

Student Agency, Stigmergy and Distributed Coordination: the November 2014 Greek Students Mobilisations

Maria G. Kokolaki 

Abstract

The Greek student mobilisations and school occupations that culminated in November 2014 provide a case for exploring how communicative traces acquired political significance and facilitated decentralised coordination among secondary-school students. Drawing on contemporaneous interviews and a corpus of digital, audio-visual and media material, the article examines communication across assemblies, student councils, peer networks, occupied school spaces, websites, and social media. The findings show that communicative traces did not independently generate participation. Occupation announcements, assembly resolutions, photographs, banners, reports, and online posts became consequential when students interpreted them within local relationships, assessed their credibility, legitimacy, relevance, and associated risks, and incorporated them into collective deliberation and decision-making. The recurrent sequence linking action, communicative traces, situated interpretation, social reinforcement, assembly deliberation, local decision, and new action is conceptualised here as Distributed Stigmergic Agency (DSA). DSA is proposed for explaining communicatively mediated feedback and decentralised coordination, rather than as a comprehensive theory of mobilisation. The article contributes to childhood studies and the anthropology of education by demonstrating how students acted as knowledge-producing political actors, while schools operated as cultural, epistemic, and political environments within a wider hybrid communicative ecology.

Keywords: Greek student mobilisations, participation, stigmergy, agency, distributed coordination, lived citizenship, anthropology of education



Μαθητική Εμπρόθετη Δράση, Στιγμεργία και Κατανεμημένος Συντονισμός: οι Ελληνικές Μαθητικές Κινητοποιήσεις του Νοεμβρίου 2014

Μαρία Γ. Κοκολάκη 

Περίληψη

Οι μαθητικές κινητοποιήσεις και καταλήψεις που κορυφώθηκαν τον Νοέμβριο του 2014 προσφέρουν ένα γόνιμο πεδίο για τη διερεύνηση του τρόπου με τον οποίο επικοινωνιακά ίχνη απέκτησαν πολιτική βαρύτητα, διευκολύνοντας τον αποκεντρωμένο συντονισμό μεταξύ των Ελλήνων μαθητών δευτεροβάθμιας εκπαίδευσης. Αντλώντας δεδομένα από σύγχρονες των γεγονότων συνεντεύξεις, και από ένα σώμα ψηφιακού, οπτικο-ακουστικού και μιντιακού υλικού, το άρθρο εξετάζει την επικοινωνία που αναπτύχθηκε σε συνελεύσεις, μαθητικά συμβούλια, δίκτυα συνομηλίκων, υπό κατάληψη σχολεία, ιστοσελίδες και μέσα κοινωνικής δικτύωσης. Τα ευρήματα δείχνουν ότι τα επικοινωνιακά ίχνη δεν παρήγαγαν αφ' εαυτών τη συμμετοχή. Οι ανακοινώσεις καταλήψεων, τα ψηφίσματα των συνελεύσεων, οι φωτογραφίες, τα πανό, οι αναφορές και οι διαδικτυακές αναρτήσεις αποκτούσαν ουσιαστικό νόημα μόνο όταν οι μαθητές τα ερμήνευαν στο πλαίσιο των τοπικών τους σχέσεων, αξιολογώντας την αξιοπιστία, τη νομιμοποίηση και το ρίσκο, προτού τα ενσωματώσουν στη συλλογική διαβούλευση. Το Αυτή η επαναλαμβανόμενη αλληλουχία, η οποία συνδέει τη δράση, τα επικοινωνιακά ίχνη, την πλαισιωμένη ερμηνεία, την κοινωνική ενίσχυση, τη διαβούλευση των συνελεύσεων, τις τοπικές αποφάσεις και τη νέα δράση, εννοιολογείται εδώ ως Κατανεμημένη Στιγμεργική Εμπρόθετη Δράση (Distributed Stigmergic Agency -DSA). Η DSA αναπτύσσεται ως ένας εστιασμένος μηχανισμός παρά ως μια ολοκληρωμένη θεωρία κινητοποίησης. Τέλος, το άρθρο συμβάλλει στις σπουδές για την παιδική ηλικία και στην ανθρωπολογία της εκπαίδευσης, αναδεικνύοντας τους μαθητές ως πολιτικά υποκείμενα και παραγωγούς γνώσης, και τα σχολεία ως πολιτισμικά, επιστημικά και πολιτικά περιβάλλοντα μέσα σε μια ευρύτερη υβριδική επικοινωνιακή οικολογία.

Λέξεις κλειδιά: μαθητικές κινητοποιήσεις, στιγμεργία, συμμετοχή, εμπρόθετη δράση, κατανεμημένος συντονισμός, βιωμένη πολιτειότητα, ανθρωπολογία της εκπαίδευσης

Introduction

The Greek secondary-school mobilisations that developed during the first term of the 2014–2015 school year and culminated in the November 2014 occupations offer an instructive case of decentralised collective action within a hybrid communicative environment. This article explores how students interpreted circulating information about educational reforms, negotiated its political significance, and incorporated communicative traces into local deliberation, decision-making, and coordinated action across geographically dispersed school communities.

Emerging in the context of austerity and uncertainty concerning educational and occupational futures, the mobilisation involved occupations, demonstrations, assemblies and public interventions across Greece. Students also used social media, educational websites, online news, and peer-to-peer communication, but digital circulation alone did not determine participation.

Spanning hundreds of schools, the movement developed within a dense hybrid communicative environment linking assemblies, student councils, peer networks, digital platforms, and public debate. This interconnected ecology offers a valuable opportunity to explore how communication generated coordinated collective action among geographically dispersed and locally autonomous actors.

Research on networked social movements has shown that digital media facilitate information exchange, visibility, mobilisation, coordination, and participation, while contemporary protests increasingly unfold within hybrid communicative environments where online and offline action are closely interconnected (Anduiza et al., 2014; Bennett & Segerberg, 2012; Castells, 2015; Gerbaudo, 2012; Theocharis et al., 2015). Yet digital technologies alone cannot explain how dispersed actors coordinate collective action. Mobilisation depends equally upon meaning-making, social relationships, trust, existing organisational structures, and participants' capacity to interpret and act upon unfolding events (Margetts et al., 2016; Wright et al., 2018).

From an anthropology of education and childhood studies perspective, the occupations are approached not merely as reactions to educational policy but as socio-cultural processes through which students negotiated meanings of schooling, citizenship, democracy, authority, participation, and social justice. Rather than treating students as politically immature or merely future citizens, this article approaches them as active social actors who interpret and shape the social worlds they inhabit (James & Prout, 1997; James, 2009; Wyness, 2018). Schools and educational institutions in general are understood not only as sites of instruction and socialisation but also as cultural and political environments in which young people actively construct meanings, identities, and collective responses to institutional realities (Christensen & James, 2008; Pechtelidis, 2018). Student participation is examined as a process through which young people collectively reinterpret institutional realities and generate their own forms of political practice.

The empirical material reveals a recurrent process through which local action produced communicative traces, those traces entered situated processes of interpretation and deliberation

elsewhere, and subsequent decisions and choices generated new traces. To conceptualise this process, the article develops the viewpoint of Distributed Stigmergic Agency (DSA) as a focused explanatory mechanism rather than a comprehensive theory of collective action.

The article argues that coordination emerged through four interconnected processes: trace-based indirect coordination, situated semiosis and meaning-making, distributed cognition and collective action through social reinforcement. These processes are distinguished from the contextual literatures on connective action, communication ecologies, polymedia, and lived citizenship. The article proceeds from the empirical ‘puzzle’ to the mechanism, showing how influence did not amount to control, diffusion did not amount to imitation, and coordination did not require a single unified command structure.

2. Theoretical Framework

2.1 Hybrid Collective Action and Communication Ecologies

Contemporary collective action has been profoundly shaped by the expansion of digital communication technologies and their integration into everyday social life. While earlier approaches often emphasised formal organisations, stable memberships, and centralised leadership, contemporary mobilisations increasingly emerge through decentralised networks connecting individuals across multiple communicative environments (Bennett & Segerberg, 2012; Castells, 2015). Digital technologies have expanded opportunities for participation, coordination, and information sharing, facilitating forms of collective action that frequently develop through the interaction of online and offline activities.

These transformations became particularly visible during the wave of mobilisations that followed the global financial crisis of 2008. Movements such as the Arab Spring, Occupy Wall Street, the Spanish *Indignados*, and the Greek *Aganaktismenoi* demonstrated the growing importance of networked communication infrastructures in facilitating participation and enabling large-scale collective action (Anduiza et al., 2013; Castells, 2015; Theocharis et al., 2015).

Although differing significantly in their political objectives and local contexts, these mobilisations shared important organisational characteristics. They relied extensively on digital communication technologies, emphasised horizontal participation rather than hierarchical leadership, and combined online communication with assemblies, demonstrations, occupations, and other forms of face-to-face engagement. Scholars have increasingly described such mobilisations as forms of hybrid collective action, highlighting the interdependence of physical and digital participation (Anduiza et al., 2013; Castells, 2015; Gerbaudo, 2012; Theocharis et al., 2015).

The role of communication in these movements has generated extensive scholarly interest. Margetts et al. (2016) argue that social media platforms facilitate forms of participation that are visible, relatively easy to initiate, and capable of generating powerful network effects. Digital communication can lower participation costs, increase awareness, and expose individuals to the actions and opinions of

others, thereby influencing willingness to engage in political action. Similarly, Castells (2010, 2015) situates contemporary mobilisations within the broader development of the network society, arguing that social and political action increasingly unfolds through communication networks that connect geographically dispersed actors and facilitate new forms of collective organisation.

A particularly influential explanation of these developments is Bennett and Segerberg's (2012) concept of *connective action*. Their work suggests that communication technologies enable participation through personalised forms of engagement rather than through strong organisational structures or unified collective identities. Individuals connect personal experiences and concerns to broader political issues through flexible communication networks, allowing collective action to emerge from distributed patterns of participation. Rather than depending exclusively on established organisations, mobilisation may develop through the circulation of personalised content, social interactions, and digitally mediated communication

At the same time, scholars caution against viewing contemporary activism as exclusively digital. Collective action continues to rely upon interpersonal relationships, shared experiences, and physical co-presence, with online and offline participation functioning as mutually constitutive dimensions of collective engagement (Gerbaudo, 2012; Theocharis et al., 2015).

Accordingly, recent scholarship increasingly focuses on the broader communication ecologies within which participation unfolds. Madianou and Miller's (2013) concept of *polymedia* emphasises that communication is experienced as an interconnected environment composed of multiple media. Similarly, Applin and Fischer's (2011a, 2012, 2013) notion of *PolySocial Reality* (PoSR) highlights the multiple overlapping social, institutional, physical, and digital environments within which contemporary social life occurs. Complementing these perspectives, *polymediation* (Herbig, Herrmann, & Tyma, 2015) draws attention to the circulation, transformation, and recontextualisation of meanings, narratives, images, and messages within interconnected media.

Taken together, these conceptualisations suggest that contemporary collective action develops within complex communication ecologies linking people, technologies, institutions, and symbolic resources. While they provide important insights into the conditions that facilitate participation and communication, they offer a less developed account of how communicative processes become coordinated forms of collective action.

2.2 Student Agency, Participation and Lived Citizenship

Understanding collective action requires attention not only to communication environments but also to the actors who participate within them. This is particularly important in the case of student movements, as recognition of young people and children as legitimate political actors has historically been contested. Traditional perspectives frequently portrayed children as dependent and politically immature individuals undergoing preparation for future citizenship (Lee, 2001; Wyness, 2006). In contrast, the new paradigm in the sociology of childhood conceptualises children and young people as active participants in the

production of social life who contribute to shaping the social worlds they inhabit (James & Prout, 1997; Corsaro, 2015). From this perspective, young people are understood not merely as future citizens but as social and political actors in the present.

