Children's 'eye views' of an archaeological site: A multimodal social semiotic approach to children's drawings

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Abstract

This paper presents eight-year-old children's 'eye views' of the archaeological site of the Agora in Athens, Greece, based on drawings made during an educational programme on site. Complementing a significant body of research on drawings, we introduce a multimodal social semiotic perspective to explore drawings as 'designed' accounts of children's 'eye views'. We argue that each account arises as an agentive response to their interests and prompts in the environment framing their experience, such as features of the site and the educational programme. Based on four drawings, we identify salient elements of children's experience in their representations which we analyze as material realizations of (i) their interests and agency, (ii) their visual and embodied engagement with the archaeological site, and (iii) the framing of the educational task and overall programme. Our findings contribute to research on the importance of the visual in learning.

Keywords: children, drawings, meaning-making, multimodal, museum

Introduction

In order to collect and explore children's experiences and perspectives, a number of researchers experimenting with different creative methodologies in participatory research have turned to drawings (i.e. Anning 2002; Anning and Ring 2004; Hopperstad 2010; Wright 2007; Cox 2005).

In the field of informal learning, a similar interest in visual methodologies and tools emerged, marked by the use of drawings (Coe 1983), visual journals and digital photography (Kirk 2014; Dockett et al. 2011; Fasoli 2003). Drawings in particular have been used for evaluating museum educational programmes and museum exhibits (Diamantopoulou 1997; 2007; Nicol and Hornecker 2012; Studart 2000), assessing children's understanding, perceptions and memories of the museum space (Moussouri 1997; Piscitelli et al. 2003), and exploring children and adults' meaning making (Insulander and Selander 2009; Kress 2010; Diamantopoulou et al. 2012).

Building on this line of research, we explore children's drawings of an archaeological site. We are interested in children as they comprise a significant section of the visiting public (Andre et al. 2017; Falk and Dierking 2000) and archaeological sites as they have remained notably under researched in contrast to museums, zoos and science centres (Hooper-Greenhill and Moussouri 2001). We consider their drawings as entry points into their 'eye views' of the site, using the term 'eye views' to refer both to children's physical viewpoints during their engagement with the site, and to their newly made meanings about it as both realized and made evident through their visual representations. This understanding of 'eye views' elaborates further on Kirk's exploration of children's 'experiences through their eyes' (2014: 216) by attending to their preferences and viewpoints, both literally and figuratively, as captured in image and words.

Being interested in their 'eye views', we analyze four drawings made by eight-year-old children as part of the activities designed for an educational programme at the archaeological site of the Agora in Athens, Greece. Drawing upon the methodological and interpretative framework of multimodal social semiotics (Kress 2010), we recover their 'eye views' by attending to what they included in their drawings, how they represented and transformed it through the modes of image and writing. We argue that their drawings are 'eye views' designed on the basis of their

interest and agency as well as the choices they made at the time of drawing amongst a great repertoire or resources, ranging from new information, previous knowledge, skills and materials. The most prominent of these resources that actually prompts and shapes their 'eye views' is the educational framing of the experience, traces of which we recover from the drawings.

The first part of this paper summarizes the main underpinnings of the multimodal social semiotic perspective and discusses how this framework can be applied to the analysis of drawings. In the second part, we analyze four examples from a corpus of 80 drawings addressing the question of whether and how the children's overall experience of the site and educational programme manifest in their drawings.

Children's drawings: A Multimodal social semiotic approach

Endeavoring to address both the image and writing in children's drawings using a single interpretative framework, we turned to multimodal social semiotics. Multimodal social semiotics can be imagined as 'a fork with two prongs' (Kress 2010: 105): the multimodal and semiotic. The multimodal prong relates to the framework's principal tenet that meaning and thus, all communication arises in and across multiple 'modes', such as image, speech, gaze, posture, gesture, footing, movement and sound (Kress and Jewitt 2003; Jewitt 2008). Modes are 'socially made and culturally available' (Kress 2013: 132) and have specific 'affordances'—that is, possibilities and limitations for communication.

The semiotic prong relates to 'signs' and 'semiosis', with 'signs' being a significant and motivated combination of form and meaning, constantly made anew in response to the 'signs' made by others and on the basis of the sign makers' interest, agency and choices (Kress 2010). 'Semiosis', on the other hand, is the process of representing and communicating meaning through 'signs' using a range of different actions and artefacts called 'semiotic resources' (Mavers 2011; Kress and van Leeuwen 2006).

Within this framework, all communication is seen as 'design' (Kress 2010) made in response to a 'prompt' and with an audience in mind. In this paper, 'design' refers to the children's process of evaluating, choosing, combining and transforming semiotic resources. This design is made as a response to their interests and the prompts offered by the institutional framing of the communication, tailored to the assumed interests of their intended audiences (Bezemer and Kress 2016; Wright 2007; Mavers 2009; Kress and van Leeuwen 2006; Kress 2010). Applying this framework enables us to foreground the relationship between the programme and the drawings mediated by children's agency in 'selecting', 'framing' and 'transforming' a number of resources into new signs.

