Our experience of the concept applied to the percept is initially pre-verbal, it is given to us intuitively. It is only when we put concepts into words that we know we have them and can communicate them. Such concepts draw our attention to the character or nature of the percept we have constructed from our observation. Once we become aware of our concepts and articulate these in words or images, they have to be 'clothed' in culturally specific 'garments'. This reminds us of Gadamer's (2013, p. 490) statement that "being that can be understood is language".

The *content* of what we experience is given to us through our sense organs and nervous system. The *concept* gives the *percept* its wider context, its relationships to other things, its nomothetic (law-giving) structures and thus its meaning. Thinking, says Steiner (1963, p. 349), approaches the given world-content as an organizing principle. An organizing principle enables us to make sense of what we see. Bortoft (Bortoft, 1996)give an example of a picture of a giraffe's neck. What initially appears as an indistinct group of shapes becomes *visible*

as a picture of the patterns on the giraffe's skin, once we organize the shapes into patterns and match this to the concept of the spatial implications of a two-dimensional picture and the concept of giraffe, which we know from the collective social world of concepts. Steiner points out that concepts are "never found isolated. Concepts combine to form a totality built up according to inherent laws (1963, p.76).

By producing concepts, we give meaning to our experience. As Steiner says, "to explain a thing, to make it intelligible, means nothing other than to place it into a context from which it has been torn owing to our (bodily) organisation" (1963, p. 113). These organizing ideas do not have their source in the percept, as in positivism, nor are they 'thought up' by the mind, nor are they the product of the how the mind works, i.e. *a priori* structures, as in constructivism. In the same way that phenomenology since Husserl has done (Zahavi, 2008), Steiner posits that the world is given to us as physical beings-in-the-world, as lived experience, which we have to interpret. According to phenomenology, our lived experience of the lifeworld is habitual and taken-for-granted. It requires complex processes of phenomenological and hermeneutic analysis to reveal the underlying structures (Zahavi, 2001).

The source of concepts according to Steiner is not in what is given by the empirical world but is given by the world of ideas intuitively through thinking- "thinking brings this concept to the perception from man's (sic) world of concepts and ideas…intuition is for thinking what observation is for perception" (Steiner, 1963, p. 112). This aspect links Steiner to idealism, though not *subjective* idealism, because the I is not the source of the ideas, but rather to an *objective* idealism- the content of our concepts is given *through* the I. The I, as spiritual being, is part of the world-content and not separate from it and thus is embedded in the source of ideas and concepts. The source is not the 'I' itself and is therefore neither subjective nor objective. One can appreciate why Sijmons (2008) concludes that Steiner's philosophy is both phenomenological and idealist. Although this process is intuitive, the act of knowing is not passive. It is an active, intentional, productive and performative act (da Veiga, 2016). In the willed act of observation, in which attention is directed towards the sensory experience that interests us, mental images arise, though without coherence or meaning. It requires a performative act to match the percepts we have constructed with the appropriate organizing ideas so that they are once more meaningful in relation to the whole.

Steiner says the source of concepts and ideas (ideas being larger, more generalized concepts, perhaps comprising several concepts) is the world of ideas and their validity is self-evident. He gives the example of the concept *triangle*, which any person can think. As Steiner puts it, "The one undivided concept, triangle, does not become a multiplicity because it is thought by many. For the thinking of the many is itself a unity" (1963, p.108). He says that the concept of triangle is universal and self-explanatory. Triangles in the geometrical sense do not exist in the natural world- they are an idea whose validity is to be found in thinking and not in seeing (even by seeing the representation of a triangle in a geometry book). Schieren (2016, p. 431) speaks of concepts being self-evidential entities founded ontologically in their own inherent laws and thus are of a more objective character, in the sense that they are not created by the subject but are qualities inherent in the object in its world context. In the act of knowing, subjects have individualized and partial access to the objective concepts and the relationships between these.

Following Steiner's epistemology, the process of learning involves the progressive growth of individualized concepts towards their more universal form. The individualizing process matches a concept to a specific percept and at the same time enables the subject to link this experience to a wider context of meaning by accessing the 'world of ideas'. One could object that the notion of *triangularity* as a geometrical law is actually a cultural concept available to us at least since the times of Euclid and Pythagoras. Once the idea has been constructed, irrespective of the language this is framed in, it then becomes accessible to anyone with the education to access it, and thus in a sense universal. It would, however, be difficult to claim that children (or indeed most adults) could construct the notion of a geometrical triangle without any educational instruction. This is why Vygotsky distinguished between natural concepts that can be based on everyday experience and observation and scientific or universal concepts that can only be attained through instruction(Eun, 2010; Vygotsky, 1997). In Russian the word for universal (*vseobscij*), literally 'common to all', has the same root (*obsca, obsce*) as society (*obscetstvo*), community(*obscina*) and communication and interaction (*obscenie*) (Roth, 2018). Concepts in this sense have a common origin that each subject- each I- has access to. These are concepts culturally 'clothed' and individually understood. They become literally universal in the sense of

accessible to all through social discourse and thus belong to the *social construction* of reality. Triangles acquire their cultural meaning through this process. Recalling my characterisation of production and construction above, we would have to say that the existence of concepts as pre-linguistic reality would therefore have to be described as *spiritual production*, since even the spiritual world has a history and an evolution and therefore what is now, has emerged out of and relates to what was. The meaning of pre-linguistic concepts and their relationships remains hidden to us or esoteric until we have concepts to describe them.

