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„UNFURLING THE FUTURE"

Generating Credibility and the Master Narrative in the ‚edX Announcement Conference'

Verfasser

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0. INTRODUCTION

Whilst the transcendence of technology into the virtual realm continues unabated, those who claim dominion over these technologies must establish and sustain such claims within the public sphere. In matters of emergent technologies, the manner by which an organization promotes a capital venture is paramount to the general acceptance of this endeavour by the wider public. This general acceptance, crucial to the organization's securing of credibility and future viability, may be the outcome affected by deliberative stratagem: that which emanates from a corporate agenda intent on the maintenance and growth of socioeconomic stature in the present and in the future.

The recent developments in online technologies subsist within the Internet epoch commonly referred to as Web 2.0[1], an interconnected network of user-generated content defined by highly dynamic websites. These second generation websites eclipse their visually static, read-only predecessors through collaborative and interactive practices. Simply stated, the contemporary Internet is *social*, and as such decisions taken by administrators of a certain domain must co-opt the opinions and attitudes of its users towards creating an engaging online experience. Thus, the synthesis of developer and user imaginations defines contemporary cyberspace.

This novel empowerment of the user, however, does not forfeit asymmetrical power structures inherent to traditional economic activities. The purported inclusion of user sensibilities and interests into an emergent technology may simply be the actuations of intelligent business, a process of assimilating the user into the intentions of the controlling bodies towards a specific trajectory of development.[2] This particular version of how a technology will develop, unfurled for this purpose of persuasion, speaks directly to a unique vision of the future.

As we shall see, the edX announcement conference held on Wednesday, May 2, 2012 deliberatively echoes the framework of Web 2.0: the administrative will to harness differing opinions

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[1] Web 2.0 is defined as the modern internet environment characterised by blogs, wikis, social networking, web applications techterms.com and the evolution "from static web pages to dynamic or user-generated content" Oxford Dictionaries, 2013).

[2] See Deuten and Rip's *The Narrative Shaping of Power* in 'Contested Futures' (Brown, Rappert, Webster 2000) provide an illustration of this practice in the biotechnology industry. Furthermore, many studies denigrate citizen participation as an illusory component of corporate stratagem (Grönholm 2009).

and subjectivities into a framework conducive to sustainable business practice. Such purposive action—that which attempts to uphold a particular agenda—remains a crucial area of interest for investigative social sciences, and will only prove increasingly salient to understanding both the future envisioning of technologies and the present context in which it manifests.

Through contemporary discourses in Science and Technology Studies, this practice of involving the public in processes of political activity is known as 'Public Participation.' (Frewer et al. 2004, 88). The deliberate inclusion of the public into the drama of enacting a specific, preordained understanding of the future (and, in the case of edX, the position e-learning platform within this future) characterises these singular instances of public engagement.

This study will provide an analysis of such an event, the edX announcement conference, wherein we will observe the in situ bounding of this novel technology to the institutional agenda presented explicitly and implicitly therein. (Kaplan and Radin, 2011) Furthermore, by engaging directly with raw, conversational data, we sidestep the 'reality of edX' universally taken for granted and instead investigate this reality as a version amongst others and look instead to how this particular version was constructed and maintained.

This introductory chapter provides a detailed description of the academic discourse in which the ensuing research is positioned and outlines aims and objectives, research questions, methodology, scope and limitations, as well as salient information regarding the conference itself to be analyzed in the following. While the primary sections of this study will analyze the edX announcement conference, a number of sensitizing concepts may be useful prior to our engagement with the transcript in order to facilitate an understanding of the material dealt with throughout this study. The first of these is what we will denote as 'Institutionalized Revolution', a paradoxical concept permeating the announcement conference and requiring consistent attention from the edX panellists in order to maintain credibility towards the objective of promoting the edX. Subsequently, we will discuss this 'credibility' of the edX initiative (as both a partnership and a platform), followed by an introduction to a number of indexical concepts relevant to the conference prior to our analysis.

Institutionalized Revolution.

