UNPACKING THE EMPEROR'S NEW POLICIES: HOW MORE MATHEMATICS IN EARLY CHILDHOOD WILL SAVE NORWAY

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The Norwegian Minister of Education is changing how mathematics in early childhood education should be viewed as part of a shifting of its main function from providing children with opportunities to develop holistically to, instead, preparing them for school. Using Edelman's notion of the political spectacle, the discursive means used in press releases to frame a key policy initiative as a rational and responsible answer to a problem in education is explored. The promotion of the problem and the construction of the solution will have significant impact on how early childhood education and care is undertaken in Norway.

Keywords: early childhood education, media, political spectacle, mathematics, Norway

**INTRODUCTION** 

In August 2015, the Norwegian Minister for Education and Research launched a national strategy for mathematics and science education titled "Tett på realfag<sup>1</sup>" [Close up with mathematics and science] (Kunnskapsdepartementet, 2015f). The realfag strategy, as it was labelled, argues for increased focus on mathematics and science in the education system, from

<sup>&</sup>lt;sup>1</sup> In Norwegian, *realfag* is a collective term for mathematics and science. It literally means real subjects or reality subjects, i.e. subjects addressing material reality as distinguished from subjects dealing with humanities such as literature, language, history etc. I will be using this and other Norwegian terms when the connotation does not come across well in standard translation into English.

early childhood education upwards. Although positioned as a minor change, the strategy attempts to shift the curricular approach in early childhood education and care from the Nordic social pedagogy tradition towards the readiness for school tradition (Schaanning, 2015). These can be seen as endpoints of a continuum of curricular approaches in early childhood education. In the social pedagogy tradition, "the focus is on broad developmental goals, e.g. physical and motor development; socio-emotional development; personal and social skills; artistic and cultural development; and authentic (through lived situations) approaches to literacy, number and science thinking" whereas in the readiness for school tradition, "the emphasis tends to be placed on more focused skills and school-like learning areas, e.g. mathematical development, language and literacy skills, with children's life in the centre and the range of experiences offered to them playing a more secondary role" (OECD, 2006, pp. 63-64).

The two traditions contrast on a range features (Bennett, 2005). In the readiness for school tradition, the early childhood centre is "viewed as a place for learning and instruction. Children are expected to reach pre-defined levels of development and learning" (p. 12), in contrast to the social pedagogy tradition where it is "viewed as a life space, a space in which children and pedagogues learn to be, to know, to do and to live together" (p. 12). The readiness for school tradition has "prescribed targets – generally pertaining to cognitive development" (p. 12) and pedagogical strategies managed by the teacher in contrast to "broad orientation rather than prescribed outcomes" (p. 12) and "confidence [being] placed in the child's own learning strategies and centres of interest, that is, on learning through relationships, through play and through educator scaffolding at the appropriate moment" (p. 12) in the social pedagogy tradition. Hence, shifting the strongly rooted Norwegian social pedagogy tradition towards a readiness for school approach is a significant change with direct impact on how young children's learning is conceived and on the role of educators in supporting that learning.

In Lange and Meaney (in press), we pondered the creation of a new common sense about early childhood education and care in Norway. Acceptance of this common sense would allow for breaking the stronghold of the social pedagogy tradition in the Norwegian conception of early childhood education and care to make way for the readiness for school tradition, as if it was an innocent and necessary development. The paper raised several questions, such as what did the Minister do to shift the discursive frame for discussions about Norwegian  $barnehage^2$  - the common sense about barnehage – to facilitate a significant change in early childhood education policy? In this paper, I respond to some of these questions by exploring how mediatisation of educational policy contributes to significant altering of educational traditions.

#### MEDIATISATION AND EDUCATIONAL POLICY

In the debate article analysed in Lange and Meaney (in press), the Minister espoused a belief in causal links between a stronger focus on mathematics and science in barnehage and more PhDs in high-tech fields that would secure the future well-being of the Norwegian society. Given that such links seems tenuous at best, with spurious relationships between means and ends, the Minister's new policy must be considered symbolic rather than instrumental (Miller-Kahn & Smith, 2001) aiming at affecting ideology, what is taken for granted as common sense, rather than the state of affairs supposedly being addressed.

