# ‘Learning for the test’: A study of students’ sharing and discussing past multiple choice questions on Facebook

Tanya Tyagunova

*Martin Luther University Halle-Wittenberg, Germany*

Christian Greiffenhagen

*The Chinese University of Hong Kong, Hong Kong*

*Abstract*

This article explores the phenomenon of university students re-using past multiple-choice questions (MCQs) as a method of exam preparation. Based on online non-participant observation of student communication in Facebook groups supplemented by interviews with students and lecturers, it asks what it means to *learn* with past exam questions. By focussing on what students actually *do*, rather than what they *say* they do, our study: (1) challenges the view of MCQs as only encouraging memorisation, since learning with past MCQs also involves engaging with content in meaningful ways, and (2) argues there is a ‘double contingency’ of students’ learning and lecturers’ assessment strategies standing in a reflexive relationship with each other. The paper draws attention to the constitutive role of the practical aspects of learning and assessment and calls for more research from a praxeological perspective on the relation between particular assessment formats and the actual learning practices they generate.

## INTRODUCTION

Preparing for and passing exams is a key aspect of university education. However, despite the importance of grades and exams in students’ academic work, there still remains a curious absence of empirical research that has investigated university examinations and students’ preparation for them in practice. This article, using ethnographic data, presents the empirical results of a naturalistic study of student preparation for university examinations, in particular those containing multiple-choice questions (MCQs). More specifically, we focus on the phenomenon of *re-using past examination questions*.

Despite ongoing changes in teaching and learning philosophy, MCQ tests continue to be favourable for teaching large classes in particular as a way of managing their

pressures and reducing the time needed to handle them. Re-using test questions enables both lecturers and students to minimise the amount of work required in both designing and preparing for MCQ examinations. We are thus dealing with a phenomenon that is ubiquitous in today's undergraduate education. However, it has largely been ignored in the literature. If the use of past exam papers is discussed, it is only in passing and typically in the context of academic dishonesty (cf. McCabe, Butterfield, and Trevino 2012). For educational research, the practice of using past exam papers seems to be an 'uncomfortable phenomenon' of inquiry, providing a striking counterpoint to 'how exactly students *should* study' (Gurung, Daniel, and Landrum 2012, 170, italics added). Indeed, there is a large body of literature on such practices as using 'PeerWise' (e.g. Duret et al. 2018; Dynan and Ryan 2019; Sykes, Hamer, and Purchase 2018) or two-stage collaborative exams (e.g. Kinnear 2020; LoGiudice, Pachai, and Kim 2015; Mahoney and Harris-Reeves 2017), which are widely understood to foster understanding and improve student learning. From this perspective, students' use of past exam papers appears to be rather uninteresting, in that it does not match with what could be treated as 'appropriate' or 'good' learning strategies.

The only place we can find extensive discussion of the use of past exam papers is in practical guidebooks. The practice of consulting past exams is presented in such texts as 'by far the smartest, strongest and choicest' way to pass any exam 'easily' (Benson 2014, 24). Of course, such accounts should be treated with caution: they are practical advice that instructs students what to do rather than describing what students actually do. However, like the work of McCabe and his colleagues, they point to the inherently ambiguous status of using past exam papers: students see consulting past exams before a test as a beneficial practice, while lecturers treat it as a questionable, possibly even illegitimate method of preparation (cf. also McCoubrie 2004, 711).

The present paper provides insight into what students actually do when learning with past exam papers. Our approach can be described as 'ethnomethodologically-informed ethnography' (cf. Button et al. 2015; Randall, Rouncefield, and Tolmie 2021). It focuses on participants' everyday activities as they happen with an ethnomethodological interest in specific 'phenomenal field details' and the practical 'rational features' of their production (Garfinkel 1967, 2002). To investigate students' ways of learning and preparing for examinations thus involves describing what students are recognisably oriented toward and what they do *in practice*. Thus, rather than trying to identify what 'appropriate' forms of learning should consist of, our study examines what learning with MCQs—as a real-world practice—actually looks like. It focuses on the 'specifically uninteresting' (Garfinkel 2002, 107)—to participants themselves, but also to other social researchers—organisational practicalities of this ordinary practice. Our research question is: What does this practice tell us about students' academic work and, in particular, their methods of dealing with university examinations? Concerning this question, we show that (1) studying past exam papers involves engaging with content in meaningful ways, providing students an operationalisation of the intentionally abstract formulations of the official curriculum and examination requirements, allowing them to see what really matters for the test; (2)

there is a 'double contingency' of students' learning and lecturers' assessment strategies standing in a reflexive relationship to each other.

## TAKING ON THE PRACTICAL SIDE OF LEARNING AND ASSESSMENT

One way to gain an understanding of how university students learn and prepare for examinations is to investigate learning in a situation where it routinely takes place, closely observing and describing what students actually *do* and what resources they *use*. However, as already indicated, observational studies of student learning and preparing for university examinations are surprisingly rare. Although we can find some ethnomethodological descriptions of such university practices as student note-taking (Korbut 2019), teaching chemistry in lecture format (Garfinkel 2002, 219-244), opening and closing university seminars and lectures (Francis and Hester 2004, 115-121; Tyagunova and Greiffenhagen 2017), or student participation in seminars (Tyagunova 2017), there are only few examples of empirical observations on how students deal with university examinations.[1] Most of them have been conducted in the tradition of sociological ethnography, such as the classic *Making the Grade* by Becker, Geer, and Hughes (2003 [1968]) and *Up to the Mark* by Miller and Parlett (1974).

The main question Becker, Geer, and Hughes (2003 [1968]) pose concerns what kind of faculty and course requirements students must meet in their studies at university and what specific practices they create to deal with them. In examining these practices, Becker, Geer, and Hughes describe the perspective students develop toward their academic work as the *grade point average (GPA) perspective*. The GPA perspective reflects the environmental emphasis on grades and students, Becker, Geer, and Hughes (2003 [1968], 83) point out, are constantly looking to discover both formal and informal academic requirements in order to obtain any information that may affect their grade:

> The information may be passed on in an unofficial tutorial (of the kind fraternities often arrange), it may be taken from a living group's file of old exams and term papers, or it may be distilled out of the pooled bits of information gathered by a number of students in the same course.

Although students also try to access such information when interacting with faculty members,[2] their peers are considered a chief source of information about not only the

[1] However, there is extensive research using ethnomethodology and conversation analysis to investigate educational phenomena in other educational settings, such as kindergartens, schools, and out-of-school settings (e.g. museums, astronomical observatories, or teaching hospitals; for an overview, see Gardner 2019; Hester and Francis 2000; Macbeth 2010; and the Introduction in this special issue). There are also some conversation analytic studies that address issues of academic identity (Benwell and Stokoe 2004), university student engagement with academic tasks (Stokoe, Benwell, and Attenborough 2013), or students' interactional practices when demonstrating their knowledge in oral university examinations (Tyagunova 2021).

[2] See also the study of Smith (2016) on student–faculty interaction at a U.S. research university, which presents an 'ethnographic revisit' of Becker, Geer, and Hughes's *Making the Grade* and describes students' practice of calculating the effort required for desired grades *prior* to interaction with faculty.

requirements of various courses but also how to circumvent those requirements. In their study, Becker, Geer, and Hughes could only indicate that students seek the information necessary to deal with examination requirements. Their study does not offer any detailed analysis of students' examination strategies or their relationship with those of the faculty.

With a similar focus and, in part, methodology, Miller and Parlett (1974) likewise investigate students' methods of dealing with particular examination requirements, describing them in terms of playing the *assessment game*. By analysing how students organise their studying, they develop the notion of 'cue-consciousness', that is, the degree to which students look for 'cues' sent out by faculty—hints about exam topics, aspects of the subject the faculty favour, and so on—and employ specialised techniques to discover such cues. For Miller and Parlett, playing the assessment game is a sophisticated 'adaptive response' to the learning system rather than an act of 'manipulating' it. However, like the study of Becker, Geer, and Hughes, Miller and Parlett do not elaborate any empirical description of students' strategies in the context of studying for MCQ examinations.

Although not primarily focussing on students' methods of dealing with examination requirements, Nespor's study (1994) of undergraduate physics and management majors and Nathan's ethnography (2005) about student culture provide further insight into how students learn and, in particular, prepare for tests. Specifically, Nespor (1994, 95) describes management students' practice of 'condensing notes'—that is, compressing 'the space and time of a particular course (its lectures and its textbook(s))' into a format 'that resemble[s] the tests in their spatio-temporal parameters'. Another common practice which, for Nespor, reflects the practice of compressing is the 'circulation of coursework': old notes, old tests, and term papers (Nespor 1994, 96-97). Similarly, Nathan (2005, 119ff.) describes students' techniques for 'limiting workload' (such as reducing preparation time) in order to balance their time and effort.