In the years prior to 1900, the revisionist attempt in Germany to dissuade revolutionary thinking within Marxist communities would reach unprecedented popularity. Such revisionist ideology would become entrenched in the increasing adoption of capitalism as an economic

imperative whilst neglecting the often-proliferated maxim of Marx himself: "the emancipation of the working class must be conquered by the working class themselves." (Marx 1864) However, could it not be that practical reforms, lobbied from the capitalist system, would be sufficient in attaining the endgame of emancipation—primary objective by which Marxism was founded—without the means?

The confrontation was destined to wrestle in the minds of Marxists and fellow comrades well into the next century as the schism pried apart the internal consistency of Marxist ideology. In 1908, nearly a decade following her immigration to Germany, the socialist revolutionary Rosa Luxemburg marshalled what would be the defining offensive against the revisionist movement. Her seminal writings, entitled "Reform or Revolution," sought to clarify this emergent dichotomy, the dichotomy having inhibited the idealized revolt and render Marxists susceptible to reform.

Through Luxemburg's prose the hybridized reformation enacted by the revisionists was severed from what she believed to be true Marxist imperatives. Although the argument would be made over an entire treatise, her clarity on the subject of reform in lieu of revolution is found in her opening lines: "Can we oppose the social revolution, the transformation of the existing order, its final goal, to social reforms? *Certainly not.*" (Luxemberg 2008 [1908], 41; my emphasis)

Thus, the concept of 'institutionalized revolution' must be read with particular acuity to the adjective in place. By this we mean it is not an 'institutional' revolution to which we are speaking: that which would require an institution to change greatly under the pressure of an emergent paradigm or otherwise. Rather, this *institutionalized* revolution is a revolution under the auspices of the institution, and established and directed forward by such.

A Matter of Paradox.

The debate surrounding reform versus revolution, inherent to the foregoing example, is deeply rooted in any such 'revolutionary' movement persisting within an overarching system of governance which itself attempts to gain revolutionary support towards a revolt against this same system. However, to conflate the two terms (i.e. "reform or revolution"), whether purposeful or otherwise, necessitates the *'dealing with'* of this inherent contradiction in order to progress towards the objectives of a given organization.

Not unlike the attempted revolution ushered forward by those of the early 20th century, the edX announcement conference, as this study will illustrate, appears as such an instance wherein the

edX members[3], having facilitated its joint creation, must deal with the internal contradictions posed by their vision when viewed relative to the institutional framework from which it emerges. This paradoxical stance, intrinsic to the revelation of a novel approach to education by way of its forbearing institutions—Harvard and MIT—and the novel inclination towards revolution born from their joint cooperation, present this conference as a unique case to apply scholarly concern. A case, as it where, in which those that rhetorically incite revolution are those which lead the institutionalized *status quo* of the outlying system to which an absolute upheaval is planned. If a revolution in higher education—one that might suffice Kuhn's explication of a paradigm shift (Kuhn 1996:10)—is to come from within a pre-existing institution, the revolution is thus fettered to the sustained directives and institutional framework from which it originates.

Simply put, the edX announcement conference poses immense challenges for the edX panellists towards creating an event conducive to both an enthralling presentation of a revolutionary and historic partnership and product, as well as the maintenance of leadership over this technology through its self-consciously institutionalized approach to a highly "disruptive" technology. (MITNewsOffice 2012) At its foundation, this poses issue to the meaning of 'revolution' as utilized by the edX team in describing this emergent initiative (if revolution is taken with its adjectival descriptors "sudden, complete, dramatic" (dictionary.com 2013)). A 'revolution' such as this, being *incorporated*, might be better described as 'reform.'[4]

A large constituent of this paper contributes to illuminating *how* the edX panellists deal with this paradox, both tacitly and observably. However, this statement may unintentionally presuppose the asymmetrical nature of this paradox: the false premise that only the members of edX are cognizant of this paradoxical stance. Instead, the argument will be made that the audience corroborates in the allowance of this paradox to persist, despite the contradictory nature of its announcement.