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<sup>&</sup>lt;sup>2</sup> The organisation and naming of institutions for early childhood education and care varies significantly across countries. The word *barnehage* (*barnehager* in plural) is the Norwegian term for institutions providing early childhood education and care for 1-5 year old children. Barnehage literally means children's garden. It is commonly translated to the German kindergarten (although not capitalised as in German) but this term is used for a variety of institutions around the world. Hence, in order to maintain the context of the study and avoid invoking misleading connotations, I have chosen to use the Norwegian term throughout the paper.

To understand the impact of symbolic policies on ideologies surrounding barnehage, it is important to analyse the language and discourse used in promoting the new realfag strategy through its mediatisation by the Minister/Ministry in the form of press releases. As Franklin (2004) stated:

Politicians' preference for soundbites above sustained policy debate reflects the extent to which their determination to set the news agenda and to use media to inform, shape, and manage public discourse about policy and politics have become crucial components in a modern statecraft and system of governance. (p. 256)

Press releases from the Minister/Ministry is a form of mediatisation of policy. They are "soundbites" deliberately aimed at using the media to "inform, shape and manage" the public discourse. Franklin (2004) relates how a retired Head of Information in the UK Blair government described the media strategy as based on the three Rs: Rhetoric, Repetition, Rebuttal: ensuring that the Rhetoric was short and memorable, that it was Repeated at every opportunity and if there was any criticism of it, to come back immediately with a Rebuttal.

In earlier research on mediatisation of educational policy (Lange & Meaney, 2014), we explored how children were positioned through media reports on national testing in Australia when it was first introduced. Like the introduction of the realfag strategy in Norway, the introduction of national testing and associated initiatives, such as a website for parents to compare school results, had an impact on the ideology around children, in that they were positioned as commodities to which value should be added by the education system. To promote such an outcome, the public were co-opted into technical discussions about the testing, rather than about how testing framed foundational discussions about the purpose of education, such as the kind of mathematics education that children need for citizenship.

Invoking the metaphor of theatre (Smith, Miller-Kahn, Heinecke, & Jarvis, 2004), the discursive framing of education policy in the media can be considered as part of *the political spectacle*. This notion was coined by Murray Edelman (1964/1985, 1988) to denote the pervasive reporting of news in readily available media. Over many years, Edelman (e.g. 1964/1985, 1977, 1985, 1988) explored the consequences for the social psychology of politics and for democracy of the political spectacle:

The spectacle constituted by news reporting continuously constructs and reconstructs social problems, crises, enemies, and leaders and so creates a succession of threats and reassurances. These constructed problems and personalities ... play a central role in winning support and opposition for political causes and policies. (Edelman, 1988, p. 1)

Edelman considered his epistemological principles to be in opposition to the positivist views on politics, dominating political science at the time. The quote above continues:

The latter role is usually masked by the assumption that citizens, journalists, and scholars are observers of "facts" whose meanings can be accurately ascertained by those who are properly trained and motivated. ... Rather than seeing political news as an account of events to which people react, I treat political developments as creations of the publics concerned with them. (Edelman, 1988, pp. 1-2)

Framed in terms of political spectacle, the question addressed in this paper is how the Minister, backed by his Ministry, construct a public concerned with mathematics and science in barnehage.

In education research, Edelman's political spectacle has been used by Miller-Kahn and Smith (2001), Smith et al. (2004), and Anderson (2005, 2007) in studies on education policies in USA; and by Smyth (2006) to discuss what he described as "a debilitating overload of political

interference and media hyperbole in respect of teaching and teacher education" (p. 301) in Australia.

Peter Appelbaum's (1995) research seems to be the only study in mathematics education to use Edelman's work. He used it to understand how gender issues in mathematics were constructed as problems in need of attention by being framed by a cluster of beliefs, ideological commitments and common sense:

Edelman argues that [social problems] enter discourse and therefore exist as reinforcements of ideologies. In the case of gender issues in mathematics, beliefs about the importance of mathematics performance and the centrality of mathematics and science knowledge for economic and military advantage internationally have contributed to more general ideological commitments; these commitments have in turn constructed a notion that greater levels of participation in school mathematics and better scores on achievement tests are basic educational goals. (Appelbaum, 1995, p. 143)

Within a commonsense view of achievement in measurable forms being a central goal for education, gender issues in mathematics were constructed as a problem that for some was part of the natural order and for others a social injustice that needed to be overcome. Neither perspective allowed for critiquing the basic tenet that mathematics achievement is important. For those with a vested interest in the beliefs about the importance of mathematics as "contributing to the *technological and socio-economic development* of society at large, either as such or in competition with other societies/countries" (Niss, 1996, p. 13; original italics), this deeply ideological position was conveniently camouflaged as common sense.

