australasian journal of TECHNOLOGY EDUCATION

The Australasian Journal of TechnologyEducation is a peer refereed journal, and provides a forum for scholarly discussion on topics relating to technology education. Submissions are welcomed relating to the primary, secondary and higher education sectors, initial teacher education and continuous professional development, and general research about Technology Education. Contributions to the on-going research debate are encouraged from any country. The expectation is that the Journal will publish articles at the leading edge of development of the subject area.

The Journal seeks to publish

- reports of research,
- articles based on action research by practitioners,
- literature reviews, and
- book reviews.

This journal provides immediate open access to its content on the principle that making research freely availble to the public supports a greater global exchange of knowledge.

Images of Technology and Sustainable Development in Swedish Children's Literature

Cecilia Axell, Jonas Hallström & Jan-Erik Hagberg

Abstract

The aim of this article is to investigate images of technology and how technology is linked to sustainable development in Swedish children's literature. Our perspective is that such images represent values that are conveyed to the young generation. We have chosen to study books by four Swedish authors, Elsa Beskow, Inger Sandberg, Jan Lööf and Sven Nordqvist, all of them still read by many children, parents and teachers, both in and out of school. In the examined books, technology is portrayed in several modes: as a servant to man, as a deterministic force, as a loyal and equal companion to man, and as a natural phenomenon in a nostalgic world. Technologies that have a leading role in the stories examined are placed in different kind of contexts, more or less social, more or less utopian or idyllic. In all four authors' writings there is an optimistic faith in children's ability.

Keywords: Sustainability, technology education, children's fiction, Sweden

Introduction

In 1987, the United Nations report *Our Common Future* (The Brundtland Commission) was published and the elegant definition of the road for the world community to take was established: "Sustainable development is development that meets the needs of the present without compromising the ability of future generations to meet their own needs" (UNWCED, 1987, p. 43). Sustainable development has, since then, been an iconic concept. Technology is given a decisive role as a kind of enabling force; new technologies are to be the solution to conflicts between growing economic activities and reductions in the use of natural resources. Sustainable development can, however, also be expressed as a set of traditional values that, in a country like Sweden, have been a part of everyday life for many generations. Those values can be summarized as you should be industrious and thrifty, support your family, manage the resources you have got and turn means and responsibilities over to the next generation when that time comes. Such virtues were dominant, and still are, in many rural and agrarian communities, although they have largely been challenged and perhaps even overridden by ideals embedded in the consumer society.

Education for sustainable development has been a goal in the Swedish national curriculum since 1994, not the least in the subject Technology. The most recent curriculum from 2011 (Lgr 11) states that:

> An *environmental perspective* provides opportunities not only to take responsibility for the environment in areas where [the pupils] themselves can exercise direct influence, but also to form a personal position with respect to overarching and global environmental issues. Teaching should illuminate how the functions of society and our ways of living and working can best be adapted to create sustainable development. (Skolverket, 2011, p. 12)

In the current discussions on the future there are, however, a variety of opinions and uncertainties; sustainable development is a kind of plastic metaphor, which can be loaded with various values, ideas and images. Thus the school has to handle this uncertainty about fundamental future concerns.

The aim of this article is to study images of technology and how technology is linked to sustainable development in Swedish children's literature. Our perspective is that such images represent values that are conveyed to the young generation. Children's literature is, therefore, a means to understanding which ideals the adult community wants to consolidate and develop among children and adolescents at a particular time (Kelly, 1974; Hintz, 2008; Reynolds, 2011).

Background, selection, and methodology

At the turn of the twentieth century, Swedish children's literature began blossoming with authors such as Selma Lagerlöf and Elsa Beskow, but this period ended with World War I when economic restraints limited both the production and consumption of children's literature. During the 1920s and 1930s, children's literature was retrospective and consisted mainly of collections of conventional stories and fairy tales; social realism was conspicuously lacking (Westin, 1996; Kåreland, 2008). In the 1950s and onwards, however, there was pluralism and a desire to broaden themes in Swedish, as well as in British and American, literature. New ways of writing were tested, including a more credible approach to reality. After 1965, a politicized and globally conscious literary climate prevailed in Sweden, influenced by anti-war and environmental movements (Westin, 1996; Pearson, 2011). Current children's literature is characterised by a variety of styles and border-crossing genres, but, paradoxically, at the same time there is anxiety about provoking established opinions (SBI, 2013).

