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Participatory appropriation as a pathway to self-regulation in academic writing: The case of three BA essay writers in literature

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Abstract: Over the years, research on writing has increasingly emphasized the value of adopting a sociocultural perspective to understand how social context and social interaction relate to writing regulation. Using the theoretical lens of *participatory appropriation*, this study investigates the self-regulatory behavior of three successful Bachelor essay writers in literature, and how the interaction with their supervisors supported students' development of writing regulation in disciplinary-relevant ways. Data was collected through in-depth qualitative interviews at three key moments in the term; Pintrich's self-regulation framework was used as coding heuristic to trace participants' self-regulation behavior over the term. Self-regulation data was cross-analyzed with data coded as participatory appropriation to identify the overlap between students' self-regulation of writing and their social experiences, especially the dialogue with their supervisors. Our results show how the supervisors acted as agents of socialization, providing frames for adoption of disciplinary-relevant ways of thinking and doing, as well as indirectly sustaining the students' motivation and re-conceptualization of the writing experience. Overall, this investigation responds to calls for inquiries of self-regulation against the backdrop of the social context in which it is embedded.

Keywords: writing supervision, disciplinary writing, writing regulation, metacognition, motivation



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1. Introduction

In an unconventional piece titled “Academic writing, I love you. Really I do”, Hayot (2014, p. 66) describes academic writing as an experience of *transformation*:

A self-chosen apprenticeship in academic prose can be transformative ... others I know and don't know, faculty and students, have been not only stymied and frustrated but also expanded, glorified, and changed by their passage through the demands and possibilities of the writerly disciplines that govern scholarship in the humanities today.

In this paper, we will describe three such experiences of personal transformation, catalyzed by writing an academic piece – a bachelor essay¹ in the humanities.

Academic writing is a pathway for the development of expertise: the acquisition of content knowledge and the unique cognitive skills required to think about and communicate this knowledge to specific readers (Berkenkotter & Huckin, 1995; Carter, Ferzli & Wiebe, 2007). Academic writing thus involves self-regulation of learning (SRL): setting goals in response to task, topic and audience, and regulating one's behavior, thought, and affect in the process of writing. The literature on the importance of self-regulation (SR) in writing development is abundant, especially in primary/secondary settings and from a cognitive and socio-cognitive standpoint, (see Graham, Gillespie & McKeown, 2013; Graham & Perin, 2007; Graham & Rijlaarsdam, 2016). However, research from a sociocultural perspective that illuminates how writing regulation develops naturalistically, in social contexts and in advanced disciplinary ways, is not as densely populated. Indeed, in their recent review of the past two decades of empirical research on writing regulation, Sala-Bubaré and Castelló (2018, p. 773) point out that an emerging challenge is to “account for regulation in situated HE [Higher Education] contexts”, together with the need for more conceptual clarity about how regulation is investigated.

This study is situated at the theoretical convergence between research on regulation of learning, and research on writing regulation adopting a sociocultural perspective. Acknowledging that “versions of cognition assumed by cognitivist approaches tend to be ‘lonely’ ones” (Nishino & Atkinson, 2015, p. 37), cognitive science and educational psychology research on self-regulation (SR) / self-regulated learning (SRL) have become more sensitive to context and social dynamics (Azevedo, 2009; Hadwin & Oshige, 2011). Recently, concepts such as socially-shared regulated learning (SSRL) and co-regulated learning (cf. Hadwin, Järvelä & Miller, 2018; Hadwin & Oshige, 2011) brought to the surface the fact that self-regulation is a socially-embedded, evolving process. This research has thus moved closer to sociocultural studies of writing regulation, which typically step away from individual cognition to favour socially-mediated processes of academic enculturation that come into play in the production of text (Prior, 2006; Prior & Bilbro, 2012). Overall, there is an evident interest in exploring

how self-regulation of academic writing develops naturalistically, and especially in connection to events of interaction and socialization. How do students self-regulate during an essay writing experience? Which experiences of social interaction do they report as meaningful and transformative for their writing regulation?

In this paper, we start from the position that SR of writing—as any other learning endeavor—is multifaceted, agentive, adaptive and socially situated (Hadwin et al., 2018). Specifically, our study includes both an analysis of individual SR of writing *and* of how this SR stems from social interaction—the interaction events that provided opportunities for transformation and development of regulatory processes. In other words, we take into account “the process by which a novice writer acquires and internalizes writing regulation skills while working with a more skilled writer” (Sala-Bubaré & Castelló, 2018, p. 759), as recounted by the students themselves. We follow three Bachelor essay writers in English literature who successfully negotiate the disciplinary rite of passage of writing a BA essay. We trace their individual SR of writing and investigate if/how engaging in interaction with their supervisor provides them with an opportunity to participate and experience writing in a disciplinary and culturally-relevant way, thus promoting their self-regulation of writing in transformative ways.

Data from in-depth qualitative interviews conducted at three points in the BA essay-writing term was analyzed through an established SR framework (Pintrich, 2000, 2004), which we used as a coding heuristic. This data was then cross-analyzed using the concept of participatory appropriation (PA) (Rogoff, 1990). Participatory appropriation, which Rogoff adopts in contrast to the notion of passive internalization, refers to the process of transformation that occurs in an individual through participation in a socially-meaningful activity (Rogoff, 2008). As such, it highlights the agentive, dynamic and ongoing quality of changes in individual cognitive development stemming from participation and interaction (Rogoff & Angelillo, 2002). PA was thus helpful to spotlight those instances in our interview data where students narrate or refer to episodes of social interaction (mostly with the supervisor), which they see as meaningful and transformative for their writing. Our approach to data analysis allowed us to highlight each participant’s unique process of self-regulation of writing, as well as identify where and how these processes were reported as being “transformed” by the students’ interaction with their supervisors.

2. Review of theories and research

Contributing new knowledge through writing is, undeniably, a challenging creative effort, especially for novice students in a discipline. The task of adapting their writing skills and content knowledge to meet the readers’ expectations can be elusive, because of the often tacit nature of writing knowledge in disciplinary communities. Elton (2010) for instance, draws on the concepts of “craftsmanship” (Sennett, 2008) and “knowing with” (Bransford & Schwartz, 1999, in Elton, 2010) to advocate investigations that appreciate the complexity of writing practices at the university level, often revolving

around perceptions of writing quality and expectations that are difficult to formulate explicitly even by the experts themselves (see also Dysthe, 2002). Furthermore, for most students, writing a Bachelor's essay is the first experience of truly independent disciplinary academic writing, which in itself requires the ability to orchestrate a range of knowledge types across tasks and genres, critical reflection, and creativity (Johns, 2011; Tardy, 2016). This may be especially challenging in the humanities and particularly in literary criticism, where disciplinary epistemology is fluid and less encased in typical rhetorical structures (Kuteeva & Negretti, 2016): genres are centered on argumentation, disposition, and tend to shy away from schematization of form and discourse (see Carter et al., 2007; Shaw, 2009). It is thus important to understand how social experiences, and especially the interaction with an expert, facilitate these novices' regulation of writing.

Our study gains relief against this backdrop, but a clarification of the conceptual basis of our study is in order, especially since the theoretical panorama of self-regulated learning (SR/SRL) and writing regulation is in itself multifaceted and not always consistent in its definitions (Sala-Bubaré & Castelló, 2018).

Although theoretical models of SRL have not always aligned (see Winne, 1995; and Zimmerman, 1995), theories overlap on the fact that SRL entails the ability to engage in actions, thoughts and feelings towards the achievement of learning goals (Zimmerman, 1989, 2000). Traditionally, the focus of cognitive research has been on individual processes, but, in more recent years, key shifts have occurred in the research on SR/SRL, captured by the emergence of concepts such as co-regulation and socially-shared regulation (Hadwin et al., 2018; Hadwin & Oshige, 2011; Järvelä & Hadwin, 2013; Molenaar & Järvelä, 2014). Targets of analysis are not only cognitive aspects of learning, but also interactions, contextual affordances, affective dimensions, and perceptions. These conceptual shifts recognize regulation as an ongoing, active and dynamic process of development that is both individual and socially situated. Specifically, research on co-regulation—defined as an “emergent process in interaction” (Hadwin & Oshige, 2011, p. 248)—has illuminated how interaction, in episodes of co-regulation where teacher and learner exchange ideas, negotiate thinking and make decisions together, is crucial in the development of individual, autonomous self-regulation. Our study can be thus framed as including aspects of co-regulation (Hadwin et al., 2018), insofar as we see interaction as a key site for ongoing individual development and appropriation of regulatory processes.

2.1 Cognitive and socio-cognitive research on writing regulation and academic writing

Theories of SR/SRL are at the core of writing research from a cognitive and socio-cognitive tradition—which takes the lion's share in terms of writing regulation research. Here we refer to Sala-Bubaré and Castelló's (2018) meta-analysis of writing regulation research in higher education (HE). As they explain, research in the cognitive paradigm poses writing regulation primarily as a cognitive process of rhetorical problem-solving,

(Bereiter & Scardamalia, 1987; Flower & Hayes, 1980), and typically studies have focused on writing processes in relation to various cognitive dimensions. Often this translated in experimental designs with non-authentic tasks, and/or in connection to measures of writing quality (e.g. Breetvelt, van den Bergh & Rijlaarsdam, 1994; Ong, 2014; Van den Bergh & Rijlaarsdam, 2001). Some of these studies have concerned themselves with interventions and their effects, and on this point, they overlap with most of the research from a socio-cognitive perspective.

Socio-cognitive research has typically converged on the various effects of interventions aiming to improve learners' writing strategies (Graham et al., 2013; Graham & Perin, 2007; MacArthur, Philippakos & Iannetta, 2015; Rogers & Graham, 2008). Another strong focus of this research are the students' beliefs and perceptions about their self-regulation, the task, and metacognition (cf. Sala-Bubaré & Castelló, 2018). Especially in second-language writing and in academic writing, the cognitive/socio-cognitive focus has been prevalent, addressing for instance areas such as task perceptions and mental perceptions of audience and purpose in connection to writing strategies and achievement, writing processes, metacognitive skills, and metacognitive aspects tied to genre awareness and rhetorical effectiveness (Linares Cáliz, 2015; Negretti & Kuteeva, 2011; Negretti, 2017; Schoonen, van Gelderen, Stoel, Hulstijn & Gloppe, 2011; Wischgoll, 2016; Yeh, 2015). In a longitudinal investigation involving foreign language writers attending an English for Academic Purposes (EAP) course, Nicolás-Conesa, Roca de Larios and Coyle (2014) show that how students conceptualize the activity of writing itself—a product-oriented effort vs. a recursive process of problem-solving—leads in the latter case to the development of increasingly complex task perceptions and goals for writing, impacting students' ability to self-regulate, as well as their motivation and their writing performance. Correspondingly, studies with L1 novice composition writers and L2 graduate writers emphasize that rhetorical and audience-oriented task perceptions translate into qualitative changes in students' self-regulation strategies for writing, and stress the importance of scaffolding metacognitive skills together with genre knowledge development (Negretti, 2012; Negretti & McGrath, 2018). Socio-cognitive research thus recognizes regulation as comprising cognitive, affective, and social aspects, which learners monitor to reach a communicative goal, and suggests a strong link between individual SR and social dimensions of writing: "all aspects of self-regulation, including motivational regulation, are developed through social and cultural interaction/influences" (Wolters & Mueller, 2010, p. 633, quoted in Teng & Zhang, 2016, p. 21).