Central to this reconceptualisation are the concepts of *participation* and *agency*. According to Baraldi and Cockburn (2018), participation refers to children's and young people's involvement in communication, social interaction, and decision-making processes, while agency refers to their capacity to influence social relations, negotiate meanings, and contribute to social change. Agency is therefore not simply an individual attribute but a relational and context-dependent process that emerges through participation itself. Similarly, Bandura (2001) conceptualises agency as intentional and self-reflective action while emphasising the reciprocal relationship between actors and their environments.

Importantly, participation takes place within unequal intergenerational relations. Alanen's (2009) concept of the *generational order* highlights how children and adults occupy different positions within structured networks of authority, responsibility, and social influence. Adult institutions frequently define the conditions, boundaries, and acceptable forms of children's participation. Yet, as Baraldi and Cockburn (2018) argue, these structural constraints do not eliminate agency. Children may interpret, negotiate, resist, or transform adult expectations, and participatory processes often generate outcomes that cannot be fully controlled by institutional actors. Therefore, participation cannot be understood solely through formal mechanisms of consultation or representation but must be examined in relation to broader social relationships and power structures (Percy-Smith, 2018).

These arguments are closely connected to contemporary understandings of *lived citizenship*. Rather than treating citizenship as a legal status attained in adulthood, scholars increasingly conceptualise citizenship as a social practice enacted through everyday participation, communication, and engagement with collective concerns (Lister, 2007; Wyness, 2018; Baraldi & Cockburn, 2018). Citizenship, from this perspective, is experienced and negotiated through social relationships and institutional contexts rather than simply granted through formal membership in a political community.

Extending this perspective, Pechtelidis (2018) draws on the concept of *subjectification* to argue that democratic citizenship emerges through active involvement in collective life rather than through preparation for future participation. Young people should therefore be understood not as future citizens awaiting political maturity but as political actors in the present whose identities, dispositions, and forms of citizenship are continuously shaped through participation in everyday social practices.

Educational settings provide particularly important contexts for the enactment of lived citizenship. Schools are not merely sites of instruction but socio-cultural environments within which students negotiate authority, construct identities, develop peer cultures, and participate in collective decision-making. Institutional structures such as student councils, assemblies, and school-based participation initiatives are often presented as mechanisms for fostering democratic engagement and civic competence. Nevertheless, such forms of participation frequently remain confined within adult-

defined institutional frameworks, encouraging students to participate primarily in approved and regulated ways (Wyness, 2006). As a result, young people often continue to occupy a liminal position between present and future citizenship.

Contemporary childhood studies challenge this limitation by emphasising children's capacity to actively shape the social worlds they inhabit (James & Prout, 1997; Christensen & James, 2008; Wyness, 2018). Particularly relevant is Corsaro's (1992, 2015) concept of *interpretive reproduction*, which suggests that children do not simply internalise adult culture but actively reinterpret, negotiate, and transform cultural meanings through interaction with peers. Children's peer cultures therefore constitute important sites of collective meaning-making through which identities, values, relationships, and forms of participation are continuously constructed and reconstructed (Corsaro & Eder, 1990).

From this perspective, student participation in collective action should not be understood as a deviation from educational norms or merely as resistance to formal schooling. Rather, it represents a legitimate expression of agency and lived citizenship. Students do not simply adapt to institutional structures; they may engage with, negotiate, challenge, and reshape them through collective practices and political action (James, 2009; Pechtelidis, 2011, 2018).

These insights are particularly relevant in contemporary hybrid communicative environments, where digital technologies expand opportunities for communication, participation, and mobilisation. Technological developments create additional possibilities for self-expression, collective action, and engagement across both online and offline contexts (Applin & Fischer, 2015). Similarly, Wyness (2018) argues that technological developments have enabled children and young people to assume increasingly significant educational, social, and political roles across both public and private spheres. Participation and agency are therefore exercised not only through face-to-face interaction but also through engagement within broader digital communication networks.

However, while existing scholarship provides important accounts of agency, participation, and lived citizenship, it remains less clear how dispersed communicative activities and local expressions of agency become coordinated forms of collective political action. Addressing this question requires a framework that would link communication, meaning-making, participation, and coordination within a single explanatory model.

2.3 From Communication to Collective Coordination

Research on networked activism, communication ecologies, and youth participation explains important dimensions of contemporary mobilisation. Digital media increase visibility and connect dispersed actors through flexible networks; childhood studies establish young people's capacity for participation and meaning making; distributed cognition explains how cognitive activity can extend across people and artefacts; and diffusion theories identify conditions under which participation spreads.

A specific explanatory problem nevertheless remains. Existing approaches do not fully specify how locally produced communicative artefacts are transformed into shared knowledge, collectively

authorised decisions, and coordinated action across autonomous school communities. The issue is not simply how information circulates or why individuals participate, but how communication becomes culturally meaningful and collectively consequential.

Collective knowing refers here to the situated and relational production of sufficiently shared understandings through which participants evaluate information, compare experiences, assess credibility, legitimacy, and risk, and determine possible courses of action. It does not require complete consensus. Knowledge remains provisional, contested, and revisable as new information enters a school community.

This problem is particularly visible in student movements. Assemblies, councils, peer groups, occupied spaces, websites, photographs, reports, and social media connect actors who remain embedded within distinct schools. Students may observe action elsewhere without simply imitating it. They interpret circulating material through local experience, debate its implications, and decide whether and how to act.

The central question is therefore: how did communicative traces become resources for information, deliberation, and coordinated action during the November 2014 occupations within the 2014-2015 school year? The empirical material revealed a recurrent sequence linking local action, trace production, circulation, interpretation, deliberation, and new action. The article conceptualises this sequence as *Distributed Stigmergic Agency* (DSA).¹

2.4 Distributed Stigmergic Agency: Core Foundations and Scope

DSA is built around four interconnected analytical components: stigmergic trace-based coordination, culturally situated semiosis, distributed cognition as a basis for collective knowing, and the social reinforcement of participation. These components describe the processes through which decentralised coordination developed, while agency refers to students' emergent capacity to interpret communicative traces, deliberate upon possible responses, participate in collective decisions and shape subsequent action. Connective action, communication ecologies, polymedia, childhood studies, and lived citizenship provide the wider theoretical context in which the mechanism is situated, but they do not constitute equivalent components of DSA.

The first foundation is *stigmergy*. Although developed in the study of social insects, classical stigmergy explains how actions leave traces in a shared environment and how those traces influence later action without a central plan (Grassé, 1959; Heylighen, 2016a, 2016b). In the present article the concept is used analogically rather than literally. Student mobilisation did not involve mechanical responses to environmental modifications. Actions produced communicative traces that remained

¹ The initial idea of bringing agency and stigmergy into dialogue developed through discussions with M. D. Fischer. A preliminary version of this idea was outlined as a “synmergic” model in a common abstract submitted for a conference in 2017, although the proposed paper was not ultimately presented. The present article revisits, reformulates, and substantially develops that early conceptual exploration through the concept of Distributed Stigmergic Agency.

available for interpretation and response. As these traces circulated, they also produced a partial and mediated awareness of actions occurring elsewhere, approximating the *holoptic visibility* associated with peer-based coordination (Bauwens, 2006).

The second foundation is *semiosis* and *situated meaning-making*. Communicative traces included assembly resolutions, occupation announcements, photographs, slogans, banners, website reports, posts, videos, and public statements. These artefacts transmitted information, but also framed grievances, expressed emotions, represented identities, and indicated possible action. Their significance depended on cultural knowledge, social relationships, institutional contexts, and ongoing interaction (Peirce, 1931-1958; Hall, 1997a, 1997b; Susi, 2016).

The third foundation is *distributed cognition* and *collective knowing*. Stigmergic cognition and cognitive stigmergy explain how informational environments can support knowledge and coordination across persons and artefacts (Marsh & Onof, 2008; Lewis, 2013). As it is already mentioned, collective knowing refers more specifically to the situated and relational production of sufficiently shared understandings through which participants compare experiences, assess credibility, legitimacy, and risk, and decide what can be done. It is interpretive work rather than information aggregation.

The fourth foundation is *social reinforcement*. *Weak ties* can transmit information across otherwise disconnected settings, while *threshold models* and *complex contagion* explain why costly or uncertain participation often requires repeated signals from multiple trusted sources (Granovetter, 1973, 1978; Centola, 2010, 2021). Such reinforcement can reduce uncertainty, increase perceived legitimacy and feasibility of participation, and broaden the range of actions students regard as possible. It does not, however, determine the meaning of a communicative trace or the response it will generate. Students interpret the available signals, evaluate alternative courses of action, negotiate and decide collectively whether and how to act. Social reinforcement thus conditions choice without replacing agency, interpretation, or deliberation.

Together, these foundations generate a specifically human form of trace-mediated agency and coordination: local action produces a communicative trace; the trace circulates across hybrid settings; participants interpret it through local experience; peer interaction and repeated signals shape its credibility and relevance; assemblies deliberate upon possible responses; a locally authorised decision produces action; and action generates new traces.

The conceptualization of DSA shares Actor-Network Theory's interest in heterogeneous associations among people, technologies, institutions, and artefacts (Latour, 2005), but it retains a distinction between intentional actors and communicative artefacts. Traces and platforms influence action without possessing equivalent intentional agency. Their consequences arise because participants interpret, contest, and incorporate them into decisions.

DSA refers to the emergent capacity of dispersed actors to coordinate intentional action through production, circulation, situated interpretation, collective evaluation and deliberative use of

communicative traces across interconnected social and media environments. It therefore identifies a focused mechanism of sign-mediated, decentralised coordination through which communication becomes collectively consequential.

Empirically, DSA became visible in recurrent sequences linking local collective action, the production and circulation of communicative traces, situated interpretation, social reinforcement, collective deliberation, and subsequent action. Rather than constituting a rigid or linear model, these elements formed a recursive process in which each round of collective action generated new traces that could subsequently be interpreted and acted upon elsewhere. Figure 1 summarises this recursive process.

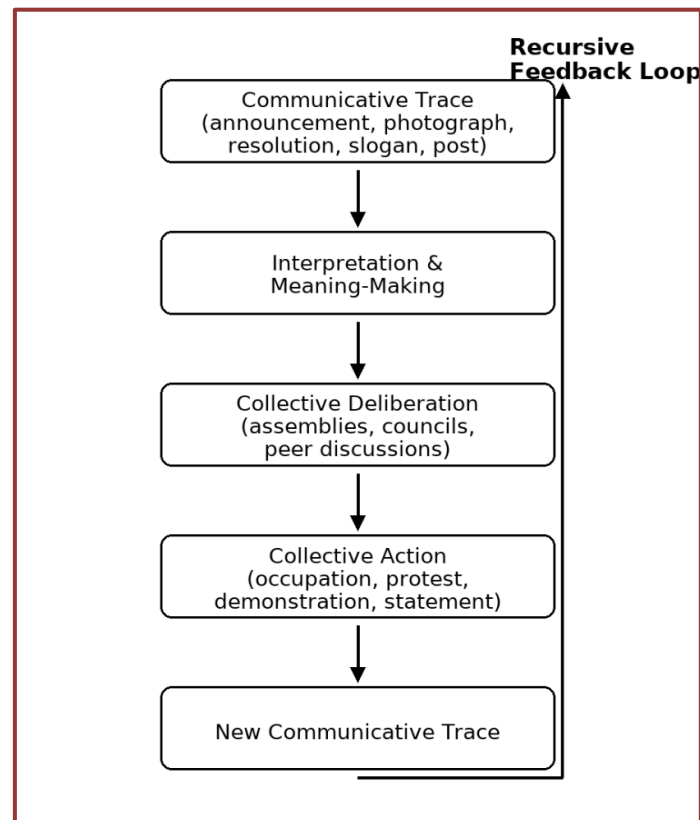


Fig. 1: Recursive cycle of DSA

The mechanism, thus, becomes empirically observable when communicative traces produced through local action circulate beyond their original setting, enter processes of situated interpretation and collective deliberation in another school community, and contribute to new, locally authorised collective action. DSA is therefore most likely to emerge in contexts where communicative traces are sufficiently visible and enduring to circulate across settings, and where actors have opportunities to interpret, evaluate, and deliberate upon them collectively. The analytical focus lies not on the circulation of information itself, but on the processes through which communicative traces are transformed into collective knowing and coordinated action.