Books by four popular and influential Swedish writers have been chosen: Elsa Beskow, Inger Sandberg, Jan Lööf and Sven Nordqvist. We employ a hermeneutic method, that is, a method of text interpretation based on repeated readings of the texts and examination of illustrating pictures. We analyse and interpret the present text by looking for similarities and differences between the stories regarding view of technology and technological development. After analysing and interpreting the stories separately and in chronological order, we restructure and let the parts that seemed to have common points be grouped together. The results are finally organized and discussed in relation to a few global themes deemed central to the authors' respective books (Attride-Stirling, 2001; Ödman, 2007).

Our selection of children's books covers a wide timespan as they represent the literary climate of the beginning of the 1900s, 1960s and 1970s, as well as recent decades. The selected authors are all read today. We see these four as iconic writers, authors of reference both in daily talks about children's books and in educational discussions about what children may learn from reading. We realise, of course, that such a small sample, at best, can only illustrate some of the variations that are to be found in the vast literature for children.

Images of technology and sustainable development in children's literature – four examples

Doctor Klokamundus' Invention (1919) by Elsa Beskow

Elsa Beskow (1874-1953) is the foremost name in the field of picture books, which developed in the late nineteenth century (Westin, 1996). Many of her books have become classics and are therefore continually reprinted and translated. Some of her fairy tales have messages about the expanding modern and urbanised world, including future technology and people's relation to the ongoing technological development. One of these stories, Doctor Klokamundus' Invention, is included in one of her story collections.

Doctor Klokamundus' Invention was published in 1919, most recently reprinted in 1996. The story takes place in a fantasy land, Kringelkrokien, which is far ahead technologically. Inventions such as the telephone, the phonograph, the airplane, and the cinema have existed there for several hundred years. Most tasks are done with the help of machines. But the confidence in technology and science

Australasian Journal of Technology Education. Published online October, 2014

2

has gone too far and technology is used as a tool to homogenise people. The children (boys) start to misbehave. Instead of seeing the underlying causes, the adults believe that the "problem" can be solved by technology: a high-tech fostering machine. Doctor Klokamundus, together with skilled engineers and builders, constructs the machine. In the fostering machine, everything is managed by using sophisticated and automated technology, which replaces human coexistence.

The boys are stuck inside the big, boring machine with a complete lack of aesthetics and coziness. Each room is equipped with a clock and a loud voice calls out every hour what needs to be undertaken. If the boy does not obey, he gets an ice cold shower. In the morning, an alarm clock rings and when it stops ringing all the beds are turned upside down and folded into the wall. At seven o'clock the school starts. The pupils sit in their desks and a gramophone rattles the lessons over and over again. Twice a week the boys watch a movie which teaches them how to behave, like how to hold a knife and fork in a proper way. The upbringing of children should thus be done without any human contact. If any of the boys longs for someone to talk to, he can do so at a certain hour in the afternoon and via a receiver on the wall. The answer he gets comes from a gramophone.

The story has, as most fairy tales, a happy ending, since the boys escape from the fostering machine and live a "Robinson Crusoe life" in an abandoned castle ruin. By using their creativity, they develop their skills and learn how to survive in the wild. The story expresses the consequences of a deterministic view on technology, as people in Kringelkrokien do not realise the dire consequences of their reliance on technology. The implicit message is that in a technological world, there is an imminent risk that people's innermost needs and desires are forgotten. The boys' experiences, however, illustrate that there are other routes to take if technology is controlled by the one who uses it. Technology can be a tool for conviviality, to use a phrase from Ivan Illich (1985), and help people to develop themselves and avoid being governed by societal institutions.