What these ethnographic studies draw our attention to are the mundane, practical aspects of learning and assessment at university, which have been largely underexplored. In what follows, we look at an example of exactly that: the student practice of *using past exam papers* as a method of exam preparation. Our focus is on the *relation between MCQ tests and student learning strategies*. As Becker, Geer, and Hughes (2003 [1968]) point out, different examination methods structure the kinds of knowledge that students feel they must acquire in order to pass the tests. MCQ tests indicate that 'the student must learn the exact phrasing given in the textbook or the lecture' (Becker, Geer, and Hughes 2003 [1968], 75) and thus, in a sense, memorise it. More importantly, Becker, Geer, and Hughes (2003 [1968], 59ff.) point out the conflict between the effort students put in to earn grades and their attempts to 'learn for themselves': students feel they have to acquire the knowledge they need to satisfy the formal requirements in order to pass the test instead of concentrating on 'the substance of the course'.

The influence of assessment methods on students' preparation strategies is also a topic of study in research on 'student approaches to learning' in the tradition of educational psychology (e.g. Biggs 1987; Biggs and Tang 2011; Entwistle 2009; Marton, Hounsell, and Entwistle 1984; Smarandache et al. 2020). The underlying idea is that there is a

fundamental distinction in how students approach different academic tasks (i.e. how they learn). On the one hand, they may try to *understand* the task and therefore apply such strategies as searching for meaning and integrating parts of the task into a whole (a 'deep' approach). On the other, they may simply focus on *reproducing* the content, therefore adopting rote learning strategies (a 'surface' approach). The most reported finding is that there is the strong association between MCQ examinations and 'lower levels of cognitive processes', that is, a tendency to memorise the content (Scouller and Prosser 1994, 268; Scouller 1998; Struyven, Dochy, and Janssens 2005). However, most of these studies typically rely on questionnaires and students' self-reporting, and hence they miss concrete details concerning what students actually *do* as opposed to what they *talk about* doing when learning for exams.

Against this background, this paper provides a detailed empirical analysis of how students prepare for MCQ tests, drawing material from ethnographic observations of naturally occurring student communication. Our empirical case is Facebook groups in which students share and discuss past MCQs when preparing for tests. This focus allows us not only to look at what students talk about doing but also to observe them actually doing it. Our question concerns the kind of learning that goes into 'studying with past exam papers': do we necessarily deal here with memorisation and adopting a 'surface' approach to learning? Another question concerns the relationship between learning and its context: how do students' learning and lecturers' assessment practices relate to each other, given that MCQ tests (may) encourage game-playing strategies from *both* students and lecturers?

## DATA AND METHODS

In this paper, we focus on how students prepare for exams in the context of studying for a teacher-training certificate at one German university. The exams consist entirely of MCQs and are administered in paper-and-pencil format.

The data for the analysis are primarily based on online non-participant observation of student communication in Facebook groups, supplemented by offline observations of testing situations and interviews with students and lecturers. The collected data are part of a bigger project investigating students' and lecturers' approaches to dealing with both written and oral examinations at university.

We became aware of the existence of student Facebook groups in our pilot study and realised that they would be exciting sites to investigate.[3] Although we obtained very helpful information when interviewing students about their practices of preparation for MCQ examinations, we wanted to see what students actually do when using past exam papers by following their communication on Facebook: their searching for, sharing, and discussing of past exam questions on Facebook group pages.

[3] Cf. Baker (2013) for Facebook as a source of 'rich data' providing vital insight into the participants' practices.

We collected our online data from four Facebook groups, the memberships of which vary from 300 to 2000 users. These numbers are not stable, increasing from semester to semester. Moreover, some of the members might leave the group(s) as soon as they complete their studies, while their posts still remain on the group page. We adopted the following procedure to collect the data: one of the researchers (T.T.) gained access to one of the groups through a student who was the administrator of the group and who already knew about the research project. For the other three groups, T.T. used her real name to request admittance to the groups (by sending requests to group administrators).

Aware that we were engaging with a highly sensitive topic concerning the activities of students that are, if not 'illegal', at least legally 'grey', we assumed that contacting group members to obtain their explicit consent, as suggested by Langer and Beckman (2005, 197), would potentially endanger our study if the participants were to oppose to the research. Hence, we tried to find a balance between the purpose of our research and ethical requirements, guided by Coughlan and Perryman's (2015, 163) statement that 'ethical regulations and restrictions should be proportional to the scale and purpose of the research' and that 'the ethical dimension should not prevent socially and educationally valuable research taking place'. Against this background, we did not advertise our research intentions and did not ask participants for informed consent. Instead, we adopted an 'unobtrusive' research strategy: 'being present, but not actively representing' ourselves and, at the same time, not hiding our research intentions (Dyke 2013, 152; Langer and Beckman 2005). The second reason for our decision was the specific research design: 'crowd research' (cf. Cross and Fletcher 2009). As Kozinets (2015, 140) notes, with large online groups it is practically and logistically almost impossible to obtain informed consent from all group members due to the size of the groups and their fluid membership. Since it was thus impossible for us to obtain informed consent, our chief concern has been to protect the participants as best we can while both collecting the data and preparing the study for publication. We had to make sure that no harm would come to participants. We settled on the following solution.

First, during data collection, we did not save any personal profile metadata—that is, personally identifiable information (such as names, email addresses etc.)—but only text, such as posts and comments. Furthermore, any screenshots that we took were anonymised before analysis, and the original screenshots have been deleted. Second, for publication, we chose to 'heavily disguise' (Bruckman 2002) all the data used in this paper: we have anonymised all our data by changing the date and time of posted messages, group names, the names and pseudonyms of the group members, and the names of faculty members, as well as details that could be treated as sensitive, such as the titles of courses, examinations, and so on. Third, we have tried hard not only to anonymise participants but to actively 'camouflage' them (cf. Ess and Hård af Segerstad 2020). A key strategy has been the translation of the data from German to English. Given the closed character of the groups (see below) and the fact that all post excerpts were translated into English, we can exclude the danger of readers linking the data with online quotations. Finally, there was no professional relationship conflict. The students we followed on

Facebook were not in 'our' course of study, nor were we 'their' examiners. We were, thus, not in a direct relationship of 'lecturer–student' or 'examiner–examinee'.

The research strategy chosen for using this data was approved by the Legal Adviser's Department of the local university as satisfying ethical guidelines of conducting online research on sensitive topics (Art. 14 Par. 5b GDPR). With respect to the offline interview dataset, all participants gave their informed consent prior to their participation in interviews, and all data were properly anonymised to protect participants' confidentiality.

Our analysis draws on 350 Facebook posts that we saved as screenshots when navigating four student Facebook groups, reading and selecting those posts that thematised past exam papers. We also observed situations in which students were writing MCQ tests, focussing on how examiners arrange and control these testing situations. Additionally, we selected relevant excerpts from the interviews that we conducted with students and lecturers (in total, 32 interviews lasting between 30 and 90 minutes) about students' preparation strategies and lecturers' methods of designing and processing examinations. The analysis involved several rounds of reading and open coding the posts and interviews, paying particular attention to what themes emerge, how they are discussed, and what practical problems they point to. We moved reflexively between data collection, devising categories, and interpretation, rereading the selected posts and interview excerpts, relating them to each other and to our descriptions, and reconceptualising the thematic categories and our descriptions. The following section presents four main topics that emerged from our analysis.

## ANALYSIS

We start by describing the diffuse networks that students form on Facebook in which past exam papers are searched for and shared. Then we focus on what students see as 'good' reasons to learn with past exams. After this, we show how learning with past exams is accomplished through collaborating to find the 'correct' answers. Finally, we look at how students respond to the strategies with which lecturers try to counteract students' use of past exams.