Methodological and interpretative considerations

We adopt multimodal social semiotics both as methodological and interpretive approach to drawings, aligning with several other methodologically similar research projects (Lancaster, 1999; Kress et al., 2001; 2005; Kress and Selander 2012; Insulander and Selander 2009; Diamantopoulou in prep). This approach enables us to treat drawings as a set of data sufficient for recovering the children's 'assessment of the environment of communication' (Kress 2013: 132). Operating on our framework's epistemological assumption that signs are always newly made as a response to a new prompt (Kress 2010), we chose not to collect any data additional to drawings. Asking the children to talk or write about their drawings in response to prompts by the researcher would 'invest [their initial] visual narrative with added layers of meaning' (Diamantopoulou 2007: 73) and create new signs. Similarly, complementing our analysis with data arising from other methods, such audio and video recordings of the participants' talk and actions while drawing (Duncan 2013; Hopperstad 2010; Cox 2005; Lancaster 1999)—despite offering an all rounded picture of the multimodal process of drawing—would shift our attention away from the question of 'what are these drawings a sign of?'. Additionally, in line with tenets of multimodal social semiotics, we assign 'trust in the sincerity of their representation' (Mavers 2011: 37) acknowledging children's agency in their selection of the most apt resources for communicating their meanings.

Our approach additionally takes into account the limitations arising from the various media, as paper, drawing surfaces, graphite and colouring pencils, made available to children

for their drawings. Similarly to modes, the media involved in students' sign making have their own affordances which shape the outcomes of any communicational or representational attempt (Wright 2007).

Contextualizing the children's 'eye views'

Contextualizing children's 'eye-views' within the institutional framework that prompted them is significant in supporting the claim that children's meaning making is shaped by both their interests and their agentive engagement with the semiotic resources offered by the institutional setting—the school and the archaeological site in this instance.

The four drawings were selected amongst a set of 80 drawings produced by one class of eight year old primary students participating in the educational programme designed as part of one of the authors' doctoral research project (Diamantopoulou, in prep). The school granted permission for students' participation in the programme and the publication of their drawings further to securing approval from the children's guardians and parents.

The educational programme, comprising activities both at school and the site over three consecutive days, addressed the daily life at the Agora, the political, administrative and commercial centre of Athens in the fifth-century BC. The children participated in a researcher led guided tour at the slope of the Acropolis hill overlooking the site and another in the Agora. These involved a discussion about the site's topography and the ancient landscape, and an exploration of its ruins.

The children further engaged in a role play drawing activity in which they assumed the roles of heritage specialists, architects, archaeologists, conservators and politicians undertaking the task of redeveloping the site. Based on the role they assumed, the students were invited to work either individually or in groups of two or three and draw the Agora as a site appropriate for children, using a piece of A3-size drawing paper, coloured pencils, graphite pencils and drawing pads. They drew while seated on the ground of the archaeological site, often using alternative surfaces as support for their drawings such as the ancient building blocks (Figure 1). Their drawings were to be presented to their class the next day, with their classmates assuming the role of 'judges'.

Figure 1. Some of the students drawing while seated on the ground

Analytical categories and data selection

Our analytical categories 'framing', 'selection', 'organized arrangement' and 'transformation' emerged from Kress's theory of communication (2010) and Kress and Van Leeuwen's grammar of visual design (2006). The categories refer to significant aspects of the semiotic work which meaning makers do when they design a representation. Based on these categories, we traced the children's 'eye views' by attending to (i) their 'framing' of aspects of the site through the selection and foregrounding of specific aspects of their experience, (ii) the 'selection' of particular semiotic resources from both the site and the educational task, and (iii) the 'organized arrangement' based on the coming together of various modes and (iv) the 'transformation' of aspects of their experience through the representational resources of these modes.

We first identify all those 'semiotic resources' the children selected in order to best 'frame' the aspects of the site they attended to and wanted to communicate. We then trace which site and programme-resources have been used in the drawing, and if and how these have been potentially 'transformed' into new signs by relating them to the ones made available to them during the experience of the programme and the site. We acknowledge, however, that a vast repertoire of cultural resources comes into play in the making of a representation, including resources which cannot be easily identified as they do not directly relate to ones emerging during the programme, but relate to other 'sites', such as popular culture, discourses about heritage and history, school textbooks, prior knowledge and skills. Attending to this complex 'arrangement' of resources enables us to recover the children's 'eye-views' and their interests in communicating them to their 'readers'.

Based on these analytical categories, we viewed all drawings and identified two distinct categories: those drawings depicting specific monuments encountered during the guided tours and others locating the archaeological site within its wider landscape. Two drawings from each category are analyzed in the next section as typical examples. The drawings in Group A (Figure 2) depict the Monument of the Eponymous Heroes and these in Group B (Figure 3) show key landmarks, functioning as topographic maps of the site. Both groups include one drawing made by children working together and one by an individual, thereby offering examples of both 'collective' and 'individual eye views'.
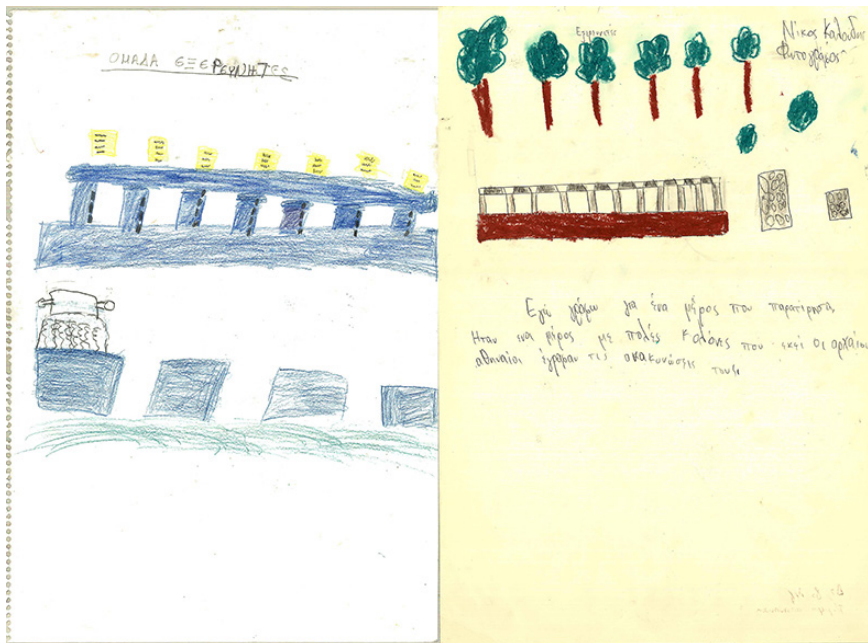

Figure 2. Group A: Focusing on a monument

Figure 3. Group B: Mapping the site

Analysis of Group A: Focusing on a monument

The first group includes two examples of children's 'eye views' of the Monument of the Eponymous Heroes which they encountered during the guided tour (Figure 4). The monument used to comprise a fenced pedestal on which stood ten statues representing the ancient heroes of Athens after whom the ten political tribes of Athens were named.