Thus, to sum up, my reading of Steiner's epistemology sees it as both ethical and emancipatory. It is about individuals basing their actions on the most comprehensive understanding of the relationships available to them within a given context. This involves an iterative and productive activity of intuitively matching experience with pre-linguistic concepts. Such a process of knowing is in effect a form of learning since the concepts expand over time with new experiences, thus providing a progressively more comprehensive horizon of knowing. Such knowing as learning also means that identity evolves with knowledge- thus knowing is becoming. The act of knowing is the performative act of the subject- the I - yet the concepts we use in our discourse are 'clothed' in cultural and linguistic forms and are thus available through socially interaction. Once we have new concepts, we can use these to direct our attention to the world, for example in research.

Epistemology: three options

In terms of epistemology in research, Crotty (1998) points out that there are only three basic possibilities; using objectivist, subjectivist or constructionist paradigms. An objectivist epistemology claims that there is only one ultimate truth and reality and that this exists whether human beings look for it or not. Knowledge is 'out there' and once 'captured' or 'acquired', can be defined, possessed and measured. Related to objectivist understandings are naturalistic accounts that argue that phenomena once considered to be supernatural, supersensible or spiritual, can be accounted for by naturalistic explanations (e.g. consciousness and mind are a functions or products of the brain). Positivist research is objectivist. In social research objectivism assumes that statistical analyses of large samples of data based on standardized surveys and questionnaires show how things are and this is often used to support 'evidence-based' policy decisions. The phrase 'evidence-based' suggests that such evidence is an objective, quantifiable, statistical fact. It assumes that social life has underlying 'laws' and regularities that make it predictable, quantifiable and thus controllable. Subjectivism, by contrast, is a doctrine that asserts that, as far as human beings are concerned, there is no external or objective knowledge. It sees the origin of all knowledge as located in the human mind.

Constructionism stands between objectivism and subjectivism. It understands knowledge as being co-constructed by people in interaction with each other and with the world and which cannot be based on a standpoint outside of the lifeworld (Burr, 2004). The lifeworld refers to taken-for-granted assumptions about the world, "what people 'know' as 'reality' in their everyday, non- or pre-theoretical lives. In other words, 'common sense 'knowledge'" (Berger & Luckmann, 1966, p.27). Crotty (1998, p. 44) makes the important point that constructionism does not *create* meaning, which would be a form of subjectivism. Rather it *constructs* meaning because the world is already there, though without meaning. Creation is ahistorical. It comes out of nowhere- a mystical null-point without precursors or precedents. This perspective is not compatible with historical and monistic notions of evolution. Constructionism is also not a form of objectivism, which would see meaning as inherent in the things we study in the social world. Crotty (1998) conflates epistemology and ontology on the grounds that in social research, knowledge about people always closely relates to our understanding of the nature of reality and how people relate to themselves, to others and to the world. In other words, how reality comes about is bound up with how we know about it and who we are.

The varieties of constructionism

Constructionism spans a wide spectrum of positions, from radical constructionism that denies any reality and sees all knowledge as relative, to more moderate forms of social constructionism that see the

meanings given to actually existing reality as socially constructed and culturally situated. Most forms of constructionism recognize that the world really exists, but is without meaning for human beings unless they construct meaning, which they do in social interaction, using cultural artefacts such as language and symbols and social practices, and is frequently articulated in the form of narrative accounts of being and becoming. A constructionist view of knowledge recognizes that it can be embodied and distributed across social practices as knowing-in-practice, rather than only being located 'in people's heads' as something they possess (Billet, 2001). It can also be reified by language or symbol.

The philosopher John Searle (1995) makes the point that although there are many cultural artefacts, that is, concepts that are manifestly human 'inventions' and institutional facts (e.g. train timetables, money, laws, religions), there are also 'brute facts' that pre-exist every social or cultural linguistic construction referring to these. These include physical entities like mountains, water, fire and human conditions such as hunger or thirst, ageing, death and other biological processes that may be given different and changing social and cultural meanings, but which exist beyond these as universal aspects of human experience. However, in the everyday lifeworld, even these concepts are 'clothed' in cultural meaning to the extent that experience is shaped by such meanings (or lack of them- a thing in the world may be effectively 'invisible' if it has no meaning). Searle distinguishes between mountains that are ontologically objective and feelings that are ontologically subjective, in the sense that their existence depends on someone's experience. Furthermore, some propositions can be considered true "independently of anybody's feelings or attitudes" (Searle, 2010, p. 18) and are thus epistemologically objective. The statement, for example, "Vincent van Gogh died in France", is epistemologically objective and can be verified by external sources, whereas the opinion that Van Goh was a better painter than Manet is epistemologically subjective. The distinction lies in the mode of existence of these entities. As Searle puts it, "the question is not, How can there be an objective reality which is subjective? But rather, *How can there be an epistemologically objective set of statements about a reality which is ontologically subjective*?" (Searle, 2010, p. 18).

The distinction between Steiner's ideas world of concepts and Searle's brute concepts and cultural concepts is not fundamental. The ideas world in Steiner is the spiritual world and Steiner posits no ultimate separation of the mind from reality. For Searle there is also no separation; there is only one human reality. The location of Searle's concepts is language and the social circulation of ideas, and pre-linguistic intentionality, which is, in his view, consciousness. Searle argues that language is the state of nature of human beings because as soon as you have language, you have social relations. However, language arises out of pre-linguistic intentionality. Intentionality is the relationship between the mind and the object of its consciousness, in other words intentionality is the directedness of consciousness, which is always of something other than itself (Gallagher & Zahavi, 2012). Self-consciousness is a special case, but does not fundamentally differ from other forms of intentionality. Intentional states exist in a wider context that Searle refers to as the *Network*, which links all possible objects of consciousness, which is in effect a world of concepts. If my intentional state directs me towards planning my lessons, the notion of lessons requires a whole set of other intentional states and assumptions and a whole set of abilities, capacities and dispositions to be able to do this, which Searle refers to as *Background* (2010, p. 31). The Background expresses the nature my embeddedness in the Network. Intentional states that are volitional become intentions-in-action when I actually enact the intention.