## SEARCHING FOR PAST EXAM PAPERS: CLOSED AND SECRET FACEBOOK GROUPS

When it comes to Facebook groups, it is important to distinguish between the different privacy settings of 'public', 'closed', and 'secret' groups.[4] Anyone can find and join a public group. In contrast, closed groups can be found, but one cannot read the group's content until one is admitted to its membership. Secret groups are not publicly visible and will not show up in search results for non-members. It is in closed and secret groups that past exam papers are being shared, clearly hinting at the legally dubious status of

[4] We collected our data in 2017. In August 2019, Facebook changed group privacy settings: 'closed' and 'secret' groups are now labelled as 'private and visible' and 'private and hidden' respectively.

learning with past exams. One student enrolled in a distance learning programme describes her accidental 'detection' of one such group:

> S: I arrived in *city x* and was the first one there and was studying before the exam, having a look at the stuff. Then, another student arrived, who was writing the exam, too, and I just asked her: 'Which exam are you taking? This is my first exam' and so on. […] She had already written the exam I was preparing for and could tell me roughly what kind of questions might be asked in the exam. […] Then, she talked a little more and said: 'Are you not a member of that Facebook group?' Me: 'Which Facebook group?' […] After realising that the group of which I am a member was not the one that she meant, she suddenly didn't talk about it as openly any more. She said: 'I'll just take a look to see if I can find anything'. Then, she had a look into this Facebook group, opened the exam and told me what was written in the past exam. This group has a very common name without any mention of the name of the institute or the university. It's not at all possible to derive from the name that such things are being shared there. Only later, I discovered the name of the group. That student didn't tell me right away, but somehow tried to hide it. She only told me what was in that exam: there is a file in the group of which she is a member and there are such and such questions in it. And it was exactly the exam that was given to us. Later, I found out through the others that the group's only purpose is to upload past exam papers.
>
> *1*

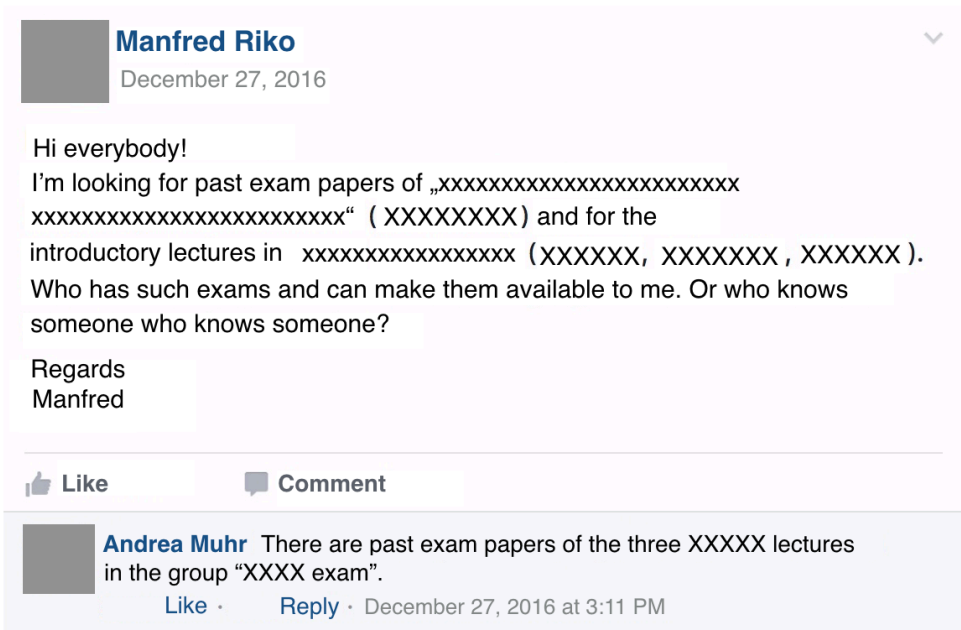
To become a member of a secret group, one has to be invited by a current member. The information about the existence of one such group may be received, for example, through rumours, a 'solidary' clue from a friend, or, as in the case of the long-distance student, accidental small talk in the hallway. The long-distance student has to realise that the Facebook group composes a diffuse community that is difficult to access:

> S: I found that first student, who had told me about that secret Facebook group, in the Facebook group of which I am a member, and I wrote her: 'Hey you, you were talking about this group. I'm not a member yet, can you help me in any way?' She didn't answer, not until today. When I wrote my second exam, I talked to someone again. But I didn't want to mention that group so openly because I realised: in some way, it is a sensitive topic. Not everyone knows about it, it is not easy to get in. I only dropped some hints about past exams and so on. Immediately, she said: 'Hey, I have past exams, give me your email address and I'll mail you what I have'. And she sent it to me via email. But I think she is probably in that group. However, she didn't say anything about it.
>
> *2*

There are specific *protection arrangements* the members of secret groups make to preclude potential disclosure. The long-distance student had to act quite delicately, dropping indirect hints and making many attempts before she obtained some information

about the 'sensitive topic'. While she succeeded in finding out the name of the group, which is so vague that 'one never would realise there are past exams being shared', she failed in accessing the group's content. The protection arrangements aim at disguising the materials (and their users), which have been created under precarious conditions and thus appear questionable in their status. The past exam papers that circulate in such groups are, as the student says, mostly Word documents showing the structure and content of an exam paper that has been 'smuggled out' in some way or another (i.e. 'taken away, photographed, or written down') from the examination room. The long-distance student wonders how that act is possible, considering that exams are supervised. Files of past exam papers appear to be valuable 'illegal' products that require appropriate protection measures. In this respect, Facebook groups operate as a 'black market' for past exams.

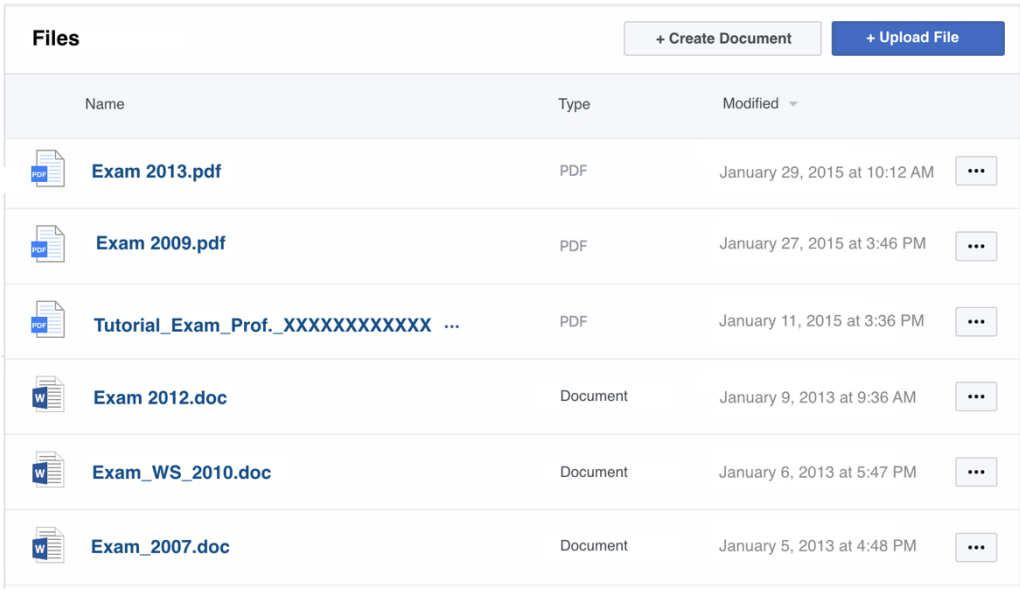
For students, Facebook groups[5] offer a place where past exams, or the person that may have them, can usually be found relatively quickly. One question is being posed systematically: 'Does anyone have past exams by any chance…?'. Running ahead of a negative answer, students can try to ensure the success of their searching by deliberately using the diffuse character of their networks on Facebook, for example, by mobilising their membership in several groups and posting the same request in many groups simultaneously or relying on the 'chain principle': 'Or who knows someone who knows someone?':




*3*

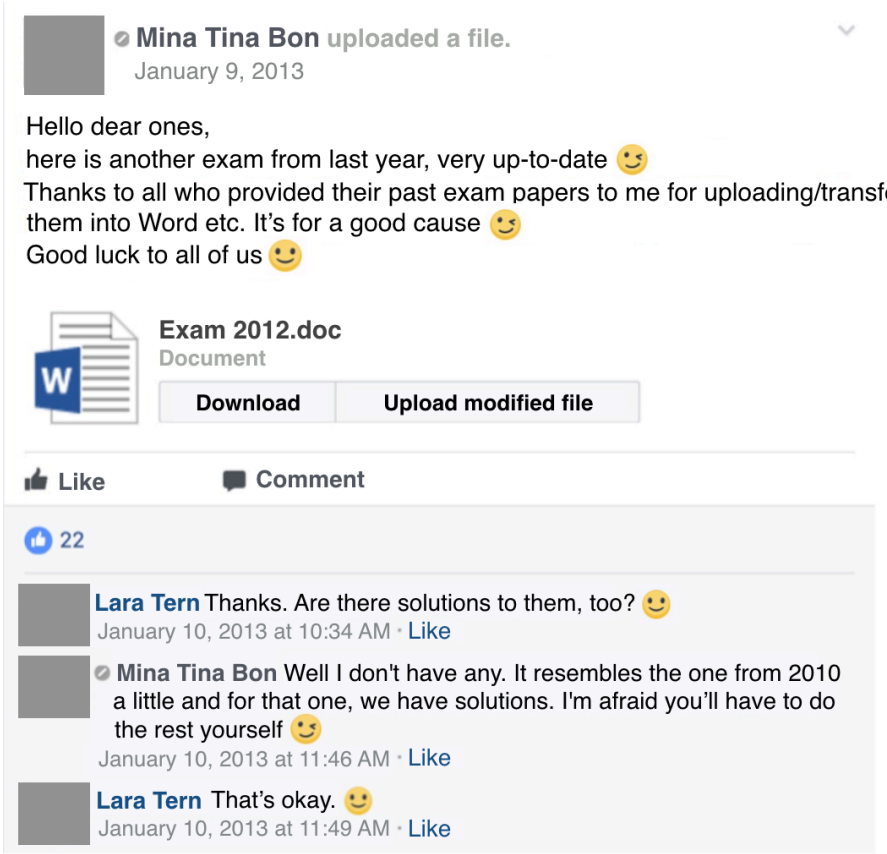
[5] In the following, we focus on 'closed' groups.