The Little-Fellow-Star (1969) by Inger Sandberg

Inger Sandberg's (born 1930) books have been translated into thirty languages. Many of them are still popular and have been reprinted several times. She wanted to write books that spoke directly to children, books that were not limited by contemporary adult conventions (Nilsson, 1996). In the 1960s, when modernism entered the world of children's books, time had caught up with Sandberg's ideas (Hultén Sonne & Hultén, 1993).

Sandberg's books have a clear educational structure (Hallberg, 1991). In *Filurstjärnan* (*The-Little-Fellow-Star*) (1969) she takes up environmental issues in a kind of space saga. A girl, Barbro, has been sick, and as comfort she gets a kaleidoscope. Suddenly a space rocket appears in the kaleidoscope. When Barbro shakes the kaleidoscope it breaks and a small rocket lands on her hand. Out of the rocket steps a little spaceman from another star, a "Little Fellow" (a "*Filur*"). He is a space spotter who looks for "stupid and good things that beings on other stars do" (p. 4). Barbro wants to accompany him to his star but, as she is too big for the space rocket, the Little Fellow uses magic to let Barbro see and hear everything that is happening when the Little Fellow returns to his star. Barbro discovers a dark world of reckless industrialisation without regard to inhabitants or nature.

The story is a metaphor for the situation on Earth; a dystopian vision. The star is contaminated with purple smoke coming from the cars. All windows must be kept closed and residents are forced to walk around with oxygen tanks. Little fellows die of polluted air and a great sweeper passes through the town each day and sweeps up the poisoned Little Fellows and their pets. Barbro may also follow what is happening to a "Very Little Fellow", Opus, when he and his mother take a trip to the countryside to go fishing and pick berries. He asks his mother if they should bring their oxygen tanks, but his mother replies that they do not need it because the country side has not yet been polluted. But she turns out to be wrong. The fishes Opus catches are found to be inedible.

Even the rural areas have been affected by pollution, as the factories spew out wastewater into rivers and all vegetation has been sprayed with pesticides. Exploiting nature in order to build golf courses is a priority of the politicians, instead of preserving the forests or building children's play grounds. The men in charge are responsible for the development, and children and women do not have much influence. In the House of the Deciders (Parliament) there are only men – Little Fellows in trousers.

Australasian Journal of Technology Education. Published online October, 2014

3

Although the story is dystopian, it also shows that the development can be steered in another, more positive, direction. What is needed is engagement from those who care about humans and nature, namely women and children. Together, they must rebel against those who are in charge. In the story, the Little Fellows in skirts and the small Little Fellows go into the House of the Deciders and successfully start a debate about the environment. The message in the book is that no one can own air, soil and water and consequently, no one has the right to destroy or poison such resources. It is a story imbued with high confidence in the child's ability and wisdom.

What happens after the women and children of the star have rebelled against those who are in charge, the readers do not know. However, it calls for reflection and the educational message of the story is clear.

Pelle and Uncle Otto's invention (2006) by Jan Lööf

Jan Lööf (born 1940) is an artist and writer who has written for children during a career which spans several decades. Many of his books have been translated into English and other languages. A recurrent theme in his work is technology, especially in the books about the boy Pelle. There are several books in this series but in this article we focus on Pelle and Uncle Otto's Invention (Lööf, 2006), which is a kind of history of the internal combustion engine and its pros and cons. The book starts with a short introduction to Nikolaus Otto (1832-1891), the alleged inventor. Then there is a short explanation of how the engine works, followed by Otto's own first feelings about having created a noisy and polluting machine. Pelle shows what an Otto engine looks like and continues "[I]t would change life for people on Earth. But, naturally, Uncle Otto knew nothing about this" (p. 3). This is a recurring theme in the book, the fact that Otto in no way could foresee the problems that his invention would cause over the next century and a half.