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[3] Throughout this study, we will interchangeably use the terms members, panellists and administrators to describe the five individuals (i.e. Anant Agarwal, Rafael Reif, Drew Faust, Susan Hockfield, and Alan Garber) who preside on the panel during the edX announcement conference.

[4] See above section. The transition, in this case, from physical to virtual platforms does not facilitate a break from the previous institutional ethos, but simply permits a transition of this ethos into cyberspace.

The Credibility of edX.

The focal STS interest within this study relates to the persistent maintenance of credibility found within the edX announcement conference. We make the claim that much of the work by the academics administrators presiding over edX within the announcement conference is accomplished towards this end. As we will see, the newly revealed partnership between parent institutions Harvard and MIT and subsequent defense of this partnership throughout the announcement conference is especially critical to the initiation and preservation of credibility, and therefore, vastly important to the sustainability of the narrative espoused by the edX panellists. Thus, the question we pose is: how is it that the edX panellists, in their utterances throughout the announcement conference, work towards attaining credibility? By way of our analysis of this question, we therefore provide the grounds for drawing conclusions as to what the edX announcement conference adds or changes to our existing STS knowledge regarding the construction of futures with respect to online learning in particular. We will initially focus on the localized attainment of credibility before addressing the overarching implications of such throughout the analysis.

The attainment of credibility does not in itself represent an endpoint. We can first observe this on a localized level. Credibility, once secured through particular means and conventions, provides the necessary foundation conducive to further utterances, which are hereafter rendered valid by previous attainments of credibility. This does not suggest that the achievement of credibility is episodic, but rather credibility must be consistently attained, often simultaneous with utterances relying on its validation by this foundational credibility.

The edX announcement provides an intriguing instance in which credibility is manufactured in order to provide a basis for the introduction of an institutional partnership as well as the virtual platform. This basis of credibility—to be teased from member utterances in the analysis below—provides 'validation' for the entire argumentative stance taken by those responsible for the emergent edX. Thus, all utterances and instantiations of argumentation retain the notion that the version of reality from which these utterances emerges is valid.

As Shapin contends: "All propositions have to win credibility, and credibility is the outcome of contingent social and political practice." (Shapin 1995, 257) Thus, notions of credibility may be considered intrinsic to any context wherein claims are made that uphold revisions or novel ideations of reality. The methods of achieving credibility *must* be observable, be they drawn upon implicit or explicitly in the course of dialogue. Although possibly assumptive or presupposed in a number of

cases (i.e. that members of renowned institutions would have credibility prior to the utterances made in a press event), credibility must be promoted to the audience through the medium of speech.

In devoting an entire section of his investigation into AIDS research to the complexities of credible fact-making, Steven Epstein supports this notion that credibility is inherent to all activities of knowledge transfer. For Epstein, the problem of credibility enacts antagonistic power struggles through society wherein trust in the expert allays doubts and uncertainties of scientific knowledge (Epstein 1996, 14). However, such science is not without political impetus and in the case of edX, as Epstein confers in the highly political case of AIDS, the means of public communication are often transformed through the artifice of rhetoric (Ibid, 15). Latour and Woolgar—channelled by Epstein— who observed the creation of scientific facts in their study *Laboratory Life*, illustrate credibility as an achievement won through rhetorical device via the marshalling of supportive evidence and scholarly support, and generally by making nature "behave" in the laboratory. (Latour and Woolgar 1979, ch.5)

Once political interests impinge upon technical judgments, the analysis of events must be attained through means highly-attuned to the contextual nature of the event and the rhetoric 'imposed' through claims of credibility. Consequently, all utterances emergent from, and rendered valid by, these declamations of credibility are to be analysed.

Finally, and to expand upon the preceding section, an attempt will be made through the analysis to discover how the aforementioned paradox of an 'Institutional Revolution' is dealt with— due to its possible challenge to credibility—by the edX panellists throughout the event. As an institutional venture of Harvard and MIT, edX must be positioned as a credible investment. An investment which continues the legacy of intelligent, rational decision making of two of the world's "foremost academic institutions" and does not pose a great challenge to intuitional credibility as a whole (MITNewsOffice 2012).