In this paper, I investigate the political spectacle as a methodological tool for understanding how the Norwegian Minister tries to garner support for his education policy with respect to making major changes in early childhood education appear to be minor adjustments to

Norway's existing traditions. Understanding the media strategy employed by the Minister requires a methodology that can tackle not only the "content" of the Minister's political initiatives, but also what seems to be active attempts to construct a public concerned with mathematics and science in barnehage and "prime" that public into acquiescence. Edelman's description and theorisation of the political spectacle suggests that it might be useful.

Although travelling educational discourses (Otterstad & Braathe, 2016) are likely to affect the Norwegian situation as the Minister may draw upon similar rationales for putting forth his policy, there is also likely to be differences caused by geography and history. For example, the political cultures of US, Australia or UK, where Edelman's political spectacle has previously been used in regard to educational policy, are different in many respects but perhaps have more in common with each other than with the Norwegian political culture. Apart from a similar historical and linguistic heritage, the former three are shaped by a polarisation between two major political groupings, whereas the political culture in Norway like the other Scandinavian countries has a strong tradition for consensus building across political differences. Therefore, it is not self-evident that Edelman's theorisation about a US context is applicable to Norway. Hence, this paper investigates the value of using Edelman's political spectacle for analysing policy formation in regards to mathematics education in the context of Norway in order to determine its applicability for a larger study, which will consider not just press releases, but also new articles and online comments by the general public.

#### USING THE POLITICAL SPECTACLE AS THEORETICAL FRAMEWORK

Edelman's theorisation of the political spectacle has been operationalised in slightly different ways in the education research mentioned above. Referring to Edelman (1964/1985, 1988),

Miller-Kahn and Smith (2001) used a framework with seven elements also used in Smith et al. (2004). Anderson (2005) used a framework with six elements based on Edelman (1977, 1988), also used by Smyth (2006) and Anderson (2007). In both cases, the authors suggest that their framework is presented as such by Edelman. However, they are slightly different extractions of the main points from Edelman's rich discussion of the political spectacle. The difference is one of emphasis and seems connected to whether the authors combine Edelman (1988) with Edelman (1964/1985) or Edelman (1977). In the following, I take my starting point in Anderson's (2005, 2007) framework which comprise the following elements: 1) the importance of language and discourse; 2) the definition of events as crises; 3) a tendency to cover political interests with a discourse of rational policy analysis; 4) the linguistic evocation of enemies and the displacement of targets; 5) the public as political spectators; 6) the media as mediators of the political spectacle.

The first element, the importance of language and discourse, is meant to capture what Edelman (1977) aptly phrased as "the linguistic structuring of social problems" (p. 26) and "how the problem is named involves alternative scenarios, each with its own facts, value judgments, and emotions" (p. 29), i.e. the relationship between language and politics (Anderson, 2007). It would include rhetorical features such the short and memorable phrases referred to by Franklin (2004) above as well as metaphors. The remaining elements name what they comprise and will be discussed later.

### **METHODOLOGY**

## **Collecting data**

This study is part of a wider project investigating mediatisation of Norwegian policy formation with respect to mathematics education in barnehage. As an initial, explorative study, press releases are investigated. These can be seen as not just informing the public about the dealings of the Ministry of Education and Research, but also as active attempts to form public perception of current issues. They are shaped to feed into the media with little or no need for further editing and issued with a frequency of roughly one press release per working day, "low seasons" not included<sup>3</sup>.

The Norwegian government's website for official documents, *Regjeringen.no*<sup>4</sup>, was used to locate press releases from *Kunnskapsdepartementet* [Ministry of Education and Research]. The search terms *barnehage*, *matematikk* and *realfag* were used individually and in combinations, to locate relevant press releases. In the searches conducted on 18<sup>th</sup> March 2016, there were 89 hits for barnehage, 62 hits for matematikk and 44 hits for realfag. Combined searches yielded the distribution shown in Figure 1.

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<sup>&</sup>lt;sup>3</sup> Since the government came into power 16<sup>th</sup> October 2013 and 1<sup>st</sup> April 2016, i.e. during 898 days in power, 455 press releases was issued.

<sup>&</sup>lt;sup>4</sup> <u>www.regjeringen.no</u>. The website also comes in an English version *Government.no*, however, this only covers part of the content of the Norwegian version. Hence, the Norwegian site was used for finding the documents. The English version was consulted for translation issues.