Nonetheless, socio-cognitive research on writing regulation has focused primarily on individuals as the unit of analysis and the social, interactive and dynamic quality of interplay between individual SR is not explored enough (Hadwin & Oshige, 2011). In this study we take a step further towards sociocultural perspectives, and incorporate an analysis of how the interaction with the supervisor may have mediated and transformed the participants' own regulation of writing.

2.2 Sociocultural research on writing regulation

As mentioned above, the recent research on co-regulation (Hadwin et al., 2018; Järvela & Hadwin, 2013) finds several points of convergence with research on writing regulation that adopts a sociocultural perspective. As stressed by Dysthe (2002, p. 494), outside socioculturally oriented research “there is still a strong tendency to view a student’s success or failure in writing a thesis as a question of individual writing skills”. A sociocultural outlook is not only desirable, but necessary to understand how social aspects of the writing experience influence students’ ability to self-regulate as they interact with and appropriate the *modus cogitandi* of an academic community.

Much of the research in this tradition conceptualizes writing regulation as a process of social mediation, “intrinsically related to the processes of internalization of cultural activities, discourses and actions” (Sala-Bubaré & Castelló, 2018, p. 769). Sociocultural studies of writing regulation typically foreground a complexity of *social practices* to explain writing development and expand their concern beyond the individual learner to embrace various layers, often by looking at the whole writing setting (Beach, Newell & VanDerHeide, 2015; Prior, 2006; Prior & Bilbro, 2012). More specifically, these studies have shown how students, both undergraduate and graduate, are challenged by the more complex aspects of text production in academia, due to the combination of its situatedness and its cyclical nature (Castelló, Iñesta & Corcelles, 2013). In terms of academic writing regulation, students’ hardest challenges include the need to establish an authorial identity in the text—strategizing aspects of voice and stance, and the need to reconceptualize the text as an activity or artifact, rather than a product/object (Castelló & Iñesta, 2012).

Social interaction, especially with a supervisor, helps students tackle these complex aspects of disciplinary writing. Studies on academic writing regulation have illuminated the role played by the supervisor/tutor/teacher as a mediator of disciplinary ways of producing knowledge, producing arguments, and engaging in the process of writing (e.g. Castelló & Iñesta, 2012; Castelló et al., 2013; Eriksson & Mäkitalo, 2015; Lee & Schallert, 2008; Nishino & Atkinson, 2015). Supervisory meetings have shown to be opportunities for enculturation (Björkman, 2017), and the dialogue between a supervisor and a student, centered on writing, is the occasion for co-construction of knowledge, transformation, and the internalization of ways to “think and write in the discipline of specialization where the work is situated” (Dysthe, 2002, p. 499). Similarly, Eriksson and Mäkitalo (2015) identify planning and conceptualization of a text in a disciplinary-relevant way as especially difficult for undergraduate students. They show that supervisory dialogues help students to see the text as a work in progress and a thinking tool (process rather than product), and to redefine and strategize the organization of the text over time. In another study with L2 undergraduate students, Lee and Schallert (2008) highlight another challenging aspect of academic writing regulation: that of revision. In-depth, transformative revisions are especially difficult for students to strategize (see also Feltham & Sharen, 2015, with L1 college writers), and how students engage with teacher feedback is key for meaningful revisions. In sum,

social interaction, especially with a supervisor, seems to be where complex writing regulation skills are developed. Thus, in this paper we take a particular interest in the interaction between a learner and an expert representative of an academic community of practice, with the process of text production at the center of this experience.

2.3 Participatory appropriation

In light of our focus on interaction as a site for development of writing regulation, the concept of participatory appropriation (Rogoff, 1990), provides a useful tool to explore this transformative experience. Participatory appropriation (PA) is part of the triadic framework proposed by Rogoff (1990, 2008, summarized in Table 1) to explain situated practices of learning, anchored in the Vygotskian view of social learning in which development stems from participation into relevant social practices.

Table 1. Rogoff's (1990) framework of social learning.

Participatory Appropriation	Guided Participation	Apprenticeship
Spotlights individual cognitive changes, and aims to illuminate how these changes stem from interaction and participation in meaningful practices.	Frames <i>processes and systems of involvement</i> of participants in culturally relevant activities, both in interaction and side-by-side: <i>how directions are given and how participation is organized.</i>	Focuses on the plane of <i>community activity</i> , and spotlights the culturally organized activities, and their <i>relations to the practices and institutions of the community</i> in which activities occur.

It should be noted that these three complementary notions refer to different angles from which the same phenomenon can be investigated, rather than three separate concepts—the only difference lies in the focus of the investigation. Because our interest is individual development as stemming from social interaction, we chose participatory appropriation (PA) as the most relevant concept.

Through this concept, inspired by Bakhtin's (1981) notion of appropriation of words, Rogoff seeks to contrast the view of internalization as a passive process of transportation from the outside to the inside, to highlight individual development as agentive and socially embedded: "In my view, appropriation *is* a process of transformation ... I use the term 'appropriation' to refer to the change resulting from a person's *own participation* in an activity, not his or her internalization of some external event or technique" (Rogoff, 2008, p. 67, italics in the original). Two key aspects of Rogoff's concept of PA are significant for the purposes of this investigation. First of all, participatory appropriation pays attention not only to *what* changes in the individual, but also *how and why*. Secondly, the notion of appropriation implies an *agentive and creative* negotiation of ways of thinking (and writing) experienced through social

interaction, an aspect emphasized also in sociocultural research on the role of dialogue in writing supervision (Dysthe, 2002). Hence, through participation in a socially relevant activity, and especially through dialogue, learners discover, talk about, question, appropriate and transform ways of thinking and regulating writing. Since our study reports interview data, the concept of PA thus allows us to spotlight those instances in the data where appropriation is shown: when participants report, engage with, and transform into new thoughts and questions the dialogue and the episodes of social interaction that they see as meaningful for their writing regulation.

In this landscape, our study positions itself in key ways. First, we adopt a longitudinal approach to the study of SR in writing, in a naturalistic setting and with an authentic writing task—an approach typically prevalent in sociocultural research (Sala-Bubaré & Castelló, 2018). Conceptually, our approach also responds to the need to pay attention to regulatory events as occurring in a flow (Molenaar & Järvela, 2014), which entails mapping SR across the learning process as a whole. Second, following Hadwin and colleagues (2018), we see regulation as a multifaceted phenomenon, comprising regulation of motivation, behavior, and agency on the surrounding context. Because of this perspective, we adopted as coding heuristic a theoretical model or SRL that allows for a relatively macro-description of regulatory actions and cycles across the learning process, and we used Pintrich's (2000, 2004) framework to code the regulation of writing described in the participants' interviews. Although this framework is not specific to writing (or learning to write), it is an established model of SRL, and has the advantage of comprising a description of all the phases and areas of self-regulation, rather than delving into of micro-level cognitive processes. This comprehensiveness and breadth, we reasoned, should also be applicable to learning to write, and should allow us to capture the development of writing regulation through a theoretically-sound, systematic approach that can be applied to learning situations different from the one described here. Finally, as we have seen, we agree that writing regulation, as other forms of SR, is influenced, situated, and *appropriated through participation* (Järvela & Hadwin, 2013, p. 26, emphasis added). In this study of BA essay writers, we thus adopt the concept of participatory appropriation (PA) to identify in the data the instances where interactions with the supervisors are reported by the students as sites of meaningful writing regulation, perceived opportunities for negotiation of thinking, and personal development. We aim to find answers to these questions:

- How do three successful BA essay writers in literature self-regulate during the process of writing their essay?
- How does participatory appropriation (primarily in the form of interaction with a supervisor) explain and influence these students' self-regulation of writing?

3. Method

3.1 Context

This study was conducted at a large, research-based university in Sweden. The participants were recruited from a group of students in their final term of the Bachelor's program in English Language and Literature; all three participants were writing a BA essay in English Literature. In the final term of this program, students write their BA essay over the period of one term (ca. 5 months): they attend a series of two-hour writing workshops on various topics, and have individual tutorials with a supervisor (15 hours of supervision time), who reads their drafts, gives them feedback and discusses their essay with them. The supervisors are researchers and teachers at the department, who are experts in a variety of topics related to English linguistics, English literature, and literary criticism. The students are assigned supervisors based on the topic they are interested in.

The students' BA essay must be based on "an independent study of a limited problem in the field of English Linguistics or Literature" (quote from the essay instructions). The students, in consultation with their supervisor, narrow down the topic of their essay themselves. The BA essay is a longer piece of writing than they have produced thus far in the program: it is supposed to be between 6000 and 8000 words long. The essay in English literature must refer to primary sources (the students' chosen work(s) of literature) and secondary sources (literary criticism and theory). The students are given grading criteria and detailed written instructions for the BA essay at the beginning of the term. Important criteria for the assessment of the essay are the originality of the topic, its contextualization within the relevant knowledge in the field, and the students' ability to work independently. Once their essay is finished, the students defend it in a public seminar, and are examined by another faculty member in the department. The grade is set by the examiner in consultation with the supervisor.

3.2 Participants

The participants were three BA students in English literature in the final term of their program, writing their BA essay on different topics and works of literature written in English. The supervisors assigned to them were experts in these particular topics or works of literature.

The participants were given fictional names: Kurt, Jane, and Virginia. All three students finished writing their BA essay within one term and received good grades (A or B). Before the first interview, all three students had meetings with their supervisors, although both Virginia and Kurt had their meeting earlier in the term than Jane. Jane's supervisory meeting was thus a more preliminary meeting where her topic was discussed, whereas Kurt's and Virginia's meetings were more in-depth. Informed consent was obtained before the study, stressing that participation was voluntary, anonymous and would not affect grades, and that the students had the right to withdraw anytime.