Human beings are embedded in collective intentionality that manifests in each individual mind as I-intentionality. Collective intentionality is based, according to Searle, on common assumptions held by people at a pre-linguistic level, including basic behavioural processes such as shared attention, eye contact, offering some kind of response when spoken to or gestured at, collective recognition, shared attitudes, desires and beliefs, and the will to cooperation. Out of these arise shared assumptions, procedures and conventions and institutional facts. The core question is, where is all this located? Searle says, the human mind, but observes that currently there is (or was in 2010 when he wrote that) no adequate account of the relationship of consciousness and mind to the biological body. Steiner locates the human mind partly within the individual soul (the functions of thinking, feeling and willing) and partly within the spiritual world. Either way, we are looking at a non-material *entity or process*. Whatever its origin, consciousness or intentionality can only be described as relationship, network, interaction, energy, flow, organisation - or any

other non-material process, but not as material substance! It is activity that has a function but no substance. However, we don't need to decide this age-old philosophical problem of spirit/mind and matter, in order to start doing research. The point is that Steiner's account does not rule out a social construction of reality, it just locates it in a wider context that he calls the spiritual world. It depends on how we define social. Social (etymologically derived from *socius* Latin for friend) is always the relationship between two or more beings. Society is a form of that but not the only one possible.

In constructionism the subject engages with the object in an interactive way that acknowledges both sides of the equation. The knowledge that is constructed is neither inherent in the object nor the creation of the subject, yet has to be faithful to both. In constructionism the subject takes the object seriously and the constructs produced have to reflect the nature of the object in a faithful way, yet mediated through the subject's perception of it. Thus meanings are both subjective and objective. Adorno (Adorno, 1966, p.131) uses the term 'exact imagination' (in German *exakte Phantasie*) to describe the process of how the subject lends voice to what would otherwise remain silent in the object. He also speaks of the mimetic function of the subject giving expression to the experience of the object. Adorno was concerned with the task of combining experience and knowledge and giving this an aesthetic form in such a way that it preserves the primacy of the object rather than the subject, as part of his negative dialect and its task of preserving the nuances, difference, and the uniqueness and otherness of the Other. Constructionism is also about allowing the Other voice and being curious about what it has to say. In being so, it is willing to allow incompleteness, ambiguity and gaps in the fabric of being. Rather than seeking mastery over the 'captured' object, it seeks closeness to it, it seeks to give expression to it. It is an approach that takes on board the fact that the knowledge process changes who we are and changes the object too. This aspect particularly comes to expression in phenomenological or human science approaches (van Manen, 2014).

This aspect of preserving the authenticity of the Other in knowledge shows how important it is to distinguish between *social constructionism* and *constructivism*. Social constructionism sees knowledge as embedded in and permeated by historical meanings, embodied by the people who use it and by the language(s) used. Knowledge is based on relationships between things rather than referring to essential qualities of the things themselves. A *constructivist* stance, however, takes the view that knowledge is constructed by the individual mind on the basis of processes inherent to the mind (or even brain). Piaget's (Piaget, 2001) epistemology is a classic form of constructivism. Following his account, knowledge is ultimately a biological process involving the individual's adaptation to her environment. His theory of knowledge seeks to explain how we account for change in the world using cognitive structures that develop through being used and his theory of development arises out of that process. In constructivism the cognitive structures that enable the mind to categorize experience are deemed to be innate and emerge developmentally by "giving form to the empirical data of sensation and giving rise to new conceptual structures" (Packer & Goicoechea, 2000,p.228). Constructivism is both an individualistic and a dualistic understanding of knowledge as the individual meaning-making project of the subject constructing knowledge about the world as object.

Vygotsky (1978), in contrast to Piaget, argued that knowledge is learned collaboratively through social interaction and communication, mediated through cultural artefacts, such as language, tools, institutional systems or art, though societal and more general knowledge exists within the wider discourse. The knowledge that emerges through intersubjective action is internalized by individuals, becoming the basis for their intra-subjective internal understandings that later re-enter social discourse through that person's activity. Language learning, for example, occurs through social interaction but the language itself, be it Russian or English has a societal and collective ontology. A sociocultural and constructionist epistemology, such as Vygotsky's, seeks to challenge dualistic accounts of knowledge by founding the process of knowledge construction in purposive activity, human action-in-the-world, or what is referred to as practice. This perspective seeks to overcome the separation of the person as subject from the world as object.

Dahler-Larsen (Dahler-Larsen, 2015) describes the key elements of social constructionism as language, interaction and imaginary. Language, he says, is not only descriptive but is also performative of social practice and generative of social phenomena. Language can bring social phenomena into being. An example is the historical fact that the sociological category of youth as a life phase between childhood and adulthood

was unknown before 1900 in Germany (Hurrelmann and Quenzel, 2012). This doesn't mean that youths didn't exist, but rather that the category of youth didn't exist and social expectations and options for young people were correspondingly different. Youth came to be seen as neither children nor young adults. Once a construct has been made to describe a social phenomenon, it makes that phenomenon 'visible'.