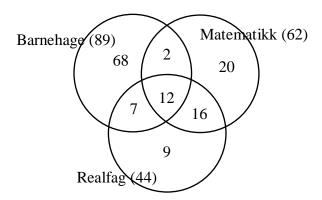


Figure 1. Venn-diagram showing the number hits in press releases for the search terms barnehage, matematikk and realfag and combinations hereof.

For the present paper, the 12 press releases found in the combined search on barnehage & matematikk & realfag were analysed as they were deemed to be the most relevant for the present study.

### **Data Analysis**

The analysis of the text<sup>5</sup> in the press releases used a coding scheme based on Anderson's (2005, 2007) identification of six elements of the political spectacle. These six elements were the main codes. Sub-codes and sub-sub-codes were then developed to specify the main codes and provide prompts in the coding process. Inspired by Miller-Kahn and Smith's (2001) framework, sub-codes for Element 1, the importance of language and discourse, focused on symbolic language, phenomena labelled as problems, emotional symbolism, and dramaturgy. These foci were highlighted by Edelman (1988).

Before the analysis began, it was decided to look for how barnehage was linked to school in the press releases. This came from the work of Schaanning (2015) who in an analysis of the strategy

<sup>&</sup>lt;sup>5</sup> The photos used in the press releases will be subject to a different analysis at a later date.

document *Tett på realfag* (Kunnskapsdepartementet, 2015f) pointed out how barnehage and school was presented as though they were seamless parts of the same educational enterprise:

Barnehage is thus considered to be the first and crucial link in the school years. There should be a seamless, continuous transition from barnehage to school, so that barnehage children will be well prepared for what they will meet at school. ... It means that the working methods that are established in school, now also will have an impact on what you do in barnehage. ... In line with this, barnehage and school are not treated separately in the strategy document - they belong to the same package and are therefore treated as one. All the time, the authors use "barnehage and schools" as a generic term and can completely effortless talk about that they contain "students," and that it is important to strengthen their "competence". (Schaanning, 2015; section "Barnehage som skole"; my translation)<sup>6</sup>

As Schaanning's point is at the centre of the difference between the social pedagogy tradition and the readiness for school tradition, it seemed valuable to see if, how and to what extent this link was present in the press releases. Consequently, a sub-code to Symbolic language, itself a sub-code to Element 1, was defined in advance to collate all instances of barnehage and school being presented as a unit.

Words for crisis, to be coded at Element 2, the definition of events as crises, were not used in the press releases, but at times, strong wording was used in descriptions of problems. Thus, the distinction between a problem, which in the analysis was connected to Element 1, the importance of language and discourse, and crisis, Element 2, was not straightforward. According to Edelman (1988) the terms problem and crisis both depict deplorable states of

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<sup>&</sup>lt;sup>6</sup> Barnehagen anses således for å være det første og avgjørende leddet i skoleløpet. Det skal være en sømløs, kontinuerlig overgang fra barnehage til skole, slik at barnehagebarna skal være godt forberedt på det de vil møte på skolen. ... Det betyr blant annet at arbeidsmåtene som er etablerte i skolen, nå også skal få innvirkning på hva man gjør i barnehagen. ... I tråd med dette behandler man i strategimeldingen ikke barnehage og skole separat – de hører til samme pakken og behandles derfor under ett. Man bruker hele tiden «barnehage og skole» som en fellesbetegnelse, og kan helt ubesværet snakke om at de inneholder «elever», og at det gjelder å styrke deres «kompetanse».

affairs, the difference being that problem connotes permanence and crisis instability, which requires and legitimises action:

In the conventional view, then, problems are chronic (though curable in principle) and crises are acute; but the distinction turns out to be arbitrary when the catalysts or crises are examined. / More often than not a crisis is an episode in a long sequence of similar problems. ... A crisis, like all new developments, is a creation of the language used to depict it; the appearance of a crisis is political act, not a recognition of a fact or of a rare situation. (Edelman, 1988, p. 31)

This quote raises issues to do with where political spectacles are situated. If problem and crisis are distinctions in political language rather than in the quality of events, it could be that the political rhetoric is more low-keyed in Norway than in the US, where Edelman worked, and hence less prone to invoke a crisis. It could also be that culturally it is not appropriate to situate the need for barnehage to include more mathematics as a preparation for school as a crisis, or it could be that presenting it as a problem allows for a subtler shifting of the ways that mathematics education in barnehage are discussed, which could not be done if it was presented as a crisis.