Files of past exams can then be sent to the inquiring student, or she or he can be referred, as the example above shows, to a folder within the Facebook group where past exam papers are stored. Such online archives often accumulate other exam-relevant materials too, including summaries of lectures or materials from tutorials (cf. Example 4). Facebook groups thus collect relevant information that can be retrieved at any time and without any commitment: downloading a file is not bound to any action.




*4*

And yet, the sharing of past exams is based on cooperation. The metaphor of a 'black market' has its limits in this respect: if Facebook groups operate as focal points for past exam papers, it is primarily because there is a kind of 'solidarity' upon which the practice is built:




*5*

Here, the student uploading the file performs a kind of *post hoc reward*—a compensatory act that documents the mutual dependence of the participants. The practice lives on such acts of gratefulness of those who already 'came through' and can 'donate' their files to the next cohort. There are further reasons students have for uploading a file with past exam questions to Facebook, as we will see in the next section.

## REASONS FOR LEARNING WITH PAST EXAM PAPERS

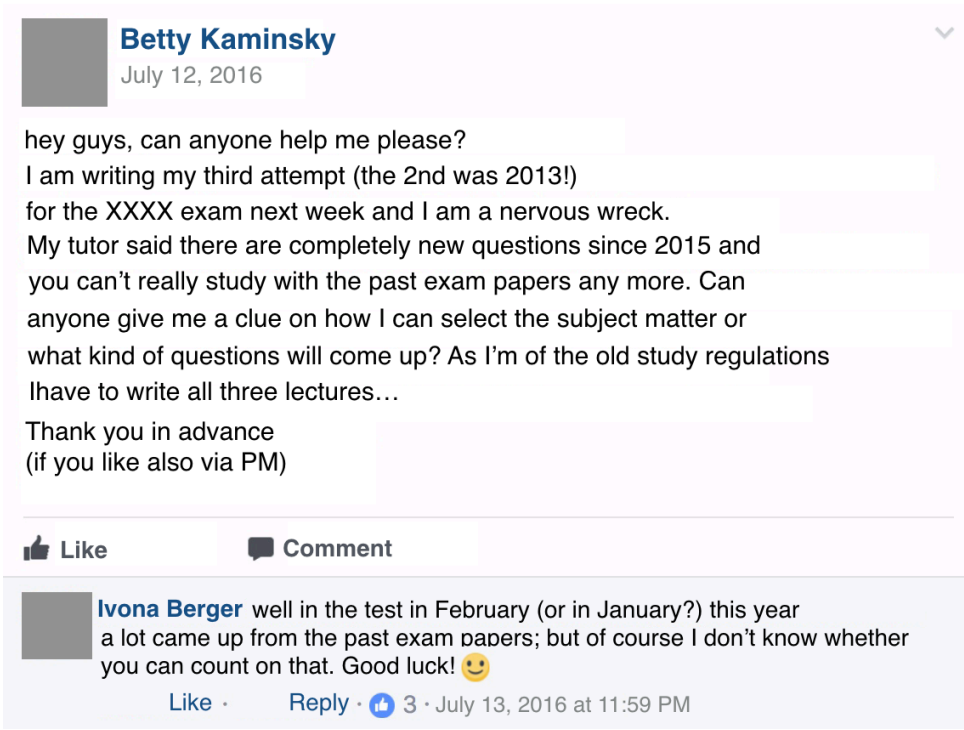
For students, there are 'good' reasons to learn with past exams. First, past exams seem to function as a *reduction mechanism*, allowing students to reduce the study material to an amount that they can handle more easily and thus 'save' the time needed for extensive engagement with the content:

> S: In the winter semester of 2012/2013, I had to pass a big exam in *subject X*. […] there was really a lot of content to be learned by rote. Many fellow students of mine were very nervous already in the beginning of the year and began to work through the lectures and to study. I was behind, felt very unprepared, but didn't want to spend too much time

> studying. While talking to a fellow student, it turned out that there were past exams with which one could practice. I asked her how to get those exams and she said that there was a group on Facebook, but one had to be invited. I asked her to invite me and I got access to the group and to past exams in there.

*6*

Second, past exams are suggested by students to give them a *focus*. An inventory of past questions promises to provide familiarity with possible questions on the forthcoming test: one knows 'the potential depth of the questions—not necessarily the content' or, as another student said in the comments on one post, 'it's quite possible then that the exam appears to be a mix of familiar questions'. In this sense, past exams are expected to show how the material learned in class corresponds with possible exam questions (what type they are, what format they have, and how 'deep' into the material they go), as well as how it might be sorted out according to its exam relevance:

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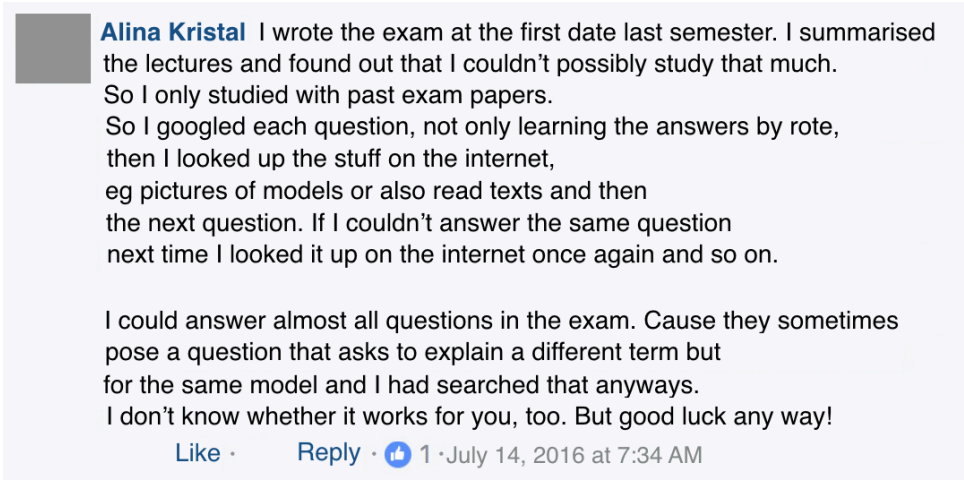
The student here shows signs of being alarmed. With her explicit appeal to the group, she indicates that she is in a panic and searching for help handling the study material. Through such contextualisation of their requests, students indicate that they are 'in need': they feel overwhelmed with 'so much stuff', they don't know how to 'select' it, they are pressed for time, an exam is imminent and there are 'horror stories' about it. Past exams are assumed to show how far one must go when reading the material to be

learned, and they provide an orientation toward what is to be learned and what might be omitted ('that should actually not come up').

Contrary to what lecturers might think, learning with past exams rarely consists of plainly memorising the answers to past questions. Learning the answers by rote often turns out to be problematic. First, lecturers themselves often modify their exam questions more or less systematically from year to year. When learning with past exams, students therefore must deal with questions that do not wholly represent those on the forthcoming test and that can subtly vary in their exact wording. As a result, students have to *work through* past exam questions:




*8*

In this student's 'running commentary' on her exam preparation with past exam papers, the student formulates what this work might consist of[6] when working with past questions, students search the internet, look up models, and read texts that closely cover the topics tested by the exam questions with just enough effort to answer them. They try to revise unclear terms and become aware of questions that might be phrased differently while aiming at the same topic as a previous exam, as well as questions that might use the 'same' terms but target something different. In this respect, learning for the test means primarily getting to know possible exam questions.

Second, learning the answers by rote is not possible, as past exam papers usually do not indicate the correct answers. In rare cases when students have assembled a collection of 'correct' answers, the reliability of these answers may be questioned: the solutions at hand might turn out to be 'unfortunately pretty wrong', as one student wrote in a Facebook comment.

[6] This example, as well as other Facebook posts examined here, nicely demonstrates the reflexive relationship between 'saying' and 'doing': participants say what they have been doing (attempting to address a problem posted by another participant), where their saying is itself *part* of the doing.