The word *imaginary* (as a noun) refers to the social capacity to construct "phenomena such as *Bildung*, performance, competition, goals, sin, democratic deficit, community and so on, the social meaning and significance of which may have no determinant or physical referent" (Dahler-Larsen, 2015, p. 317). Such ideas are relational rather than essential. They circulate and evolve as shared social or institutional categories. Critics of constructionism suggest that to say that something is constructed means that it doesn't really exist, but as Dahler-Larsen (2015) points out, that is only because they tend to assume that 'things' only exist as solid, physical, measurable entities or states brought about by physical processes, such as consciousness being produced by the brain. Dahler-Larsen says that this materialistic notion of *thing-nes*s is a modern, Western, rational idea- if something exists, it must be a *thing*. This way of thinking leads us to ask, "yes, but does it really exist?" The answer to such questions depends on a person's ontological and philosophical stance. The question, as to whether something really exists or not, whether it is true or real, reflects an objectivist, positivist and probably materialistic perspective. The question, as to what something means, reveals a constructionist and interpretivist stance. It's like responding to a child who is afraid, by telling her there is nothing to be afraid of. From an objectivist perspective there may well be no tangible threat. From a subjectivist perspective, it's all in the child's mind (with the implication that the child just needs to convince herself or be convinced that all is well- "just trust me, there is no reason to be afraid"). The constructionist perspective leads us to say, "I accept that you are afraid because something about this situation makes you feel fear. What experience makes you feel this and can I help?".

Social constructionism prompts the researcher to question all taken-for-granted, everyday assumptions, such as knowing what learning or development mean. This also includes questioning the taken-for-granted notion (held by some people with certain academic backgrounds) that non-material or spiritual phenomena and the concepts used to refer to them, cannot be approached scientifically because they have no physical referent. The idea of an ethic body is therefore nonsense to them. This way of thinking is arrogant, disrespectful and blinkered and above all, prejudiced in the negative sense. Today we are advised to take other people, who think and act differently, who have other understandings of the world, seriously, as contemporary cultural anthropology does. As Monaghan and Just (2000, p.146) put it, "anthropology is at its best when focused on the things that people say and do that *do not* fit with our expectations…[when it] provides the limiting case for people who want to enshrine their own prejudices as universal principles."

This relational and relativist view of knowing as a process also means that what counts as truth is relative to the community discussing it. Within each community- the scientific community, for example, truths may be held to be universal. Gergen and Gergen (Gergen & Gergen, 2008)give the example of understandings of death. They argue that seeing death simply as the termination of biological functions and thus the end of being "would be an enormous impoverishment of human existence. If a nourishing life is of value, there is much to be said for those who believe in reincarnation, the Christian dogma of 'a life hereafter', or Japanese or Mexican or African tribal views of living ancestor spirits." (2008, p. 161). The constructionist perspective recognizes that there are different, sometimes complementary ways of seeing life and death. It is always a question of the hegemony of certain ways of seeing by certain people, at certain times in certain places. As Biesta (Biesta 1998) notes, counter practice is important if only because it shows that the ways things are, is not the only possible way they can be.

Gergen and Gergen (2008) point out that social constructionism challenges the Western intellectual and cultural tradition since the Enlightenment of the "individual knower, the rational, self-directing, morally centred and knowledgeable agent of action. Within constructionist dialogues we find that it is not the individual mind in which knowledge, reason, emotion and morality reside, but in relationships" (Gergen and Gergen, 2008, p. 161). Constructionism offers an alternative to the individualist account of human action by pointing out that relationships are the fundamental source of intelligibility. Things become meaningful in relation to each other, people *become* in relation to others through their actions. This perspective has been

articulated by a number of scholars (Buber, 1983; Levinas, 1998; Nancy, 2000; Stein, 1989), but Biesta (Biesta, 2013) has articulated this most recently in relation to education. He argues that people come into being as subjects capable of acting autonomously and socially responsibly through existentially encountering the Other. The Other is not only the other person, but any experience of non-self. Through the experience of interruptions, discontinuities, unfamiliar things and challenges to her current status, the subject experiences her *selfness* in relation to the Other, or rather the encounter brings about change in the self, which brings the self into being. We come to self through the experience of the Other. We are called forth by the Other, by the fact of our responsibility for the Other and are thus summoned by the Other into being.

The embodied nature of this experience is what links this idea to phenomenology. There are many interesting perspectives on education today that draw on phenomenological and therefore constructionist epistemologies, which Waldorf practitioners can learn from (e.g. (Faulstich, 2013; Jarvis, 2006; Lave, 2009; Marton, 2015; Meyer-Drawe, 2012; Nieke, 2016). This may be a challenging perspective for many Waldorf practitioners, who tend to think of the individuality as the most important aspect of the human being. However, careful reading of Steiner's philosophy will show how intertwined the individuality is with the social Other. Ethical individualism- an unfortunate term in some ways- is by no means to be understood individualistically. The sum of ideas in the ideas-world is individually constituted in each one of us, and my action will be 'good' if my intuition, "immersed in love, exists in the right way within the relationship between things" (Steiner, 1963, p. 177). "Individuality is possible only when each individual is acquainted with others through individual observation alone…"(ibid, p. 180). The highest ethical state a human being can aspire to is to, "live in love of the action and to let live, having understanding for the other person's will is the fundamental principle of free human beings… If human nature were not fundamentally social, no external laws could make it so…(1963, p. 181). Perhaps *individual acts of ethical sociality* would be a better term.

Steiner and constructionism?

So how does Steiner's epistemology relate to constructionism? Schieren (2012) describes the process of combining concept with percept as akin to what he calls 'constructivism', with the difference that constructivism describes such concepts as subjective. This may be true of constructivism, in which the concept is produced by the individual mind out of its inherent structures. However, this is not what social constructionism says. As Crotty (1998, p. 63) points out, "to say that meaningful reality is socially constructed is not to say that it is not real…constructionism is compatible with realism in ontology…". He points out that if idealism is the philosophical view that "what is real is somehow confined to what is in the mind, that is, consists only of 'ideas' (to use the word coined by Descartes…)…[then]social constructionism does not confine reality in this way" (Crotty, 1998, p.64). Many forms of social constructionism are realist; they accept that the world is real but without meaning. It is also relativist to an extent because it accepts that different people at different historical times form different concepts to make sense of the regularities they experience in the world. Thus such concepts are neither entirely subjective nor entirely objective and meaning-making is an ongoing cultural process.