It must be noted, in order to hamper any motion towards generalization, that this notion of politically charged credibility striven towards by a given party are not universal, but are highly contextual, especially in geographic terms. Thus, achievements towards credibility are transformed about the "morally" charged context in which the particular vie for credibility exists. (Douglas 1975 [in Shapin (1995), 260]) Although the moral landscape of this event may be deduced from inferences upon the socio-political landscape in which this event is situated, this study does not attempt to make moral considerations a primary notion of this study apart from explicitly moral statements from the conference participants (which are analyzed accordingly). The above citation from Douglas merely

discourages any generalisations of the means of attaining credibility found within this particular event.

We can also make a number of observations about the emergence of this conference as the maintenance of credibility at the macro level, beyond the conventions employed in localized discourse within the talk. As with Epstein's case of AIDS, or by extension, any medical/pharmaceutical claims upon illness, enormous commitments (i.e. capital, resources, etc.) to the foundation of credibility are built around the localised utterances within an event, thus permitting an environment for these utterances to be endowed with credibility. In the case of edX, the maintenance of credibility accomplished in Harvard and MIT provide an *a priori* basis for the credibility of the edX initiative.

Thesis Outline.

This section provides a short outline of the remaining sections of this thesis in order to clarify the direction taken forwards from our foregoing inquiries to concluding statements.

First, we will clarify the scope of this study through an enumeration of its primary aims and objectives, along with discourse upon the methodology and theory used herein as well as the focus and limitations of the research. Following the above, basic assumptions, an illustration of the annals of press conference studies, and theoretical considerations attributed to this study will be outlined. This section will begin to position this study amongst other research regarding the press conference as an item of scholarly interest along with studies into credibility and conversation analysis. Following this, a brief contextualization of the edX announcement will be made in order to aid the reader in understanding the context in which this event resides, and subsequently the concept of narrative and master narrative will be discussed in terms of the edX conference along the demarcation of three vocabularies used within this study will be clarified.

These introductory sections will lead directly into a thorough dissection of the announcement conference by way of conversation analysis, wherein we will elucidate the means by which the administrators responsible for the edX announcement manages to enliven credibility in order to promote edX over the course of the event. This constitutes the primary division of this study and seeks to analyze the edX announcement conference in its entirety. As previously discussed, the attribution of this framing to the obvious source—the edX panel, which for all intents 'controls' the announcement conference—would be a reduction. Contrarily, the maintenance of a master narrative are not to be taken as wholly asymmetrical affair, that is to say entirely maintained by the edX panel.

Instead, we must include the *collectivity* of all actors present. This analysis constituted the majority of this study.

Finally, the foregoing analysis will be drawn vis-à-vis the reactions of the media representatives in their subsequent publishing of articles.[5] This correlation between the master narrative (i.e. the narrative, manifest within the announcement conference, to which all local opinions and ideations are subsumed in creating an 'objective' history of the event) and its subsequent inscription into print media will provide an invaluable resource for reflecting upon the similarities and disparities between the initial framing and its eventual manifestation in the media.

This study was developed in order that the structure of localized structure of utterances uncovered within the edX announcement conference are reflected within the construction of the analysis section, wherein the dialogue is analyzed chronologically. In the chapters prior to the analysis, we discuss crucial terms of sociological interest to this study, which we then allocate to the analysis when required. Crucial items of sociological interest discussed in these early sections of this study are more applicable to particular aspects of the analysis than others, and therefore certain concepts are not consistently applied throughout the analysis. Despite the possible reduction in fluidity such a structure permits, the clear demarcation of theoretical and conceptual concepts provided for the reader in these early sections allows simple referencing in order to facilitate an understanding of their usage within the analysis. This provides a structure that manifests organically around the primary source.

With the foregoing in mind, we will shortly discuss the aims and objectives of this study, followed by the concretization of such in enumerated research questions.