Element 3, a tendency to cover political interests with a discourse of rational policy analysis, had sub-codes for justification for problems and their solutions. Element 4, the linguistic evocation of enemies and the displacement of targets, was expected to be easily identifiable in the press releases and not in need of pre-defined sub-codes.

Text referring to statements by experts was coded as belonging to Element 5, the public as political spectators, because it was considered that in using experts, the authors of the press releases were situating those experts as the ones in control, which meant that the public could relax in knowing that although there was a problem, the government, through the use of experts had resolved it. Consequently, the public did not have to participate in a democratic discussion

about how to resolve the issue, let alone whether there was an issue. However, there were only few references to experts, so the operationalisation of this element is provisory.

As the focus in this paper is on the input to the media by the Ministry through press releases and not the actual mediation of this input in the media, the  $6^{th}$  element, the media as mediators of the political spectacle, is not discussed here.

NVivo software was used as it allows for flexible construction and reconstruction of codes and code hierarchy as well as for coding and recoding and extraction of results of the coding.

### **RESULTS**

The quantitative outcome of the NVivo analysis in Table 1 shows the number of sources and references coded at each of the six main nodes<sup>7</sup>. As the coding involves some ambiguity, the number of references indicate order of magnitude rather than exact numbers.

Table 1. The main codes, corresponding node names, number of sources (i.e. press releases) coded at nodes, and number of references to nodes across sources

Main code	Node name	Sources	References
The importance of language and	Discourse	10	96
discourse			
The definition of events as crises	Crisis	0	0

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<sup>&</sup>lt;sup>7</sup> In NVivo, you "code" at a "node", which is a container for references to a theme, issue, topic or opinion.

Main code	Node name	Sources	References
A tendency to cover political interests with a discourse of rational policy analysis	Rational policy	10	90
The linguistic evocation of enemies and the displacement of targets	Enemy and target	0	0
The public as political spectators.	Public as political spectator	2	4
The media as mediator of the political spectacle	Media mediating spectacle	0	0

Two methodological points can be drawn from Table 1. First, the large number of references in small number of short press releases suggests that Edelman's political spectacle is a relevant analytical tool in analysing press releases by the Norwegian Ministry of Education. Second, the references are concentrated in two of the six elements, the importance of language and discourse, and, a tendency to cover political interests with a discourse of rational policy analysis. In the following sections, I use Edelman's (1988) theorisation of the political spectacle to discuss significant features in the material coded at these two dominant nodes, that is, the rhetorical device "barnehage and school", the metaphor "the learning chain", and the problem "the realfag problem" and its justification.

### Barnehage and school

As a rhetorical device, the expression "barnehage and school", was coded under "the importance of language and discourse". Consistent with what Schaanning (2015) noted in his discussion of the realfag strategy document (Kunnskapsdepartementet, 2015f), barnehage and school were almost always mentioned together in the press releases, thus suggesting a uniform education system. For example, a press release from October 2014 stated:

Good knowledge in realfag is built in the individual school and barnehage. Now we wish to build up the realfag culture and the realfag competence out in the barnehager and in the schools. (Kunnskapsdepartementet, 2014a; my translation)<sup>8</sup>

The frequency with which barnehage and school was linguistically positioned as part and parcel of the same education system, could have been related to the search terms used to locate the 12 press releases. However, within the wider pool of press releases belonging to the theme Utdanning [Education], a search for barnehage yielded 50 press releases of which 45 contained the combined search term barnehage & skole. Presenting barnehage as an integrated part of the school years, therefore, seems to be a wider, non-accidental, discursive pattern, not specifically connected to press releases about mathematics and realfag. Because of the consistency of the pattern, it can be considered as instance of the first two of the three R's, rhetoric, repetition, rebuttal, that Franklin (2004) identified as key discursive devices in winning support for political causes. As discussed earlier, the Nordic early childhood education and care social pedagogy tradition has been distinctly different from the readiness for school tradition. Repeatedly feeding the media press releases containing the rhetorical figure "barnehage and

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<sup>&</sup>lt;sup>8</sup> God kunnskap i realfagene bygges i den enkelte skole og barnehage. Nå ønsker vi å bygge opp realfagskulturen og realfagskompetansen ute i barnehagene og i skolene.

school" seems to be one method for covertly changing perceptions of the commonsense relationship between barnehage and school. As noted by Schaanning (2015), this rhetorical figure allows the authors of the realfag strategy to talk about children in barnehage as "students" whose "competency" it is important to "strengthen". These ways of describing young children are foreign to the social pedagogy tradition.