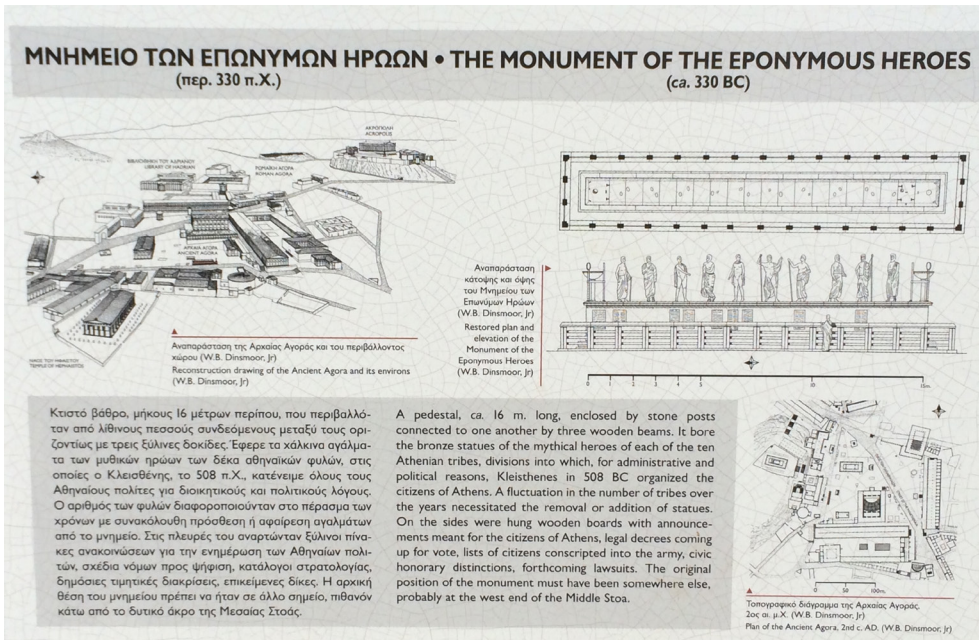Figure 4. The Monument of the Eponymous Heroes

ΜΝΗΜΕΙΟ ΤΩΝ ΕΠΩΝΥΜΩΝ ΗΡΩΩΝ • THE MONUMENT OF THE EPONYMOUS HEROES
(περ. 330 π.Χ.)   (ca. 330 BC)

Figure 5. The interpretive text next to the monument

The educational programme explained the monument's role in antiquity as a public notice board for relevant military registers and Athenian laws and discussed the functions of contemporary equivalent media such as public notice boards, government gazettes, newspapers and media. The children were prompted to speculate about the function of the holes found on the pillars as cases for the insertion of wooden beams onto which public announcements were placed. They were further shown two images with reconstructions of the monument: one accompanying the interpretive text displayed on a plaque standing next to the monument (Figure 5), and another in an A4 print out (Figure 6).

Looking at both drawings as a response to the task on site, we notice that the children have represented the monument in detail and in its present state, without attempting any extensive reconstruction as instructed by the researcher.

Drawing 1: Making the invisible visible

The first drawing (Figure 7) comprises both text and image, with the text, positioned at the top of the page and over the image, reading "EXPLORERS' TEAM". Occupying the central part of the page, the image drawn consists of a long rectangular blue base onto which rests a row of seven short blue pillars connected at the top by a continuous block of balustrade of the same colour. Each one of the pillars has either three or four black rectangles on the right side representing the actual number of holes opened on their surface. Crowning the balustrade, rectangular yellow blocks with writing have been drawn, spaced apart. Below this row of pillars, four blue pedestals stand alone in a line and at a small distance from each other, separated from the other features by space left empty in the middle of the page. The pedestals stand on horizontally arranged bundles of semicircular blue and green lines while a black and white item features on the first pedestal drawn on the left.