3.3 Interviews

Each student was interviewed at three points during the term: at the beginning of the writing process, half-way through after sending the first draft to their supervisor, and after submission of the final essay. Both researchers were present at all the interviews, which were conducted in English. A semi-structured interview protocol (see Appendix) was adopted, with follow-up questions for clarification and elaboration as needed. The protocol questions prompted students to discuss their ideas, goals for writing, writing strategies and difficulties, as well as their opinions on the writing they had produced. To stimulate recall (Gass & Mackey, 2000), we asked the students to bring a printed copy of their current text, so that they could look at their work during the interview. Interviews were recorded and transcribed. Identifying information was then removed, such as supervisor names, titles of novels and author names. False starts, minor language errors and repetitions have been removed from the quotes reported here.

3.4 Data analysis

Interview transcriptions were analyzed with the support of nVivo 11 at every stage: to code our data, to calculate inter-rater reliability, to count instances and proportions of particular categories, and to extract representative excerpts from the coded data.

3.4.1 Categories

To code instances of self-regulation, Pintrich's (2000, 2004) framework of self-regulated learning was used. Various frameworks for self-regulated learning exist (c.f. Zimmerman, 2000; Winne, 1995). In our view, Pintrich's framework was the most adaptable as a coding heuristic for the purposes of our study, which aimed to capture all aspects of SRL—cognition, motivation, behavior, and context (intended as monitoring, control and evaluation of a learner's perceptions of the contextually-determined task conditions and the affordances of the context of learning). In addition, this framework also focuses on different phases of self-regulation, and as such provided a robust heuristic for a systematic analysis of data elicited in a naturalistic setting. As Pintrich points out (2004, p. 391), while a focus on the "very microlevel grain size in terms of the actual cognitive events of tactics used by students" may be better elicited through other instruments and explained through SRL models that sustain this research focus, a broader interest on the "general aptitude or propensities to use different self-regulatory processes" may be captured using self-report instruments, such as our in-depth interviews combined with stimulated recall techniques.

This model posits four *areas* of self-regulation: (1) cognition, (2) motivation, (3) behavior, and (4) context (see Table 2). These four areas of self-regulation also have four *phases*: (1) forethought, planning, and activation; (2) monitoring; (3) control, and (4) reaction and reflection. These phases do not necessarily occur one after the other, and can, in fact, occur simultaneously. Each area also includes a variety of strategies,

Table 2. Phases and areas for self-regulated learning.

Phases and relevant scales	Areas for regulation			
	Cognition	Motivation/Affect	Behavior	Choice
Phase 1 Forethought, planning and activation	Target goal setting Prior content knowledge activation Metacognitive knowledge activation	Goal orientation adoption Efficacy judgements Perceptions of task difficulty Task value activation Interest activation	Time and effort planning Planning for self- observations of behavior	Perceptions of behavior
Phase 2 Monitoring	Metacognitive awareness and monitoring of cognition	Awareness and monitoring of motivation and affect	Awareness and monitoring of effort, time use, need for help Self-observation of behavior	Monitoring and awareness
Phase 3 Control	Selection and adaptation of cognitive strategies for learning, thinking	Selection and adaptation of strategies for managing, motivation, and affect	Increase/decrease effort Persist, give up Help-seeking behavior	Control and choice
Phase 4 Reaction and reflection	Cognitive judgments Attributions	Affective reactions Attributions	Choice behavior	Evaluation and reflection

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which for the sake of brevity we do not summarize here: for instance, the “forethought” phase of cognition may include SR strategies such as setting goals and activating metacognitive knowledge of various aspects—task perceptions, subject-matter knowledge, (writing) strategies, previous experiences and the self—in a more or less declarative, procedural or conditional way (when and why) (see Pintrich, 2000, p. 458).

The interview data was coded for areas and phases of self-regulation, line by line. Due to the fact that some areas and phases can overlap, some categories overlapped (i.e. parts of text were marked as two areas or two phases). As Pintrich (2000) himself underscores, the boundaries between these areas may be fuzzy: phases and interactions among different components may occur simultaneously (p. 455). For example, it is not always straightforward to distinguish between behavior and cognition. This fuzziness is therefore inherent in the phenomenon under study, and is indeed representative of the fact that SR is cyclical and multifaceted, with thought, behavior and motivations coming under scrutiny at the same time. In terms of data analysis, this required us to repeatedly consult and discuss Pintrich’s descriptions of each area and phase (2000, 2004), run a coding pilot with inter-rater reliability, and engage in several rounds of coding verification and comparison to ensure systematicity and trustworthiness (Creswell, 2007). The repeated verification of data coding allowed us to multi-layer the coding of the students’ comments (areas and phases).

After coding for SR, we coded for instances of participatory appropriation (Rogoff, 1990, 2008), thus adding another layer of coding. Comments were coded as PA whenever participants explicitly mentioned their supervisors or interaction with them (or more seldom, other peers or teachers). This interaction could be real or imaginary. For example, when talking about decisions they made while writing, students would sometimes describe an imaginary dialogue with their supervisor (“I guess my supervisor may say...”), which helped them make these decisions. It should be noted that in nVivo both SR and PA were set as independent categories (nodes) applied to the same data: to answer RQ2, we thus focused on the overlap between these categories.

3.4.2 Procedure

Data analysis required several stages. In the first stage, we trained ourselves by coding data for one interview together. Then, one other interview from the same student was coded separately, to verify our coding reliability. The inter-rater agreement was calculated for all individual categories and it was found to be fairly high; Cohen’s kappa coefficient was between .52 and 1.00. The lowest agreement was found in the area “Cognition: Reaction and reflection”, where the agreement was only moderate. However, the rest of the categories all had substantial or higher agreement, varying between 82% and 100% (mean: 95%).

After discussing problematic aspects of coding and revisiting the theoretical framework, we moved to the second stage of analysis, and coded the rest of the data

together, checking several times for consistency and accuracy. After this stage, we both returned to the literature (Pintrich, 2000) and independently verified the coding, taking notes about instances that could need re-categorization. These few instances were then discussed once more, and re-coded as appropriate.

This process was time-consuming but necessary to ensure systematicity and, particularly, trustworthiness in our coding. We used the function of matrix query in nVivo (RQ1) to see the overall pattern of how the data were coded, such as the proportion of interview data covered by the various codes for each student. This provided us with a basis to identify the individual SR process in each of our students over the course of the three interviews—their unique trajectories of self-regulation—and enabled us to compare the students. Matrix query analysis was used to identify the data that was coded both under participatory appropriation and the four areas and four phases of self-regulation, and determine what proportion of data was covered by both these categories (RQ2). Finally, we extracted examples for each student/interview to include in our results. This final stage was also an opportunity for a final “quality check” of our interpretation.

4. Findings

This section provides the reader with both quantitative and qualitative data, giving a general overview of the participants’ self-regulation (SR) of writing over time, as well as participatory appropriation (PA) data overlapping with self-regulation. A macro overview of the data coded as SR across the three participants over time can be found in Table 3. Table 4 offers an overall picture of how data coded as PA overlapped with data coded as SR.

Table 3. An overview of the students’ self-regulation.

		Kurt				Jane				Virginia			
		Cog	Mot	Beh	Con	Cog	Mot	Beh	Con	Cog	Mot	Beh	Con
Interv 1	%	64.8	1.6	5	9.8	43.7	6.2	10.8	21.4	41.1	0	7.6	2.9
	(nr)	(42)	(2)	(8)	(8)	(19)	(4)	(7)	(11)	(29)	(0)	(9)	(4)
Interv 2	%	43.4	0	14	19.3	54.4	1.5	7.3	10.6	44.8	0.4	9.6	8.6
	(nr)	(20)	(0)	(9)	(8)	(44)	(5)	(11)	(16)	(54)	(1)	(16)	(18)
Interv 3	%	46.5	0	12.3	19.7	58.8	1.6	3.2	11.9	52.1	2.6	0.8	3.9
	(nr)	(7)	(0)	(3)	(3)	(24)	(3)	(5)	(10)	(71)	(5)	(2)	(4)

Note. Cog: Cognition. Mot: Motivation. Beh: Behavior. Con: Context. Numbers in parentheses indicate how many instances of the code were identified in the data source (e.g. Interview 1), and percentages indicate the proportion of the coded data in relation to the data source.

First of all, Table 3 shows that the category of SR of cognition seems to cover most of the data for all three participants (percentages ranging from 41.1% to 64.8%). This is perhaps not surprising, considering that we were asking them to think about their

writing. It is notable that all three students—undoubtedly also as a result of the interview setting—seemed metacognitive about their writing. Metacognition in relation to writing can be defined as “a generic concept that refers to both knowledge and strategies that the writer uses to manage his/her cognitive processes during writing” (Escorcia, Passerault, Ros & Pylouster, 2017, p. 235). Thus, students’ comments indicate metacognition insofar as they show awareness of monitoring and evaluation of their subject knowledge, their writing strategies, their argumentative choices/dilemmas, and their overall goals and specific aims for the essay, as in the example below:

- (1) The first story... it’s about... I have discussed this aspect of the story so far and I might have to cut down a few things I realize now, for example not retelling the plot and stuff like that. [Kurt browses through his text] And then uhm... I am not sure whether I am going to weave them together... and then it might make me have to go back to the introduction and fiddle with the thesis little bit as well. (Kurt)

This kind of ‘think-aloud’ reflection was elicited in all three participants’ interviews, but particularly in Kurt’s initial interview (as shown in Table 3).

The second general aspect worth pointing out in Table 3 is that very little data was coded as SR of motivation (from 0% to 6.2%). The few instances coded under this category were explicit self-efficacy statements about a particular aspect of text composition, rather than the task as a whole—for instance, providing a convincing argument for a specific idea with the support of secondary sources—and could be categorized as Ease of Learning (EOL) assessments of specific aims (see Pintrich, 2000, p. 462). It should be noted, however, that all three students expressed a strong personal interest in their primary source material, which may have provided intrinsic motivation.

In terms of SR of behavior (from 0.8% to 14%), the instances coded referred to time management and time planning strategies (when and how to complete certain parts of the text, time needed) and were for the most part help-seeking strategies: the need to get in touch with the supervisor or to wait for feedback to move further. In a couple of occasions, SR of behavior referred to organization of physical space (Jane), but coding these instances was not always straightforward because they were often closely followed by SR of context (monitoring deadlines, requirements). Most of the instances coded under SR of context occurred towards the end of the term and were instances of evaluation of the BA program and its organization (reaction and reflection), including the seminars and their content, the sequence of activities, and the other learning affordances offered by the program.