Pelle goes on to talk about the initial advantages of the Otto engine compared to the steam engine; the former was small but still comparatively strong. It was so small, in fact, that you could put it on a horse wagon and make it into a car. Although there is no timeline, the narrative must here deal with the early twentieth century and a car break-down on page eight indicates that it takes place outside of Chicago. This is not surprising, since the USA was the first country to adapt this new technology on a grander scale (Hård & Jamison, 2005). The solution was to build smooth, straight roads, with the disadvantage that people went faster and thereby more frequently crashed. Nevertheless, according to Pelle, there were obvious advantages to the Otto engine, for it was versatile and could be used in many types of vehicles. What induced the most change in society was the private car, since it made private transportation so much more flexible.

Uncle Otto's engine could also be put to military use in motorised armored cars and combat airplanes with machine guns and bombs. Otto was, however, lucky never to know anything about all the misery that would come. Lööf here addresses the drawback of the Otto engine – and indeed any technology; the potential for use and misuse, good and evil uses (Kranzberg, 1986; Ihde, 2006).

According to Pelle, Uncle Otto would have been surprised had he seen how many cars there are today; far too many: "It is sad to have to say this, but it is time we said goodbye to Otto's fine gasoline engine. Somebody has to invent a new Otto engine without any dangerous combustion gases" (p. 22). The whole book is finished with Pelle saying:

> But how to come up with an engine which is as good as Uncle Otto's? I have been trying myself a little bit. First I thought of sun power. You put a solar collector on the car roof. But it doesn't work when it's raining! The best thing would be an engine fuelled by rainwater instead of gasoline! If the engine fails when it's raining you just have to funnel the rain and it will fill up all by itself. A good idea in my view! But as regards the technical side of it – that's up to someone else to solve! (pp. 25-26)

The book thus ends on a rather positive note while still acknowledging the complexities of new energy solutions; it is implausible that humans would find energy sources and invent accompanying technologies which are both free, abundant and without any drawbacks.

Australasian Journal of Technology Education. Published online October, 2014

4

The world according to Pettson. The sustainable life of the rural bricoleur: Pettson and his joyful cat

Sven Nordqvist (born 1946) has by now written ten books about the ingenious Pettson and his life on a small farm somewhere in Sweden. The books are a tremendous success and have been read by (and for) most Swedish children. They are translated into English, German and many more languages and published in more than twenty countries. We use examples from three of them: *The Santa Claus Machine* (1994), *Pettson and the Fox Hunt* (2009), and *Findus moves out* (2012). (See also the App: Nordqvist & Feldt, *Pettson's Inventions* (2013)).

Pettson is on old man; at least he claims to be, when he takes a nap on his sofa thinking on a new construction he will make in his working shed. The days come and go and Pettson does what he always has done - cultivates his garden, goes fishing at the nearby lake (catching perch), makes an invention out of what he has collected in his house, in the attic or things left somewhere in his garden. He listens to the weather report on the radio (a tube radio, certainly) or just quarrels with his cat Findus. It is a world in harmony.

The stories are centred on something that Pettson invents and constructs: an alarm system if the fox should come during the night hungry and hankering for a hen; a new cottage for Findus made out of the old privy house; and a machine that can feed the stove with wood sticks, which in reality is going to be a Santa Claus kind of robot. The automatic Santa is a complicated innovation and Pettson must use his entire creativeness. The Swedish eighteenth-century engineer Christopher Polhem appears in Pettson's dreams and demonstrates his mechanical alphabet to Pettson (Lindgren, 2011). Pettson learns how cogwheels and rods should be connected to perform certain functions.

On a basic level, children who encounter the books can learn how a variety of tools can be used and how different mechanical parts can be connected to make a device work. On a more abstract level, they can learn basic craftsmanship and workflow when you develop and manufacture technology objects. They can certainly be inspired to a creative way of thinking. On a moral or life style level, they can learn that it is possible to manage on the resources that you create yourself.