The question of the origin of concepts might seem an obvious point of difference between Steiner and constructionism, most of which posits a social origin for knowledge. As Bergman (Bergman, 1963) points out, Steiner is unique among modern philosophers because of his claim that his philosophy is based on spiritual experiences. In thinking, the human being lives "in the reality of the world as a spiritual world, and that the world of the senses is, in truth, a manifestation of the spiritual principle" (1963, p. 14). Yet, in contrast to positivistic approaches that assert that thinking grasps what is already there in the world, Steiner saw physical phenomena as riddles to be solved by thinking. Objects, Steiner says, have their ideal content in themselves, yet this is not accessible to our senses. However, our thinking gives us access to the ideal, at least potentially, since this kind of thinking has to be developed. Our experience of spiritual reality is mirrored by our physical body and Steiner describes a spiritual journey, which has the aim of consciousness and thinking that is no longer a mirroring but is direct, which is what Buddhism and other spiritual paths also teach.

It is interesting in this respect to take Cassirer's (Cassirer, 1929; Recki, 2013) understanding of spirit and the human spirit into account. Cassirer's epistemology is considered to be a constructionist one (Recki, 2013) and the construction of symbolic concepts is described as being through the energy of the spirit (*Energie des Geistes)*. Cassirer's notion of spirit is that of activity and is therefore one of function rather than of substance. Recki quotes Cassirer as saying that we should not understand spirit as the name of a substance or a thing or even an essence and we should only use the term spirit in the functional sense as a comprehensive term for all the functions that constitute and produce human culture (Ricki, 2013, 46). Thus knowledge involves the spiritual activity/energy of producing concepts and has to do with efficacy (*Wirksamkeit*) in real situations and develops itself only in the shaping and forming of *something* concrete. Meaning is not inherent in natural events but is the product of human spiritual energy. Symbols, in Cassirer's terms, mediate between the sense perceptible and the spiritual as it manifests in material things or artistic media. As Ricki (2013, p. 49) puts it, "each act of symbolising presents the unity of spiritual meaning and sense perceptible sign. Thus symbols achieve the construction of the entire world of objects. A new form of mutual relationship and correlation arises in the coming together of the sensory and the spiritual". I think this idea of the I as the spiritually active agent or function in the human being is very close to Steiner's understanding of the I in his epistemology. Elsewhere, Steiner undoubtedly describes the I in essentialist terms, though frequently also as activity. Thus in my constructionist reading of Steiner's epistemology, the I is activity or agency rather than a 'substance', fixed entity or unchanging core. The I is the subject who learns, knows, acts and becomes. It is not something complete that just needs to be brought forth. It is emergent and in a state of becoming.

The human being's potential to participate in reality in thinking, which is a spiritual activity, is the aspect that most distinguishes Steiner's philosophy from all other paradigms, including constructionism. And this seems to me the central problematic of Steiner's whole approach for the researcher. Can one use his epistemology and his account of the human being if one has not developed spiritual thinking? Steiner addressed this in his book *Riddles of the Soul (Von Seelenrätsel)* (Steiner, 1983) by offering the analogy of the relationship between a photograph and the negative as being like the relationship between empirical social or human science (that he calls anthropology) and spiritual science (anthroposophy); they are compatible because they are two ways of representing the same reality. Dahlin (2017) draws attention to the similarity to Cassirer's description of the relationship between empirical, natural science and the cultural sciences. Both, according to Cassirer, share an empirical, experiential basis but only the cultural sciences imbue experience with a symbolic sense or meaning. Natural science is concerned with the perception of *things*, whereas the cultural sciences are concerned with expressive perception of *meaning*. Natural science privileges thing-perception, whilst cultural science privileges expressive perception based on "our lived experience in a human community sharing a common system of 'cultural meanings'"(Friedman, 2016). In Cassirer's system, all cultural forms of expression, be they mythic, literary, artistic or scientific are equally valid. The cultural sciences, though rooted in their historical and geographical space nevertheless can have an intersubjective validity over time and place through being continuously hermeneutically interpreted and reinterpreted. Thus cultural meanings, or in Steiner's case, spiritual meanings can have the status of universal accessibility through the hermeneutic process. Like the conclusion of Shakespeare's sonnet 18 claims,

> so long as men can breathe, or eyes can see,
>
> so long lives this, and this gives life to thee.

As long as ideas are embedded of a living discourse, they are alive and accessible. If they are continuously critically reflected and hermeneutically analysed, they retain their validity and relevance. This is true for the ideas of anthroposophy-in-practice.

For all intent and purposes, Steiner's epistemology works at the everyday level, even without the researcher having attained spiritual forms of thinking. If the ideas of anthroposophy are used heuristically, as Rittelmeyer (Rittelmeyer, 1990, 2010, 2011) and Kiersch (Kiersch, 2010)suggest, or as concepts that direct our way of seeing, as Schieren (Schieren, 2016b) suggests, then we use these as theory is used in most qualitative social science. In a research context, theory is a concept that directs our attention to phenomena and gives them meaning. Wagemann (2016) reminds us that the origin of the word *theory* was the Greek

verb *theorein*, to observe, to look at and to contemplate. Gadamer (2013), however, adds another dimension to this notion by pointing out that the original Greek concept of *theoria* meant full participation in a sacred act or theatrical performance, "*theoria* is a true participation, not something active but something passive (pathos), namely being totally involved in and carried away by what one sees" (2013, p. 127). Anthroposophical concepts from Waldorf theory not only direct our way of looking, they also enable us to participate and be inspired by the process we are involved in as participant observers. This possibility of progressively embodying experience from both sources- bodily experience of the world and experience of the pre-verbal ideas-world, in which experience is given meaning through the act of knowing, is the basis of Steiner's theory of learning and development and education. Steiner' epistemology is not primarily concerned with generating knowledge as such, it is about expanding the capacity of knowing-in-life, and thus knowing-in-practice. It is an emergent, iterative, ongoing process that never ends because there are no absolute limits, not least because the whole itself is evolving. The ideas-world is continuously changing through the never-ending resource of people experiencing and acting and translating these lived experiences (*Erlebnisse*) into experiences (*Erfahrungen*) as embodied practical knowing or wisdom.