Our second research question aimed to understand the role that the participatory appropriation experience seemed to have in the students’ self-regulation. As described in the method section, we coded as PA all the instances in the interviews where students explicitly mentioned dialogues or interactions with their supervisors or, at times, instructors of seminars and peers. We aimed to investigate how our participants perceived and made use of these interactions, real or imaginary, to self-regulate their

writing—in other words, how these dialogues could be instances of co-regulation, and how the students themselves seemed to appropriate and transform these co-regulatory events into individual ways of regulating their writing, as in the example below:

- (2) [Supervisor] asked about “how will you structure the essay, like how will you write about the two books”. I tried to think of a way ... I’m not sure, I don’t think it really holds up. That’s why I kept the way like reading of (the book) in different kind of spaces and then took out the things that were not about those specific things. (Virginia)

Overall, Table 4 shows that, with some variation across the three participants, the percentage of data coded as both SR and PA ranged between around 8% to 35% (a further breakdown across the areas and phases is available in Tables S1, S2 and S3, in the Appendix). As we will see in more detail in the following sections for each interview, it was not so much the extent but rather the quality of the data coded as PA that was crucial for the students. As we explained, we used the concept of PA to identify in the interview data evidence of the students’ *appropriation* of ideas, thoughts and strategies stemming from their participation in social activities, especially in the dialogue with the supervisors. As the quote above shows, these episodes of interaction are not just recounted, but engaged with, reasoned about, and effectively transformed by the students into new regulatory strategies. Thus, the analysis of the SR/PA overlap allowed us to put the finger on *what* the students say about this interaction and the transformative quality they assign to it, which is more revealing than *how often* they mention it in their interviews (indicated by the percentages of overlap). Overall, the dialogue with the supervisor seemed to provide nourishing “food for thought” to the students at key moments of the writing process, who in their comments often evoked this dialogue to monitor and evaluate task perceptions, goals, content knowledge, ideas, arguments, and strategies for regulating and evaluating their writing. At times, the supervisor was also invoked in an imaginary way, especially by Kurt, as a way to think further about the possible options for future directions of his essay.

Table 4. An overview of the students’ participatory appropriation + SR.

		Kurt	Jane	Virginia
Interview 1	% (nr)	23.7 (19)	10.6 (10)	13.1 (11)
Interview 2	% (nr)	33.4 (17)	24.1 (22)	20 (23)
Interview 3	% (nr)	35.6 (4)	9.7 (10)	8.3 (9)

Note. The table shows the percentage of data source (e.g. Interview 1) coded both as SR and PA. Numbers in parentheses indicate how many instances of the code were identified.

We will now present a more in-depth view of both SR data and the SR/PA overlap (see Figures 1-6), with qualitative data, for all three students.

4.1 Interview 1 – Invention: Activating content knowledge and finding an “angle”

At this point in time, the students seemed engaged in what we may call *invention*: how to identify a precise topic, bring together knowledge and insights derived from reading the primary material and secondary sources, and create coherence in the argumentation. As can be seen in Figures 1 and 2, some differences among the three students can be traced already at the time of the first interview, possibly in connection

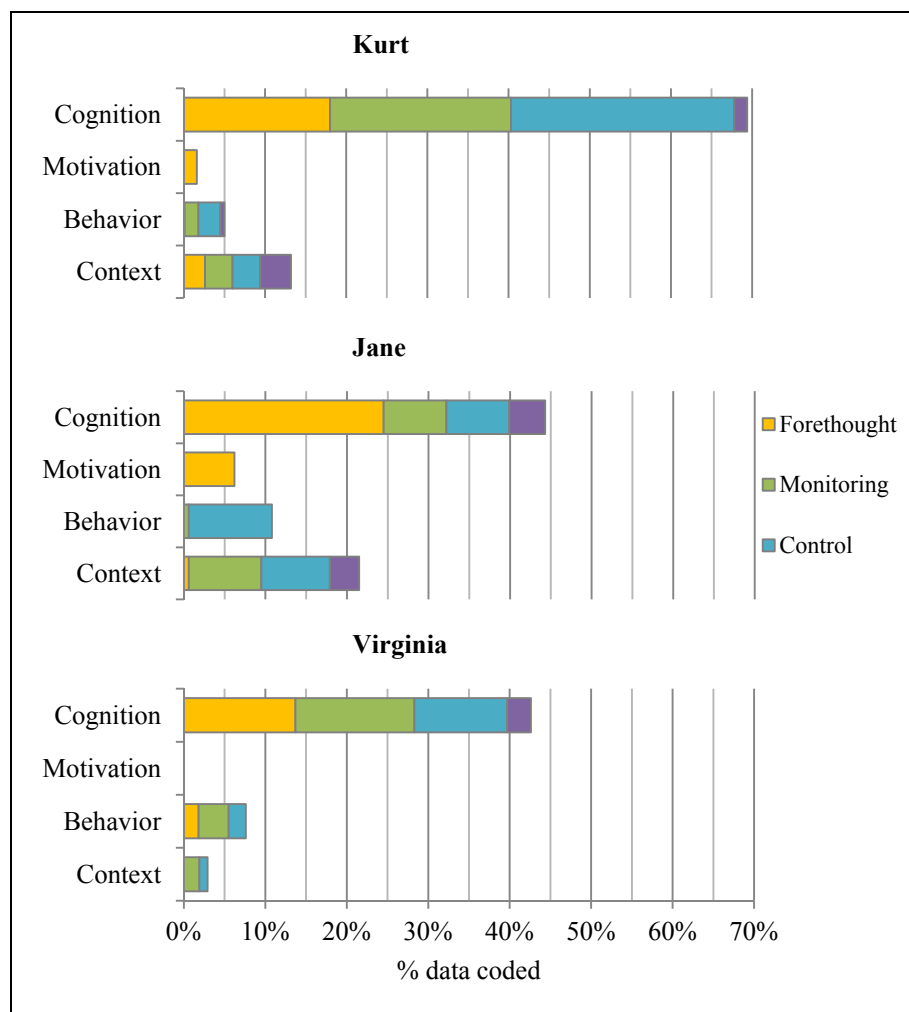


Figure 1. Phases of self-regulation in Interview 1. The percentages show what proportions of a particular area belonged to different phases.

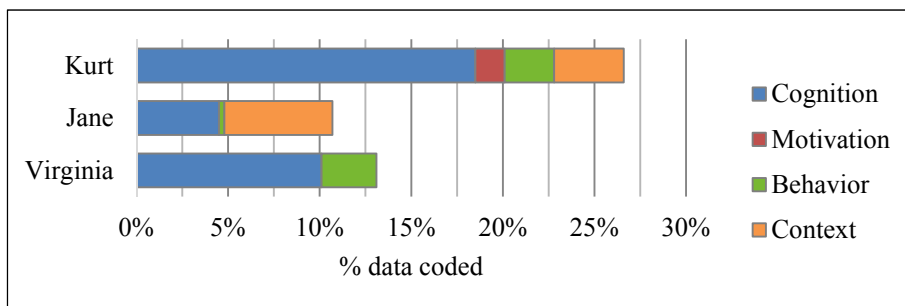


Figure 2. Participatory appropriation and areas of self-regulation in Interview 1. The percentages show what proportions of PA were coded as SR areas.

to the timing of the supervision meetings they had participated in: both Kurt and Virginia had met their supervisors earlier than Jane.

In this interview, Kurt focused primarily on cognitive and metacognitive aspects of writing, describing strategies such as activation and retelling of content knowledge, planning the essay, setting specific argumentative/rhetorical goals, metacognitively monitoring and regulating his ideas and concepts, and reflecting on/evaluating his argumentative strategies. These aspects were often related to what the supervisor said, or what the supervisor *may* say (Figure 2, cognition). Virginia, as Kurt, had already had in-depth meetings with her supervisor, so she was focused on thinking ahead and planning the essay. Jane, on the other hand, had had her first meeting with the supervisor one month into the BA essay writing term and was still very unsure about how to plan her writing. Jane's data (Table 3 and 4) refers to regulation of behavior and context, as she was trying to assess the program's requirements and possible avenues for help, discussing at length courses and teachers she talked to, deadlines, and how the events in the learning context determined her progress in the essay:

- (3) 'Cause first I wasn't very sure if ... this was my first choice. And I was planning on going with this, and working with [Teacher] ... at the beginning I wasn't very sure if I was gonna go with this or children's literature. And then it took a while until we had our first meeting with [Supervisor]. We had a preliminary meeting where we just, yea, we just discussed. It was more general kind of discussion. (Jane)

What all three students had in common in the first interview was that they all discussed aspects of writing that were coded as cognitive forethought (see Figure 1). Much of this data corresponded to activation of subject-matter knowledge. All three, for example, at length discussed their primary source material, not only in terms of plots, but also aspects such as themes of the novels, the authors, and other important aspects of these texts that they wanted to incorporate in their essays. Talking about these aspects was also a way for them to metacognitively devise and evaluate preliminary ideas for their essays, for instance:

- (4) I am looking at the political message in them ... Some of them discard the political message altogether, and two change the political message very much, so there could be some trend behind that. (Kurt)
- (5) I'm gonna look at the trauma from this community perspective ... Yeah, I'm gonna have a look at his own personal trauma. (Jane)

These quotes also lift another aspect of forethought that seemed to dominate the first interviews: goals and planning, as well as monitoring and control of these preliminary plans, and strategies to accomplish them. Specifically, all three students appeared to be struggling with the need to find an angle and/or devising a preliminary thesis statement. For instance:

- (6) I can't really boil it down to a topic, that's my problem. But it's supposed to be like privacy and the space somehow. (Virginia)
- (7) But I still felt like I was struggling to get out a proper thesis, which I still don't have. But it's kind of getting there ... Like in my head ... there's so many interesting things to write about. ... My problem is I think it's going in too many different directions. ... (Jane)

In relation to this challenge, it is notable that many of the instances coded as "cognition/forethought" overlap with data coded as PA, in which students summarize and reflect upon their discussions with supervisors. These discussions seemed to provide the students with insights for conceptually planning their texts and setting specific goals, such as the need to devise a relevant thesis statement, contextualize the topic, and focus ideas (8, 9):

- (8) We had a discussion with [Supervisor] about contextualizing, but what am I supposed to contextualize, what do I even dare to contextualize, or historicize... and it's not that I have a limited understanding of it but I have a very limited possibility of picking this up from secondary sources, because I haven't explored this before. (Kurt)
- (9) I still felt like I was struggling to get out a proper thesis, which I still don't have. But it's kind of getting there. ... [Supervisor] was like: "But, okay, I see you know a lot about this book, and you've obviously enjoyed the novel but you have to just structure your ideas". (Jane)

The comments above (6, 7, 8, 9) suggest uncertainty, but also metacognitive monitoring/regulation of emotion: students seemed to struggle in terms of where to take the text. Students' monitoring of their thinking was often followed by ideas about how to possibly push it into the right directions, and these utterances often took the form of "possibilities" or self-questions, as in:

- (10) Am I going to get into it because you know, how do I show it, how do I give a collective picture of ... and what does that mean. That could be a tricky discussion so I am not sure if I am going to go there at all. (Kurt)

On this point, as seen in (8) and (9), the interaction with the supervisor was reported as crucial by the students in overcoming their dilemmas and regulating their writing (SR/PA data). Talking to the supervisor helped not only to conceptualize the essay, but also to monitor and regulate ideas and thoughts, for instance by appropriating specific questions or aims to frame and monitor the argumentation (11, 12):

- (11) It's difficult to say. I think I'll need to talk to my supervisor. I know I am not off track completely. I am not going in the wrong direction, but it could be that I need to tweak some things, so I'm thinking she might tell me: "I have read this passage you wrote" ... I mean this is most theoretical, right, so she might say: "not all of this is needed" or "I'm not sure this is to your advantage", but we'll see. (Kurt)
- (12) I need to take those close readings and incorporate them with the theories and secondary sources and I guess like write with that in mind, make it coherent. But that's what I need to talk to my supervisor about, like what she thinks I should like go with. (Virginia)

Overall, the first interview seems to suggest that Kurt and Virginia were very metacognitive and rather critical about their writing and were somewhat insecure about how to develop it further. Virginia for instance punctuated her interview with "I guess" and "I don't know" utterances, indicating the need for guidance.