## FINDING ANSWERS TO QUESTIONS ON PAST EXAM PAPERS

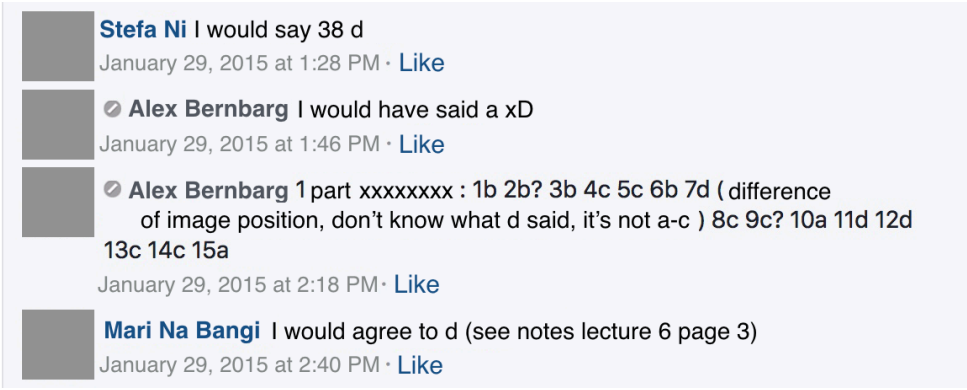
Thus, once a student gets hold of a copy of a past exam, there is yet another problem to grapple with: finding the answers. A file with past exam questions provides an overview of the kinds of questions and answers to expect, but it contains no information as to which particular answer is correct. *Finding out the correct answers* appears to be typically accomplished through a range of steps that aim at working out a 'useful' exemplar of a past exam paper.

### *Vetting*

This work can be done individually, as described by the student in the example above. However, the absence of an answer key or the unreliability of a collection of 'correct' answers at hand often lead to a 'temporary working team' that, through several posts on a Facebook page, focuses on reconstructing missing answers:


*9*

Here, the uploaded file of a past exam is framed only by a short reference to a 'technical' improvement of the file. Yet it is in fact an invitation to a collaboration on solutions. After this implicit invitation to search for missing answers, which the student is 'working' on, he proceeds to post the first part of his answer key. He thereby invites the others, now explicitly through the question marks after some answer variants, to work together on the answers. This work is carried out as a collective verification of the posted answers:

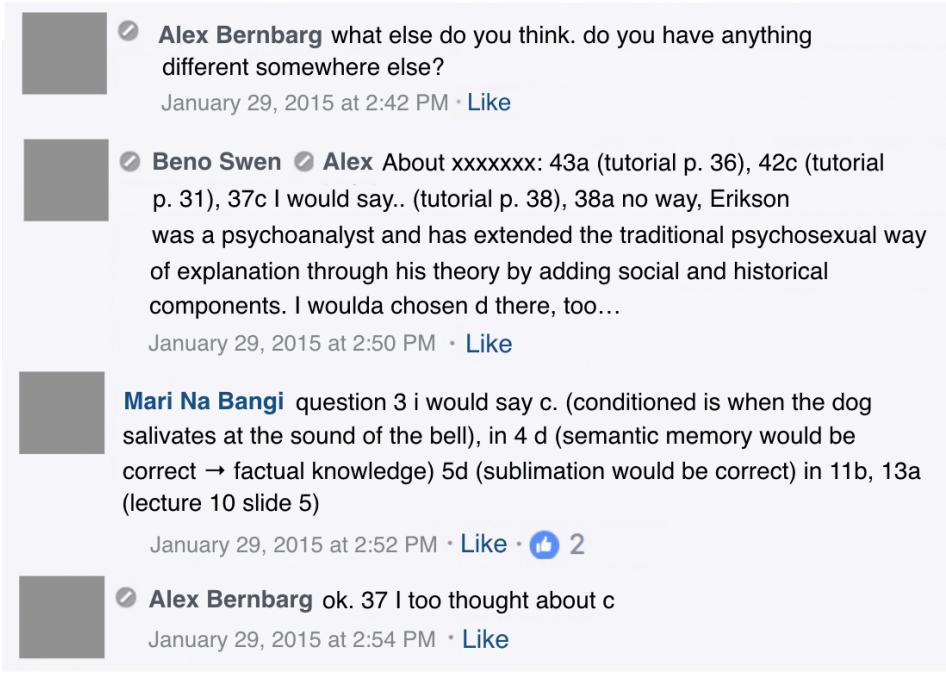



*10 (continued from 9)*

Making decisions about correct solutions resembles a *vetting* process: the students try to guess which solution might be correct by making assumptions, checking them against each other, and agreeing with the assumptions of the others or suggesting their own variants. Thus, students come up with 'probable' answers ('I would say d, but I'm not 100% sure') and have to take into account the vagueness of proposed answers: 'the solution for no. 35 from 2010 is C) but I'm not entirely sure about that! Otherwise it would be D)'. This is then followed by a kind of *voting* procedure to decide which answers are assumed to be correct: 'I would say 38 d'—'I would have said a xD'.

*Reasoning*

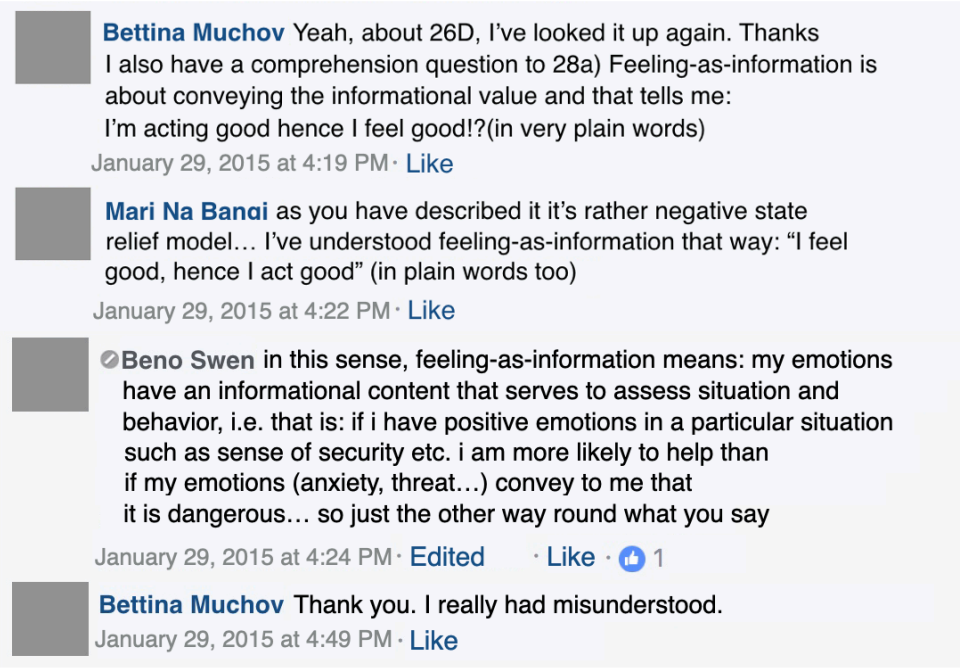
Students do not only vote on correct options. Their efforts to find answers to past exam questions involve *reasoning* and providing evidence as well. The suggestion of reasoning behind why a particular answer may be the correct one (in contrast to another) involves making reference to lecture notes, slides, and tutorials, which serve as an anchor for decisions:




*11 (continued from 10)*

Students manifestly do not rely only on lecture notes and tutorials to argue their case but also on their *previous knowledge*. They apply what they know about the subject matter to come to their decisions ('38a no way, Erikson was a psychoanalyst…') as well as what they *understand* a particular question to mean in the first place:

*some comments omitted*




*12 (continued from 11)*

Here, the comprehension question is raised after the students, in their previous comments (not shown in the example), reached an agreement on 28a as the correct answer. The student who raised the question shows that she carries out her own reconstruction of what the question means parallel to the collective discussion on the Facebook page. She not only tries to reach a common agreement about correct answers with the group but also aims at achieving a correct understanding of the particular content—an understanding just sufficient to answer the exam question.