Attending to the children's use of the mode of image entails looking at their use of its respective representational resources including perspective, colour, scale and viewing angles. In this drawing, the children have used 'perspective' by placing the pillars at the top of the page to form a 'background' and drawing the blue pedestals below as a 'foreground'.
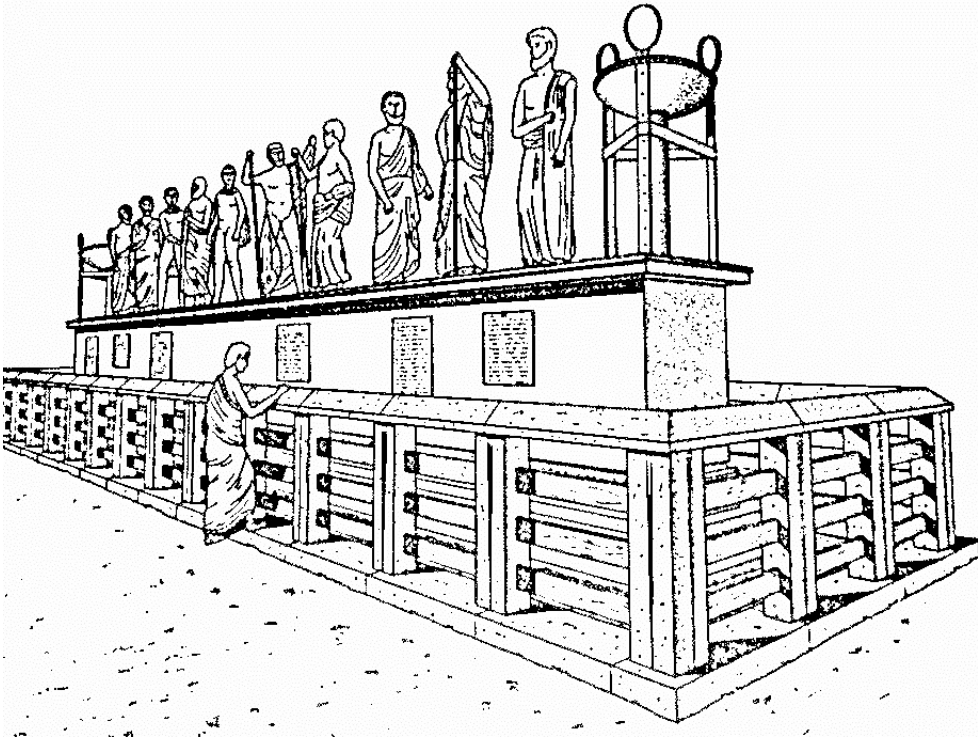
Figure 6. The print-out shown to the children during the guided tours

This perspective is further 'fixed' by the visual representation of the 'ground' through the use of overlapping semicircular lines applied starkly and roughly in green colour below the four stone pedestals, potentially marking the grass.

Moreover, colour has been used to signal the construction material of the monument (i.e. two hues of blue to indicate different stones used for the pillars, the blocks and the balustrade) as well as that of other features associated with the monument (e.g. inscriptions on slabs and writing on scrolls). Apart from signaling material diversity, colour also functions as a marker of value, age or importance, as is the case of the use of yellow for the slabs signaling that the announcements were old and decayed or perhaps made out of precious gold. Similarly, other uses of colour offer visual clarifications potentially aiming at showing children's compliance with cultural conventions and their interest in making their 'eye views' legible to their 'readers'. Such instances may be the addition of a layer of green onto the initially applied layer of blue for signaling the grass more clearly. Additionally, the children rendered some features more 'salient' through colour; i.e. more pronounced. For instance, the starkly applied black colour on the rectangles marking the holes on the pillars and the intensity in the application of two layers of blue in the pillars and balustrade may hint at the children's effort to render these features more 'salient'.

Apart from colour and perspective, the children drew the pillars from a different viewing angle than the rest of the monument, a choice enabling them to represent the holes on the sides of the pillars. Using this viewing angle, the children invited the readers into the image by prompting them to align with their 'eye views'—that is, 'to look' at the monument by adopting a similar physical standpoint while offering them a wider perspective of the monument's dimensions. Additional small details, such as the squiggles written on the papyrus scroll and
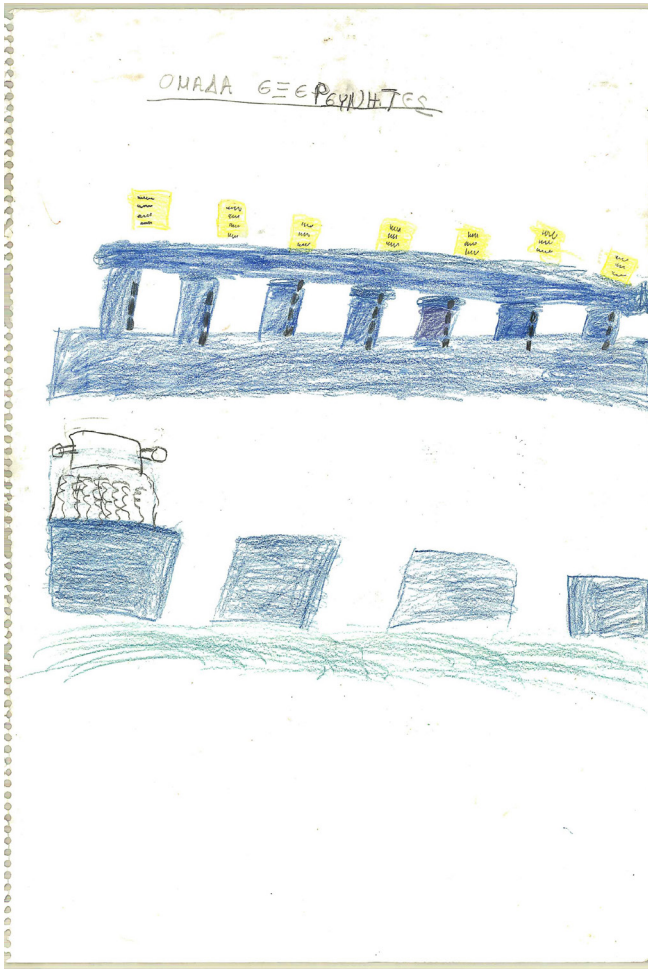
Figure 7. Making the invisible visible

the yellow slab, materialize the use of the resources of scale and proximity, signaling the distance between the 'reader' and the monument as being close enough for recognizing the presence of writing, but quite far away for reading it. These add an interpersonal layer to the communication of the children's designs to their readers.