0.1 Aims and Objectives

This thesis will describe how the edX panellists attempt to enact and maintain credibility throughout the announcement conference in order to govern the future of education through governance of the present. Thus, the primary aims of this study are as follows:

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[5] This stylization of the 'reaction' is taken from Godin (1997) in his articulation of the causal action/reaction, which in hindsight may be attributed to a certain instance of rhetoric.

- To discover how credibility is attained within the edX announcement conference and how this permits the continuance of information dispersal therein.
- To investigate the edX announcement conference as a means of transmitting a particular framework onto the public.
- To evaluate theoretical statements within STS literature by attribution to found discourse.
- To discern how imaginations of the future are engendered within the present.

These objectives are of considerable interest in the field of STS and media studies due to their importance for understanding the means by which information is communicated by organizations, institutions and governing bodies to the public. The utility of rhetoric and other forms of mediating a particular message to the populace impact enormously on how particular information is disseminated within a particular context. Furthermore, the way credibility and the attainment of such functions within a society can be considered highly revealing in terms of the cultural practices and norms embodied within a particular setting. Institutional talk is a key component of social interaction and the intricacies and the complexities of its structure must be further understood.

0.2 Research Questions

The foregoing illustrations of research intent can be broken down to the following research questions:

1. How do the members of edX establish credibility within the edX announcement conference?
    1.1. How is this credibility subsequently maintained throughout the conference?
2. How is the narrative encompassing edX supported and defended from contravening viewpoints towards the construction of the master narrative?
    2.1. How are time structures manipulated to this end?
3. How are the arguments within the edX announcement conference presented in media articles following the event?
    3.1. How are unresolved arguments continued through these media articles?

The first question attempts to discover the methods by which the edX panellists initially employ stratagem (i.e. providing evidence of progress) to instil credibility within the first phase of the announcement conference. This study describes how these panellists support the case for both the

announcement of edX as well as the underlying partnership between Harvard and MIT through their attainment of credibility.

The second question looks to discuss the means by which the edX panellists first construct the 'narrative', which illustrates the emergent edX. Furthermore, we look to how this narrative is brought to question in the latter phases of the announcement conference in constructing the 'master narrative' is born from this struggle.

The final, secondary question (to be addressed in part within the appendix) focuses on the means by which the media, having witnessed the edX announcement conference, takes up or rejects the proposed framework of edX within coverage of the event in subsequent articles. This issue already becomes apparent within the ''question and answer' phase of the conference and will be discussed more thoroughly in the appendix of this volume.

0.3 Methodology & Theory

In this section, we will discuss in greater detail the various methods and theoretical implications of such methods as applied to the edX announcement conference within this study. The edX announcement conference is a video recording uploaded to YouTube as a production of the MIT News Office. (MITNewsOffice 2012)[6] We begin first with an illustration of 'ethnomethodological respecification' and conversational analysis—the latter being our primary means of analysis within this study—followed by the postanalytic methodological work of Bogen and Lynch, and finally an illustration of Shapin's methodological considerations when studying credibility.

The primary methodology employed within this thesis is an 'ethnomethodological respecification.' This section will detail the characteristics of this methodology and justify its applicability to the edX announcement. It should be noted that we commit a minor redundancy when discussing both an 'ethnomethodological respecification' and the subsequent 'postanalytic ethnomethodology', as a ethnomethodological study is both inherently a respecification and postanalytical by nature. These qualifying adjectives instead refer to specific features of ethnomethodology, which the author wishes to showcase. As such, respecification refers to a

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[6] The video was downloaded onto this researcher's computer prior to analysis in order to more efficiently navigate its contents.

divergent method of discerning sociological investigation wherein order is found "in-and-as-of-the-workings-of-ordinary-society." (Button 1991, 6) The 'postanalytical' appendage to ethnomethodology will be discussed in the appropriate section below.

Everyday Conversation.