Implications for practitioner research in Waldorf practice

A constructionist reading of Steiner's epistemology would provide researchers with a basis for interpreting pedagogical phenomena within the context of their practice. It would enable them to use conceptual metaphors, such as ether body, life-processes, sleep, sympathy and antipathy and other key constructs of Waldorf theory as heuristic models to interpret aspects of practice. Constructionism emphasizes that all knowledge claims relate to particular groups of people at particular times and so this cultural perspective should inform our curriculum. Rather than defining universal knowledge, a curriculum needs to relate knowledge to the interests, needs, possibilities and values of a particular time and place.

This has enormous implications for the development of the Waldorf curriculum. The research question is, "what is needed and by whom, whose values are in play, and what are the repercussions for society and the world?" (Dragonas, Gergen, McNamee, & Tseliou, 2015, p.xi). All knowledge embodies implicit values and most modern science today embodies materialistic values. Constructionism offers voice to other, often marginalized ways of understanding the world, such an anthroposophy. Instead of looking for equivalents to a standardized, often Eurocentric curriculum(Boland, 2015), teachers can try to go back to pre-linguistic, pre-cultural moments of human experience and generate curriculum responses to the developmental tasks of the children and young people in whatever cultural frame they deem relevant. This is neither an exclusive focus on local cultural traditions (which are anyway often hybrid or marginalized) nor does it simply apply historical Waldorf traditions and their equivalents, but seeks local and cosmopolitan (temporary) solutions in context.

Above all, dialogue is crucial. As Gergen (2015, p.100) puts it, "physics and chemistry generate useful truths from their communal traditions, just as psychologists, sociologists and priests do from within theirs." Given that there is no single transcendent truth, what is important is the dialogue between these different ways of understanding the world. Thus Waldorf practitioners need to engage in dialogue with other sciences such as neurology and sociology, respecting what makes these perspectives different. They should also have the courage and confidence to trust in their understandings of Waldorf practice, knowing that these can be grounded in solid and valid research practice.

References

Adorno, T. (1966). *Negative Dialectics* (E. B. Ashton, Trans.). New York: Seabury Press.

Altrichter, H., & Posch , P. (2007). *Lehrerinnen und Lehrer erforschen ihren Unterricht (Teachers research their teaching)* (4th. edition ed.). Bad Heilbrunn: Klinkhardt.

Appadurai , A. (2006). The right to research. *Globalizations, Societies and Education*, 4(2), 167-177.

Aristotle. (2009). *The Nicomachean Ethic*s (D.Ross, Trans. L.Brown Ed.). Oxford, UK: Oxford University Press.

Barfield, O. (1988). *Saving the Apearances. A study in idolatr*y (2nd edition ed.). Middletown, Connecticut: Weslyan University Press.

Bassey, M. (1999). *Case Study Research in Educational Studies.* Maidenhead: Open University Press.

Berger, P., & Luckmann, T. (1966). *The Social Construction of Reality. A treatise in the sociology of knowledge.* London: Allen Lane/Penguin.

Bergman, H. S. (1963). Introduction: Rudolf Steiner as a philosopher. In H. S. Bergman (Ed.), *The Philosophy of Spiritual Activity.* West Nyack, NY: Rudolf Steiner Publications.

Bergold, J., & Thomas, S. (2012). Participatory research methods: A methodological approach in motion. *FQS Forum: Qualitative Sozialforschung/Forum Qualitative Social Research,* 13(1).

Biesta , G. J. J. (1998). Say you want a revolution...suggestions for the impossible future of critical pedagogy.. *Educational Theory,* 48(4), 499-510.

Biesta , G. J. J. (2002). How general can Bildung be? Reflections on the future of a modern educational ideal. *Journal of Philosophy of Education*, 36(3), 377-390.

Biesta , G. J. J. (2012). The future of teacher education: Evidence, competence or wisdom? *Research on Steiner Education*, 3(1), 8-21.

Biesta, G. J. J. (2013). *The beautiful risk of education*. Boulder, CO.: Paradigm Publishers.

Boland, N. (2015). The globalisation of Steiner education: Some considerations. *Research in Steiner Education*, 6(Special issue December 2015), 192-202.

Bortoft, H. (1996). *The wholeness of nature: Goethe's way towards a science of conscious participation in nature*. Hudson, NY.: Lindisfarne Books.

Buber, M. (1983). *Ich und Du*. Heidelberg: Verlag Lambert Schneider.

Carr, W. (2006). Philosophy, Methodology and Action Research. *Journal of Philosophy of Education*, 40(4), 421-435.

Carr, W., & Kemmis, S. (1986). *Becoming Critical: Education, Knowledge and Action Research.* London: Falmer.

Cassirer, E. (1929). *Philosophie der symbolischen Formen: Phänomenologie der Erkenntnis* (Vol. Vol.13). Hamburg: Hamburger Ausgabe.