As we have seen in the above SR/PA quotes, the supervisory meeting was perceived by all three as crucial to regulate planning and invention, but also effort and behavior. This can be seen as well in the two examples below, where the students explain what they decided to work on following their meetings with the supervisors:

- (13) Yea I know this, but for the close reading thing I just look at, um, okay, I would sit down, this is a close reading, and then I'd just like do a close reading of a lot of passages. (Virginia)
- (14) And I also drafted like a preliminary bibliography. I had like about, I don't know, between 15 and 20 titles so far. But, yea, some of them I've read already and some of them I have on paper and then I have to go back and to the complicated part of it. I had to go back to the library and then to find them. (Jane)

As mentioned at the beginning of this section, individual differences could be traced across the three students. These differences seem connected both to personal preferences, the pace of their progress in the essay, and the opportunities they had of meeting their supervisor. In general, Kurt seemed to have had an earlier head start, reflected in larger portions of "cognition" data coded under monitoring and control (see

Figure 1), whereas Jane and Virginia still considered various options to further their work. SR of behavior was also slightly different across the three students: while for both Kurt and Virginia, these instances connected to help seeking and time management were few, for Jane this was more relevant at this point in time (see Figure 1).

This data suggest the importance of the social context and the elicitation of feedback for students at the beginning of the writing process, especially from the supervisor. Almost all the instances coded as evaluation in the first interviews overlapped with PA dimension, as below:

(15) I had this workshop with [Teacher], so now I see I may have gone a bit overboard with re-telling the plot. Yeah I can assume that whoever is going to read it has read it so I don't have to summarize it more than a little bit. (Kurt)

(16) And then I came to the point where I had to write the topic proposal. I did write that, but I think it was the same as the discussion, very general. (Jane)

It is also interesting that Kurt often refers to the writing experience as an explicitly collaborative or at least co-constructed effort, as denoted by his use of "we":

(17) But I want to sort of know what I'm doing while I'm doing it... I mean I sent [Supervisor] an email a week ago with a couple of questions and I think we're sort of getting there. (Kurt)

4.2 Interview 2 – Turning the corner and bringing the argument together

At the time of the second interview, all three students seemed to have turned a corner and narrowed down their topic. This sense of direction was marked by palpable enthusiasm and deep engagement with their essay, which at this point they were drafting and re-drafting. This is evident in that most of the data were coded under SR of cognition (see Figure 3).

Figure 3 shows that focus was given to monitoring and especially control of cognition for Jane and Virginia, who described strategies to direct their thoughts and give shape to their writing:

(18) That was all like notes to myself: "Go read this and go and here do this. This needs some developing". And then you write the idea that you wanna go back to and where to go back to. (Jane)

(19) [talking about her use of secondary sources] Some of them maybe had something to do with the topic but they kind of got way off topic so I just took them out completely. And I think maybe I'll use some of it later when I have more of a structure, but now I only take the things that are really on topic. (Virginia)

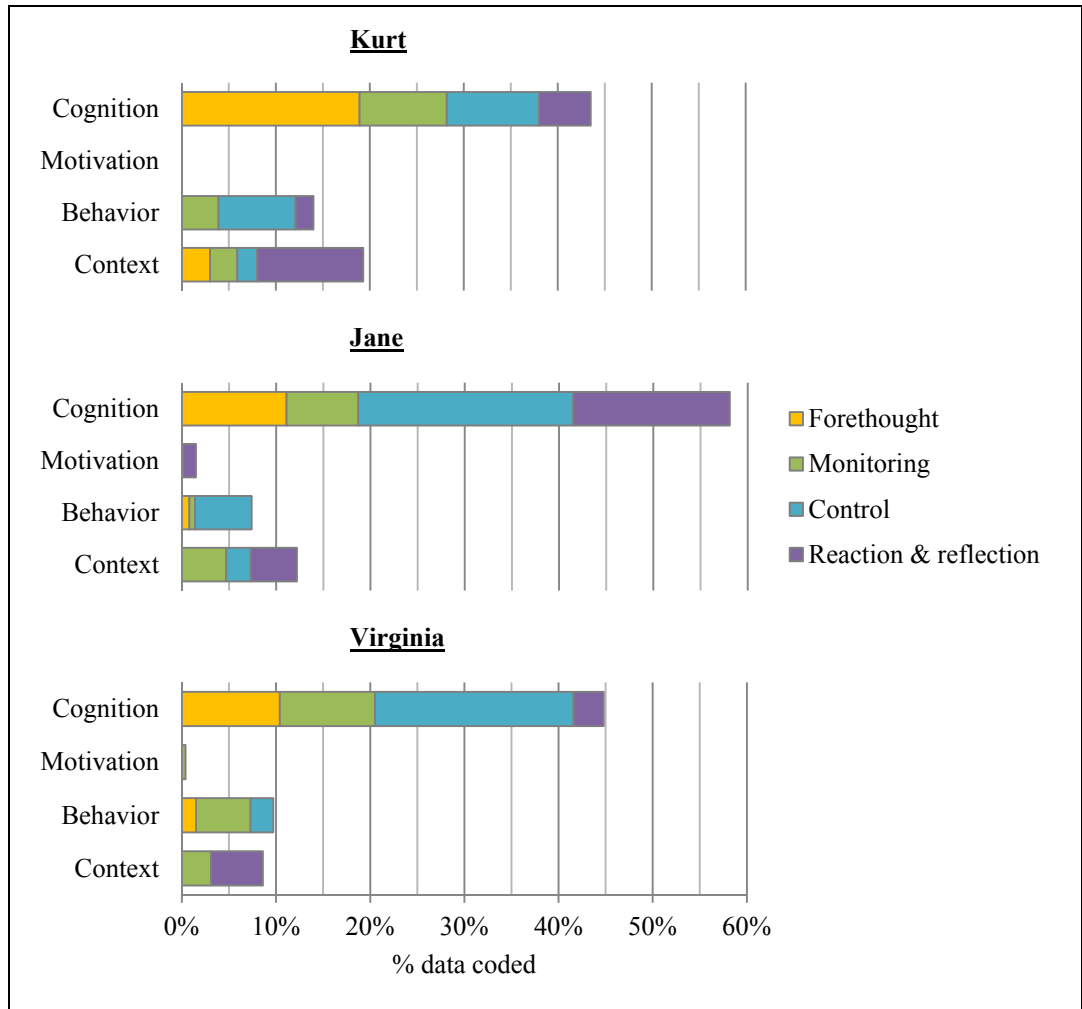


Figure 3. Phases of self-regulation in Interview 2. The percentages show what proportions of a particular area belonged to different phases.

At this point in the process, the analysis of the overlap between SR/PA data suggests that interaction with the supervisor is crucial in the students' regulation of writing, not just in terms of cognition but also in terms of behavior. Consulting the supervisor (help seeking) is brought up by all three as a strategy to overcome impasses in writing. However, the main impact still seems to occur on the cognitive plane (see Fig. 4), and the excerpts below (coded as monitoring and forethought of cognition) show how the

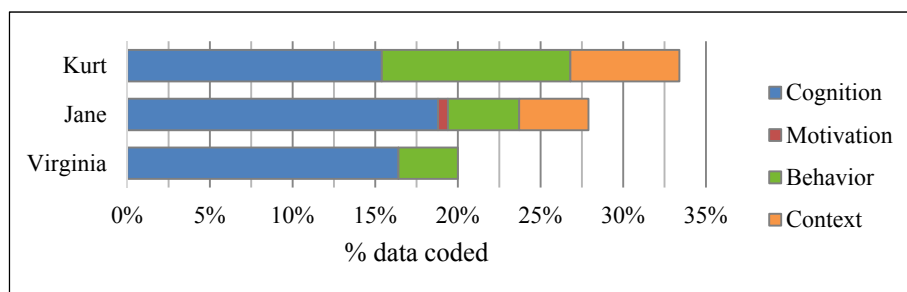


Figure 4. Participatory appropriation and areas of self-regulation in Interview 2. The percentages show what proportions of PA were coded as SR areas.

dialogue with the supervisor (or a peer), real or imaginary, is once again evoked to describe strategies for monitoring, regulating, evaluating and further planning the text both by Kurt (20), and Virginia (21). Notice also how both comments suggest metacognitive awareness of the value of the strategies as suggested by the supervisor:

(20) My supervisor’s suggestion was that these could be just fused together so that I have a more solid introduction ... Because at the end we want a good essay and the more information I get from [Supervisor] the more I learn about this process so the next time around it will be easier. (Kurt)

(21) I have a problem with like putting [the secondary reading] in with the close readings ... I can’t really connect it ... she [the Supervisor] said she would like focused sections, and that’s what I think I’ll do, choose some of these ideas and develop them. (Virginia)

Kurt, specifically, seemed very much engaged in planning further action after having received feedback (see “forethought” in Figure 3):

(22) I’ll do the introduction and the allegory sub-sections, but I’ll wait with this until I am done with the main body first ... I’ll combine these two maybe ... it’s a bit more than cosmetic but it’s not a huge change. (Kurt)

In comparison to Virginia and Jane, more instances in Kurt’s data were coded as SR/PA of behavior (Figure 4) and referred to help-seeking strategies with the intention to elicit ad-hoc feedback on ideas from the supervisor.