*Struggling with 'awkward' questions*

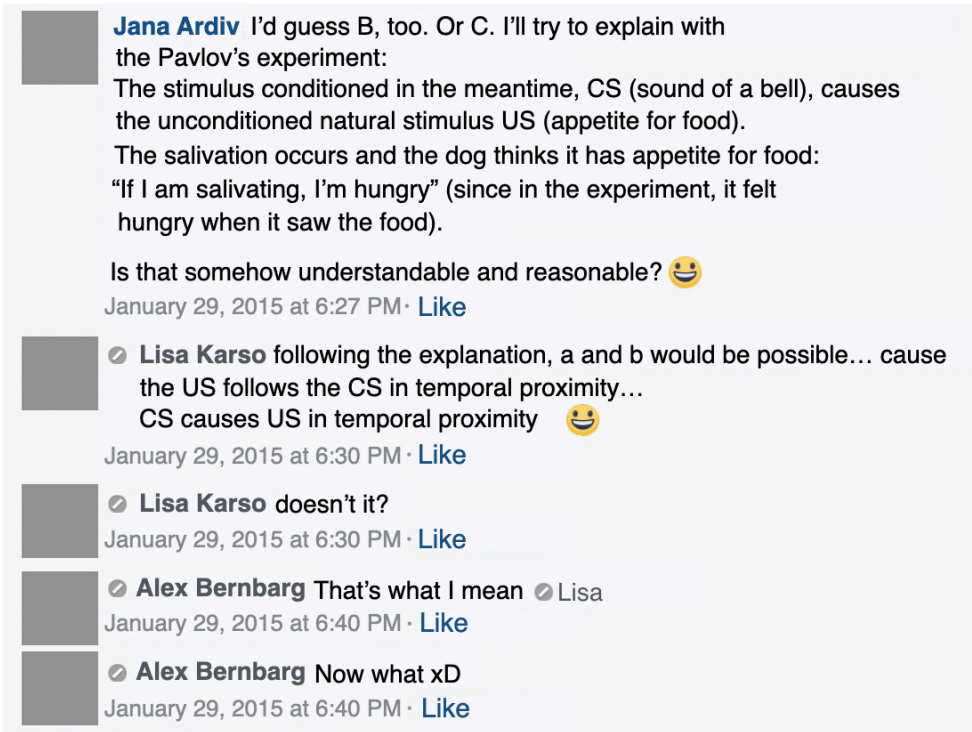
It becomes evident how vague some of the agreed upon reasonings for certain answers remain when students, despite various arguments, do not come up with a solution that appears plausible to everybody. While in most cases collective reasoning and validation of solutions lead to an agreement on at least one of the given answer options, some questions defy students' efforts to find a reasonable answer:


*13*

Unlike in previous examples, here the group focuses on one single question posted separately as if the student meant to emphasise its specific difficulty level. Although the first two comments favour a particular answer, further attempts to clarify lead to more confusion: 'I, too, think it's a because just after the CS [conditioned stimulus], the US [unconditioned stimulus] follows the classic example of the dogs: CS (sound) just before US (food)'—'it sounds as if it could be b, too. Ah no idea'. The mutual validation appears impossible, as the students not only express doubts about the reasoning of the others but also mark their own arguments as essentially fragile: 'right? I rather thought that if there is a US then a CS follows sometime within temporal proximity, if there was an NS [neutral stimulus] before the US several times. … or do I misunderstand?'.

The more arguments that are brought into the discussion (which in this case unfolded over 36 comments), the more that the involved students tend to consider all three answers as possibly correct:

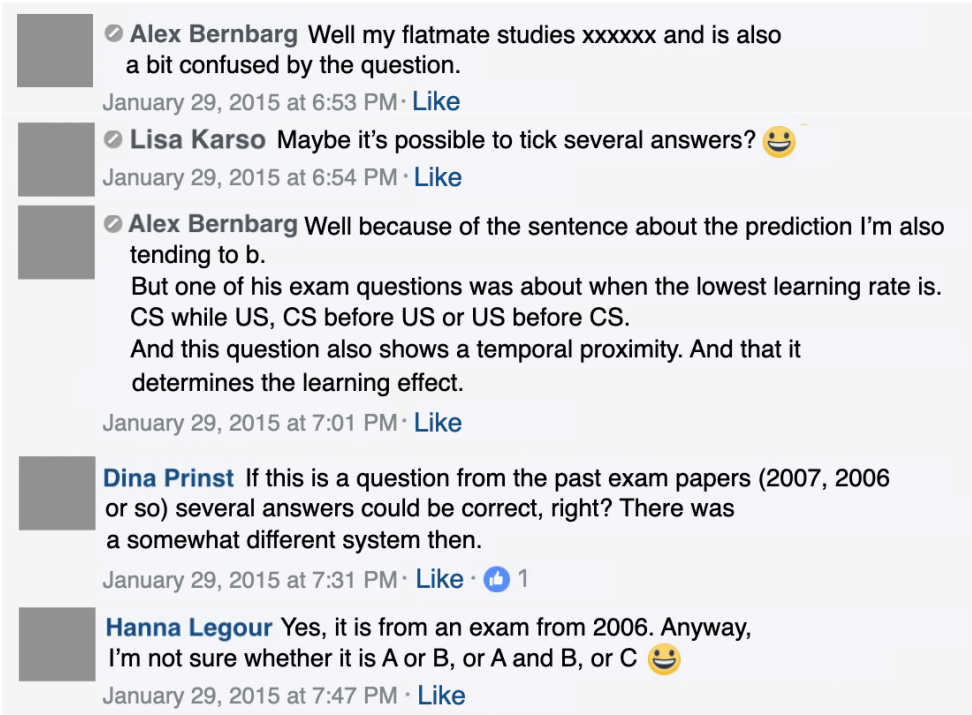
*some comments omitted*




*14 (continued from 13)*

For students, the difficulty of deciding on the correct answer lies not only in the vagueness of their own arguments, which—however convincing and reasonable they seem—routinely allow for other answer options, but also in the ambiguity of the wording of the question itself. This ambiguity is clearly noticeable in the comment of one student who jokingly concludes: 'CS causes US in temporal proximity'. The answer options 'a) there is temporal proximity...' and 'b) there is a causality...' don't seem to be mutually exclusive alternatives to the students. Although the students were inclined to consider certain answers plausible or more likely in the beginning, now some of them seem to leave the mode of factual argumentation:

*some comments omitted*



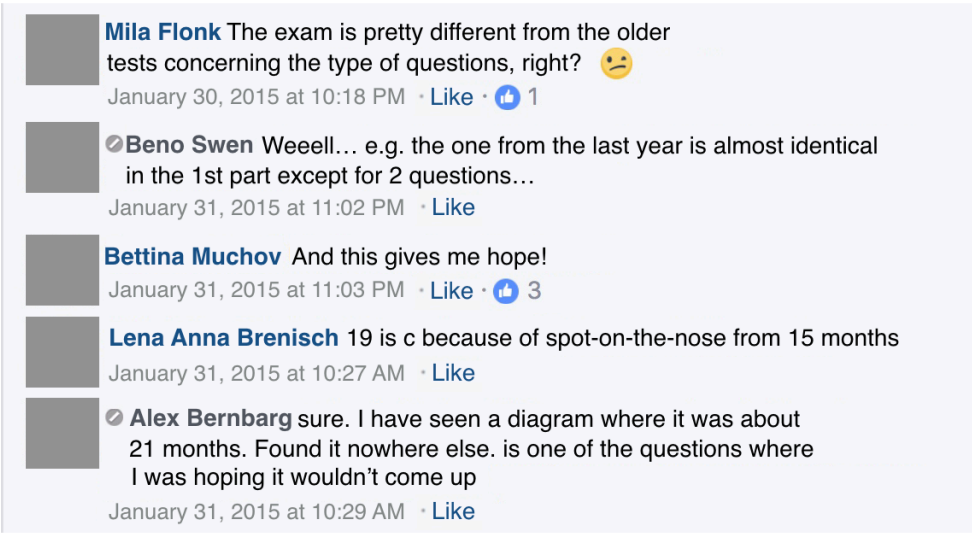

*15 (continued from 14)*

The confusion about the question, which even the student studying the subject is not able to eliminate, leads, finally, to abandoning the attempts to find a correct answer. The students do it by transforming the problem of conceptual definition into one of test design ('several answers could be correct'). The net result of this two-hour engagement with the question turns out to be quite humble, and it is commented by the student who posted the request with a kind of self-irony ('Anyway, I'm not sure whether it is A or B, or A and B, or C'). This example points to a further problem that is often encountered when learning with past exams: different versions of past exam papers.

*Paying attention to the exact wording of questions*

Since lecturers—as mentioned above and shown below—renew their question inventory more or less systematically, students have to take into account that the questions they can find in files from different years will not be completely identical to those on the forthcoming test:

*some comments omitted*

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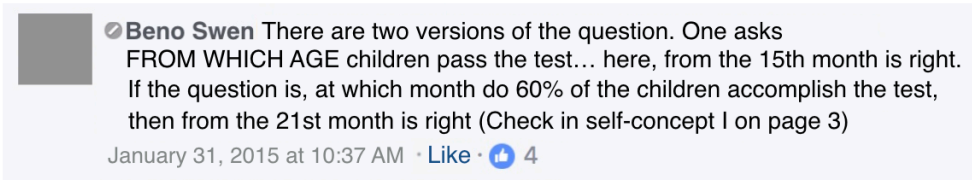



*16 (continued from 12)*

The decision to select one answer or the other may still turn out to be flawed when a question that looks just like one from past exams in wording and terms is different in some detail. There may be warnings about such instances: for example, 'We have to pay attention to this in the exam…sometimes he asks about secular and sometimes about individual! That's so shitty!'. Thus, students have to and do take note (here by complaining) of both the exact meaning of what is being asked and the exact wording of the question, comparing it to past exams. In this respect, students, even when studying with past exams, can be seen to adopt the strategy of learning 'broadly' and comprehensively in order to be prepared for whatever the precise way in which the test is designed turns out to be.