### The learning chain

The commonsense link between barnehage and school was reinforced with other symbolic language, also coded under "the importance of language and discourse". In October, 2015, the Minister introduced the term *learning chain* in a press release with the vigorous title: *Knowledge, quality and restructuring*:

We shall therefore strengthen the whole learning chain, from barnehage and school to higher education and research, says the Minister for Education Torbjørn Røe Isaksen. /.../ The government is building the knowledge society, and that work starts already in barnehage. (Kunnskapsdepartementet, 2015c; my translation)<sup>9</sup>

The metaphor "learning chain" rhetorically not only states the obvious chronology of barnehage and school in Norwegian children's lives. The material object giving rise to the metaphor is a series of (usually unbreakable) rings or links fitted together to make a flexible ligament. The properties of the individual links are qualitatively different from the bond formed by their concatenation. Links in a chain are nothing in themselves and everything in combination. As popular wisdom has it, a chain is no stronger than its weakest link. Miller-Kahn and Smith

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<sup>&</sup>lt;sup>9</sup> Vi vil derfor styrke heile læringskjeda, frå barnehage og skole til høgare utdanning og forsking, seier kunnskapsminister Torbjørn Røe Isaksen. /.../ Regjeringa bygger kunnskapssamfunnet, og det arbeidet startar allereie i barnehagen.

(2001) points out that words – in this case "the learning chain" – lacking concrete referents, creates politically useful ambiguity:

[N]o tether exists to tie them to the world of experience and intractable, concrete details. Or rather, there are so many different mental pictures that form in the minds of the public when these words are spoken that one can scarcely pin down the specific meaning of the person who spoke them. ... / Such linguistic ambiguity creates a kind of fog. It holds the public in a thrall. Politicians use ambiguous language to unite a public and create an impression of consensus that does not exist. (p. 5)

The learning chain, let alone strengthening it, has no concrete referents. It is symbolic, foggy language aimed, consciously or not, at shifting the common sense about childhood and barnehage. By using the metaphor "learning chain", the Minister portrays a harmonious, seamless connection between barnehage and school, which extends to research, the epitome as well as the basis for "the knowledge society" (this is discussed more in Lange & Meaney, in press). To cynics, the metaphor chains barnehage to school<sup>10</sup> and shifts the purpose of barnehage, the main societal institution for early childhood, to become about "contributing to the technological and socio-economic development of society at large, either as such or in competition with other societies/countries" (Niss, 1996, p. 13). In this perspective, the holistic perception of childhood in the social pedagogy tradition is a luxury that has to be abandoned. The public is induced to acquiesce in this deprivation by the dire circumstances invoked. Childhood needs to be subsumed under the labour force qualification perceived as needed for "the knowledge society", which is another metaphorical expression with no concrete referents

<sup>&</sup>lt;sup>10</sup> This pun does not work in Norwegian because the two meanings of chain it plays upon are represented by two unrelated words in Norwegian, kjede (string, series, concatenation) and lenke (enchain, tie, fetter, shackle, manacle).

to tie it to "the world of experience and intractable, concrete details" (Miller-Kahn & Smith, 2001, p. 5) and open to a wide range of meanings ascriptions. Edelman (1988) stated:

In a crucial sense, then, the specific content of news items is often irrelevant so as their influence upon political support and opposition is concerned. ... It is the dynamism of the spectacle and its ambiguity, not its substance, that are politically and psychologically critical. (Edelman, 1988, p. 100) Ambiguity in terms such as learning chain and knowledge society allows for different interpretations, so that everyone can use the same symbolic language as though it contains the same meaning. In this way, differences are hidden and covert messages of the government about what is common sense accepted without dispute. In the press releases, the Minister with subtle linguistic means reconfigured barnehage and school as integral parts of the education system whose main purpose is to serve the labour force qualification necessary for the future well-being of the Norwegian society, epitomised as the knowledge society. More mathematics in barnehage will save Norway.