Looking further at the overlap between SR/PA data, overall the supervisors’ feedback, questions and suggestions helped students think about how to frame their text, i.e. monitoring, control and evaluation of cognition. This interaction seems to have helped students in “turning a corner”: crystallizing a clear topic and angle for the BA essay. For instance, in Kurt’s comments (23, 24), the supervisor’s questions were critical for his ability to monitor and control thought:

(23) And then my supervisor said that it could be quite important. It could actually become the main point to investigate. (Kurt)

(24) And maybe [Supervisor] will say: "Well this is good enough", or maybe, "this is what you are aiming at, so make this one as best as you can". (Kurt)

Similarly, cognitive monitoring for Jane includes a social dimension. Like Kurt and Virginia, Jane seems to have turned a corner: she finally has a clear aim for the argumentation of her essay, and she reports her supervisor's questions as crucial for her epiphany: these questions were appropriated by Jane as cognitive strategies to unravel her thoughts and find a thesis statement:

(25) [Supervisor] asked the right question at that time, 'cause I had the answer to [Supervisor's] question: "What do you like about this novel?" This is what I wanna write about. (Jane)

(26) [reporting on her dialogue with her supervisor] "Okay, it's about time to think about a title." Like, 'title?' I don't even know what angle I'm gonna tackle this from, but I came up with the title before I started writing, most of it. Because you kind of set yourself small mental goals, mental targets. And then actually I wrote these key words ... And my thesis were these key words, actually. (Jane)

Analogously, Virginia had now completed a theory section, after suggestions from her supervisor, and was able to narrow down her topic, which had become her main goal both in reading the material and in determining the structure of the text:

(27) I just kept what I thought was more most in line with uh the topic ... And maybe I'll use some of it, later. Now I only take the things that are really on topic, because [Supervisor] asked about like: "How will you structure the essay, how will you write about the two books?" ... that's why I kept the reading of [Novel] in different spaces and then I took away the things that were not about those specific things. (Virginia)

The quote above, as (28) below, illustrates how the dialogue with the supervisor was appropriated by the students to evaluate their own work, helping them see what needed to improve and validating their approach by pointing out what was valuable:

(28) [after supervisor's feedback] It's good to have gotten this sort of right from the beginning you know... I mean it wasn't right from the beginning I mean... this is like the third or the fourth incarnation of the idea but, once you produce a text then it's sort of good to know that it works. (Kurt)

Finally, some of the data in interview 2 coded as SR/PA referred to help-seeking and time management strategies, coded as regulation of behavior (29, 30). Other SR/PA instances referred to strategies such as monitoring the context (courses and exams deadlines and requirements, conflicts between courses, deadlines) (31, 32):

- (29) And then if I sort of think I have enough I'll probably I'll check with my supervisor and say this is where I am at, and then maybe [Supervisor]'ll get a sample or we'll just talk about it. (Kurt)
- (30) I'll wait for feedback and when I feel inspired again ... I'll write my conclusions. I'm gonna read what [Virginia] said about my essay. (Jane)
- (31) My essays are due like in, two weeks, I think. But then I have the exam. I doubt they do it, like, parallel. (Virginia)
- (32) I'm beginning to understand that the time plan... you sort of try to push us to produce a text so that we can in a less-stressful way work on it later on, and that makes sense. (Kurt)

4.3 Interview 3 – Thinking back on the process, and rethinking academic writing

Not surprisingly, most of the interview data at the end of the term seemed to fall under the cognitive area and the “reaction/reflection” phase of self-regulation (see Figures 5 & 4 below, and Tables S1-S3 in Appendix for the SR area+phase breakdown). The essay was now completed and submitted, so the interviews had a retrospective focus. As we mentioned earlier, all three participants' comments about the context at the end of the term seemed to critique various aspects of the BA program such as requirements, timelines, and types of seminars. This is seen especially in Kurt and Jane's data (Figure 5), which contained more comments pertaining to SR of context (reaction and reflection) in comparison to Virginia.

At this point, the students had almost completed their essays and reflected on their experiences of the writing process, their perceptions of the task (before and after) and changes in their goals for the essay, describing what they tried to accomplish. Both Jane and Virginia mentioned the need to choose primary material that sparked personal interest and to devise an interesting topic:

- (33) What I had mind was to have something interesting to write about, because I think it's very important that you feel attached to the things you're writing about. (Jane)
- (34) When I figured out what I was writing about, it felt like my topics kind of came together or something ... There were too many like single ideas, and now they came together. (Virginia)

Jane also offered reflective comments that described help-seeking strategies as crucial for her self-efficacy:

- (35) But I'll see what [Supervisor] has to say about it ... But, you know, there is like a lot of doubts and I'm still a little bit ambivalent about it. (Jane)

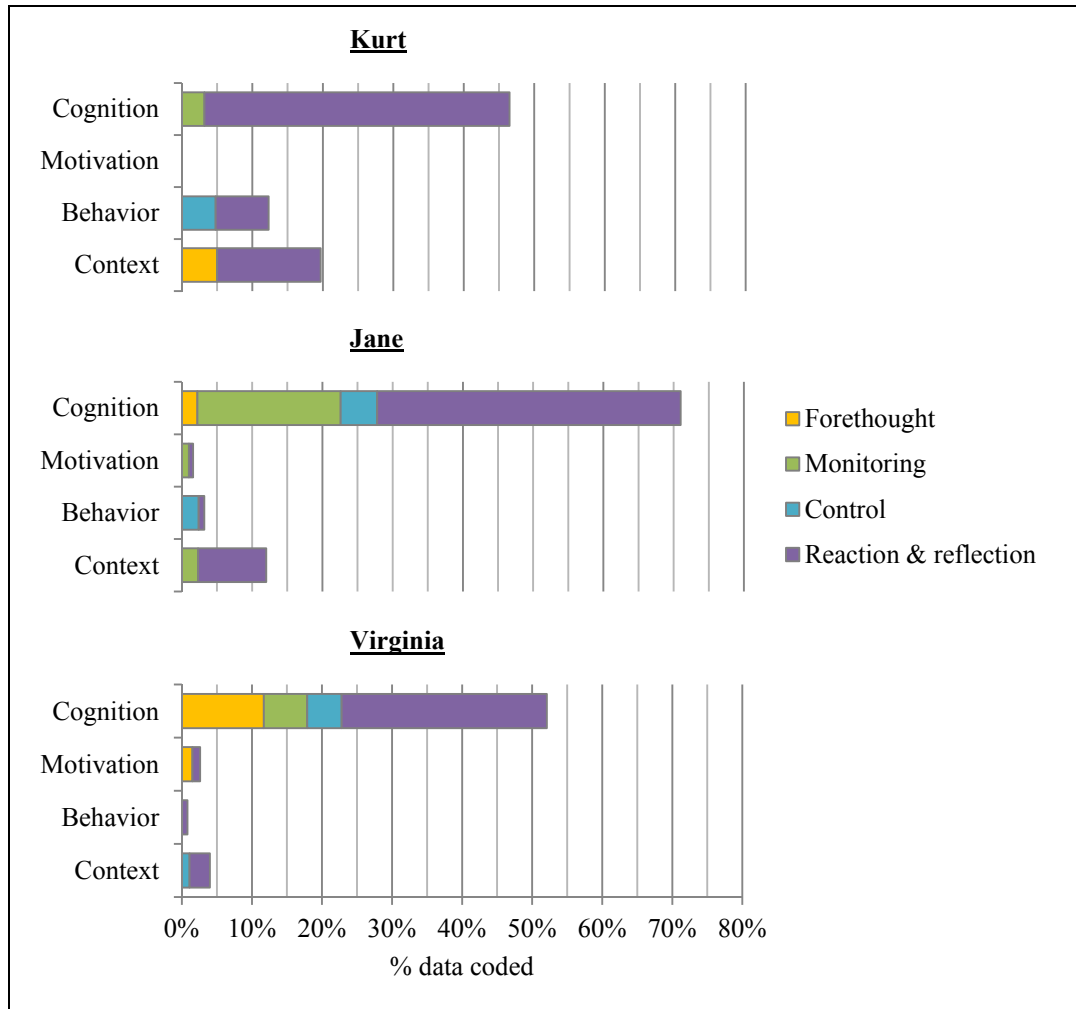


Figure 5. Phases of self-regulation in Interview 3. The percentages show what proportions of a particular area belonged to different phases.

Partly, this may be explained by Jane’s need for confirmation. Although self-doubts were also expressed by other students at some points, Jane’s quotes (35, 36) illustrate how important it was for Jane to elicit feedback to ensure that her evaluation of her work was accurate. Casting a retrospective eye on her experience, Jane describes how

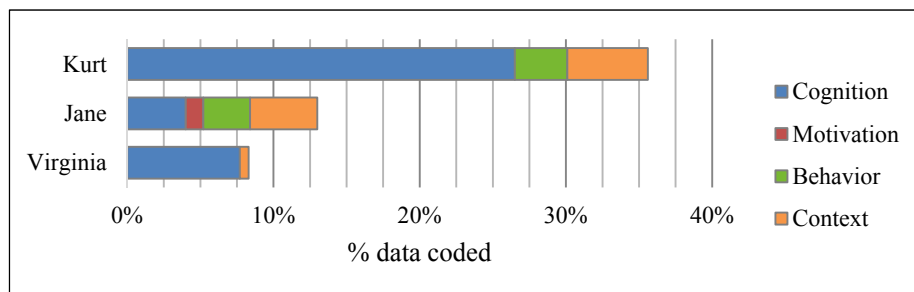


Figure 6. Participatory appropriation and areas of self-regulation in Interview 3. The percentages show what proportions of PA were coded as SR areas.

social interaction was crucial for her ability to self-regulate, and the importance of feedback and dialogue to evaluate her work and catalyze strategies for further writing:

- (36) Someone, tells you: “Yea, okay, I’ve seen this and, um, the ideas are good, and do this and restructure like that or maybe change here or change there” ... just the simple fact of like talking out loud. And for me personally ... I think it’s very important to get feedback on what you’re working on. (Jane)

For Virginia, the participatory experience with the supervisor helped her monitor and control her cognition during writing, and to set refined rhetorical sub-goals (notice the use of “we”):

- (37) We did, me and [Supervisor] discover that we couldn’t really define [topic] when I used it in the reading of the books, so then I added this section to kind of make it the theoretical part. (Virginia)
- (38) Supervisor comments were really helpful, ‘cause I can’t really see what’s important and not important. I can’t see it for myself, really, so it’s, like, it needs someone else to see. (Virginia)

Therefore, both Jane’s and Virginia’s comments above suggest how very difficult it is for students to judge the quality of their own texts and how important the supervisory dialogue is in scaffolding this evaluation, especially since they are faced with professional genres as models:

- (39) I don’t know if I can see it for myself. I don’t know how good it’s supposed to be, ‘cause I only read much better essays ... I only read like articles and I guess they’re a little deeper. (Virginia)

At this time in the process, differences among the three students have to do with the fact that in Virginia’s case, for instance, the SR of cognition data was occasionally coded as “forethought”, mostly because she still had a few specific goals and final touches to make. In addition, she made a few statements coded as “Motivation: reaction/reflection” (see Figure 5).