## LECTURERS' COUNTER-STRATEGIES AND STUDENTS' RESPONSES TO THEM

Students also have to take into account the different counter-strategies with which lecturers react to the circulation of past exam papers. The main reason why lecturers employ MCQs is to save time and effort in having to grade (which is why MCQs are particularly attractive for large classes). Designing MCQs may take more time and effort

than other forms of exams, but grading them is easy. Thus, in a sense, MCQs are an investment in the future: the more often a particular question can be re-used, the higher the 'return' on the initial 'investment' of time and effort. The circulation of past exam papers undermines this reduction of work. From the lecturer's view, they also challenge the diagnostic function of MCQ tests by opening the opportunity for students to identify correct answers prior to the test. Lecturers answer the practice of using past exams with a range of counter-strategies:

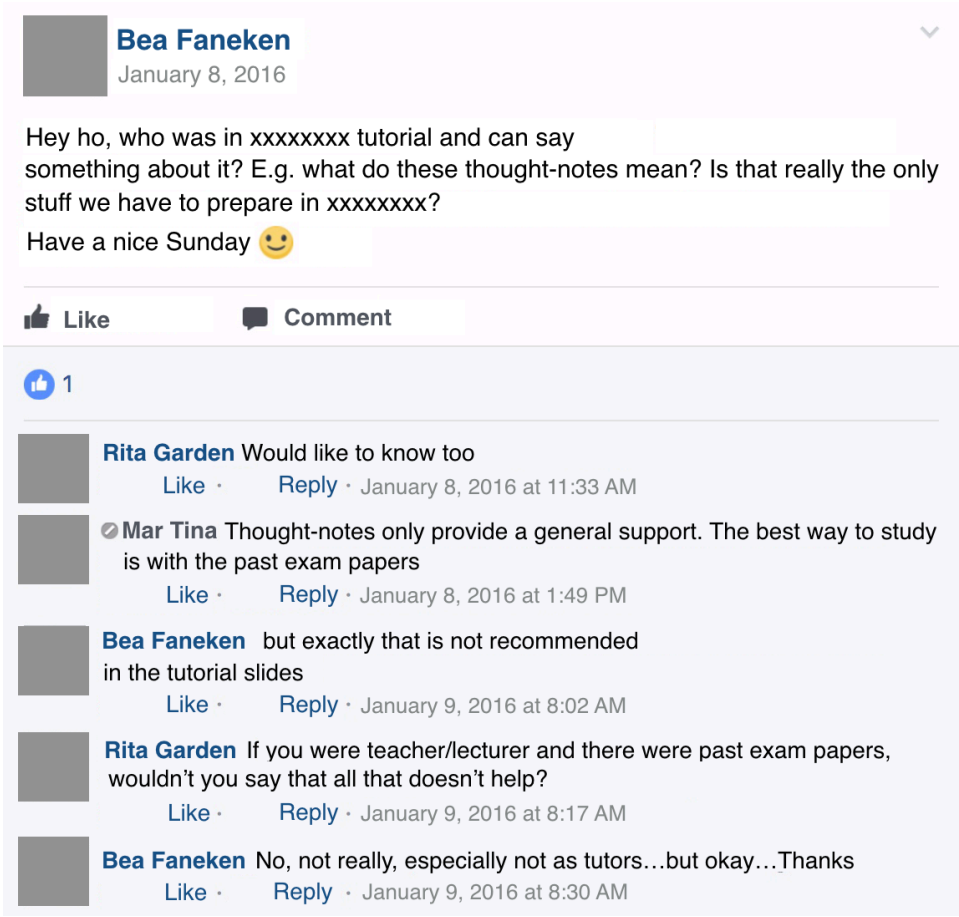
> L: […] and this [students' use of past exam papers] compels us to reconstruct the exam well we always reconstruct it each/ well not basically but for example we change the order of correct and false answers and indeed we always have two three new questions or we add some answers […] Therefore, while preparing a test, I act on the assumption that there is the possibility to prepare for the exam with past exam papers and I try to counter-act a bit by reconstructing the test otherwise I could use it again the one from the last year.
>
> *17*

Thus, lecturers continually have to work *against* their own exam questions: they *renew* them through the modification of wording and the order of certain questions or answers, as well as through attempts to create completely new questions. Further, they employ various *local control techniques*, for example, forbidding the students from having more than two or three pens and a student card on their exam desks, handing out question papers directly to the examinees present in the examination room, or giving a warning to treat a mobile phone as an 'attempt to cheat'. They gird themselves against students' potential attempts to take a sample question paper from the examination room.[7]

Another strategy to counteract the effect of the circulation of past exams and thereby to maintain the usability of MCQs as a test instrument is *pre-emptively advising* the students against using past exam papers. Students harbour habitual distrust of such lecturers' 'advice':[8]

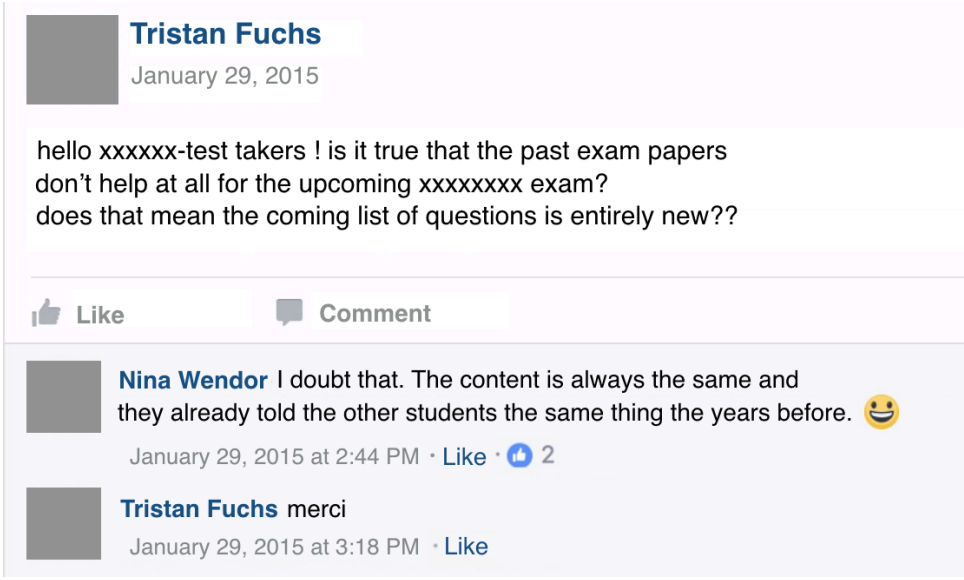
[7] Of course, the function of such control measures is the double one—not only to prevent removing question papers from the examination room but also to exclude 'smuggling' of past exam papers, or other references, into the room.

[8] The 'thought-notes' that the student in this post asks for are short summaries of the relevant content. They were given to students by one lecturer as a 'helping tool'—a kind of 'memo' in order to remind the students to what to pay attention when preparing for the test.




*18*

Students see in such recommendations a conflict of interest due to a particular position ('If you were teacher/lecturer…'). On their part, they advise their less experienced fellow students to treat such recommendations sceptically as strategic calculus. Furthermore, students have doubts about their lecturers' assertions that they have renewed their exam questions entirely:




*19*

Here, the student does not believe the lecturer's assertion that this year's questions would be different from the previous ones. First, the content has not changed from the previous years before (which, the student correctly reasons, makes the re-use of questions attractive for the lecturer). Second, it seems the student heard from other sources that the lecturers have made the same statement in previous years in which the lecturers *did* re-use previous questions (in other words, the student has evidence that the lecturers misled students in the past).

Thus, if it makes sense for the students not to refrain from using past exams, then it is primarily because the content communicated in lectures remains relatively constant from year to year: 'They can't think of something new every semester concerning the content that should be taught' (from a student's comment on one Facebook post). The practice of using past exams takes advantage of the limitations that lecturers come up against in their attempts to renew the questions on the level of the content itself:

> L: [...] well the lecture changes only a little concerning the content well it is always well I always update it a little when I add new studies in some way or so but let's say the basic statements remain more or less the same over the years. In that regard it would be the simplest for me to give the same exam each year and insofar it is yeah of course annoying to know that there are past exam papers that one can use.