Apart from inviting the 'readers' to align their vantage points and attend to the same details, the children seem to have made an effort to also align their representations with the educational framework and showcase relevant knowledge that addresses the assumed expectations for completing the task. A number of details, such as the inclusion of a scroll, slabs and squiggly writing communicate information about their understanding of the monument as an 'information hub' entailing a range of laws published on a variety of writing surfaces. Similarly, the inclusion of details such as the holes on the sides of pillars is also a visual statement of the children's new knowledge about their role and the function of the monument.

Through such choices, children gave visual substance to abstract linguistic utterances made during the guided tour such as 'information', 'announcement', 'law', and 'displaying', while foregrounding the value and importance they assigned to the monument's function in antiquity.

The children have also drawn upon the resources of the mode of writing to provide more visibility to the less visible aspects of the monument and showcase to the 'readers' their engagement with it. Through the heading "EXPLORERS' TEAM" and the resources entailed here—'possessive case', 'plural number', 'capitalization', 'underlining' 'centrality' on the page, 'headline' style—the children signify their agency, the collaborative nature of their exploration, the educational framing of the task and the importance they attribute to this. These selections of resources accentuate the significance of the word 'explorers' and its meaning, potentially signaling an entry point into the image. Moreover, through this title, the children also communicate their 'epistemology'—their approach to the shaping of knowledge and an account of how they know what they know, which is through exploration and discovery. This is also achieved through the inclusion of visual elements such as the holes on the pillars indicating attention to detail. Image and text in this drawing evidence that their 'eye views' have been shaped equally by close observation of the monument as well as by the verbal narratives of the educational programme, which they have visually substantiated.

Drawing 2: Assuming a role

The second drawing features the Monument of Eponymous Heroes, comprising a long and relatively high continuous base onto which a row of short eleven pillars is flanked by a balustrade and two separate blocks with oval inclusions outlined and shaded in pencil (Figure 8). The monument, positioned at the centre in the upper part of the page, is framed at the top by a row of six trees and two patches of green, as well as the word 'Explorers' written in lower case. The student's name and surname followed by the word 'photographer' are placed near the top right corner of the paper. The text at the bottom reads: 'I am writing about a place I observed. It was a place with many columns where the Ancient Athenians used to write their announcements'.

     A prominent characteristic of this multimodal ensemble is the use of the representatioal resource of 'layout', referring to the organization of various elements on the page. The use of layout here divides the drawing into three sections (i) the top part with the text naming the student and the role he adopted, (ii) the middle part with the image of the monument, communicating information regarding the landscape and the monument in its current state, and (iii) the lower half comprising three lines of explanatory text. All features spaced out on the page with blank areas framing them, separating them from each other. Nonetheless, in spite of keeping these features and sections 'as physically, as well as visually, distinct' (Ormerod and Ivanič 2002:

78) through the use of empty space between them, they complement each other and contribute to a more detailed account of the child's 'eye view'.

     Similarly to the first drawing, the resources of perspective, proximity, scale, viewing angle and colour facilitate not only the representation of this child's 'eye view' but also assign an interpersonal aspect to his representation by indicating a particular viewpoint for the 'readers' while contextualizing the monument in space. For instance, the viewing angle adopted suggests an engagement of the 'reader' with the monument from the level of visitor walking past it. Additionally, the perspective created by the line of trees at the top of the page relates closely to the child's physical viewpoint of the trees at a short distance behind the monument. It also communicates to the reader some knowledge of the landscape while facilitating orientation. Concomitantly, the child draws upon the resource of colour to represent different features and different materials (i.e. the pedestal and
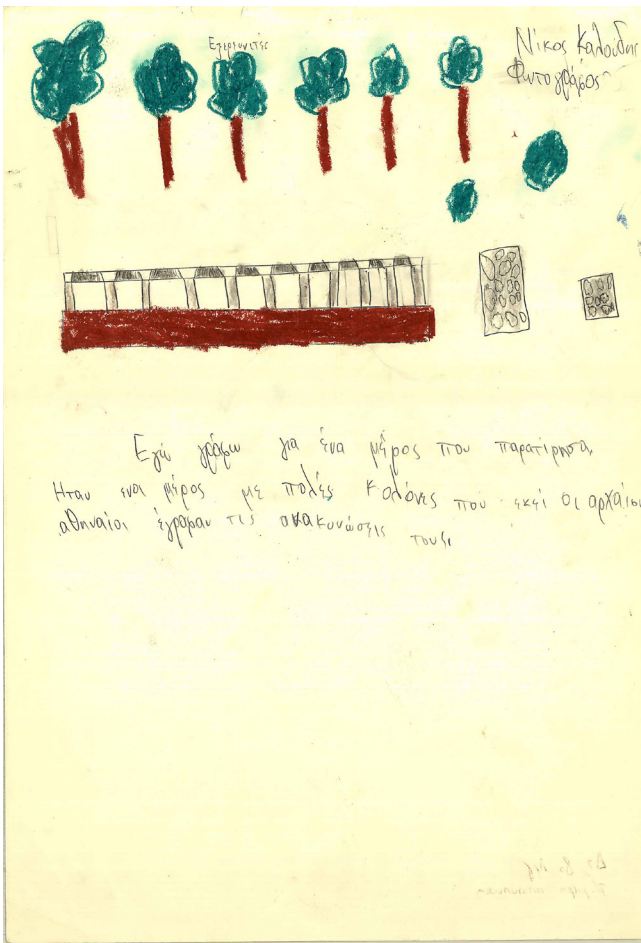
Figure 8. Assuming a role

tree trunks in thickly applied brown whereas the pillars and the two other blocks of stones to the right are shaded with a graphite pencil).