Pettson's world is sustainable but at the price of being static. There are few, if any, interactions with the social problems connected to poverty, migration, climate change, and technology development. Nordqvist's books belong to a long tradition in Swedish literature for children in which the story takes place in a pastoral and rural landscape as it once was, or is believed to have been. The most prominent author in this tradition is Astrid Lindgren with, for example, the books about Pippi Longstocking and Emil of Lönneberga. The time is before urbanisation, consumer society and modern communications technology. The books are read by generation after generation of children (or read to them by their parents, grandparents or teachers). The stories become a bridge between generations; the oldest can experience reminiscence from their own childhood and the youngest can compare their conditions with how children lived a long time ago.

Discussion

The increasingly technologically driven society during the twentieth century is a theme in many stories. A deeply rooted ambivalence towards new technology objects is notable (Mitcham, 1994). The authors we have studied give, however, contrasting images of technological development. Lööf's and Nordqvist's books offer a dreamland to readers with a historical interest with their detailed descriptions, especially in the illustrations, of traditional or well-known artefacts and systems. Beskow's, Sandberg's and partly Lööf's books deal with ethical concerns connected to expanding technological systems and their implications for man and nature.

The narratives taken together give some noteworthy examples of images of technology and what a sustainable society can be. From an analytical perspective, inspired by Schwarcz (1967), Reynolds (2007) and Applebaum (2010), we identify four main ways in which technology is portrayed:

1. Servant mode: technology is a powerful assistant to man and a tool to fulfil needs, wishes and dreams.

Australasian Journal of Technology Education. Published online October, 2014

5

2. Deterministic mode: technology is something that has escaped from man's control.

3. Benevolent mode: technology is a loyal and "equal" companion to man.

4. Nostalgic mode: "older technologies" are better or more natural than modern (or the latest) technologies and old technology is attributed a higher value.

The first three modes, especially, correspond roughly to instrumentalist (1, 3), determinist (2) and substantivist (2) conceptions of technology, as suggested by Feenberg (2006). The technologies that have a leading role in the stories examined are, however, placed in different kinds of contexts: techno-centric, techno-utopian; urban idyllic and pastoral idyllic.

- Techno-centric context: This is demonstrated most clearly in *Doctor Klokamundus' Invention* and *The Little-Fellow-Star*. People use technology to gain control or economic benefits, without regard to consequences for other people or for nature. Alternatively, man has become increasingly dependent on technology. Technology has developed into a threat to man's creativity, as traditional knowledge and skills are forgotten. The view of nature is anthropocentric; nature can be conquered in the name of progress.

- Techno-utopian context: The foremost example of this is the final pages of *Pelle and Uncle Otto's Invention*. Technology is seen as a positive force to solve human problems and to fulfil human needs, but technological advances must be in harmony with the environment and nature. The argument for not emptying Earth of its resources leans on an anthropocentric view; we must not destroy for our descendants.

- Urban idyllic context: *Pelle and Uncle Otto's Invention* takes place in this kind of context. Technology is placed in an urban world, which has not been flooded by modern technology. Nature is more or less absent. There are references to the welfare society (the Swedish *folkhem*).

- Pastoral idyllic context: Nordqvist's books about Pettson epitomize this sort of context. Technology is a natural tool in a rural world. The contact with nature retains morality and balance. Society rests on an eco-centric vision, which means that the ecosystems, other species and the landscapes have intrinsic values, regardless of their importance to man. There is a connection to virtues that, in a country like Sweden, have been a part of everyday life for many generations in many rural and agrarian communities.

The books also convey messages about children, technology and sustainable development, which can be summarised as Childhood is embedded in nature and children develop best in harmony with it, a belief that has its roots in a romantic tradition. Elsa Beskow uses, for instance, images of the children as "plants", which should be cultivated to self-sufficiency (compare with Cogan Thacker & Webb, 2002).