*20*

In this respect, past exam questions remain 'reliable' instruments of exam preparation, even if they are modified in some way or another: 'Last year there was a whole topic exactly like one of the past exams. The answers only came in a different order.

Well, I studied exclusively with past exams and passed' (from a student's comment on one Facebook post).

However much effort the students put into their exam preparation through past exams, it is all in vain upon the arrival of a new lecturer who breaks the continuity of the exam's content. A new lecturer will usually structure the content of his or her lecture differently and thus also create a new inventory of exam questions, rendering past exam papers 'useless':


21

Here, the student who comments on the post is sceptical about the transferability of the content due to the new lecturer ('I wouldn't rely on it being similar'). Hence, the reliability of past exam papers results from the (relative) stability of the content *and* continuity of lecturers. The change of lecturers is like the 'expiration date' for past exam

papers: henceforth they may not be longer used. On the other hand, the continuity break also means a new start: from now on, one can begin creating 'new' past exam papers.

There is thus a circularity and inherent reflexivity of the relationship between students' learning and lecturers' assessment strategies. The circulation of past exam papers gives rise to lecturers' attempts to counteract it, whether by continually renewing the exam questions or by strategising when planning and processing the test. Students, on their part, consolidate their efforts to adjust to changing circumstances by, for example, creating new versions of modified past exam papers and working through different versions of the 'same' exam at once.

## DISCUSSION

Let us return to our initial question: what does the practice of learning with past exam papers tell us about students' methods of dealing with MCQ examinations? But also, what does it actually mean to *learn* with past exams? Drawing on the results of our analysis of the practice of re-using past exam papers, we shall discuss these questions by taking up two aspects of our analysis which need further explication. The first is the relationship between MCQs and memorisation. The second concerns the relationship between learning and assessment.

## DO STUDENTS 'LEARN' WHEN THEY PREPARE FOR MCQ EXAMINATIONS?

We do not deny that in particular cases students may rely on memorisation when preparing for MCQ examinations. However, what we question is whether MCQs actually (only) encourage memorisation. Using past exams to prepare for MCQ tests would seem to be an extreme form of memorisation where one only needs to memorise the answers. However, looking at students' engagement with past MCQs on Facebook, we see that students have to *study* these questions. What does this 'study' consist of? Here, we have to distinguish between different ways students use past exam papers, displayed by their 'doing' and 'saying' on Facebook—that is, in and through their methods of (notably) 'formulating' the 'whats', 'hows', and 'whys' of preparing for upcoming MCQ tests with exam questions from previous years. The first, and perhaps most obvious, reason for consulting past MCQs can be understood as the *economical reduction* of examination material and time required for learning and preparation. Without doubt, this can be organised very 'strategically': once a student gets hold of past exams, he or she can avoid extensive reading.

The second invoked and variably elaborated reason for using past exams is that they operate as a *focusing tool,* giving students a guideline for what to concentrate on in their effort to learn: how to sort, structure, and come to grips with the study material. When students prepare for a forthcoming test, they do not try to learn everything they have gone through in class, nor in their notes, tutorials, or textbooks. Rather, they focus on

learning what they assume will be tested on the exam. In this sense, even a student 'learning for its own sake' at one stage will want to know which aspects of what was presented in lectures are the most important, where 'important' means necessary to get a good grade in the exam.[9]

Third, past exam papers as they are invoked and discussed on Facebook also disclose and contribute to *understanding* of what should be learned. Educational psychology research on learning approaches treats MCQ examinations as addressing low-level cognitive processes. Indeed, MCQs do not always require the highest level of understanding. However, our data show that even if students are 'only' trying to study for the test, they will have to engage in understanding. In order to reconstruct missing answers, students have to relate their copies of past exams and their lecture notes, textbooks, internet sources, and previous knowledge to each other. On the one hand, there is a kind of collective 'vetting' of, and subsequent voting on, which answers are assumed to be correct. In this respect, of course, there is the opportunity to simply memorise them. On the other hand, missing answers become the object of negotiation and a search for meaning—they entice arguments and rationales for or against a particular answer. What here counts as meaning and understanding is tightly bound to local examination requirements. Students manifestly do not search for a 'personal' meaning of all the terms and topics they have to study; they do not seek to understand them 'as a whole', but rather primarily to the extent sufficient for passing the test—which is to say, *sufficient for all practical purposes*. Furthermore, students struggling with 'awkward' questions have to pay attention to both the meaning of what is being asked *and* the exact wording of the question (the words and terms used). In fact, when trying to understand the underlying meaning in order to identify a correct answer, students inevitably must focus on details—those aspects of the task that might be treated as accompanying memorisation.

There is thus an interplay between understanding and memorising rather than an either/or dichotomy—that is, *either* understanding for its own sake *or* memorising for external examination demands. If studying for MCQ tests—even in its 'worst' form—cannot be restricted to mere memorisation, then we need a more differentiated understanding of student learning, an understanding that recognises that, in the examination context, student learning is strongly *oriented towards the forthcoming test*: it is selective, as well as highly interested in understanding sufficient for answering the expected examination questions.

## THE RELATION BETWEEN LEARNING AND ASSESSMENT

The second aspect of our analysis refers to the relationship between *learning* and the *context of learning*. Our analysis shows that the form of assessment employed is constitutive of, but does not determine, the actual learning practices in any given case. Any particular form of assessment can likely be used in a way that encourages 'deep' as well as 'surface'

[9] In this respect, for students, there are 'good organizational reasons' (Garfinkel 1967, Chapter 6) for learning with past exam papers.

approaches. Studying with past MCQs does not necessarily lead to better or worse learning. It depends on the precise ways in which participants organise their practices and engage with materials. In our data, we can see evidence of various forms of processing the content—including those that one might consider 'good' in terms of learning and understanding.

Furthermore, the practice of both students and lecturers re-using past MCQs clearly documents that learning and the context of learning *reflexively* develop and reconstitute each other. There is an *interactive interplay* between students' and lecturers' strategies and counter-strategies: lecturers' yearly recycling of past MCQs opens the opportunity for students to identify correct answers before taking the test, while students' re-use of past exam papers drives lecturers to constantly modify their exam questions. The consequence of such modifications is the multiplication of past exam papers. As a result, lecturers have to continually work *against* their own dream 'to give the same exam each year'. On the one hand, lecturers and students seem to be in opposing relations with each other long before they meet in an examination room. On the other, these opposing relations are characterised by a deep interweaving of actions: the practice of re-using past exam papers causes a circular process of counter-strategies and adjustments, and both sides take the other's strategies into account. In this light, there is a manifest 'double contingency' (Luhmann 1995) of students' learning and lecturers' assessment practices, generating alternative action options. There is still much to do by way of investigating, from a praxeological perspective, which learning practices and strategies are made possible and constituted by educational systems and particular assessment formats.

## CONCLUSION

In this paper, we focused on one particular case of students' exam preparation: studying with past exam papers. This case, however, also throws light on students' situation in more general terms—the situation wherein they must not only learn but also learn *in the context of assessment*. The question 'What are the assessment's demands?' is here very pertinent. There are various levels of knowledge about such demands. On the one hand, they are plainly stated in course descriptions. However, these demands are quite abstract and not easily transferred into concrete studying strategies, at least not until after the exam is taken. The act of piecing together assessment demands is always oriented toward the assessment method used in the course. In this sense, studying with past exam papers provides students an operationalisation of the intentionally abstract formulations of the official curriculum and examination requirements, allowing them to see what really matters for the test.

Furthermore, when preparing for the test, students must balance their particular learning intentions with different practical concerns: their schedule (determining when they can study), the amount of time available (determining how much they can study), and the materials they have access to (determining what they can study). Re-using past MCQs can be seen as a way to manage academic work with regard to the practical limits

of learning and assessment: time and effort. In this regard, to analyse what constitutes learning would also mean to describe how the practical aspects of assessment and curriculum are managed and become relevant to what students actually do.

The last question we want to address is about the status of past exam papers—whether students' copying and using MCQs should be considered inappropriate or perhaps 'dishonest' behaviour. It is not our goal here to provide any definite answer to this question. However, our data suggest that participants seem to treat it as such: lecturers try to 'guard' exams and students try to access to them, but they do so in 'hidden' ways, such as by creating 'secret' and 'closed' Facebook groups. With regard to their legality, past exam papers seem to operate within a kind of 'grey area' of learning. They are, using the characterisation of Hughes (1993, 105), 'the shady side of the institutional tree'. Indeed, they do what we can call, following Hughes, the 'dirty work' of university learning and assessment: 'cutting corners', 'coping ploys', 'cue-seeking', and other 'backstage' activities performed to come to grips with the situation. However, 'Each job includes ways of doing things that would be inappropriate for those outside the guild to know' (Fine 1993, 267). And it is these things that allow the job to keep running.

## ACKNOWLEDGEMENT

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