This drawing communicated the child's 'eye view' through both image and text, with text annotating the image—a practice complying with writing practices valued in school (Anning 2002). This combination of image and text also brings into coherence and cohesion the genres of observational drawing and the written account respectively. Specifically, the two sentences summarizing his written account at the bottom of the page reiterate information depicted through the image, such as the presence of many columns. At the same time, the word 'I observed' in the text affirms the child's epistemological positioning as the result of observation, further visualized in the details comprising the observational drawing. Furthermore, the text naming the monument's function in antiquity does not have a visual representation given his choice of doing an observational drawing.

The contextualization of the drawing in time is further elaborated through the different verb tenses in the text. The use of the verb 'write' in the present tense is an instance of direct communication with the reader at the time of making the drawing whereas the use of past tense ('I observed') refers to his enquiry through observation, as well as the customs of the ancient Athenians ('they used to'). The representational resources of both text and image in this ensemble ascribe salience to the child's act of observation as a key approach to 'exploring' the monument.

Through writing, the child names the three different dimensions of time entailed in his 'eye view': (i) the time of writing and drawing, (ii) the time he made his observation preceding his writing and (iii) the ancient times when the monument had a particular function. The combination of these modes in such a way is also an instance of the child's agency, his awareness of the intended 'readers', and suggestive of his knowledge of each mode's 'affordances' (Kress 2010); that is, the different potentials and limitations the text and the image have for communication and representation. The text at the top part of the page naming the child and his role informs us that he is one of the children making the first drawing, who in this instance adopted the role of a photographer. This role shapes the framing of the entire drawing as the 'photographer's account', with the potential embodiment of the photographer's role and gaze realized in the resources of observational drawing that the child has resorted to. Specifically, the child's choice to convey the 'real' through the role of the photographer allowed him to hypothetically capture 'real' snapshots of the site on paper by locating the monument within the physical environment of the site.

Additionally, the detail and precision in the positioning of the two blocks of stone pedestals on the right and the drawing of the exact number of pillars are indicative of the importance he, as a photographer, has ascribed to the creation of a 'precise' 'realistic' and 'valid' representation. This is further reinforced by the placement of the text at the bottom of this multimodal ensemble, potentially assigning to the drawing a particular 'informational value', conveying the 'real' and the 'given' (Kress and van Leeuwen 2006).

Analysis of Group B: Mapping the site

The second group of drawings consists of two examples from a large number of drawings depicting aerial views of the site's topography, occupying the whole surface of the paper. These aerial views have been potentially informed by the views the children experienced during the first guided tour on site's slope.

The children in Group B have reconstructed visually larger areas of the site foregrounding with several natural elements coloured in green, while adopting map making conventions. Transposing the actual site of the Agora onto a map required suitable implementation of representational resources such as colour, size, outlines, scale, and visual details in order to extend analogies and metaphors (Kress et al. 2001).

A verdant Agora

The third drawing (Figure 9) features the Agora as a vibrant green landscape crossed by a river and with trees in full bloom. The blue lines represent a river branching out into one meandering stream placed on the right side of the paper, while another branch takes its direct

course downwards. A green winding path is drawn at the top center and left side of the page, running in parallel to the river, stretching from the upper edge of the paper to its center where it stops in front of a tree. Dense swirls of blue colour attribute a sense of movement to the river, while green ones possibly indicate a roughly sketched outline of tree branches, bushes or even suggest their movement. The verdant natural environment dominating the central and upper parts of the page is complemented by the built environment represented by the two buildings at the bottom. One of these is circular with a conical roof, with the word 'THEATRE' inscribed, while the other one has the word 'PARLIAMENT' written on its pediment.

　　　Contrary to the drawings in Group A, Agora in this drawing is peopled, with humans represented by stick figures involved in some type of activity (i.e. swimming or diving in the river and eating fruit). This representation of life is also materialized in the blue and green intense swirls covering the whole drawing, suggestive of movement. Combining these features together reinforces the sense of the Agora as a 'lived space' in bloom and is suggestive of the children's interest in 'animating' the site.

　　　Similar resources to the ones used for Group A have been applied in this drawing such as viewing angle, perspective, colour, scale. However, the topographical map view depicting the landscape is predominantly shaped by the resources of viewing angle and perspective, applied in various forms and combinations.

　　　Specifically, the children captured the river, the bushes and the path through a top down view, whereas they applied a full side view for the buildings and the trees. These perspectives combined give the impression of a three-quarter aerial view. Additionally, the depiction of distant background objects as larger than the objects in the foreground creates a sense of 'reverse perspective'. This is amplified through the use of a different scale for the human figures outside the Parliament; a choice potentially necessitated by the children's interest in making amends for the fact that the buildings were drawn too small for ensuring consistency of scale across the image.

Figure 9. The Agora in bloom

The combination of different perspectives recreates the views the children had from their physical standpoints on the hill of the Acropolis overlooking the site during the tour. Concomitantly with signaling their interests in particular features of the site, they also communicate their agency in constructing an interpersonal dimension in their communication with the 'readers'. This is achieved through their use of the resource of proximity to set the distance between the 'reader' and the site, enabling the adoption of a similar standpoint.

The children draw upon the resource of colour to further elaborate on their 'eye views', with their colour choices involving a limited palette, dominated by hues of green and blue. The rendering of colour through rough circular lines is most salient in this image, evoking the movement involved in its application; circular and sideways continuous strikes, potentially indicating speedy and rough sketching for shaping the outlines of each feature and filling up the empty space between them.

Apart from drawing upon the resources of image, this group of students introduced writing and its conventions such as capitalization, underlining, and arrangement to design their 'eye views'. For instance, writing the name of the team in capital letters, underlined and positioned at the top of the page allows it to function as a heading framing the drawing. The particular name, which happens to coincide with the one chosen by those making the drawings in group A, assigns importance to the fact that these sign makers made their enquiries through exploration.