"We are trying to find the machinery."
(Sacks, H. 1984, 26)

As Sacks and subsequent conversation analysts have suggested, the conversational interplay of human behaviour provides the sociologist with copious material for analysis. We need not necessarily analyze the specialized uses of language (i.e. speeches, debates, etc.) in order to uncover the social structure inherent to conversation, as conversation already appears as a social and socially structured phenomenon. (Schegloff 1986, 111) Thus, the ostensible simplicity of everyday conversation provides the conversation analyst with a complex resource for studying the social environment, allowing analysts to wholly avoid the troubling search for "good problems." Through dialogue humans proceed to enliven governing social structures, thereby enacting the basis for social exchange. (Sacks 1984, 22) Simply put, the process of maintaining social structure exists everywhere. (Ibid.)

However, of equal interest to the analyst are moments when this typical, ordinary conduct/conversation is hindered by forces that counteract this social structure. A situation, such as a moment of disagreement between two individuals prevents the smooth continuation of dialogue, and requires the participants to deal with this issue in order to attain situational harmony once more. It is these cases, where the members of a conversation require greater exertions of "mental energy", in the form of conversation work, to deal with these transgressions.[7] At these moments the progression of conversation is challenged and must be doctored back to a form conducive to the dialogue's continuance. As such, the complex machinery enacted by these utterances, which normally function to maintain our social interactions, must be drawn upon in order to face these challenges. And as the

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[7] This is not to say that disagreements are at angle with standard, normative conversation, or are somehow an exception to the structure of dialogue. Instead, we mean to show a single, characterizing feature of typical conversation. See Pomerantz (1984) on 'disagreements' for a detail analysis of the innateness of disagreement in conversation.

quote heading this section illustrates, it is the conversation analyst who attempts to "find this machinery" within conversation: both when it appears to be functioning at its full capacity as well as when it seemingly breaks down and is restored via this "machinery". (Ibid.)

The edX announcement conference, which embodies a nexus between academic administrators and the public (as represented by those present within this event), provides an excellent instance in which dialogue is charged with various disjunctions arising between two parties as well as members within these parties. In light of what we observe the primary purpose of the announcement conference to be—that being an instance to proffer a credible assertion of the future of education through edX—this event provides an superlative instance for examining language "in its full fledged utilization." (Sacks 1984, 24).

0.3.1 Ethnomethodological Respecification

Ethnomethodology concerns itself with the practices and methods by which humans construct the social as a meaningful environment (Garfinkel 1967). As founder of the method, Garfinkel used the term 'ethnomethodology' with reference to "the investigation of the rational properties of indexical expressions and other practical actions as contingent ongoing accomplishments of organized artful practices of everyday life." (Ibid. 10) This modally dense description implies a number of distinct understandings of the social landscape that are particularly interesting to this study.

First, as Garfinkel carefully demarcated, we are interested in the natural presence of human concerns within specific settings. Thus, the analyst must be sure to distinguish between their own concerns with that of the individuals under study. The analyst must therefore "avoid confusion between relevancies entailed by the 'scientific rationalities' and the practical concerns of members in the everyday world" (Garfinkel 1967, 283) a concern initially voiced by A. Schutz and challenged by M. Lynch. (Lynch 2004)

Furthermore, within a particular event, scientific relevancies are not to outweigh those of lay individuals. This purposive disregard for the traditional hierachy between scientific and lay relevancies provides a particular attraction of ethnomethodology to the researcher. As such, ethnomethodology provides the foundation by which a scholarly attempt to abstain from *a priori* demarcation in this regard can be mobilized. As Sacks notes, we approach an event without the recourse of an a priori theory to explain the structure we can observe, and instead intend to find this structure through the actions populating the event. (Sacks 1984, 27) Garfinkel also promoted this

indifference to hierarchical valuing between scientific and lay to the methods of inquiry (Bogen and Lynch 1996, 264). Folk methods, as it were, are not assumed to be less objective than scientific methods, and their utility is only to be determined by their use within a particular context.

Postanalytical Ethnomethodology.