Crotty, M. (1998). *The Foundations of Social Research: Meaning and Perspective in the Research Process*. London: SAGE.

da Veiga, M. (2016). Grundmotive im philosophischen Denken Rudolf Steiners und ihr Bezug zu Methoden und Fragestellungen in der Phänomenologie und der analytischen Philosophie. In J. Schieren (Ed.), *Handbuch Waldorfpädagogik und Erziehungswissenschaft: Standort und Entwicklungsperspektiven* (pp. 82-115). Weinheim Basel: Beltz Juventa.

Dahler-Larsen, P. (2015). Evaluation as social construction. In T. Dragonas, K. KGergen, S. McNamee, & E. Tseliou (Eds.), *Education as Social Construction: Contributions to theory, research and practice* (pp. 315-335). Chagrin Falls, Ohio: Taos Institute Publications.

Dewey, J. (1938). *Experience and Education*. New York: Touchstone.

Dragonas, T., Gergen, K., McNamee, S., & Tseliou, E. (2015). Education as social construction: An introduction. In T. Dragonas, K. Gergen, S. McNamee, & E. Tseliou (Eds.), *Education as Social Construction: Contributions to theory, research and practice* (pp. ix-xxiii). Chagrin Fals, Ohio: Taos Institute Publications.

Elliott , J. (2007). Educational Theory, Practical Philosophy and Action Research. In J. Ellard (Ed.), *Reflecting where the action is: The selected works of John Elliott*. Oxford, New York: Routledge.

Elliott, J. (2013). Buildin Educational Theory through Action Research. In S. Noffke & B. Somekh (Eds.), *The SAGE Handbook of Educational Action Research* (pp. 28-38). London, Thousand Oaks, CA: SAGE.

Elliott, J., & Lukes, D. (2008). Epistemology as ethics in research and policy: the use of case studies. *Journal of Philosophy of Education,* 42(1), 87-119.

Eun, B. (2010). From learning to development: a sociocultural approach to instruction. *Cambridge Journal of Education*, 40(4), 401-418.

Faulstich, P. (2013). *Menschliches Lernen: ein kritisch-pragmatisches Lerntheorie (Human learning- a critical-pragmatic theory of learning)*. Bielefeld: transcript Verlag.

Fichten , W., & Meyer , H. (2006). Kompetenzentwicklung durch Lehrerforschung. Möglichkeiten und Grenzen. *Zeitschrift für Pädagogik, 51*, 267-282.

Friedman, M. (2016). Ernst Cassirer. In E. N. Zalta (Ed.), *The Stanford Encyclopedia of Philosophy* (Fall 2016 ed.).

Gabriel, W. (2014). Erziehungswissenschaft und Waldorfpädagogik: erkenntnisswissenschaftliche Zugänge zu Rudolf Steiners pädagogischem Impuls. In P. Heusser & J. Weinzirl (Eds.), *Rudolf Steiner: Seine Bedeuting für Wissenschaft und Leben heute (Rudolf Steiner: the significance of his work for science and life today)* (pp. 228-266). Stuttgart: Schattauer.

Gallagher, S., & Zahavi, D. (2012). *The Phenomenological Mind* (2nd. Edition ed.). Abingdon: Routledge.

Gergen, K., & Gergen, M. (2008). Social construction and research as action. In P. Reason & H. Bradbury (Eds.), *The SAGE Handbook of Action Research: Participative Inquiry and Practice* (pp. 159-171). Los Angeles, London: SAGE Publications.

Heikkeinen , H. L., Huttunen , R., Syrjälä , L., & Pesonen , J. (2012). Action research and narrative inquiry:five principles for validation revisited. *Educational Action Research,* 20(1), 5-21.

Hitchcock, G., & Hughes, D. (1995). *Research and the Teacher* (2nd edition ed.). London: Routledge.

James, D., & Biesta, G. J. J. (2007). I*mproving learning cultures in further education*. London: RoutledgeFalmer.

Jarvis, P. (2006). *Towards a Comprehensive Theory of Human Learning: Lifelong Learning and the Learning Society Trology, Volume 1*: (Vol. 1). London and New York: Routledge.

Kemmis, S. (2005). Knowing Practice: searching for salience. *Pedagogy, Culture and Society*, 13(3), 391-426.

Kiersch, J. (2010). „Painted from a palette entirely different". A new hermeneutic approach to Steiner's esoteric courses for teachers. *Research on Steiner Education*, 1(2), 64-72.

Kvale, S. (1995). The social construction of reality. *Qualitative Inquiry, 1*, 19-40.

Lave, J. (2009). The practice of learning. In K. Illeris (Ed.), *Contemporary Theories of Learning. Learning theorists... i n their own words* (pp. 200-208). Abingdon, UK: Routledge.

Levinas, E. (1998). *Entre-nous. On thinking-of-the-other.* New York: Columbia University Press.

Marton, F. (2015). Necessary Conditions of Learning. Abingdon and New York: Routledge.

McNiff , J., & Whitehead , J. (2010). *You and Your Action Research Project* (3rd. Edition ed.). London and New York: Routledge.

Meyer-Drawe, K. (2012). *Diskurse des Lernens (Discourses of Learning)* (2nd Edition ed.). Munich: Wilhelm Fink.

Nancy, J.-L. (2000). *Being Singular Plural* (R. D. R. a. A. E. O'Byrne, Trans.). Stanford, CA.: Stanford University Press.

Nieke, W. (2016). Lernen aus Bildungswissenschaftlicher Sicht (Learning from the perspecive of educational science). In J. Schieren (Ed.), *Handbuch Waldorfpädagogik und Erziehungswissenschaft: Standortbestimmung und Entwicklungsperspektiven (A handbook of Waldorf pedagogy and the science of education: positions and developmental perspectives)* (pp. 350-388). Weinheim and Basel: Beltz Juventa.