In analytical terms, the process involved:

- ✂ the production of communicative traces through collective action,
- ✂ the circulation and visibility of those traces across interpersonal, institutional, material, and digital environments,
- ✂ their interpretation through local experiences, cultural understandings, and social relationships,
- ✂ their evaluation through social reinforcement and peer interaction,
- ✂ collective deliberation within assemblies, councils, and other decision-making forums, and
- ✂ the generation of subsequent action that produced new communicative traces.

These elements frequently overlapped and were not necessarily sequential. Their analytical value lies in identifying the mechanism through which communicative traces became collectively consequential and enabled decentralised coordination across autonomous school communities.

3. Methodology

3.1 Motivation, Research Design, Empirical Material and Analysis

The present article presents a retrospective theoretical re-analysis of empirical material concerning the Greek secondary-school mobilisations and school occupations that developed during the first term of the 2014–2015 school year and escalated in massive school occupations of November 2014. The motivation for revisiting the case emerged from recent informal conversations with former colleagues who had experienced the occupations within their schools and with former students who had participated in the mobilisations. These exchanges renewed the researcher's interest in the events and the initial questions raised concerning their communicative organisation, political significance, and longer-term meaning.

The study is best described as an ethnographically informed qualitative case study rather than an ethnography of a nationwide movement. Its design is informed by the Extended Case Method, which uses historically situated material to connect local practices to wider institutional and political conditions and to reconstruct theory rather than to pursue statistical generalisation (Burawoy, 1998, 2009). Accordingly, the occupations are approached as a theoretically generative case through which to examine how communication, situated interpretation, and school-based decision-making became interconnected across a wider, geographically dispersed mobilisation.

The empirical corpus combines interviews conducted close to the period of the mobilisations with an archive purposively constructed with multimodal material from the press, digital artefacts and media sources. The original interview corpus consists of ten interviews conducted between November 2014 and January 2015. Four interviews were conducted with secondary-school teachers who had direct experience of the occupations and of their impact on school life, while six interviews were conducted during the Christmas vacation of 2014 with secondary-school students in the Attica region who participated in the mobilisations. The interviews addressed participants' experiences of the occupations,

communication practices, assemblies, decision-making processes, perceptions of educational reform and assessment of the opportunities and the risks associated with participation.

The multimodal corpus comprises material produced or circulated during the mobilisations, including occupation calls and announcements, assembly resolutions, student-generated statements, social-media content, educational and student websites, photographs of banners and occupied school spaces, statements by student organisations and teachers' unions, governmental and prosecutorial interventions, and reports from national, regional, broadcast, and online media. It also incorporates televised interviews and statements by participating students and political actors, as well as commentary by journalists, invited analysts, and other public commentators. The corpus does not constitute an exhaustive archive of the mobilisations.

Materials for this study were selected according to their relevance to the processes through which communicative traces were produced, circulated, interpreted, and incorporated into school-level deliberation and collective action. Moreover, the different sources were not treated as equivalent forms of evidence. Contemporaneous interviews were used to examine participants' experiences, interpretations, and accounts of decision-making close to the events. Assembly resolutions, occupation announcements, and student statements documented publicly articulated demands, decisions, and collective positions. Photographs, banners, social-media posts, and audiovisual material were approached as visual, material, and digital traces through which local actions became visible beyond their immediate settings. Press reports, official statements, televised interviews, commentaries and institutional interventions were analysed as publicly mediated representations that both interpreted the mobilisation and entered its wider communicative environment. They were not treated as transparent descriptions of students' intentions or experiences.

Recent informal retrospective conversations with former colleagues and former student participants played a dual role. They provided the initial impetus for revisiting the case, while selected observations from them are also used at clearly identified points in the analysis. As they were not originally conducted as formal research interviews or subjected to the same systematic procedures as the contemporaneous interview corpus, their analytical contribution is limited. They are used to illuminate participants' present-day reflections on the longer-term educational or political significance of the occupations and not as primary evidence for reconstructing the events of 2014.

The corpus was examined through a comparative and source-sensitive interpretive analysis that preserved the distinct contexts, purposes, and communicative functions of the different materials. Rather than seeking to establish a single authoritative account or to crosscheck sources, the analysis examined convergences, divergences, competing interpretations, and transformations of meaning across participants' accounts, institutional interventions, and media representations.

The analytical process involved three interconnected stages. The first identified principal actors, artefacts, communicative settings, public narratives-representations, and decision-making practices

contained in the corpus. The second examined how circulating information and communicative artefacts were assessed within peer networks, student councils, and school assemblies, particularly in relation to credibility, legitimacy, risk, and local relevance. The final process-oriented stage reconstructed recurring sequences linking local action, the production and circulation of communicative traces, situated interpretation, social reinforcement, collective deliberation, decision, local decision-making and subsequent action.

The concept of Distributed Stigmergic Agency (DSA) was developed abductively through iterative movement between empirical patterns and relevant theoretical literature. An artefact was treated as a communicative trace when it was produced through social action, remained available to others, and entered processes of interpretation, representation, discussion, choice and response. This criterion helped distinguish communicative traces that became incorporated into recursive processes from the broader flow of information surrounding the occupations.

3.2 Researcher Positionality, Reflexivity and Limitations

The analysis was informed by the researcher's familiarity with and involvement in the Greek educational context. This situated position provided contextual knowledge of institutional language, school practices, educational debates, and the relationships within which the participants' accounts and the public representations of the mobilisations were produced. Such knowledge was treated as an interpretive resource rather than as independent evidence or as a means of validating participants' accounts.

Proximity to the field facilitated the recognition of meanings, tensions, and relationships that might not have been immediately visible a researcher unfamiliar with the educational context. At the same time such proximity required attention to how the researcher's position may have influenced the selection, contextualisation, and interpretation of the material. The analysis, therefore, maintained a distinction among participants' contemporaneous accounts, publicly circulating representations, informal retrospective reflections, and the present theoretical reconstruction.

Recent informal retrospective conversations with former colleagues and former student participants renewed the researcher's interest in the events and influenced the questions brought to the earlier material. Their role in initiating the present re-analysis is therefore acknowledged explicitly. Where reflections from these conversations are included, they are clearly identified and used with the participants' consent. They are treated as present-day reconstructions of the meaning of participation rather than as equivalents to contemporaneous accounts.

The present re-analysis also recognises the epistemological implications of revisiting qualitative material. As Mauthner et al. (1998) argue, qualitative data cannot be fully detached from the social relations and conditions through which they were originally produced, since researchers participate in both their construction and their interpretation. Re-analysis therefore does not simply recover meanings

already contained in a stable body of material; it brings earlier material into a new relationship with the researcher's subsequent experiences, present theoretical concerns, and new research questions.

The temporal distance between the events and the present study, thus, shaped the theoretical questions brought to the material. Reflexive attention was therefore given to distinguishing participants' contemporaneous accounts and documented traces from the retrospective reflections generated through recent informal conversations and their present theoretical interpretation. The analysis recognised that the meaning of the material was neither fixed nor independent of context. Each source was therefore examined in relation to when, where, why, and for whom it was produced, as well as the communicative setting in which it circulated.

The digital and documentary material analysed in the present article originates from publicly accessible sources, including educational websites, student portals, social media content, press statements and reports. Private digital spaces or restricted-access communication platforms were not observed. All participants and schools were anonymised. Participation was voluntary and parental consent was obtained for interviewees who were minors. Particular attention was paid to preserving confidentiality and ensuring that the reinterpretation of historical data remained consistent with the original conditions of informed participation.

The study does not claim exhaustive coverage of the nationwide mobilization. The interview corpus is concentrated in Attica, while the documentary and media corpus is restricted to material that was publicly circulated, preserved, and subsequently retrievable. Private, deleted, and ephemeral communications are therefore underrepresented. The informal retrospective conversations are used only to illuminate present-day interpretations, not to reconstruct the events of the autumn of 2014. The study therefore seeks analytical and theoretical transferability rather than statistical representativeness.



Pict. 1: Banners from the marches of November 2014 in Thessaloniki
(https://www.efsyn.gr/ellada/ekpaideysi/2202_neo-lykeio-ebgale-toys-mathites-ston-dromo/)

4. Findings

4.1 Historical context: Student Mobilisation during the Greek Debt Crisis (2009–2015)

The Greek debt crisis and the austerity measures implemented after 2010 generated widespread social unrest and a series of large-scale protests throughout the country. Among the most significant was the *Aganaktismenoi* (Indignant) movement of 2011, which shared important similarities with the Spanish

Indignados movement and combined the occupation of public spaces with extensive use of digital communication technologies (Gerbaudo, 2012, 2017; Theocharis, 2016). These mobilisations highlighted the growing importance of online communication, horizontal participation, and decentralised forms of collective action.

The consequences of the crisis were particularly significant for young people. Rising unemployment, escalating educational precariousness, and deteriorating future prospects contributed to a pervasive sense of existential insecurity among pupils and university students. At the same time, reductions in public education expenditure generated dissatisfaction across different levels of the educational system.

Within higher education, the introduction of Law 4009/2011 provoked strong resistance from university students, sparking demonstrations, assemblies, and occupations of university departments (Yiakoumaki, 2011). These mobilisations drew on the historical repertoire of Greek student activism while also reflecting contemporary shifts in the forms of participation emerging during the crisis years. Alongside physical assemblies and occupations, digitally mediated activism increasingly developed through social media, web forums, and online communities. Yiakoumaki (2011) identifies the coexistence of physically grounded participation and online collectivities as a defining characteristic of youth mobilisation during that period.



Pict.2: Inter-school assemblies in Piraeus, November 2014 (from mathites.gr)

Similar developments occurred in secondary education. During the early years of the crisis, high school students repeatedly organised occupations and demonstrations in response to educational reforms, teacher shortages, depleted resources and the broader consequences of austerity policies.

Pechtelidis (2013, 2016) argues that these student-led actions bridged educational grievances to broader concerns about socio-economic inequality, democratic participation, and social justice, while consolidating alliances among students, teachers' unions, parents' associations, university students, and other groups affected by austerity measures.

A defining characteristic of these mobilisations was the increasing naturalisation of digital communication into collective action. Students utilised websites, independent blogs, text messaging and early social media architecture to exchange information, communicate, publicise protests, and synchronise efforts across geographically dispersed locations. Earlier protest cycles –notably the 2008 uprising following the fatal police shooting of Alexandros Grigoropoulos– had already demonstrated the volatile potential of digital communication networks for facilitating rapid information exchange and triggering spontaneous large-scale mobilisation (Theocharis, 2011; Tsalikoglou, 2009). By 2014, these practices had become increasingly integrated into student political culture.