Beskow's, Sandberg's and Lööf's stories illustrate what can happen if humans ignore the negative consequences of the utilisation of technology. Sandberg's story serves as a positive model for change, as it shows how humans, i.e. women and children, can organise to reclaim the development. In all these three author's writings, there is a faith in children's ability to choose the right path. The children are the ones who must take responsibility for the future and overcome the problems the current adult generation has created (Bradford, Mallan, Stephens, & McCallum, 2011).

From a gender perspective, the message in the stories is clear: men are the source of technological development. They are the ingenious inventors (*Pelle and Uncle Otto's Invention*) or the inventing bricoleur (Pettson). Children and women act as spokespeople for nature and humanity. This interconnection between women and nature is an age-old association that has persisted in culture and language throughout history (Merchant, 1989).

Despite technology playing an important part in children's lives in the Western world, anti-technological attitudes towards new technologies are to be found in many children's books (Applebaum, 2010). In the books by Beskow and Sandberg, technology takes the shape of a potentially dehumanising force. In Beskow's and Nordqvist's and partly in Lööf's books the

Australasian Journal of Technology Education. Published online October, 2014

6

technology landscape consists mainly of older or traditional technologies. The setting is an agrarian society with small towns and villages. The nostalgic dreams are there. The implicit message is that "it was better before". None of the stories examined presents development of new technology as a positive force that can contribute to sustainability (to some extent Lööf takes a more nuanced standpoint). A nostalgic world thus rules in many stories for children.

In the Swedish national compulsory school curriculum, narratives and fiction are included in the description of the core content of a majority of the school subjects (Skolverket, 2011). Technology is, surprisingly, one of the few exceptions. This article shows that reading and talking about children's books can have a great potential as a pedagogical tool in education for sustainable development, especially in relation to technology education. Pedagogy is usually about simplifying phenomena in order to boost pupils' understanding, by using concepts, models, etc. However, the role of technology in relation to sustainability is complex and sometimes even ambiguous and contradictory. Introducing children's literature in technology classrooms may, therefore, be a powerful tool to help bring out and discuss these complexities as well as to show that there is a way forward. Technology can frame alternative, sustainable ways of life for future generations (Feenberg, 2006). We have suggested some modes and contexts that could inform such discussions.

Affiliations

Cecilia Axell[#], Jonas Hallström, & Jan-Erik Hagberg
Department of Social and Welfare Studies
Linköping University, Sweden
[#]Cecilia Axell <cecilia.axell@liu.se>

References

Applebaum, N. (2010). Representations of technology in science fiction for young people. New York, NY: Routledge.

Attride-Stirling, J. (2001). Thematic networks: An analytic tool for qualitative research. Qualitative Research, 1(3), 385-405, doi:10.1177/146879410100100307.

Beskow, E. (1919/1996). Doktor Klokamundus uppfinning. In E. Beskow (Ed.) Muntergök: Sagobok (pp. 55-71). Stockholm, Sweden: Bonnier Carlsen.

Bradford, C., Mallan, K., Stephens, J., & McCallum, R. (2011). New world orders in contemporary children's literature: Utopian transformations. (2nd ed.). Basingstoke, England: Palgrave Macmillan.

Cogan Thacker, D., & Webb, J. (2002). Introducing children's literature. From romanticism to postmodernism. London, England: Routledge.

Feenberg, A. (2006). What is philosophy of technology? In J.R. Dakers (Ed.), Defining technological literacy: Towards an epistemological framework. New York, NY: Palgrave.

Hallberg, K. (1991). Det moderna rummet: Inger och Lasse Sandbergs bilderböcker. In Vår moderna bilderbok (pp. 71-103). Stockholm, Sweden: Rabén & Sjögren.

Hård, M., & Jamison, A. (2005). Hubris & hybrids: A cultural history of technology and science. New York, NY: Routledge.

Hintz, E.S. (2008). Heroes of the laboratory and the workshop: Invention and technology in books for children, 1850-1950. In M.M. Elbert (Ed.), Enterprising youth: Social values and acculturation in nineteenth-century American children's literature (pp.197-211). New York, NY: Routledge.