Noffke, S., & Somekh, B. (2013). *The SAGE Handbook of educational action research.* London, Thousand Oaks, CA: SAGE Publications.

Packer, M., & Goicoechea, J. (2000). Sociocultural and constructivist theories of learning: Ontology, not just epistemology. *Educational Psychologist,* 35(4), 227-241.

Piaget, J. (2001). *The Language and Thought of the Child* (M. Gabain & R. Gabain, Trans. 3rd. edition ed.). London and New York: Routledge.

Rawson, M. (2003). *The Spirit in Human Evolution*. Fair Oaks, CA: AWSNA Publications.

Rawson, M. (2012). Contemplative practice and intuition in a collegial context: An action research project in a Waldorf school. *Research Bulletin of Waldorf Research Institute,* 17(1), 47-54.

Rawson, M., & Stöckli, T. (2007). *Praxisforschung in der Waldorfschule: Ein Reader (Practice-based research in Waldorf schools)*. Solothurn: ipf Publications.

Recki, B. (2013). *Cassirer*. Stuttgart: Reclam.

Rittelmeyer, C. (1990). Der fremde Blick.Über den Umgang mit Rudolf Steiners Vorträgen und Schriften. In F. Bohnsack & E.-M. Kranich (Eds.), *Erziehungswissenschaft und Waldorfpädagogik* (pp. 64-74). Weinheim and Basel: Beltz Verlag.

Rittelmeyer, C. (2010). Vorwort. In H. Paschen (Ed.), *Erziehungswissenschaftliche Zugänge zur Waldorfpädagogik* (pp. 7-10). Wiesbaden: VS Verlag.

Rittelmeyer, C. (2011). Gute Pädagogik-fragwürdige Ideologie? Zur Diskussion um die anthroposophischen Grundlagen der Waldorfpädagogik. In P. Loebell (Ed.), *Waldorfschule heute. Eine Einführung*. Stuttgart: Verlag Freies Geistesleben.

Robinson, M., & Soudien, C. (2013). Teacher development and political transformation: Reflections from the South African experience. In S. Noffke & B. Somekh (Eds.), *The SAGE Handbook of Educational Action Research* (pp. 467-480). London, Thousand Oaks, CA. : SAGE Publications.

Roth, W.-M. (2018). Translation and its consequences in qualitative social research: On distinguishing 'the social' from the 'societal'. Forum: *Qualitative Social Research, 19*(1). doi:http://dx.doi.org/10.17169/fqs-19.1.2988

Schieren, J. (2012). The concept of learning in Waldorf education. *Research on Steiner Education, 3*(1), 63-74.

Schieren, J. (2016a). Einleitung (introduction). In J. Schieren (Ed.), *Handbuch: Waldorfpädagogik und Erziehungswissenschaft: Standortbestimmung und Entwicklungsperspektiven (A handbook of Waldorf pedagogy and the science of education: positions and developmental perspectives)* (pp. 9-25). Weinheim Basel: Neltz Juventa.

Schieren, J. (2016b). Lernen in der Waldorfpädagogik. In J. Schieren (Ed.), *Handbuch: Waldorfpädagogik und Erziehungswissenschaft: Standortbestimmung und Entwicklungsperspektiven (A handbook of Waldorf pedagogy and the science of education: positions and developmental perspectives)* (pp. 427-446). Weinheim Basel: Beltz Juventa.

Schneider, P. (1982). *Einführung in die Waldorfpädagogik*. Stuttgart: Klett-Cotta.

Stein, E. (1989). *On the Problem of Empathy.* New York: Doubleday.

Steiner, R. (1963a). *The Philosophy of Spiritual Activity. Fundamentals of a modern view of the world. Results of introspective observations according to the method of natural science* (R. Stebbing, Trans.). West Nyack, NY.: Rudolf Steiner Publications.

Steiner, R. (1963b). *Truth and Science* (R. Stibbing, Trans. P. M. Allen Ed.). West Nyack, NY: Rudolf Steiner Publications.

Steiner, R. (1968). *A Theory of Knowledge Implicit in Goethe's World Conception*. Spring Valley, NY.: Anthroposophic Press.

Steiner, R. (1983). *The Riddles of the Soul* (W. Lindemann, Trans.). Spring Valley: Mercury Press.

Steiner, R. (1996). *The Foundations of Human Experience.* Hudson, NY.: Anthroposophic Press.

van Manen, M. (2014). *Phenomenology of practice: Meaning-giving methods in phenomenological research and writing*. Walnut Creek, CA: Left Coast Press.

Vygotsky, L. S. (1997). The problem of consciousness. In R. W. Rieber & J. Wollock (Eds.), *The collected works of L.S. Vygotsky: Vol 3 Problems of theory and history of psychology* (pp. 35-49). New York: Plenum Press.

Wagemann , J. (2016). Erkenntnisgrundlagen der Waldorfpädagogik. In J. Schieren (Ed.), *Handbuch Waldorfpädagogik und Erziehungswissenschaft: Standort und Entwicklungsperspektiven* (pp. 31-81). Weinheim Basel: Beltz Juventa.

Wenger, E. (1998). *Communities of Practice: Learning, Meaning and Identity.* Cambridge, UK: Cambridge University Press.

Wiehl , A. (2015). *Propädeutik der Unterrichtsmethoden in der Waldorfpädagogik (Propadeutic of teaching methods in Waldorf pedagogy)*. Frankfurt am Main: Peter Lang.

Zahavi, D. (2001). Beyond empathy: phenomenological approaches to intersubjectivity. *Journal of Consciousness Studies*, 8(5-7), 151-167.

Zahavi, D. (2008). Phenomenology. In D. Moran (Ed.), *Routledge Companion to Twentieth Century Philosophy* (pp. 661-692): Routledge.