The 2014-2015 school-year students mobilisations emerged within this broader historical and socio-technical trajectory. They drew upon both institutionalised and non-institutionalised traditions of student participation, including assemblies, student councils, demonstrations and occupations, while simultaneously operating within increasingly networked communication environments. Consequently, they should be understood not as isolated outbreaks against specific reforms but as part of a wider cycle of youth mobilisation shaped by austerity, educational restructuring and the growing incorporation of networked communication into collective action.

4. 2 The 2014-2015 Occupations: Communication Ecologies and Mobilisation Dynamics

4.2.1 Mobilisation Emergence, Visibility and Diffusion

The implementation of Law 4186/2013 and, specifically, the introduction of new institutional framework for the upper secondary education, namely the “New Lyceum,” which included the “Question Bank” (*Trapeza Thematou*) centralised assessment system, became the immediate catalyst for the new wave of student mobilisation that took place during the first trimester of the 2014-2015 school year. These reforms were introduced within a public schooling system already affected by budget reductions, understaffing, and uncertainty regarding university admissions and occupational futures.

Students and teachers who participated in the interviews perceived these high-stakes assessment arrangements as an intensification of academic pressure designed to ration higher education access, thereby disproportionately penalising lower-income students by increasing reliance on private preparatory tutoring (*frontistiria*). As a male student commented: “*The question-bank system will send us directly to private tutoring and will burden our parents with extra money spending*”. A female teacher similarly noted: “*The reforms reinforced the examination-driven character of upper secondary education, intensifying the academic pressure on students and widening educational inequalities.*” These concerns were also documented in online statements issued by regional student committees and in formal resolutions published by the national teachers' unions (OLME).

Beginning in September 2014, secondary school students across Greece organised demonstrations, assemblies, and school occupations (*katalipseis*), protesting against the new assessment framework and broader educational reforms. The movement scaled rapidly, eventually involving hundreds of schools and generating nationwide demonstrations. Mobilisation was particularly intensive in Attica and urban centres in other regions, where concerns about the New Lyceum intersected with wider frustration over austerity policies and the future of public education. Echoing earlier mobilisation patterns (Pechtelidis, 2013, 2016), teachers' unions and parents' associations expressed solidarity with students' demands, framing the occupations as legitimate responses to educational inequality and broader concerns about social justice and democratic participation.

These protests did not emerge from an organisational vacuum nor in isolation. High school students activated formal, legally established participation mechanisms: the five-member (*pentameli*) classroom committees, the fifteen-member (*dekapentameli*) school student councils, class and school assemblies, debates and voting. Representative bodies convened school assemblies to deliberate, vote on, and participate in collective action of protests and occupations.

However, this traditional physical repertoire of formal collective action now operated within a hybrid environment infused with mobile social media platforms, independent educational portals, and peer-to-peer digital networks. Information regarding neighboring and far-away schools did not rely solely on direct face-to-face exchanges, peer networks or school student councils and inter-school committees; it was pulled further through social media feeds, educational websites, specialised student web portals, and the mass media coverage.

From an analytical standpoint, the significance of this hybridity lies primarily in the visibility it afforded collective action rather than in the technologies themselves. Once an assembly voted to occupy a school, banners, online declarations, and photographs of occupied school gates circulated publicly, signalling control of physical space, geographical spread, and collective commitment. This mediation transformed local school-level decisions into visible public events. Actions that might otherwise have remained confined to individual neighbourhoods became available for observation, debate, and adaptation by students elsewhere.

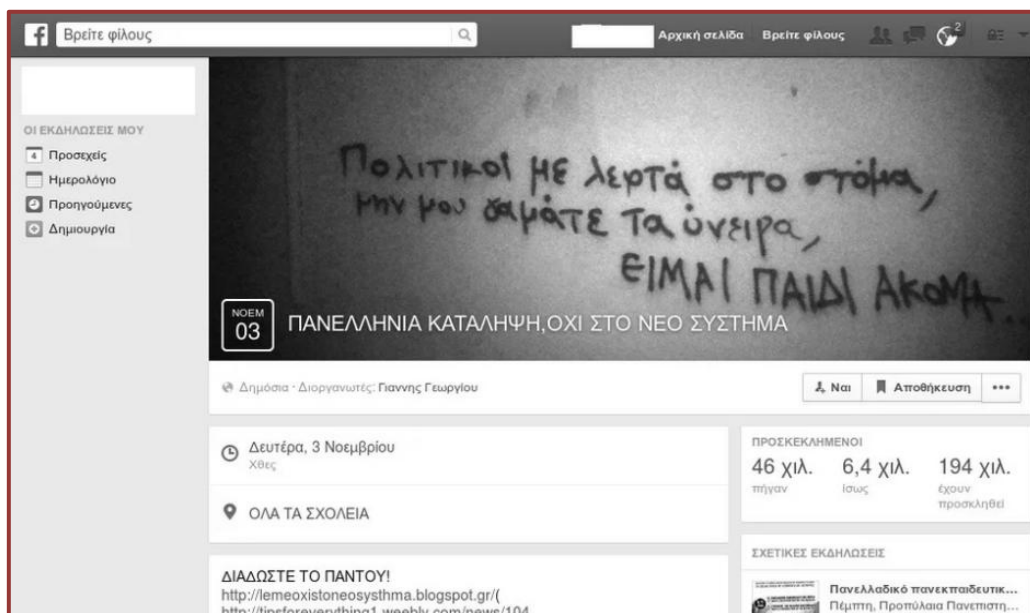
This increased visibility altered the informational terms of collective engagement. Students no longer calculated the risks of launching an occupation based solely on internal school dynamics; they could monitor traces produced by geographically dispersed peers to evaluate the scale, momentum, and perceived legitimacy of the movement. These communicative artefacts functioned as indicators of collective commitment, suggesting to hesitant school communities that mobilisation was viable and expanding. As one female student explained: "We were able to observe the actions of other schools, not only nearby but also to other parts of Greece, discuss our common goals, evaluate risks and emerging opportunities for participation". This account illustrates how students used circulating traces to evaluate risk and opportunity within their own peer networks.

Importantly, these artefacts did more than increase awareness. By rendering widespread participation visible, they reduced uncertainty regarding the feasibility and legitimacy of collective action or the perceived risks of initiating a local occupation. Rather than directing mobilization from above (top-down), those communicative traces functioned as interpretive resources through which students analysed ongoing developments, debated strategies and evaluated possibilities within their own school communities. Therefore, their significance depended on the local peer evaluation and assembly deliberation they prompted, rather than on simple exposure to information.

Viewed through the lens of Distributed Stigmergic Agency, expanding visibility was not merely an outcome of mobilisation but one of its coordination mechanisms. Local actions generated communicative traces within a shared symbolic environment, enabling autonomous, geographically dispersed school communities to monitor the broader movement, interpret its viability, and synchronise local decisions without a central command structure or a unified political hierarchy.

4.2.2 Producing and Circulating Communicative Traces

Educational websites and mainstream news portals frequently highlighted the role of digital technologies and social media platforms in facilitating communication among students and accelerating the diffusion of occupations. A prominent example was the student-led Facebook initiative advocating for a nationwide synchronised day of occupations, often referred to as a “*Panhellenic Occupation Day*,” which spread rapidly across student peer networks aggregating local school mobilisations into a unified national scale.



Pict.3: the Facebook page with the event “PANHELLENIC OCCUPATION, NO TO THE NEW SYSTEM” (from Newsroom iefimerida.gr 4/11/2014)

Interview data consistently illustrate that students discovered ongoing occupations through a fluid combination of websites, social media platforms, educational portals, regional news reporting,

immediate peer groups, intra-school assemblies and student councils. Information did not travel through a single channel; it cascaded across an interconnected polymedia environment. This circulation reduced geographical isolation, connecting different schools through shared awareness of a rising national movement and reinforcing the perceived legitimacy of local participation.

A student recalled the moment they saw the banners of a neighbouring occupied school, detailing how that visual/material trace immediately shifted the conversation within their own school network from “Should we protest?” to “How soon can we organise an assembly in our school?” Another student described their experience as: *“We were bombarded with images of protests on social media and in the news on TV. This inevitably incited us, made us wonder and discuss with our friends and schoolmates what would happen in our school. Can something similar happen here? What will the consequences be if we do participate in the occupation? What about our lessons, what about absences and possible punishment by the school? How will we cover the lost school-time? And who will stay in the school, who will take the blame if something happens in the building and so on.”* In the grammar of DSA, these narratives depict how influxes of networked traces perform a crucial semiotic function: they trigger complex contagion and localised peer interpretation, forcing students to collectively weigh institutional risks against systemic solidarity.



Pict. 4: Students outside an occupied school (Newsroom iefimerida.gr 4/11/2014)

This dynamic illustrates a recurring pattern across our empirical material: information regarding occupations was not passively consumed but became an object of collective interpretation and peer debate. Online announcements, photographic evidence of locked school gates in the press, students’ updates, journalistic reports and comments functioned as discursive resources within individual school communities, in schoolyards, classrooms and assemblies. Students used those resources to analyze the state of the movement, debate alternatives, and negotiate the ethical legitimacy of shutting down their

own schools. The value of these communicative and symbolic artefacts lay in their capacity to stimulate localised meaning-making embedded within the everyday social life of the school.

From an ethnographic perspective, the crucial issue is not merely that information circulated but how students incorporated circulating artefacts into their everyday peer cultures and generated further communicative activity. The process was recursive and non-linear, linking localised, physical experiences with a broader national struggle. An announcement issued by one school, functioning as a deliberative trace, could prompt discussion in assemblies elsewhere. The resulting local assembly resolution could then generate new text reports or updates, posts, photographs or social media comments, that re-entered the communication ecology as resources for further interpretation. Communication therefore operated not as a linear, one-way process of information transmission but as a recursive process in which each local action produced semiotic traces that created conditions for subsequent interventions.

Within Distributed Stigmergic Agency, these digital and material traces functioned as mechanisms of decentralised coordination. Their significance lay not simply in sharing information but in connecting geographically dispersed and autonomous decision-making bodies. As publicly visible signs of mobilisation providing tangible evidence of collective action, they contributed to a shared cognitive and symbolic environment within which participants could constantly monitor the movement's scale, assess its legitimacy and the momentum and align local decisions and tactics with a broader collective trajectory.



Pict. 5: Banner writing “Occupation” outside an occupied school

As these artefacts accumulated, independent self-reliant distinct local initiatives progressively fused into a broader nationwide movement despite the absence of a single centralised organisational hierarchy or organisational control. Interviewees noted that, despite their geographical separation and administrative autonomy, they increasingly came to view themselves not as isolated student bodies, but as participants or as vital nodes within a unified collective effort to defend public education. As one former student beautifully captured the sentiment: “*We came to feel and see ourselves as part of a wider*

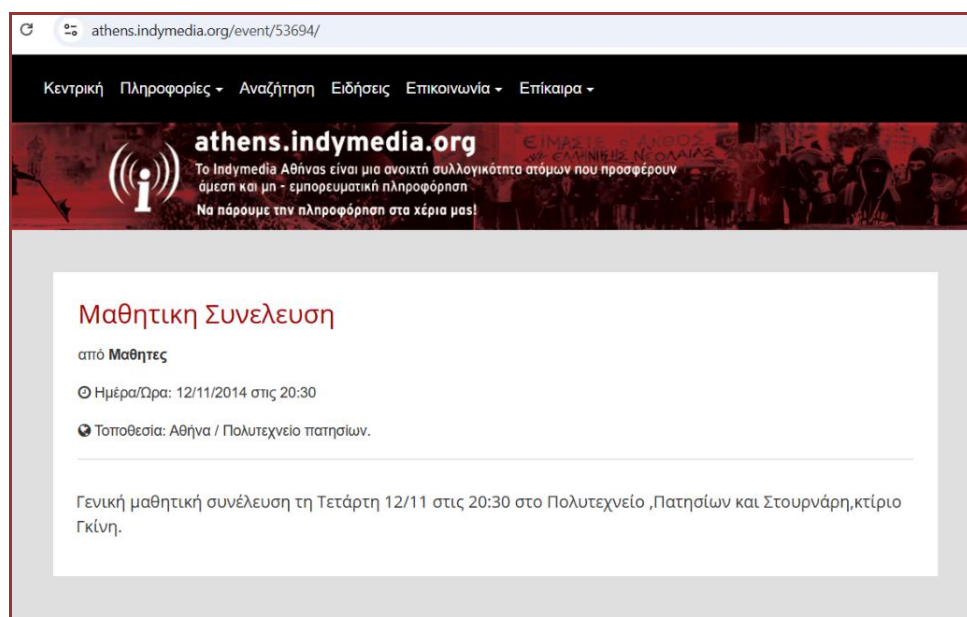
collectivity, participating in a collective mutual effort against educational reform and in defence of public and free education.”