Equally significant is the placement of the words 'THEATRE' and 'PARLIAMENT' capitalized and in old Greek onto the buildings naming their function. By annotating their images, the children label their representations while implicitly acknowledging the limitations of image to fully convey their meanings to the 'readers'. Alongside establishing an interpersonal relationship with the reader, the use of these archaic words conveys a sense of time and associations of these buildings with antiquity. Similarly, the river's positioning between the two buildings and the cylindrical shape of the theatre signify a communicative relationship with the reader and compliance with the institutional framing of the activity. This is an instance of the sign maker showcasing knowledge acquired from the programme informing the students that the political buildings are separated by the river and that one building had that particular shape. However, the rendering of the 'theatre' as cylindrical suggests application of information given at the tour about another round political building. This is an instance of the children designing their 'eye views' by drawing from their own interpretation of the available resources.

Through the use of the above resources, children created an ideal version of the site and designed a particular 'eye view' so distant from that experienced. This transformation is a sign of their interested engagement with the educational programme presenting the site in antiquity as a vibrant space with trees, crossed by a running river separating the area of the political buildings from the rest.

A top down view of the Agora

The last drawing (Figure 10), created by an individual as evidenced by the child's signature at the back of the paper, is a top down view of the Agora that covers the whole surface of the paper. The page is horizontally divided by a 'blue river' into two banks coloured in green. Two buildings feature on the upper river bank, and a row of six pillars are aligned on the lower. These two banks are connected through a 'bridge' coloured in black and rendered as a ladder. The bridge extends further into the land on both banks forming a boundary between the two buildings on the upper river bank. Some text is placed next to each of the buildings. We read the word 'house' on the top left corner of the page, the word 'Parliament' inside the triangle of the roof of the larger building, and the word 'Temple' above the fifth pillar.

Resources similar to those in the other drawings have been used here such as colour, perspective, text, and scale. Nonetheless, the sign maker has made colour the most 'salient' representational resource (Kress and van Leeuwen 2006) with its prominence intensified through the stark application of thick layers of green and blue covering the whole surface of the paper. The physical features of the site are rendered in their actual colours with the land and the river coloured in green and blue. Black has been used for the outline of the buildings, the pillars and the bridge, and for writing the text. All features of the built environment are rendered transparent, yet with solid and clearly defined boundaries as potentially indicated through the use of a thick black outline.

Apart from colour, there is also a combined use of a top down perspective for the natural landmarks (the river and its banks) and the bridge, and a frontal perspective for the buildings and the pillars. The child's selection to present the site from above—potentially prompted by the task and viewing the site from the hill—is suggestively pertinent to the child's role as an

architect or topographer. This particular selection of perspective can be viewed as her best available choice for offering an overview of the site and the position of buildings, while providing information, through the frontal views about how these buildings looked.

As in the previous drawing, the text annotates the features drawn, naming their function in an attempt to inform the 'readers' of what has been represented in this drawing. Each building potentially stands as proxy for the residential and political buildings whereas the temple is suggestive of the temple of Hephaestus that the children saw during their tour. Annotating the features adds an interpersonal layer to the drawing signposting information valuable for its 'reading'. It also communicates that the river separated the political buildings from the rest—as discussed on the tour—although here it is rendered in a different way than in drawing three where the distinction is made between the political buildings and the theatre.

Similarly to the third drawing, the sign maker attempted a complete transformation of what they had experienced at the site as evidenced through the blooming landscape represented in green and blue. Nonetheless, this drawing is depleted of life, with the only sign of life being the green colour of the riverbanks. This representation suggests an 'eye view' of the Agora as an inanimate landscape, focusing solely on the schematic representation of the site, potentially in resonance with the role of architect the child had adopted.
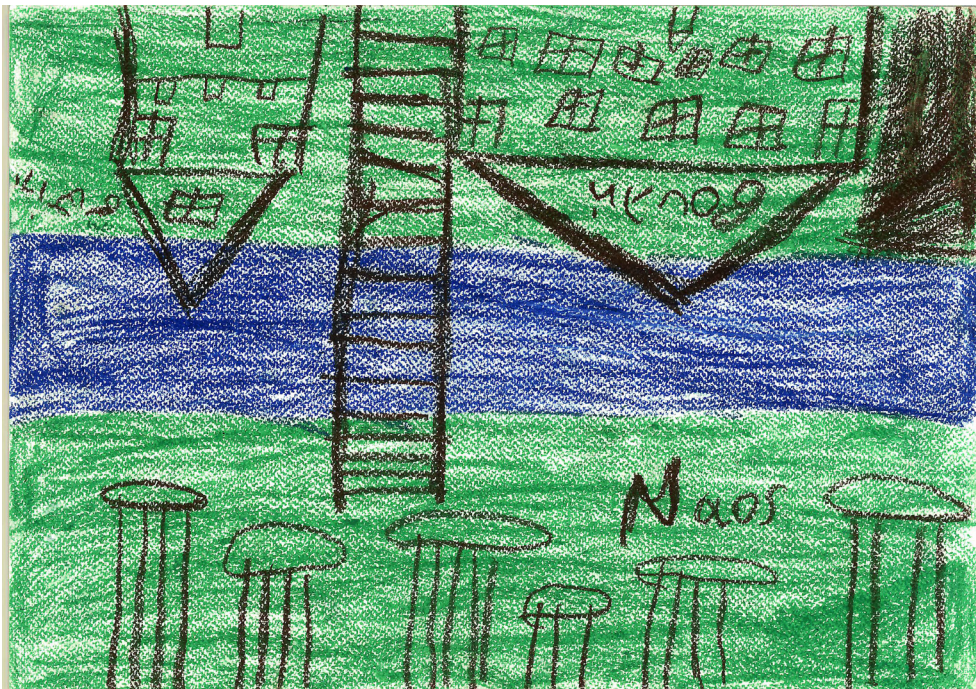

Figure 10. An individual top down view of the Agora

Children's drawings as designed accounts of their eye views

Using the interpretative and methodological tools of the multimodal social semiotic framework, we traced the children's 'eye views' based on our broader analytical category of 'framing' of their experience, and those of 'selection', 'organized arrangement' and 'transformation' of available semiotic resources.