### The realfag problem

Another way that language and discourse was used to co-opt the discussion to the Minister's commonsense perception of the role of mathematics education in barnehage was to construe it as a problem that he, almost without reference to other actors, could resolve. This is an example of what Edelman (1988, ch. 2) discussed as "the construction and uses of social problems" in the political spectacle:

Problems come into discourse and therefore into existence as reinforcements of ideologies, not simply because they are there or because they are important for wellbeing. They signify who are virtuous and useful and who are dangerous or inadequate, which actions will be rewarded and which will be penalized. They constitute people as subjects with particular kinds of aspirations, self-

concepts, and fears, and they create beliefs about the relative importance of events and objects. They are critical in determining who exercise authority and who accept it. (Edelman, 1988, p. 12)

As "problems" are signifiers pointing to ideologies and value hierarchies, attention to explicit and implicit references to problems and their rationalisation was given in the coding. By far the most used sub-codes to *the importance of language and discourse* were related to problems, and much of the material coded under *a tendency to cover political interests with a discourse of rational policy* related to justifications for the purported problems. From the Minister's perspective, the major problem was *realfagsproblemet*, the realfag problem. In the 12 press releases analysed, this word appeared in half of them. The first time the Minister used it was in December 2013 shortly after his accession to his post when launching the results from the PISA 2012 survey (Kjærnsli & Olsen, 2013):

The new PISA survey shows that we have a realfag problem in Norway. It worries me a lot. The results are simply not good enough, says Minister Torbjørn Røe Isaksen. (Kunnskapsdepartementet, 2013; my translation)<sup>11</sup>

At that time, the Minister did not yet connect the realfag problem to barnehage. This connection was only made one year later, in December 2014 (Kunnskapsdepartementet, 2014b) when a report from an expert group (Bergem et al., 2014) was announced, and then again in March, August and October 2015 (Kunnskapsdepartementet, 2015a, 2015b, 2015c, 2015d, 2015e).

According to a news database<sup>12</sup> covering a wide range of Norwegian news sources, this appears to be the first use of the term in Norwegian news media<sup>13</sup>. It was widely used in the media

<sup>&</sup>lt;sup>11</sup> Den nye PISA-undersøkelsen viser at vi har et realfagsproblem i Norge. Det bekymrer meg sterkt. Resultatene er rett og slett ikke gode nok, sier kunnskapsminister Torbjørn Røe Isaksen. (Kunnskapsdepartementet, 2013)

<sup>&</sup>lt;sup>12</sup> The database Atekst covers the time period since 1945.

<sup>&</sup>lt;sup>13</sup> *Realfagsproblem* appears once in 1999 in an opinion piece where it refers to an expected shortage of realfag teachers.

coverage of the PISA 2012 survey with 81 news items in December 2013. In the following year, 2014, it appeared with considerably less intensity, i.e. in 23 items, but then increased in frequency in 2015 to 50 items corresponding to the frequent use in press releases considered here.

When the existence of realfag problem was justified and its features specified, it was mainly with reference to mathematics proficiency among children and youth. For example, barnehage children were situated as having insufficient counting and number skills:

Norwegian children have weak skills in counting and number (Kunnskapsdepartementet, 2014b; my translation)<sup>14</sup>.

As well, Norwegian school students did not do well in international comparisons in regard to average and proportion of high-achievers, and their performance at the end of ungdomskole [junior high school] was worrying:

Norwegian students performed under the international average in science and mathematics. We also have very few students performing at the highest levels. This is serious when we know that mathematics is one of the subjects that has the biggest influence for whether the students manage to complete videregående [upper secondary] school or not, Røe [the Minister] underlines. (Kunnskapsdepartementet, 2014c; my translation)<sup>15</sup>

All three points were also made in March 2015 (Kunnskapsdepartementet, 2015d), the latter with reference to "37 percent of the students taking the written exam in mathematics in year 10

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<sup>&</sup>lt;sup>14</sup> Norske barn har svake ferdigheter innenfor telling og antall (Kunnskapsdepartementet, 2014b).

<sup>&</sup>lt;sup>15</sup> Norske elever presterer under det internasjonale gjennomsnittet i naturfag og matematikk. Vi har også svært få elever som presterer på de høyeste nivåene. Dette er alvorlig når vi vet at matematikk er et av de fagene som har størst betydning for om elevene greier å fullføre videregående skole eller ikke, understreker Røe (Kunnskapsdepartementet, 2014c)

last year, got the mark 1 or 2 [i.e. the lowest]"<sup>16</sup>. Similar references to students' marks at the end of ungdomsskole [junior high school] were recurring (Kunnskapsdepartementet, 2015b, 2015e). That these statements appear in press releases mentioning barnehage, situates barnehage as an integral part of a faulty schooling system.