4.2.3 Communication Infrastructures and Trace Ecologies

The circulation of communicative traces was sustained by a decentralised network of student-generated communication infrastructures. Alongside mainstream social media platforms, students developed and appropriated digital spaces through which information, interpretations, and organisational initiatives and strategies could be exchanged. These infrastructures did not simply facilitate communication; they provided environments within which collective identities, shared understandings, and mobilisation strategies could be articulated and negotiated.

A prominent node within this communication ecology was the Facebook community “*No to the New Lyceum*”, which functioned as vital hub for real-time information exchange, peer discussion and inter-school mobilisation updates. At the same time, educational web-portals such as *alfavita.gr* or the student website *mathites.gr* and the open activist platform *Athens Indymedia*, served as infrastructures for compiling, archiving, and circulating school resolutions, campaign slogans and local calls to action across different regions.

Although critics associated some of these platforms with established political organisations, students primarily used them as decentralised communication infrastructures through which information, interpretations, and mobilisation initiatives could circulate across school communities. Within DSA, these platforms did not merely host data; they functioned as repositories of deliberative and digital traces, transforming temporary local actions into more durable communicative resources available for interpretation and response across the mobilization.



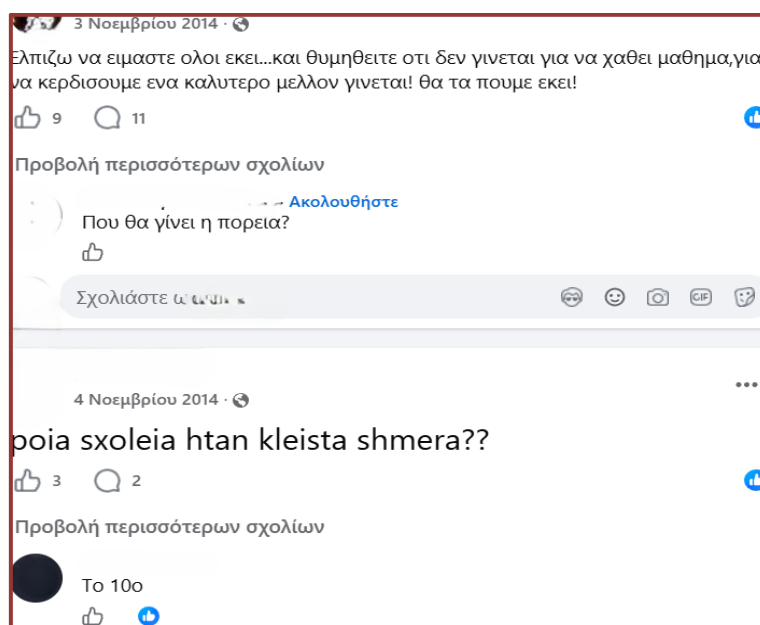
Pict. 6: A call for inter-school assembly posted on athens.indymedia.org

Within the framework of Distributed Stigmergic Agency these infrastructures provided the communicative environment through which student-generated traces produced in one school became available for interpretation and response in others. In this way, geographically dispersed school communities remained connected, contributing to broader patterns of decentralised coordination while retaining local decision-making autonomy.

These infrastructures enabled temporary local actions to leave persistent and visible signs that remained available for interpretation and recontextualisation elsewhere. By connecting geographically dispersed actors while preserving the autonomy of local school councils, these digital architectures supported horizontal communication and broader collective coordination. Within these spaces, students tracked mobilisation trends, exchanged tactical insights, and archived multimedia documentation beyond their local communities

The importance of these communication infrastructures became particularly evident during the peak of the mobilisations in November 2014, when elected occupation committees and student councils relied on digital media to broadcast their specific demands, coordinate regional street marches, and maintain open lines of communication with adjacent campuses. Calls for emergency assemblies, live dispatches from occupied buildings and rally announcements circulated rapidly through student networks during the peak of mobilisation.

These digital infrastructures complemented rather than replaced assemblies and other face-to-face practices. Hybrid communication networks formed reduced spatial barriers, amplified the reach and social visibility of locally produced communicative artefacts and contributed to broader patterns of decentralised collective action.



Pict. 7: A Facebook conversation concerning the participation in the protests (November 2014)

Importantly, students were not passive consumers of information but active producers of their own semiotic landscape: through announcements, banners, slogans, photographs, videos, digital comments and calls for participation, local school actions continuously generated new semiotic resources that circulated into the shared communicative ecology. This recursive process generated feedback loops where physical action, digital documentation and peer interpretation continually amplified and reinforced one another. One interviewee, for example, recalled how their school council systematically documented their occupation by producing hand-painting banners for the school gates while simultaneously drafting statements for local and online circulation.

The communicative traces in the material performed overlapping functions. Assembly resolutions and council statements supported deliberation and represented collectively authorised positions; photographs, banners, and occupied school gates made action materially visible; and posts, website announcements, and uploaded images extended circulation across regions. These forms were not fixed categories. An assembly resolution could become an online post, a media report, a banner, or a topic of discussion elsewhere, illustrating how meanings were transformed through polymediation.

4.2.4 Contested Meanings: Public Discourse, Political Legitimacy and Student Agency

As the occupations expanded and dominated public visibility, they increasingly became the object of public debate and political contestation. The circulation of occupation-related student-generated content through social media, educational websites and other communication channels attracted the attention of state officials, political actors, and mass media. Consequently, the marches and the occupations transformed into contested symbolic sites where competing definitions of citizenship, democratic participation, societal law, and youth political agency fought for dominance.

Governmental statements and media accounts framed the occupations as products of political manipulation, external influence, and organisational control by political groups orchestrating mobilisations. Public discussions often focused on the role of social media pages supporting the occupations and questioned whether students as teenagers were acting autonomously or under the direction of external political actors.

These dominant narratives reflected developmental paradigms that frame adolescents as politically immature, irrational and vulnerable to manipulation. Rather than recognising students as legitimate political actors capable of independent critique, such accounts reduced them to passive objects of adult political warfare.

This tension became especially visible during November 2014 when governmental attention focused on social media pages associated nationwide occupation initiatives. On 5 November 2014, the Facebook page associated with the “Panhellenic Occupation” initiative became inaccessible following accusations that it was encouraging school occupations. Its disappearance intensified public and governmental responses: the Ministry of Education and state prosecutors announced investigations involving specialised cybercrime units, regional prosecutors, and the police.

A circular issued by the Prosecutor of the Supreme Court called for intervention in cases of school occupations and encouraged educational authorities to ensure the uninterrupted operation of schools, while also suggesting legal investigation of parental responsibility for student participation. These measures generated strong reactions from opposition parties, student groups, teachers' organisations, and other supporters of the movement, who interpreted them as attempts to suppress legitimate political expression and democratic participation.

Public discourse therefore became an additional arena within which the meaning of the occupations and the political legitimacy of student participation were negotiated. Debate about occupations increasingly extended beyond educational policy itself and became connected to wider questions concerning democratic participation, freedom of expression, and the political status of young people.

So, rather than neutralising the movement, the state's intervention expanded the debate far beyond localised educational policy, connecting it to fundamental societal questions regarding free speech and the political status of young people. Students and their supporters actively challenged dominant state and media representations through their own communication networks. Student committees, regional occupation coordinators, alternative blogs and social media communities circulated statements and slogans defending the occupations as democratic responses to educational inequalities and austerity policies.

Furthermore, students' representatives entered the mainstream media sphere appearing on live television broadcasts, news panels and interviews to articulate their demands, defend their organisational autonomy and contest dominant representations of the movement. Through these interventions, students rejected themselves as passive or politically manipulated minors and presented themselves as actors capable of public debate, collective organisation, and political judgement. Their interventions challenged adult-centred assumptions about youth political capacity and created alternative spaces for political subjectification.

As these competing narratives emerged, mobilisation increasingly became an arena of symbolic and political contestation. Governmental discourse often framed occupations as disruptive, irresponsible, or politically manipulated, whereas an alliance of students, teachers, and parents frequently interpreted them as legitimate expressions of democratic participation and collective action. These opposing representations reflected broader struggles over youth agency, political legitimacy, and the place of young people within democratic participation.

Accordingly, the 2014 occupations represented more than opposition to specific educational policies. They represented a broader student claim for political recognition -a collective assertion that youth are active citizens entitled to participate in decisions affecting their lives and futures. As Pechtelidis (2015) observed regarding earlier youth mobilisations, such actions can unsettle adult

institutions because they challenge assumptions of childhood dependency and expose unequal power relations between adults and young people.

4.3 Assemblies, Elected Student Councils and Collective Meaning-Making

4.3.1 *Assemblies and school councils as semiotic arenas*

Despite the growing importance of digital communication, the 2014-2015 occupations remained firmly grounded in face-to-face participation. Interviewees, students and teachers, consistently described social media, websites, and digital networks as facilitating communication, information sharing, visibility, and coordination rather than replacing direct in-person participation. While students frequently learned about mobilisations occurring elsewhere through social media, educational websites, news reports, text messaging, and peer networks, decisions concerning occupations, demonstrations, and future actions generally emerged through school assemblies, formal voting procedures, elected student representatives, and school-level coordinating committees.

School and inter-school assemblies occupied a particularly important position within this mobilisation architecture. Activated by elected school students' councils, some of which even participated in regional inter-school coordinating committees, these physical hubs operated as more than organisational mechanisms: they functioned as complex semiotic arenas where students collectively analysed and debated criticisms, evaluated proposals, assessed risks, developed shared understandings of their political realities. Moreover, they served as the primary environments where decisions concerning occupations, street demonstrations and future actions were weighed and decided.

Interviewees described lengthy discussions concerning the fairness of the Question Bank, educational inequalities, escalating academic anxieties, and the long-term consequences of educational reform. Through this active face-to-face deliberation, individualised concerns were progressively transformed into collective grievances, while shared personal experiences became objects of collective understanding, reflection and political interpretation.

Research participants also repeatedly emphasised that information circulating beyond the school gates did not automatically produce action. Rather, it entered local school communities where it became subject to discussion, negotiation, and evaluation. Several students described learning about occupations elsewhere and subsequently debating whether similar action was appropriate, legitimate, or feasible within their own school. As one interviewee explained, students first learned about nearby occupations through friends, websites, and social media, but subsequently the issue was discussed in the school assembly before reaching a collective decision. Another participant similarly noted that although online communication provided information about developments elsewhere, decisions were always collectively negotiated through face-to-face discussion within their own school community. Digital information was therefore treated not as a direct stimulus for action but as an object of collective reflection and deliberation.