When looking at their drawings, we retraced both what children framed and the ways in which they framed it. The children framed either one of the Agora's monuments (Group A) or the surrounding landscape and the site's topography (Group B). In their framings, the

children represented the site as inanimate (drawings one, two and four) full of life (drawing three), as an ancient ruin (drawing two), a reconstructed space (drawings three and four), and a combination of a reconstruction and a ruin (drawing one). Additionally, the rendering of the same features of the site in different ways across the drawings produces different accounts resonating with the children's different framings. For example, the building representing the parliament in drawing three is drawn in resonance with the framing of the Agora as peopled, whereas in drawing four, it is rendered transparent and void of people, fitting its framing as a schematic representation. These various framings suggest that children represented not only 'the "whole object" but only ever its criterial aspects' (Kress and van Leeuwen 2006: 7) responding differently to the same prompt on the basis of their interests and attending to different aspects of their overall experience of the site and the programme.

For materializing their 'eye views,' these children employed the modes of image and writing along with their respective representational resources. Complying with the educational task requiring the depiction of a landscape, these children have predominantly used the mode of image and its resources of perspective, point of view, proximity, layout and colour to shape their visual account. Some of these resources appear more pronounced, potentially facilitating in the most apt way the representation of the particular framings children have applied. Such are the instances of the use of combined perspective in drawings three and four, enabling the 'reader' to see simultaneously aspects of the site, or the application of close proximity and salience of colour in drawing one, making aspects of the monument more visible to the reader.

Additionally, the children drew upon the mode of writing to annotate the image and offer complementary information on their identity and role, the features drawn and their enquiry process. Furthermore, they combined text and image to simultaneously represent information about different aspects of the site across time and space, as in drawing two where the text explains the role of the monument in the past, while the image depicts its ruins in the present.

Looking beyond the simple layout of features in our drawings, we have analyzed how the children achieved coherence in their accounts by bringing the resources of the modes in synergy. The visual and textual accounts in drawing two are an instance of careful design demonstrating awareness of the affordances of each mode, as information expressed in one mode complements the information given in the other mode.

Through the naming of the representational resources of modes and an explanation of their use, we retraced children's 'eye views' both as their physical viewpoints and knowledge perspectives. For instance in drawing three, through the analysis of perspective and colour, we have hypothetically recovered the children's interest in the top down view which they experienced from the hill, as well as their fascination with the programme narratives about the Agora as a vibrant place in a natural setting. Through a particular use of resources, these 'eye views' are further communicated to their 'readers', fostering an interpersonal relationship which consequently shapes their 'eye views,' while also communicating the students' compliance with the institutional discourse and effort to showcase new knowledge.

Designed as a response to the educational task, the drawings the children designed their representations and communicate their 'eye views' with their intended 'readers' in mind. The children arranged features of the programme and the site on paper by employing and adapting the various modes and their representational resources in order to orchestrate them and design a coherent and cohesive account of their 'eye views'. This agentive arrangement evidenced by the designed orchestration of modes challenges the quest for 'a mimetic link between representation and reality' (Atkinson 2002: 27) in children's representations, as the analysis has shown that children are 'actively defining reality rather than passively reflecting a given reality' (Cox 2005: 115).

In this 'designed' conversation with their assumed 'readers', the frequency and detailed representation of particular framings in the drawings show that the educational programme has significantly shaped the children's 'eye views' by actually framing for them certain 'eye views' through directing their attention to particular physical and historical aspects of the site. This has been evidenced by the frequent occurrence of information about the river dividing the area of the political buildings from the rest (drawings three and four), and the details about the function of the monument of Eponymous Heroes as information hub.

Concluding remarks

In this paper, we explored 'eye views' of eight-year-old children visiting the archaeological site of the Agora in Athens, Greece, based on their drawings. We introduced an analytical approach to recovering children's 'eye views' through the application of a multimodal social semiotic approach enabling us to identify and hypothetically recover features of the site and programme children attended to and transformed in their drawings. We argued that their drawings are motivated and 'designed accounts' of their 'eye views' purposefully created on the basis of (i) their interests at the time of making, (ii) the prompts they were given by the researcher, and (iii) their agentive engagement with the semiotic resources offered.

The analysis identified all those elements of the physical environment and the programme that were transformed into their visual accounts. It further attended to the significance of particular representational resources of the modes of image and writing as used by the children to best respond to the task given while framing it for their 'readers' at the time of making. Our analysis confirmed findings from previous research viewing children's meaning-making as a transformation of resources driven by their interests (Kress 1997) and informed by the institutional requirements of the setting in which their communication unfolds (Mavers 2009; Kress 2010).

By adopting a multimodal social semiotic approach on drawings, this paper contributes to ongoing research using visual and creative methods (Greene and Hogan 2005; Thomson 2008) and foregrounds the importance of the visual in learning (Jewitt 2008; Millard and Marsh 2001). Our perspective allows us to further Kirk's contribution (2014) in capturing children's 'eye views' by shifting the attention to the children's agency in the shaping of their 'perspectives', physical and figurative, from which they chose to see and represent the world.

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