Hultén Sonne, L., & Hultén, G. (1993). 40 år med Sandbergarna. Abrakadabra, 1993(5), 18-20.

Ihde, D. (2006). The designer fallacy and technological imagination. In J. R. Dakers (Ed.), Defining technological literacy: Towards an epistemological framework (pp. 121-132). New York, NY: Palgrave Macmillan.

Illich, I. (1985). Tools for conviviality. London, England: Boyars.

Australasian Journal of Technology Education. Published online October, 2014

7

Kåreland, L. (2008). Barnlitteraturens utveckling i Sverige. Litteraturbanken. Retrieved from http://litteraturbanken.se

Kelly, G.R. (1974). Literature and the Historian. American Quarterly, 26(2), 141-159.

Kranzberg, M. (1986). Technology and history: Kranzberg's Laws. Technology and Culture, 27(3), 544-560.

Lindgren, M. (2011). Christopher Polhems testamente. Berättelsen om ingenjören, entreprenören och pedagogen som ville förändra Sverige. Stockholm, Sweden: Innovationshistoria förlag, Nielsen & Norén.

Lööf, J. (2006). Pelle och farbror Ottos uppfinning. Stockholm, Sweden: Bonnier Carlsen.

Merchant, C. (1989). The death of nature. Women, ecology and the scientific revolution, (3rd ed.). San Francisco, CA: Harper & Row.

Mitcham, C. (1994). Thinking through technology: The path between engineering and philosophy. Chicago, IL: University of Chicago.

Nilsson, T. (1996). Sandbergs berättar historier på sitt eget vis. Förskolan, 79(4), 50-53.

Nordqvist, S. (1994). Pettson och tomtemaskinen. Stockholm, Sweden: Opal.

Nordqvist, S. (2012). Findus flyttar ut. Stockholm, Sweden: Opal.

Nordqvist, S., & Marshall, J. (2009). Findus and the fox. Stroud, England: Hawthorn.

Nordqvist, S, & Feldt, L. (2013). Pettson's inventions, App for IPads. Filimundus, Stockholm, Sweden: Rabén och Sjögren.

Ödman, P.J. (2007). Tolkning, förståelse, vetande. Hermeneutik i teori och praktik. Stockholm, Sweden: Norstedts.

Pearson, L. (2011). Children's literature. London, England: York.

Reynolds, K. (2007). Radical children's literature: Future visions and aesthetic transformations in juvenile fiction. New York, NY: Palgrave Macmillan.

Reynolds, K. (2011). Introduction. In K. Reynolds, & Grenby M.O. (Eds.), Children's literature studies: A research handbook (pp. 1-10). Basingstoke, England: Palgrave Macmillan.

Sandberg, I., & Sandberg, L. (1969). Filurstjärnan. Stockholm, Sweden: Geber.

SBI, Swedish Institute for Children's Books. (2013). Trender och tendenser. Gränser och gränsöverskridande. 2012 års utgivning. Retrieved from http://www.sbi.kb.se/sv/utgivning-och-statistik/bokprovning/trender-och-tendenser-/

Schwarcz, J.H. (1967). Machine animism in modern children's literature. The Library Quarterly. 37(1). Proceedings of the Thirty-First Annual Conference of the Graduate Library School, August 1-3, 1966: A Critical Approach to Children's Literature (Jan., 1967), 78-95.

Skolverket/National Agency for Education. (2011). Curriculum for the compulsory school, preschool class and the leisure-time centre 2011 (Lgr11). Stockholm, Sweden: Skolverket. Retrieved from http://www.skolverket.se/publikationer?id=2687

Westin, B. (1996). Children's literature in Sweden. (2nd. ed.) Stockholm, Sweden: Swedish Institute (Svenska institutet) (SI).

UNWCED: United Nations World Commission on Environment and Development. (1987). Our common future (Brundtland Report). Oxford, England: Oxford University Press.

Australasian Journal of Technology Education. Published online October, 2014

8