From an anthropology of education perspective, assemblies can be understood to have operated as political, educational, and epistemic spaces through which collective frameworks were continually constructed, negotiated and contested. Students did not merely treat these forums as spaces to exchange information concerning educational policy; rather they used them to collectively interpret events and institutional challenges, assess competing ideological viewpoints and debate the legitimacy of different forms of action.

Reliance on face-to-face structures was further reinforced by inequalities in students' access to digital technologies. Material constraints such as internet connectivity, hardware availability, and parental monitoring limited continuous participation in online environments for some students. Several interviewees therefore associated meaningful participation primarily with “direct, real-time interactions” and “actual conversations.” Assemblies functioned as an important equalising mechanism, ensuring that collective deliberation remained accessible to the wider student body regardless of differences in digital access.



Pict. 8. Report on massive student demonstrations and call for further action
(<http://www.mathites.gr/?p=1132>)

Ultimately, assemblies did more than aggregate individual opinions or function as democratic forums. They served as key mediating mechanisms through which dispersed experiences and circulating communicative traces were transformed into collectively recognised problems and collectively authorised decisions. By filtering, interpreting, and evaluating incoming communicative traces, assemblies linked distributed communication to local democratic decision-making, enabling autonomous school communities to translate communication into collective action.

4.3.2 Institutional Lineage, Participation and Democratic Learning

Elected student representatives played an important role within these processes. Interviewees frequently described members of student councils (*pentameli* or *dekapentameli*) as organisational facilitators,

helping coordinate assemblies, communicate collective decisions, circulate information, and maintain contact with students in other schools.

Importantly, these representatives did not function as leaders in a traditional, hierarchical sense, since major decisions remained subject to collective discussion and voting within the assemblies. Their role was explicitly representative, communicative and mediating, linking local school communities with wider mobilisation processes. By circulating information concerning demonstrations, occupations, and coordinating initiatives, they connected local deliberations to broader networks of student participation without centralising decision-making authority.

The significance of assemblies and elected councils becomes even clearer when considered within the historical framework of student participation in Greece. Student communities and councils are not spontaneous, informal innovations: they are institutionalised structures whose roots may be traced to the democratic reforms following the fall of the military dictatorship in 1974 and they are utilised pedagogically within the framework of civic socialisation and youth commitment to social life (Emvalotis, 1998). Their contemporary institutional form emerged through educational reforms of the 1980s, which recognised student engagement and participation as a core component of school democratisation. During the 2014-2015 mobilisation wave, these long-standing institutions provided organisational continuity and structural legitimacy, enabling students to transform immediate grievances into coordinated collective action through recognised democratic procedures. Their importance therefore lay not only in organisational coordination but also in their capacity to confer legitimacy upon collective decisions and translate deliberation into action.

This democratic dimension was explicitly articulated by Themis Kotsifakis, then President of the Greek Federation of Secondary Teachers, who argued in an interview during the mobilisations, in November 2014, that student protest constitutes an important form of democratic learning. From this perspective, the occupations were not simply political protests but also educational experiences through which students collectively explored, practiced, and negotiated forms of democratic participation and citizenship. As Kotsifakis argued:

It is not bad for the educational community, students and teachers, to mobilise for the problems, because it is also an exercise (for the students) which prepares them to become good citizens, active citizens. Beyond that, the form of mobilisations that the children will choose is their own issue and we will not tell them what to do.

The intersection between communication and collective decision-making can also be observed in the ways digital and face-to-face participation became interconnected. Information obtained through websites, social media platforms, mass media, and peer networks entered existing school-based participatory structures, where it became subject to discussion, interpretation, and evaluation. The student website mathites.gr, for example, regularly published calls for in-person assemblies and meetings of elected student representatives, encouraging participants to evaluate previous actions, discuss developments, and collectively decide future strategies. Concurrently physical protest banners,

leaflets, telephone calls, and word-of-mouth communication remained vital components of mobilisation, demonstrating that communication extended well beyond digital platforms (cf. Prentoulis and Kyriakidou, 2019). Rather than replacing assemblies, digital communication became embedded within existing participatory structures operating as complementary dimensions of the mobilisations.

These dynamics support Yiakoumaki's (2011) observation that student movements in Greece traditionally rely on a "concrete," physically identifiable presence expressed through assemblies, demonstrations, occupations, and voting procedures. While social media may facilitate communication, lower participation costs and increased visibility, sustained collective action remains dependent upon physical interaction, shared experiences, and local social relationships (cf. Prentoulis and Kyriakidou, 2019). The school building as a physical space therefore retained both symbolic and practical significance. Occupying school space represented not only opposition to educational reforms but also a direct challenge to dominant institutional definitions of authority, citizenship, participation, and the spatial organisation of formal public schooling.

Viewed through the lens of Distributed Stigmergic Agency, assemblies and elected student representatives jointly mediated the relationship between communication and action. Announcements, photographs, reports, online discussions, and other communicative traces circulated across multiple communicative environments before entering local school contexts, where they became objects of collective interpretation and evaluation. Students discussed their relevance, assessed their implications, and considered their applicability to local circumstances. The resulting decisions subsequently generated new assembly resolutions, occupation announcements, reports, photographs, statements, and calls for participation. Collective action therefore emerged not simply because information was available, but because communicative traces were continuously interpreted, deliberated upon, and incorporated into collective decision-making processes. Through these iterative processes assemblies and elected representatives functioned as key mediating mechanisms through which distributed communication became collectively consequential, allowing localised initiatives to coalesce into broader patterns of coordinated collective action.

4.4 From Communication to Collective Agency: Distributed Coordination in Practice

The empirical findings presented so far demonstrate that the 2014-2015 occupations cannot be adequately understood either as by-product of centrally directed organisational structure or as the simple aggregation of isolated, individualised acts of participation. Instead, systemic coordination emerged through recursive and non-linear interactions across a hybrid communicative ecology.

Although students frequently referred to nationwide mobilisation, empirical data gives no evidence of a centralised organisational hierarchy capable of directing collective action across schools. Individual school communities retained substantial autonomy regarding participation, demands prioritising, timing of occupations and other tactical choices. Decisions were made locally through

assemblies and existing representative structures, while participation levels varied across regions and schools.

Nevertheless, students consistently monitored developments occurring elsewhere through occupation announcements, assembly resolutions, photographs, website reports, social media content, educational portals, and peer networks. These communicative traces did not function as directives or instructions. Rather, they served as interpretive resources through which students assessed the scale, legitimacy, and momentum of the mobilisation. Interviewees maintained that their choices were products of independent evaluation rather than passive imitation. In the words of a student: *“We were not just imitating what other schools did. We were watching and evaluating action in relation to our own circumstances.”*

From a DSA perspective, coordination emerged through recursive cycles linking communicative traces, interpretation, collective deliberation, and action (Figure 1). The defining mechanism was not communication alone but the repeated incorporation of communicative traces into local, democratic decision-making structures and processes. Each round of local collective action generated traces that informed subsequent interpretation and assembly deliberation elsewhere, progressively linking autonomous school communities into a broader unified movement.

This process operated as a mutually reinforcing feedback loop, in which each stage contributed to the reproduction, amplification, and expansion of the other. Research participants described monitoring occupations in neighbouring schools, discussing developments through peer networks, and adapting ideas encountered through websites and social media to local circumstances. In this sense, coordination did not require direct command, formal leadership, or unified central control. Rather, it emerged through the continuous production, circulation, interpretation, and recontextualisation of meaningful signs across interconnected multiple communicative environments.

The occupations, therefore, can be understood as a form of decentralised collective action in which collective political agency emerged through participation itself. Within this environment, agency was neither reducible to individual intentions nor located within a centralised organisation. Instead, it emerged relationally through ongoing, dynamic interactions among students, communicative traces, assemblies, institutional council structures, digital networks, and school communities. Through this sign-mediated coordination geographically dispersed actors collectively shaped one another’s opportunities for action while retaining their local autonomy.

Four empirical sequences make the mechanism more visible. First, students encountered photographs or banners from neighbouring occupied schools; these traces prompted peer discussion about feasibility, sanctions, responsibility, and local support; assemblies then debated and voted; and the resulting local action produced new photographs, announcements, or resolutions available to others.

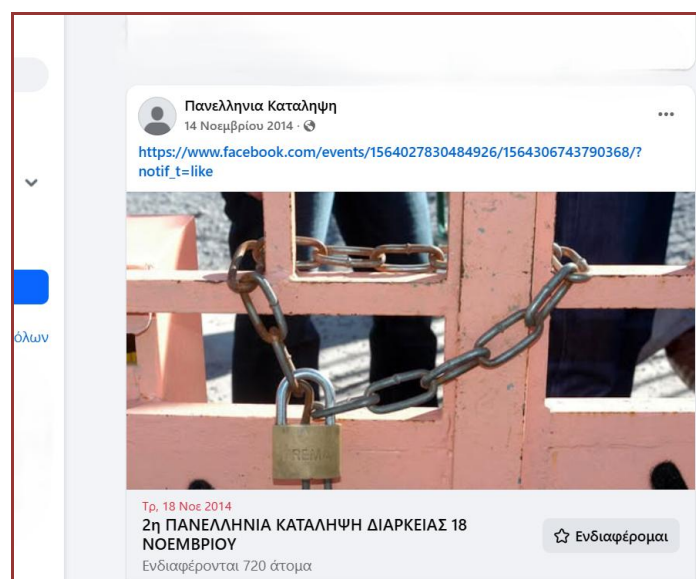
Second, a nationwide online occupation call circulated through Facebook pages, educational websites, and peer networks. The call did not operate as a directive. It entered student councils and

assemblies, where participants assessed whether it applied to local conditions and whether sufficient support existed. Decisions to participate, modify the proposed timing, or refrain from action generated locally specific statements and further communication.

Third, governmental and prosecutorial interventions became new traces within the mobilisation. The disappearance of the Panhellenic occupation page and announcements of investigations generated media reports, political responses, student discussions, and counter-statements. Institutional attempts to regulate mobilisation thereby became objects of interpretation and produced further communicative activity.

Fourth, assemblies transformed heterogeneous information into a locally actionable account. Reports from other schools, peer testimony, media narratives, and personal experiences of examination pressure were compared and contested. Through deliberation, participants defined the problem, assessed alternatives and risks, authorised a decision, and produced an assembly resolution that re-entered the wider communicative environment.

These sequences demonstrate why DSA cannot be reduced to contagion or imitation. Traces expanded possibilities and reinforced expectations, but situated interpretation and collective authorisation mediated their effects. Similar actions across schools emerged through recursive mutual responsiveness rather than identical instructions.



Pict. 9: Facebook Event, call for occupations

5. Discussion

5.1 Agency, Generational Relations and Lived Citizenship

The occupations were processes through which students enacted and negotiated political agency. Participants articulated grievances, evaluated alternatives, represented collective positions, organised action, and intervened in public debates. Although they possessed limited formal authority, they engaged

in practices central to democratic citizenship, distinguishing citizenship as social practice from citizenship as legal status.

Agency was individual but not individualistic. Students retained intentions and made choices, while their capacity to act developed through relationships with classmates, teachers, councils, assemblies, political actors, communicative artefacts, and wider publics. Collective agency emerged when concerns and judgements were interpreted, negotiated, and authorised through shared processes.

Agency should not be equated with the absence of influence. Students acted within dense networks of peer, institutional, political, and media relations. Their agency lay not in remaining unaffected by these relations but in interpreting, negotiating, accepting, modifying, or rejecting the meanings and courses of action available through them.

This point also complicates public claims of political manipulation. External actors, organisations, teachers, media, and influential online pages could shape the communicative environment without exercising unified control over school decisions. Acknowledging influence does not require reducing students to passive instruments, just as recognising agency does not require imagining them as socially isolated actors.