What is perhaps even more interesting in this final interview is that all three students seemed to indicate that their perception of the task, i.e. writing an academic essay in literary criticism, had changed due to their experience. They reflected on the nature of the task itself and on what they learned from the process of writing the BA essay:

- (40) You always write about things you don't really know about. When you write your old essays you are like, "So I can't really write anything interesting because I just know the superficial stuff". Well, I guess I feel like I know more or understand more. (Virginia)
- (41) In order to do something well you need to do it a few times, and this has been the first kind of project that I did. So, considering this I think that I did ok, but I can't really claim that I know how to do it well. So, next time around I will require much less help and I probably won't make the same mistakes again, but I'll make some new ones, right? (Kurt)
- (42) What I thought at the beginning was that it's gonna [be] like any other essay that I've written before for another course. And I was pretty new to writing literary essays, but I thought it would be the same process, like writing for a course, but it would be more developed and it would involve more critical reading and more secondary literature... But like you really have to go back and make it ... a piece of writing, I think. So, yea, that's the difference between this BA essay and another essay. (Jane).

This shift in perception seems connected to social interaction (SR/PA data), as shown by the comments where students suggest that the participatory experience changed their goals for writing and their perception of the writing task. In this quote from Kurt, for example, it emerges that although he obviously was motivated and engaged in earnest, what he actually learned was the aspect of writing as a disciplinary practice, in which the supervisor had a key role:

- (43) The initial goal was to write an essay. As I mentioned before, I didn't have a topic I was really passionate about. I sort of had an area I was interested in, but it was mostly when talking to my supervisor, [who] directed me towards an area she was comfortable with and knew could help me, and I thought it was interesting enough to jump on it. I have learned a bit about the area ... but I mostly learned about the process of writing, how to express an idea through a thesis, through argument, and how to present it. (Kurt)

Jane also acknowledges reframing her goals and her perception of the BA essay, which have changed after the writing experience (see also 42 above):

- (44) I think the goal was to write a decent BA essay. To write, like, to make it an interesting ... Yea, my goal would be to have an essay that is interesting to

read for someone who is not necessarily interested in the topic I'm writing about. So it's interesting to read and maybe has a message that would make the reader go and read the novel that I'm writing about. (Jane)

Similarly, Virginia's perception of task also changed from product-oriented to process oriented:

(45) I wrote essays last semester in [City] on four thousand words, and I thought this was gonna be kind of the same, only like twice as long. But I guess it was more, like, doing it by myself. I don't know how to explain that, structuring it by myself. (Virginia)

This communicative view of the writing task is also reflected in her final self-evaluation, which interestingly is based on the criteria of personal interest and the authenticity of the task for a positive assessment of her accomplishments:

(46) I think it's better than I thought it would be ... it feels like it's an actual essay. ... Obviously it's more interesting when you read about it. I think it's so much fun to just read everything about, like, around it ... Like I feel I haven't made it up. This is more like I found actual proof. (Virginia)

On this point, Kurt's description of his writing experience portrays a transformation of writing abilities, both cognitive and communicative, that would not have been possible without the social, dialogic and almost co-constructed process he established with his supervisor, who seemed to act as a "thinking guide" (note also the higher overlap of these codes for Kurt in Figure 6):

(47) Then I get the feedback from my supervisor and it becomes obvious that these things are not working very well ... so what I'm saying is that I get to the next level, and the next draft, and you look back and well ... and the stuff becomes obvious, but in the beginning, you really know very little, and you don't know what you don't know, right? (Kurt)

5. Discussion

Our study aimed to understand how three successful BA students in literature self-regulated during the experience of writing their final BA essay, and how social interaction, primarily with the supervisor, affected their SR strategies. We adopted Pintrich's (2000, 2004) framework for SR as coding heuristic to trace the students' SR during the essay-writing term, and operationalized the social experience by using Rogoff's (1990) concept of participatory appropriation to code data mentioning social interactions. Overall, we have attempted to spotlight how in naturalistic settings, and in specialized, academic writing in the humanities, social interaction is crucial in supporting students' regulation of writing, effectively leading to an experience of individual learning and *transformation*.

5.1 RQ 1: How do three successful BA essay writers in literature self-regulate during the process of writing their essay?

It is perhaps not surprising that our participants showed to be self-regulated learners, considering that all three successfully completed their BA essay. At the same time, the use of Pintrich's coding heuristic allowed us to identify individual differences in their path to the essay. We have seen for instance differences in the percentages of data coded as SR of cognition, behavior and motivation across the three participants at different points in time. Without entering into speculations about the students' own personalities, our interview data suggests that contextual conditions—for example how soon they were able to meet with a supervisor in the BA process—translated into different regulatory strategies adopted by the students, with Jane for instance reporting more uncertainty and devoting more time to behavior and context regulation at the time of the first interview.

Overall, however, all three participants engaged in a variety of regulation strategies that have been indicated as predictive of writing achievement, such as a consistent metacognitive engagement with their work, a great amount of effort devoted to the forethought phase—what we called *invention*—and a good amount of knowledge and interest in their primary material. Our qualitative findings seem to agree with the results of a recent study (Teng & Zhang, 2016), which found that cognitive strategies of text processing, and metacognitive strategies such as idea planning and goal-oriented monitoring and evaluation, were significant SR predictor strategies of writing scores. The students' BA essays were examined by the other teachers in the program—colleagues of their supervisors; all three finished in time and received a good final grade. In our data, all three devoted much thought to the planning of their main idea, an interesting angle that was personal and unique to them, and metacognitively monitored and regulated the development of their argument in connection to this key goal. This last aspect may explain why in our data students did not report regulating motivation extensively: especially when students have mastery-oriented or learning goals, regulation of emotion results in monitoring the “conditions for sustained motivation and cognitive engagement toward achievement” (Järvelä & Hadwin, 2013, p. 26).

The effort devoted to planning the essay by our participants echoes research emphasizing the connection between the forethought phase (goal setting and planning) and writing quality (Breetvelt et al., 1994; Ong, 2014; Van den Bergh & Rijlaarsdam, 2001). The students involved in this study spent a considerable amount of time and effort acquiring and reflecting on their existing subject-matter knowledge, metacognitively activating previous writing experiences and strategies, and, most importantly, setting specific argumentative goals. As pointed out by the literature on SRL (Zimmerman & Cleary, 2009), goals that are “specific, proximal, and challenging are more effective than general goals” (p. 250). Additionally, students reported a recursive re-assessment and re-definition of their writing goals as they progressed in their reading of both primary and secondary sources, i.e. they engaged in

“hierarchical feedback loops” (p. 250), where smaller goals are the means to the final end of attaining larger goals (the essay). These subordinate goals become checkpoints for metacognitively monitoring the attainment of highly valued outcomes, and enable students to strategically plan further action (Järvelä & Hadwin, 2013; Zimmerman & Cleary, 2009). We will talk about this point further in relation to RQ2.

The collection of longitudinal data allowed us to capture the “temporal unfolding” (Hadwin et al., 2018, p. 85) of SR of writing, and we were able to identify crucial moments in the writing process. For instance, by the time of the second interview our participants seemed to have turned a corner, having identified a key idea/topic. This key idea functioned as a “beacon of inspiration” for all three, and at this time they reported drafting, redrafting, and generally trying to devise the best argumentative structure with support in the primary and secondary material. These efforts often translated into a variety of comments coded as metacognitive monitoring and control. All three students displayed the ability to critically question their choices and point out argumentative dilemmas in light of what they wanted to attain (and on the basis of their dialogue with their supervisor, as we will discuss for RQ2), as well as the ability to discuss a variety of cognitive strategies to move forward: use of keywords, questions, rehearsal of content knowledge, and integration of secondary material. This finding aligns with the theoretical conceptualization of regulation as adaptive (Hadwin et al., 2018), meaning that it is intentional, purposeful behavior in the face of challenges, towards the attainment of specific goals. Finally, throughout the interviews, our participants perceived the need to critically reflect and evaluate their work, although they often expressed frustration and the inability to do it alone: they often mentioned the need to find help and to discuss and validate their ideas with the supervisor or with a peer (SR of behavior), confirming Teng and Zhang’s (2016) observation that seeking and being able to take advantage of social interaction is a key SR strategy in writing.

Although these students were most certainly effective self-regulated writers, the students’ comments therefore often suggest that their writing regulation was strongly intertwined with their social interaction experiences, which we framed under the concept of participatory appropriation (PA). This aspect was investigated in response to our second research question.

5.2 RQ 2: How does participatory appropriation (primarily in the form of interaction with a supervisor) explain and influence these students’ self-regulation of writing?

The participatory appropriation experience was crucial for our students’ successful navigation of what was for them a completely new writing task. The PA concept allowed us to highlight those instances in our data where students describe the supervisory dialogue and effectively engage with it, reflect on it, explain how this dialogue led to new questions and goals (i.e. how they “transformed” this dialogue into new regulatory strategies). In this sense, it is not so much the extent of the SR/PA overlap in the interview data that matters but rather what the students say about it, the

importance that they attribute to this dialogue for their writing regulation. The qualitative value of this interaction for the students' SR of writing is shown in the analysis of the SR/PA data, and its transformative value would not have been captured by presenting the data as analysed only through Pintrich's framework. Common aspects and individual variation can be traced as follows:

1) PA played a key role in the forethought phase, helping students re-formulate goals in disciplinary relevant ways. Supervisory dialogue supported students in planning strategically for the achievement of these goals, often providing them with ideas for specific task and strategies (Zimmerman & Cleary, 2009, p. 250). As mentioned in our introduction, "knowledge transformation" (Bereiter & Scardamalia, 1987, p. 6) is tricky for the novice writer in literary studies, as humanities' genres tend to be porous and argument-based (Shaw, 2009). In the first interview, for example, the primary aim was what we called *invention*, and for both Kurt and Virginia, a good portion of data was coded as forethought and activation of content knowledge (re-telling). In Kurt's case, much of this data summarized his discussions with the supervisor (SR/PA), which were recalled and engaged with to find an angle, plan his text conceptually, and identify specific goals (for example, the need for contextualization). Similarly, in Jane and Virginia, the questions asked by the supervisor provided an important forethought platform to find an angle for their essay.

2) The data we coded as SR/PA illuminated how interaction, in the form of supervisory dialogues, helped students cognitively monitor and regulate their writing. These dialogues, as re-told by our participants, were more than teacher-directed regulation, and can be framed as instances of co-regulation, in which "SRL is gradually appropriated through interaction" (Hadwin & Oshige, 2011, p. 247). This was manifested in the many instances in which students recalled their supervisory conversations to monitor their thoughts and used the supervisor's words as cognitive regulation strategies, even in imaginary situations (as in Kurt). The importance of the dialogue with the supervisor was also manifested in the many instances of behavior regulation (help-seeking strategies), reported by all three but particularly by Jane, as a way to initiate and engage in new cycles of planning, monitoring and evaluation of their writing. Thus, PA facilitated the "cyclical adaptation" of SR as an unfolding process (Hadwin et al., 2018, p. 85). The students' quotes coded as SR/PA furthermore emphasize the aspect of appropriation: in our data, the dialogues with the supervisor are not just recounted, but reasoned about, connected to important changes in goals, and transformed by the students into new ideas and strategies for regulating writing.

