This is a pre-print version of the Timothy R. Amidon, Les Hutchinson, TyAnna Herrington, and Jessica Reyman webtext "Copyright, Content, and Control: Student Authorship Across Educational Technology Platforms," published in *Kairos: Rhetoric, Technology, Pedagogy* (24.1), available at http://kairos.technorhetoric.net/24.1/topoi/amidon-et-al/platforms.html

00:01 [IP Casts music, a soft harmonic resonance, builds to a crescendo]

00:06 Tim: You're listening to IP Casts.

00:13 [IP Casts music fades out]

00:14 Howdy! Tim here. So one of the things we wanted to offer readers and listeners of this webtext was a brief overview of the heuristic and just to walkthrough how students, or teachers, or researchers might go about populating it either as individuals or as teams. And so what I'm going to do is walkthrough every category and talk about some of the ways that folks might think about it and then how they might begin the process of populating that. So as you'll note there are six categories or components of platforms that we really wanted to think about with respect to intellectual property. One of the ways we think it [the heuristic] can be used is to compare the ways those elements of platforms—whether it's how inputs and users connect; or how inputs and gateways connect; or how operations, inputs, and outputs connect to various user roles—that it helps us understand what the relationships are, perhaps, between asymmetry and composing. Or, how the materiality or the visibility of composing practices, and the content and inputs that users make, can be rendered visible or less visible within a platform. And, then, finally just to think about what circulation means within a platform.

01:33 We think there is some slippage in the heuristic as well, and we're looking forward to seeing how others work with it in the future and revise it or adapt it or critique it. I think all those things are going to be valuable for those interested in thinking about intellectual property.

149 Alright so let's start with users. So users are just the broad array of folks that get integrated into platforms. There's a lot of different ways to think about user roles, but here's one really good example about how we see people potentially populating it [the user category in the heuristic]. If we do like a comparative analysis of a plagiarism detection service or a social media platform like Twitter, we see very different roles across those two platforms. Whereas a plagiarism detection service might have a like an administrator role, a teacher role, and a student role, Twitter doesn't really have those kind of roles. It has a user role, and it has a verified user role, and it has kind of like a prestige economy that impacts how users get regarded within that platform. So just thinking widely about who the users are both on the front end of the platform but also on the back end: not just the users of the social media platform or the educational technology platform, but also thinking about how like platforms themselves [act as users] and how the value that's created within those platforms gets repackaged and sold outside of that platform as well [for consumption and use by third-party users]. So we're really trying to think broadly about what a user is.

03:03 Let's talk a little bit about [the] permissions [category]. Permissions are the processes, the practices, and the policies that unfold [within] or that surround use contexts within a platform.

They are the ways users get integrated into a platform and the kind of structures that influence user integration within a platform. What we see operating within a number of these platforms is a kind of not-necessarily-overt-consent to everything that's going on: we don't know that all users are informed about all the inputs they are making. We don't know that all users are really aware of how the inputs that they make might be interacted with or built upon by other human and computational actors in those platforms. And, then, we're not very sure that users are fully aware of all the ways that there's gateways into accessing both the inputs that they make and also the derivative products or outputs that are made based on compiling the inputs that users make at an aggregate level and at an individual level within those platforms. One of the things that we did in terms of our thinking here was we walked through some of the structures that we see influencing those permission processes or the integration process when users get integrated as a user. There's subscription models and click-wrap-agreements, there's informed consent processes, and there's just settings within a platform you can click this button (e.g., private versus public profile) and change how you're integrated into that platform as a users. There's laws that impact that whether that's privacy laws or copyright laws. And, then, there's policies both within the platforms and within institutions: for instance, like university copyright policy versus the terms of use policy that a platform promulgates. They're [policies, laws, and processes] going to impact what a user is and what rights they kind of have within that [platform], and those things [policies, laws, and processes] can be at odds at times. And we think that that's pretty valuable for the types of conversations that we'd like to have people continue enacting in the field [IP studies]-there's been a lot of work in that area and we'd like to see that continue.

05:16 The inputs, and Jessica and I have written a little about this in the past, and there's some other folks, including Shoshana Zuboff who think a lot about this or Casey Boyle's work on #sensecommons. We think these are good examples of ways of thinking a little bit about inputs. Inputs can count as content, data, and metadata. They're all the kinds of products of interaction that occur within a platform: anything that's logged so to speak or saved in the memory of platform whether it's a photo or a geolocation or a datapoint. These are all types of inputs users are going to make in a platform.

05:57 And, the operations become the interactions that exist, whether they're human interactions or computational interactions, where users and computational agents essentially interact with inputs and interact within that system in a variety of ways. So this gets tricky, but you just think about all the ways you know that people can interact with this information whether it's on the front-end or the back-end and whether it's computational actor or a human actor. And, that gets a little bit tricky to really work through, but a good example is the ways Google will crawl the web in order to support indexing, so that when you do a search you can find what you're looking for. It will return pages that have that [search term]. Plagiarism detection services work in much the same way.

06:46 And, then, the outputs are just the derivative products that make use of the inputs that arise as a result of platform use. So, when users use a platform they are creating value, they are creating that platform itself—it becomes a product—but also there are other types of derivative products that are embedded or packaged within those platforms. So, an example of a good output is a originality report that's based on one student's paper compared to another student's paper or another piece of content that exists in an academic database or on the web. That report returns an

overall assessment where 20% of whatever student paper is original or not original. So, that's one example of an output. Another output [would be] a database, or a user profile, or a trend, or some insight that the platform might gain about users or about practice because they have a kind of topsight that not all users would have.

07:53 And, then, the final category [is] gateways. Those are the variety of ways that [someone] beyond the composing author and the platform itself might gain access. And, a good example of this can be seen on the Twitter page of this webtext where we pulled out the metadata using the API. We wrote a little bit of programming and accessed Twitter's API, and pulled down some information about one of Renee Hobbs' tweets. We actually pulled down a larger number of tweets, but we just pulled that one out as an example to show how much about of data one can pull down on the back end of these systems. There's a number of other ways we can think about gateways. For instance, various students might be given different kinds of access to different kinds of information in a class. An example of this is whenever we upload a course reading to a learning management system, we're making a decision about how to share that and what type of intellectual property we want to share with students and which students should have access to that. Versus, if we just threw it up on the web where it's not being accessed through a log-in process: that would change the way third-parties beyond the composing author—in that case an instructor—and the platform—the learning management system. might access that content.

09:13 Cool! So that's that: thanks for your time!

09:14-09:29 [IP Casts music, a soft harmonic resonance, builds to a crescendo, then begins to fade out]