Public disputes over manipulation and responsibility exposed a generational order in which adults sought to define legitimate youth participation. Student statements, assemblies, and media interventions were consequently claims not only about educational policy but also about recognition as political actors in the present. In this sense, the occupations enacted lived citizenship while contesting its adult-defined boundaries.

5.2 School as a Cultural, Epistemic and Political Ecology

The findings invite a reconsideration of the school not merely as an institutional setting of instruction and regulation but as a cultural, communicative, political, epistemic, and learning ecology. The occupations developed from students' everyday encounters with examination pressure, educational inequality, institutional authority, peer relations, and uncertain futures. Mobilisation was therefore not external to educational life; it transformed meanings and relationships already embedded within it.

The school functioned as a site of collective knowing. Information from friends, websites, social media, neighbouring schools, and news reports entered local histories and relationships of trust. Assemblies compared experiences, evaluated claims, debated alternatives, and produced situated understandings of reform and mobilisation. Their epistemic function was inseparable from their political and organisational role.

The occupations also transformed school space. Locked gates, banners, assemblies, and the practical organisation of occupied buildings interrupted ordinary spatial arrangements and made authority negotiable. Through digital circulation, the occupied school simultaneously became a local material setting and a sign within a wider political ecology.

These processes illustrate interpretive reproduction. Students did not create political practices from nothing, but reworked inherited assemblies, councils, occupations, peer cultures, digital infrastructures, and public narratives. Existing institutional forms were reproduced while their meanings and uses were transformed.

Political learning arose through participation in consequential social practices. Students encountered the demands of evaluating information, constructing arguments, negotiating disagreement, assessing risk, representing others, allocating responsibility, and responding to adult institutions. These practices could teach democratic possibilities, but also constraint, conflict, unequal voice, and the costs of participation. The analysis therefore avoids treating mobilisation as automatically emancipatory.

The study contributes to the anthropology of education in three related ways. First, it conceptualises the school as a cultural and epistemic environment in which political knowledge is collectively produced rather than merely transmitted. Second, it approaches students as knowledge-producing political actors who interpret and reshape educational institutions rather than simply receiving policy. Third, it understands learning as participation in consequential social practices rather than the acquisition of abstract civic knowledge.

5.3 What Distributed Stigmergic Agency Explains

The theoretical contribution of DSA is best understood through the empirical tension revealed by the case: students were influenced by actions elsewhere, but they did not simply imitate them; school communities became coordinated, but they were not directed by a single unified command structure. Diffusion did not equal imitation, influence did not equal control, and coordination did not equal command.

Existing approaches explain distinct dimensions of mobilisation. Connective action accounts for personalised and digitally mediated participation; communication-ecology approaches describe the interconnected environments through which communication circulates; distributed cognition addresses cognitive processes extending across persons and artefacts; and complex contagion explains how repeated social reinforcement increases the likelihood of participation. DSA addresses a narrower relational problem: how communicative traces produced through local action become meaningful through situated interpretation, are evaluated through collective deliberation, and are incorporated into subsequent coordinated action.

DSA also differs from classical stigmergy. In its simplest form, classical stigmergy links action, environmental trace, and subsequent action. In the human communicative process identified here, the sequence includes communicative traces, culturally situated interpretation, collective knowing, deliberation, and locally authorised decisions. Meaning, intentionality, and democratic deliberation intervene between trace and subsequent action.

DSA should not be treated as synonymous with complex contagion. Complex contagion explains why repeated signals from multiple trusted sources may increase the likelihood of participation in costly

or uncertain action. DSA asks what those signals mean, how they are interpreted and contested within local settings, and how their meanings are incorporated into collective decisions. Social reinforcement is therefore one component of DSA rather than a complete explanation of coordination.

Collective knowing and DSA are related but not interchangeable. Collective knowing names the situated epistemic work through which participants produce sufficiently shared and actionable understandings. DSA names the recursive coordination process through which traces generated by one action enter and reshape later processes of knowing and decision-making elsewhere.

Agency within this process was individual, relational, collective, and distributed. Individuals reflected and chose; relationships enabled and constrained those choices; assemblies gave collective authority to decisions; and wider capacity emerged through relations among students, artefacts, spaces, councils, organisations, and media infrastructures. Distributed agency therefore did not eliminate intentional actors or uneven influence.

DSA is not proposed as a universal theory of collective action. It is a focused mechanism whose empirical use requires evidence of trace production, circulation, situated interpretation, deliberation, and subsequent action. Its distinctive contribution lies in explaining how communication becomes decentralised coordination while local actors retain interpretive and decision-making autonomy.



Pict. 10: Banner outside an occupied school (No to the New Lyceum)
<https://www.newsit.gr/ellada/katalhpsh-500-sxoleia-se-oli-ti-hora-facebook-0411/1536915/>

Conclusions

This article examined mobilisations and occupations that occurred mainly in October and November 2014, within the 2014-2015 Greek school year, as a process through which students interpreted educational change, produced political meanings, enacted citizenship, and coordinated action across interconnected school, social, material, and digital environments. The findings show that information became politically consequential through situated relationships and collective interpretation rather than circulation alone.

Assemblies were central because they transformed dispersed information and personal concerns into shared understandings, collective grievances, and authorised decisions. They were also

environments in which students participated in consequential problems requiring argument, judgement, negotiation, responsibility, and organisation. Political learning is therefore understood here as participation in these practices, not as a uniform or measured outcome.

The recurrent empirical sequence was action, communicative trace, circulation, situated interpretation, peer reinforcement, assembly deliberation, locally authorised decision, and new action. DSA conceptualises this sequence as a focused mechanism of sign-mediated decentralised coordination. Its contribution lies in specifying how communication can become coordination without assuming either mechanical imitation or a single unified command structure.

The article also contributes to childhood studies and the anthropology of education by presenting students as knowledge-producing political actors and schools as cultural, epistemic, and political environments. Agency did not require freedom from influence. Students acted within dense peer, institutional, political, and media relations, while interpreting, negotiating, modifying, or rejecting the meanings and actions available through them.

The analysis is based on a historically specific qualitative case and does not support statistical generalisation or a comprehensive reconstruction of every participating school. Further research could test the scope of DSA through cases in which trace production, interpretation, deliberation, and action can be observed across different educational and political contexts. In particular, it could be examined whether similar processes are observable in other forms of youth mobilisation and in collective-action settings where digital communication, local deliberation, and distributed decision-making intersect.

Bibliography

- Alanen, L. (2009). Generational order. In J. Qvortrup, G. Valentine, W. Corsaro, & M. S. Honig (Eds.), *The Palgrave handbook of childhood studies* (pp. 159–174). Palgrave.
- Anduiza, E., Cristancho, C., & Sabucedo, J. M. (2014) Mobilization through online social networks: the political protest of the indignados in Spain. *Information, Communication & Society*, 17(6), 750–764. <https://doi.org/10.1080/1369118X.2013.808360>
- Applin, S. A., and Fischer, M.D. (2011a), A Cultural Perspective on Mixed, Dual and Blended Reality. In Proceedings LAMDa'11, DFKI, 1–4.
- Applin, S. A., and Fischer, M.D. (2011b). Pervasive Computing in Time and Space: The Culture and Context of 'Place' Integration. In *2011 Seventh International Conference on Intelligent Environments, Nottingham, UK, 2011*, (pp. 285-293), doi: 10.1109/IE.2011.65.
- Applin, S. A., and Fischer, M.D. (2012). PolySocial Reality: Prospects for Extending User Capabilities Beyond Mixed, Dual and Blended Reality. In Proceedings LAMDa'12, DFKI, 1–4.
- Applin, S., and Fischer, M. (2013). Asynchronous adaptations to complex social interactions. *IEEE Technology and Society Magazine*, 32(4), 35-44.
- Athanasakis, O. (2009). The New politics of the New Century. In S. Economides & V. Monastiriotis (Eds) *The Return of Street Politics? Essays on the December Riots in Greece* (pp. 5-8). The Hellenic Observatory, LSE. Available in <https://www.lse.ac.uk/Hellenic-Observatory/Assets/Documents/Publications/Books/2013-2008/Greek-Riots.pdf>

- Avigur-Eshel, A., & Berkovich, I. (2017). Using Facebook differently in two education policy protests. *Transforming Government: People, Process and Policy*, 11(4), 596–611. <https://doi.org/10.1108/TG-06-2017-0029>
- Bandura, A. (2001). Social cognitive theory: An agentic perspective. *Annual Review of Psychology*, 52, 1–26. <https://doi.org/10.1146/annurev.psych.52.1.1>
- Baraldi, C., & Cockburn, T. (2018). Introduction: Lived citizenship, rights and participation in contemporary Europe. In C. Baraldi & T. Cockburn (Eds.), *Theorising childhood: Citizenship, rights and participation* (pp. 1–18). Springer.
- Bauwens, M. (2006). The Political Economy of Peer Production. *Post-Autistic Economics Review*, 37, 33–44. Accessible at <http://www.paecon.net/PAERreview/issue37/Bauwens37.htm>
- Bennett, W. L., & Segerberg, A. (2012). The logic of connective action. *Information, Communication & Society*, 15(5), 739–768. <https://doi.org/10.1080/1369118X.2012.670661>
- Burawoy, M. (1998). The extended case method. *Sociological Theory*, 16(1), 4–33. <https://doi.org/10.1111/0735-2751.00040>
- Castells, M. (2000). Materials for an exploratory theory of the network society. *British Journal of Sociology*, 51(1), 5–24.
- Castells, M. (2010). *The power of identity* (2nd ed.). Wiley-Blackwell.
- Castells, M. (2015). *Networks of outrage and hope: Social movements in the Internet age*. (2nd ed.). Polity Press.
- Centola, D. (2010). The spread of behavior in an online social network experiment. *Science*, 329(5996), 1194–1197. <https://doi.org/10.1126/science.1185231>
- Centola, D. (2021). Complex contagions. In G. Manzo (Ed.), *Research handbook on analytical sociology* (pp. 321–335). Edward Elgar.
- Christensen, P., & James, A. (Eds.). (2008). *Research with children: Perspectives and practices* (2nd ed.). Routledge.
- Corsaro, W. A., & Eder, D. (1990). Children's peer cultures. *Annual Review of Sociology*, 16, 197–220.
- Emvalotis, A. (1998). Historical overview of the institution of student communities (1923-1993). *Epistimoniki Epetirida Pedagogikou Tmimatos Dimotikis Ekpedefsis Panepistimiou Ioanninon*, 11, 67-102. [In Greek]. Available at <https://olympias.lib.uoi.gr/jspui/handle/123456789/5990>
- Gerbaudo, P. (2012). *Tweets and the Streets. Social Media and Contemporary Activism*. Pluto Press.
- Gerbaudo, P. (2017). *The Mask and the Flag. Populism, Citizenism and Global Protest*. Oxford University Press
- Granovetter, M. S. (1973). The strength of weak ties. *American Journal of Sociology*, 78(6), 1360-1380. <https://doi.org/10.1086/225469>
- Granovetter, M. (1978). Threshold Models of Collective Behavior. *American Journal of Sociology*, 83(6), 1420–1443. <http://www.jstor.org/stable/2778111>
- Grassé, P.-P. (1959). La Reconstruction du nid et les Coordinations Inter-Individuelles chez *Bellicositermes Natalensis* et *Cubitermes* sp. la théorie de la Stigmergie: Essai d'interprétation du Comportement des Termites Constructeurs. *Insectes Sociaux* 6, 41–84.
- Hall, E. T. (1959). *The silent language*. Doubleday.
- Hall, E. T. (1976). *Beyond culture*. Anchor Books.
- Hall, S. (1997a). Introduction. In S. Hall (ed.) *Representation: Cultural Representations and Signifying Practices* (pp.1-12). Sage Publications and The Open University.
- Hall, S. (1997b). The Work of Representation. In S. Hall (ed.) *Representation: Cultural Representations and Signifying Practices* (pp. 13-74). Sage Publications and The Open University.
- Herbig, A., Herrmann, A. F., & Tyma, A. W. (2015). Introduction. The Beginnings: #WeNeedAWord. In A. Herbig, A.F. Herrmann, & A. W.Tyma (Eds), *Beyond New Media: Discourse and Critique in a Polymediated Age* (pp. ix- xxiv). Lexington Books.