As in the case made by Appelbaum (1995) in regards to gender issues in mathematics, the Minister renders the ascription of importance to students' grades, marks and comparisons between students as common sense. Supported by the authority and ostensible rationality of the quantitative measures of students' achievements, this common sense then effectively sets the premises for educational policy to be about how to solve the purported realfag problem, now effectively rationalised as a matter of increasing students' achievements, particularly in mathematics. This entails shifting the reasons for mathematics in school and barnehage to focus on labour force qualifications.

As mentioned earlier, Edelman (1988) viewed a "problem" as a condition not easily changed. Although not previously described by the term "the realfag problem", the need to resolve issues to do with realfag seems to have been around for a while. For example, the problems identified in a realfag strategy from 2002 (Kunnskapsdepartementet, 2002) were very similar to the those identified by the Minister of Education more than ten years later, although the recent connection to barnehage means that it can now be seen as partially responsible for the problem.

The Minister may not solve the realfag problem – historical evidence suggests it is resistant to solution – but by consistently over a long period accentuating the scale and seriousness of the realfag problem and hence covering his political interests with a discourse of rational policy

<sup>&</sup>lt;sup>16</sup> 37 prosent av elevene som kom opp i skriftlig eksamen i matematikk på 10. trinn i fjor, fikk karakteren 1 eller 2. Samtidig vet vi at hvilken karakter elevene får i matematikk, er det som har størst betydning for om de greier å fullføre videregående skole eller ikke, sier kunnskapsministeren. (Kunnskapsdepartementet, 2015d)

analysis, the Minister legitimises other actions that might not otherwise be politically acceptable. In this case, these actions include chaining barnehage to the knowledge society so that the future well-being of Norway requires subsuming Norwegian children's childhood under the perceived necessities of labour force qualifications.

### **CONCLUSION**

The title of this paper took inspiration from a short tale by the Danish author Hans Christian Andersen, "The Emperor's New Clothes". The storyline has two weavers promising an emperor a new suit of clothes that is invisible to those who are either unfit for their positions, stupid, or incompetent. When the Emperor parades before his subjects in his new clothes, no one dares to say that they don't see any suit of clothes until a child cries out, "But he isn't wearing anything at all!" <sup>17</sup>

In one sense, the Minister is not wearing anything at all: there is neither a tangible "learning chain" nor a "realfag problem" – in the contemporary academic parlance, they are constructed phenomena. However, as long as the political spectacle keeps the public acquiescent, these "new clothes" can continue to affect what is taken for granted – common sense – when changes are made to policies regarding barnehage and mathematics education.

Using the political spectacle as conceived by Edelman has been instrumental in the present study by providing a framework for studying this case of mediatisation of education policy. Overall, it was possible to use it – there was lots of text that could be coded at the nodes belonging to Anderson's 6 elements. The theory of the political spectacle enabled teasing out the discursive processes of changing the ideology around barnehage. The theory provided

<sup>&</sup>lt;sup>17</sup> This summary is slightly adapted from <a href="https://en.wikipedia.org/wiki/The">https://en.wikipedia.org/wiki/The</a> <a href="https://en.wikipedia.org/wiki/The</a> <a href="https://en.wiki/The</a> <a href

insights into the connection between the elements. Rather than being separate aspects of the texts, they theory allowed them to be seen as connected in a larger pattern. For example, singular use of metaphors – such as the learning chain – are connected to the repetitive pattern of barnehage and school.

There is unexplored territory in the theory. Anderson's elements – and Miller-Kahn and Smith's as well – primarily use the discursive aspects of Edelman's insights into the role and function of political language – what linguistic features to look for to disclose how politicians create publics concerned with their causes and acquiesce in their policies (Edelman, 1988). Not reflected in the elements is Edelman's relativistic epistemological assumptions about the reciprocal construction of the observer and the observed, as stated in the quote

We are acutely aware that observers and what they observe construct each other; that political developments are ambiguous entities that mean what concerned observers construe them to mean; and that roles and self-concepts of the observers themselves are also constructions, created at least in part by their interpreted observations. (Edelman, 1988, pp. 1-2)

There is a need to explore these epistemological assumptions in doing analysis such as the present because otherwise we, mathematics education researchers, merely become the child shouting that the emperor has no clothes and do not explore our own role in the weaving of those clothes.

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