As Bogen and Lynch assert, the promotion of generalization in the natural sciences has fed into the social sciences and disrupted the theoretical basis of studying individual events. By reference to Wittgenstein, Bogen and Lynch attribute the scholarly malevolence directed at the study of such singular events as the repercussions of the analytical subsuming of all social scientific facts into aggrandized theories. In their endorsement of 'postanalytical ethnomethodology,'[8], Bogen and Lynch posit that a study of a particular event can be completed without the organizing of "an interpretation around a core theory or cognitive model." (Bogen and Lynch 1996, 266) Thus, the stability of language elements used by participants of an event to communicate is deeply inflected through the unique setting and conditions in which these utterances are spoken. This is not to disregard the importance of theory when analyzing text, but instead attempts to eschew the implementation of theory prior to engaging with the primary source of a study and instead apply theory following initial observations.

Thus, 'postanalytic ethnomethodology' further promotes the adjustment in the temporal usage of theoretical considerations when completing the analysis of a given event—i.e. at which time a theory is implemented during a study. While other sociological analysis of human activity seek to further the applicability of a preconceived theory of social structure, Bogen and Lynch, not unlike Sacks, observe the event through its unique particulars in order to discover the social structure enlivened therein. In sum, this methodology provides a particular type of method for analyzing singular events in the scope to which they themselves consciously extend (Bogen and Lynch 1996, 265). Thus, ethnomethodology, by consisting of ad-hoc use of theory, may be as close as we will come to attaining Feyerabend's "*anything goes*" with respect to the methodological progression of scientific knowledge. (Feyerabend 1975, vii)

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[8] To be found within the methodological appendix of 'The Spectacle of History" 1996, their considered analysis of the Iran-Contra Scandal.

Conversation Analysis.

The primary means for conducting this ethnomethodological study in STS is 'conversation analysis' (CA). CA is an "action-centered approach" that allows for the descriptive analysis of locally produced discourse. (Bogen and Lynch 1996, 274) The descriptions of particular conventions, used by participants of an event *in situ*, are mainly attuned to the sequential organization of discourse. (Ibid.) For instance, 'adjacency pairs' describes the pairing of an initial utterance—in which its very performance requires a second utterance from another actor to follow—and a second utterance. Therefore, a simple expression of 'Hello, how are you?' inherently beckons a response, perhaps: 'Hello, I'm well thank you."

A number of relevant tools from conversation analysis will be used in the analysis of the edX announcement conference transcript below. These methods of description will be employed and explained when required, as an enumeration of all conversational analysis tools available to the analyst would only serve to oversaturate the reader prior to the analysis. The use of certain terms of description is highly contingent on the particular phase of the conference, with the most obvious example of this being the use of 'question-answer' adjacency pairings within the 'question and answer' phase of the conference.

An important distinction must be made with regard to the reproducible nature of these conventions. When we employ such terms as 'adjacency pairs' or 'preference organizations' within our analysis, we do mean to say that these particular features are reproducible elsewhere and are not unique to the event in question. However, this does not infer that we can, or should, build all-encompassing theories (as we have discussed in sections above) from these reproducible features. Contrarily, we aim to show that these features, although reproducible, may not be conducive to overarching theories of all social sciences, but rather that particular, unique order is produced *within* each and every social situation. We wish instead to illustrate the applicability of various theories to this event and how they hold up under direct application. This usage of theory is important because it illustrates the limited scope of the research presented herein and its applicability to broader sociological concerns. By way of this candid reflection upon the limits of this research, the position of this STS thesis within the greater body of STS research is also clarified.

Scholarly interest by 'conversational analysts' in media discourse is as diverse as the innumerable manifestation of so-called 'institutional' or 'media' talk. For instance, Clayman's analysis of audience disaffiliation in the 1988 presidential elections (Clayman 1992) as well as his studies of purported neutralism in panel news interviews (Clayman 2002) are directed to two very

different aspects of conversation than his joint comparative analyses of presidential speeches (Clayman and Heritage 2002). Furthermore, institutional talk and structural components uncovered within have been described in numerous other articles and publications (for instance, Greatbatch 1988; Drew and Heritage 1992) and the narrative arrangement of certain talks and events are often cause for scholarly interest (for instance, Bovet [Chapter 3 of media policy and interaction] 2009; Hutchby 1996, 2006).