- Heylighen, F. (2016a). Stigmergy as a universal coordination mechanism I: Definition and components. *Cognitive Systems Research* 38, 4-13. <https://doi.org/10.1016/j.cogsys.2015.12.002>
- Heylighen, F. (2016b). Stigmergy as a universal coordination mechanism II: Definition and components. *Cognitive Systems Research*, 38, 50-59. <https://doi.org/10.1016/j.cogsys.2015.12.007>
- Holland, J., Thomson, R., & Henderson, S. (2006). *Qualitative Longitudinal Research: A Discussion Paper*. Families & Social Capital ESRC Research Group, London South Bank University. Available at: https://www.lsbu.ac.uk/_media_old/pdf/working-papers/qualitative-longitudinal-research-families-working-paper.pdf
- Jakobson, R. (1960). Linguistics and poetics. In T. A. Sebeok (Ed.), *Style in language* (pp. 350–377). MIT Press.
- James, A. (2009). Agency. In J. Qvortrup, W. A. Corsaro, & M.-S. Honig (Eds.), *The Palgrave handbook of childhood studies* (pp. 34–45). Palgrave Macmillan.
- James, A., & Prout, A. (1997). A New Paradigm for the Sociology of Childhood? Provenance, Promise and Problems. In A. James & A. Prout. (Eds.), *Constructing and Reconstructing Childhood: Contemporary Issues in the Sociological Study of Childhood* (2nd ed.), (pp. 7-32). Falmer Press.
- Jost, J. T., Barberá, P., Bonneau, R., Langer, M., Metzger, M., Nagler, J., Sterling, J., & Tucker, J. A. (2018). How social media facilitates political protest: Information, motivation, and social networks. *Political Psychology*, 39(S1), 85–118. <https://www.jstor.org/stable/48756033>
- Katsikas, C. (2014). The “black box” of students’ mobilisations. 05.11.2014. *Efimerida ton syndakton*. Available at https://www.efsyn.gr/stiles/apopseis/2574_mayro-koyti-ton-mathitikon-kinitopoiiseon
- Laclau, E., & Mouffe, C. (1985). *Hegemony and socialist strategy: Towards a radical democratic politics*. Verso.
- Latour, B. (2005). *Reassembling the Social: An Introduction to Actor-Network-Theory*. University Press.
- Lee, N. (2001). *Childhood and society: Growing up in an age of uncertainty*. Open University Press.
- Lewis, T. G. (2013). Cognitive stigmergy: A study of emergence in small-group social networks. *Cognitive Systems Research*, 21, 7–21. <https://doi.org/10.1016/j.cogsys.2012.06.002>
- Madianou, M., & Miller, D. (2013). Polymedia: Towards a new theory of digital media in interpersonal communication. *International Journal of Cultural Studies*, 16(2), 169-187.
- Margetts, H., John, P., Hale, S., & Yasserli, T. (2016). *Political Turbulence: How Social Media Shape Collective Action*. Princeton University Press.
- Mason, J. (2002). *Qualitative Researching* (2nd ed.). Sage.
- Mauthner, N. S., Parry, O., & Backett-Milburn, K. (1998). The data are out there, or are they? Implications for archiving and revisiting qualitative data. *Sociology*, 32(4), 733–745. <https://doi.org/10.1177/0038038598032004006>
- Marsh, L., & Onof, C. (2008). Stigmergic epistemology, stigmergic cognition. *Cognitive Systems Research*, 9(1–2), 136–149. <https://doi.org/10.1016/j.cogsys.2007.06.009>
- Papapavlou, M. (2015). *The Experience of Syntagma Square. Music, Emotions and New Social Movements*. The Colleagues Editions. [In Greek].
- Pechtelidis, Y. (2011). December uprising 2008: Universality and particularity in young people’s discourse. *Journal of Youth Studies*, 14(4), 449–462.
- Pechtelidis, Y. (2013). Occupying School Buildings in Greece of the Memorandum: The Discursive Formations Around Pupils’ Political Activism. *Research Network for the Analysis of Political Discourse. Working Papers*, 3, 1-33 Available at <http://discourse-analysis.gr/wp-content/uploads/2013/09/pechtelidis.pdf>
- Pechtelidis, Y. (2015). *Sociology of Childhood*. Zografou: SEAB. Available at <https://repository.kallipos.gr/handle/11419/4744> [In Greek].

- Pechtelidis, Y. (2016). Occupying school buildings in the Greece of the memorandum: Discursive formations around pupils' political activism. In P. Kelly & J. Kamp (Eds.), *Youth, Space and Time: Agoras and Chronotopes in the Global City* (pp. 267–292). Brill.
- Pechtelidis, Y. (2018). Heteropolitical Pedagogies: Citizenship and Childhood—Commoning Education in Contemporary Greece. In C. Baraldi & T. Cockburn (Eds.), *Theorising childhood: Citizenship, rights and participation* (pp. 215–237). Springer.
- Peirce, C. S. (1931–1958). *Collected papers of Charles Sanders Peirce* (C. Hartshorne, P. Weiss, & A. W. Burks, Eds.; Vols. 1–8).
- Prentoulis, M. & Kyriakidou, M. (2019). Media and collective action in Greece: From indignation to solidarity. *International Journal of Communication*, 13, 22–40. <https://ueaeprints.uea.ac.uk/id/eprint/68883>
- Sandoval-Almazan, R & Gil-Garcia, J.R. (2014). Towards cyberactivism 2.0? Understanding the use of social media and other information technologies for political activism and social movements. *Government Information Quarterly* 31, 365–378.
- Susi, T. (2016). Social cognition, artefacts, and stigmergy revisited: Concepts of coordination. *Cognitive Systems Research*, 38, 41–49.
- Theocharis, Y. (2011). Young people, political participation and online postmaterialism in Greece. *New Media & Society*, 13(2), 203–223.
- Theocharis, Y. (2016). Every Crisis is a Digital Opportunity: The Aganaktismenoi Movement's Use of Social Media and the Emergence of Networked Solidarity in Greece. In A. Bruns, E. Skogerbø, C. Christensen, A.O. Larsson & E. Gunn (eds.), *The Routledge companion to social media and politics*, (pp. 184–197). Routledge
- Theocharis, Y., Lowe, W., van Deth, J. W. & García-Albacete G. (2015). Using Twitter to mobilize protest action: online mobilization patterns and action repertoires in the Occupy Wall Street, Indignados, and Aganaktismenoi movements. *Information, Communication & Society*, 18(2), 202–220.
- Tsalikoglou, F. (2009). December's Unquiet Dreams. In S. Economides & V. Monastiriotis (eds) *The Return of Street Politics? Essays on the December Riots in Greece* (pp. 63–67). London: The Hellenic Observatory, LSE. Available at <https://www.lse.ac.uk/Hellenic-Observatory/Assets/Documents/Publications/Books/2013-2008/Greek-Riots.pdf>
- Vogl, S., Zartler, U., Schmidt, E. M., & Rieder, I. (2018). Developing an analytical framework for multiple perspective, qualitative longitudinal interviews (MPQLI). *International Journal of Social Research Methodology*, 21(2), 177–190. <https://doi.org/10.1080/13645579.2017.1345149>
- Wright, S., Graham, T., and Jackson, D. (2018). Media, and Everyday Political Talk. In A. Bruns, E. Skogerbø, C. Christensen, A.O. Larsson & E. Gunn (eds.), *The Routledge companion to social media and politics*, (pp. 74–88). London: Routledge
- Wyness, M. (2006). Children, young people and civic participation: regulation and local diversity, *Educational Review*, 58(2), 209–218.
- Wyness, M. (2018). Children's participation: definitions, narratives and disputes. In C. Baraldi & T. Cockburn (eds.) *Theorising Childhood: Citizenship, Rights and Participation*, (pp. 53–72). Cham: Springer International Publishing
- Yiakoumaki, V., (2011). Contesting Histories of Greek Student Protest, or the Debate on 'Open' and 'Closed' universities. *Cultural Anthropology (Journal of the Society for Cultural Anthropology), Virtual Issue (October)*. Available online www.culanth.org/?q=node/441 <https://culanth.org/fieldsights/contesting-histories-of-greek-student-protest-or-the-debate-on-open-and-closed-universities>



Σύντομο Βιογραφικό Σημείωμα

Η **Μαρία Γ. Κοκολάκη** είναι πτυχιούχος του Τμήματος Φιλολογίας της Φιλοσοφικής Σχολής του Πανεπιστημίου Αθηνών. Ολοκλήρωσε τις μεταπτυχιακές της σπουδές στην Κοινωνική Ανθρωπολογία στο Πανεπιστήμιο του Κεντ, όπου εκπόνησε και τη διδακτορική της διατριβή στην Ανθρωπολογία. Έχει, επίσης, παρακολουθήσει μεταπτυχιακές σπουδές στη Λαογραφία. Μετά την ολοκλήρωση του διδακτορικού της, ορίστηκε Honorary Research Associate στη Σχολή Ανθρωπολογίας του Πανεπιστημίου του Κεντ (2011-2014). Έχει διδάξει ως αναπληρώτρια και μόνιμη εκπαιδευτικός σε σχολεία δευτεροβάθμιας εκπαίδευσης. Υπηρέτησε με απόσπαση στο Ινστιτούτο Εκπαιδευτικής Πολιτικής από το 2011 ως το 2017. Από το 2014 ήταν εξωτερική συνεργάτιδα του Κέντρου Κοινωνικής Ανθρωπολογίας και Υπολογιστών (CSAC) των ερευνητικών κέντρων «HRAF Advanced Research Centres (EU)». Από το 2020 υπηρετεί ως ΕΔΙΠ στο Παιδαγωγικό Τμήμα Δημοτικής Εκπαίδευσης του ΕΚΠΑ με γνωστικό αντικείμενο «Ανθρωπολογία της Εκπαίδευσης: εκπαιδευτικές και διδακτικές προσεγγίσεις». Είναι συγγραφέας του βιβλίου *Εξυφαίνοντας την Παράδοση. Η παραδοσιακή υφαντική ως ποιητική των γυναικών στο Επάνω Μεραμπέλλο*.



Short CV

Maria G. Kokolaki holds a B.A. in Philology from the Philosophical School of Athens, a M.A. in Social Anthropology and a PhD in Anthropology from the University of Kent at Canterbury, UK. She also attended the postgraduate specialisation programme in Greek Folklore at the Philosophical School of the Athens University. She was an Honorary Research Associate (2011-2014) at the School of Anthropology and Conservation of the University of Kent. She has worked as an educator in secondary schools. She has also worked for seven years at the Institute of Educational Policy (2011-2017). She was affiliated from 2014 as external research associate with the Centre of Social Anthropology and Computing (CSAC) of HRAF Advanced Research Centres (EU). Since 2020 she has been working as Laboratory Teaching Staff of Anthropology of Education and teaching applications in the Faculty of Primary Education of the University of Athens. She is the writer of the book *Weaving tradition. Traditional weaving as female poetics in Upper Merabello Crete*.