3) Finally, the focus on appropriation inherent in PA illustrates how the interaction with the supervisor functioned as a mediator between social (disciplinary) expectations and the students' ability to regulate their writing. This finding aligns specifically with similar dynamics of enculturation identified by sociocultural research on teacher-student or supervisor-student interaction, especially in academic university settings (e.g. Björkman, 2017; Dysthe, 2002; Eriksson & Mäkitalo, 2015). The supervisory dialogue, as an instance of co-regulation, seemed to be more than an opportunity to internalize

regulatory strategies for writing. It provided students the means to acknowledge, reflect upon, and engage with the complexities of academic writing: the need to manifest an academic identity in their texts, to find an original, personal point of view, and to shift towards a view of the text as an artifact in progress (Castelló & Iñesta, 2012; Castelló et al., 2013), a shift reported by the students themselves.

In connection to these points, two additional aspects were notable in our data. Firstly, at the end of the essay-writing experience, all three participants modified their perception of what academic writing is and what a BA essay is about. For instance, the final interviews described a retrospective realization of what writing a BA essay entails: process, strategies and goals. Kurt's quotes, especially, suggest a new perspective on writing as disciplinary practice, and the key role played by the supervisor in this learning experience. This change recalls the reconceptualization of the writing activity observed by Nicolás-Conesa and colleagues (2014) and connects to what Pintrich (2000) discusses in terms of a shift in goal orientation: from performance to mastery (see pp. 474-479). In the light of Schunk and Zimmerman's (1998) four-level model of development, we could also characterize this shift in the students' learning from social to personal sources of motivation in writing regulation (Zimmerman & Kitsantas, 1999). In this shift, the supervisors acted as socialization agents (Rogoff & Angelillo, 2002), helping students to understand what the quality markers of a written piece in academic literary criticism are: originality, freshness, a personal connection with the ideas proposed, and the ability to connect personal insights to the larger theoretical and critical conversation in the field.

The second interesting aspect in the study was the relative paucity of statements explicitly connected to regulation of motivation. Most of the comments under this category referred to specific aspects of text development, and although students reported occasional insecurities, in general they did not report the need to regulate motivation. At the same time, as discussed earlier in section 5.1, all three indicated a strong interest in their primary material and an effective regulation of cognition, which may indeed sustain motivation. In this sense, the participatory experience may have played a key role. If we compare the supervisory experiences of the students and the educational principles advocated to support motivation as summarized by Pintrich (2003, p. 672), we find many similarities: "providing clear and accurate feedback", "sustaining their ability to take charge" and "provide opportunities to exercise some choice and control". What we can suggest thus is the potential of taking a closer look into how meaningful interaction may sustain motivation and metacognitive accuracy (Pieschl, 2009). In our study, PA overlapped mainly with the SR area of cognition, and we can hypothesize that the supervisory dialogue experienced by our students allowed them to appropriate tools to frame their thinking, evaluate and validate their ideas, and keep the fire of their interest burning. As Pintrich (2003, p. 679) suggests, "[i]t seems clear that there is a reciprocal and recursive relation between motivation and cognition, but there is a need for more research on this topic".

6. Conclusion

In our study, Pintrich's (2000, 2004) framework provided the right level of granularity to map both areas and phases of SR over time, and to capture several nuances of the students' SR during the experience of writing a BA essay. Using an established framework was essential to obtain systematicity in how SR was identified and traced in the data, which spanned a rather long period of time, and across three different participants. The concept of participatory appropriation (Rogoff, 1990) was another crucial peg in the analysis, as it brought to the surface how the participants' social experiences, and especially the dialogue with the supervisor, were part of their development of writing regulation. Nevertheless, we need to acknowledge the limitations inherent in our approach. Although we made an effort to explore the interrelation between self-regulation and social interaction, our study is still primarily focused on individual students and is based on self-reported data from interviews, and is thus neither fully a study of co-regulation or a sociocultural study. At the same time, and especially thanks to the adoption of PA with its focus on appropriation and individual transformation, the study targets many of the challenges that writing research faces, such as investigating SR of writing as a multifaceted process beyond cognition, identifying episodes of SR in adaptation to challenges, exploring the emergence of SR in connection to dialogue and co-regulation, and providing qualitative, subjective data revealing students' unfolding beliefs and intentions (Hadwin et al., 2018). Furthermore, we addressed regulation from a temporal perspective and in a naturalistic setting, where students and supervisors are engaging in a high-stakes, authentic task (the BA essay).

On this point, another limitation emerges: our data-collection method, the interview, may in itself have served as a metacognitive scaffold, helping participants think about their texts and crystallize some of the PA experiences. The students' themselves remarked on the fact that our in-depth interviews helped them become aware and reflect on their writing, a situation similarly experienced by the four participants in Wong's (2005) study. Considering that we certainly did not provide feedback or suggestions to the participants but adopted a stimulated-recall approach to help them talk about their text, this aspect suggests the potential usefulness of tutorial techniques such as coaching or any other type of verbalization to scaffold metacognition and SR of writing (Serra & Metcalfe, 2009).

This study captured episodes of writing regulation beyond the individual. Although cognitive and metacognitive aspects dominate the participants' SR of writing in the data, our analysis of the overlap between SR/PA illustrated the students' appropriation of important cognitive and metacognitive skills, including disciplinary knowledge and ways of thinking that meet situated writing expectations, though social contact. The social context not only sets affordances and conditions, but also *permeates* the development of cognitive and metacognitive writing regulation strategies when learners participate in meaningful interactions. Together with studies from a sociocultural perspective, this study indicates that the development of self-regulation in advanced

disciplinary writing is best understood when interpersonal dynamics are taken into account (Dysthe, 2002). In this scenario, supervisors became vehicles of appropriation of disciplinary culture— “ways of thinking and doing” (Rogoff & Angelillo, 2002, p. 222). This process of transformation, and the role played by the dialogue with the supervisor, is encapsulated in Kurt’s final words:

Then I get the feedback from my supervisor and it becomes obvious that these things are not working very well ... and you look back and well ... and the stuff becomes obvious, but in the beginning, you really know very little, and you don’t know what you don’t know, right? (Kurt)

Note

1. Throughout the text, we will refer to the Bachelor’s final assignment as the BA “essay” rather than “thesis”, to be consistent with the BA program’s terminology and to distinguish it from students’ mentions of the thesis when they refer to the “thesis statement”.

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Appendix A: Interview Protocol

Ask background info (topic, supervisor comments etc.)

(with text in front)

Look carefully at your text (might take a moment or two). How do you feel about it?

Could you tell us, overall, where did you concentrate most of your efforts on?

Could you tell us what aspects of your text you think need more work? Why?

What do you think you need to do next? (why)

Final comments?

Table S1. Overview of Kurt's Participatory appropriation & Self-regulation: Phases (relative %)

		Cognition				Motivation				Behavior				
		F	M	C	R	F	M	C	R	F	M	C	R	F
Int 1	%	36.8	27.0	37.8	7.6	100	0	0	0	0	0	100	0	15.8
	nr	(6)	(5)	(6)	(3)	(1)	(0)	(0)	(0)	(0)	(0)	(3)	(0)	(1)
Int 2	%	50.6	13.6	7.8	27.9	0	0	0	0	0	34.2	64.9	0	0
	nr	(3)	(1)	(1)	(2)	(0)	(0)	(0)	(0)	(0)	(2)	(5)	(0)	(0)
Int 3	%	0	0	0	100	0	0	0	0	0	0	100	0	0
	nr	(0)	(0)	(0)	(2)	(0)	(0)	(0)	(0)	(0)	(0)	(1)	(0)	(0)

F: Forethought and planning. M: Monitoring. C: Control. R: Reaction and reflection. **Note.** Percentages indicate what proportion of the total coded data (e.g. Forethought) within Participatory appropriation was coded as a particular phase (e.g. Forethought) in the data source (e.g. participant transcripts). Parentheses indicate how many instances of the code were identified.

Table S2. Overview of Jane’s Participatory appropriation & Self-regulation: Phases (relative %)

		Cognition				Motivation				Behavior				
		F	M	C	R	F	M	C	R	F	M	C	R	
Int 1	%	0	55.0	0	45.0	0	0	0	0	0	0	100.0	0	0
	nr	(0)	(1)	(0)	(1)	(0)	(0)	(0)	(0)	(0)	(0)	(1)	(0)	(0)
Int 2	%	17.1	12.7	53.2	27.8	0	0	0	0	0	0	100.0	0	0
	nr	(4)	(2)	(8)	(4)	(0)	(0)	(0)	(0)	(0)	(0)	(6)	(0)	(0)
Int 3	%	0	15.0	27.5	55.0	0	0	0	0	0	0	75.0	25.0	0
	nr	(0)	(1)	(1)	(2)	(0)	(0)	(0)	(0)	(0)	(0)	(4)	(1)	(0)

F: Forethought and planning. M: Monitoring. C: Control. R: Reaction and reflection. **Note.** Percentages indicate what proportion of the data source (e.g. Interview) within Participatory appropriation was coded as a particular phase (e.g. Forethought) in the data source (e.g. Interview). Parentheses indicate how many instances of the code were identified.

Table S3. Overview of Virginia’s Participatory appropriation & Self-regulation: Phases (relative %)

		Cognition				Motivation				Behavior				
		F	M	C	R	F	M	C	R	F	M	C	R	
Int 1	%	51.7	8.7	39.5	0	0	0	0	0	0	30.3	69.7	0	0
	nr	(3)	(1)	(3)	(0)	(0)	(0)	(0)	(0)	(0)	(1)	(3)	(0)	(0)
Int 2	%	31.1	28.7	40.2	0	0	0	0	0	33.3	19.6	46.8	0	0
	nr	(6)	(6)	(5)	(0)	(0)	(0)	(0)	(0)	(2)	(2)	(2)	(0)	(0)
Int 3	%	0	40.2	35.5	24.3	0	0	0	0	0	0	0	0	0
	nr	(0)	(2)	(3)	(3)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)

F: Forethought and planning. M: Monitoring. C: Control. R: Reaction and reflection. **Note.** Percentages indicate what proportion of the data source (e.g. Interview) within Participatory appropriation was coded as a particular phase (e.g. Forethought) in the data source (e.g. Interview). Parentheses indicate how many instances of the code were identified.