With the foregoing in mind, we can observe that an analysis of this particular event—the edX announcement conference—will complement the body of work related to particular language conventions and structures present in a variety of settings as well as the achievement of credibility through the ethnomethodological respecification enacted below.

0.3.2 Methodological Considerations for Understanding Credibility

The final methodological concern of this study is to be found in Shapin's illustration of the methodological principals by which the analyst should adhere in attending to issues of credibility. As this study attempts to uncover how credibility is established and maintained in promoting edX within the announcement conference, we must discuss particular methodological considerations when attempting to analyze such actions.

Shapin discusses three important considerations that properly direct the study of credibility. The first of these is that scientific claims, not unlike all other claims made actionable in the rest of society, must win their credibility through argumentation or other means. (Shapin 1995, 259) As such, the precedence of scientific claims over any other claims should be refuted, as they must also win approval and establish that these claims are true. (Ibid.) In the case of edX, the unique, often incongruous claims (see: Institutional Revolution) made by the members of edX must be defended against as they are not to be taken as inherently true by virtue of their airing.

Secondly, as analysts we cannot hope to denote all possible considerations relevant to manufacturing credibility within a particular event. (Shapin 1995, 260) This second maxim becomes wholly deleterious to overarching theories of manufacturing credibility—in the much same way ethnomethodology denigrates generalized theories of social structure—being that the unique instances of manufacturing credibility are possibly infinite. Thus, the onus is upon the analyst to discern through observation ("Don't think, look!" (Wittgenstein 2009, 66)) what methods for attaining and securing credibility are enacted *in situ*.

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Finally, and of particular interest to the study at hand, is that the *'of what'* of established credibility must be understood: thus, for what exactly this secured credibility is enacted must be clarified (i.e. the edX initiative and underlying partnership?) as well as who benefits from this credibility (i.e. the edX panellists? the world's learners?). These concerns may seem deceptively simple. However, the establishing of credibility also entails a delimitation of the particular audience from whom this credibility must be won, and the particular methods—judged suitable by edX panellists—by which this may be achieved.

0.4 Focus and Limitations

By the very nature of ethnomethodology—as discussed at length within the foregoing section—we attempt to uncover the *in situ* creation of social structure. The focus and limitations of this study are primarily related to the methodology employed when analyzing the edX announcement conference. In describing the particular usage of conventions towards achieving credibility we sidestep the direct possibility of supporting a generalized theory of social structure. Despite the obvious disadvantage this poses when viewed in terms of classical sociological inquiry, the respecification conducted within this study does not remain isolated from outlying research. Instead, the conventions illustrated by implementing 'conversation analysis' as well as general illustrations of how credibility is achieved are highly transferable, and allow for vivid comparisons between the edX announcement conference and similar public events previously studied via sociological inquiry.

Secondly, within the appendix, our descriptive inquiry as to how various media outlets represents the announcement conference and the arguments presented therein will provide a preliminary means of discussing how successful the edX panellists were in enacting the framework set forth within the announcement conference. Thus, due to the extent of material found within this edX announcement conference, the analysis of subsequent media uptake is relegated to Appendix III, outside of the primary analysis. Discussion there is meant to provide an initial foundation for further research and analysis.

0.5 Basic Assumptions

In order to accomplish this analysis a number of basic assumptions relating to the ethnomethodological approach have been made. These specific assumptions are itemized in the following:

First, in order to study the structure of the conference, we are assuming that the edX press conference does in fact *have* a structure to analyze. The organization of the conference prior to the actual event (i.e. the introduction, actual announcement, and 'question and answer' phase, all of which are scheduled to take place in this order) is the basis for which the actual event, as it unfolds, is structured. However, the actual occurrence of the announcement conference, that which transcends this basic structure and characterizes the mobilization of the conference, is to be analyzed as a *local* achievement of the conference's structure. Therefore, we take this assumption a step further in that we describe how, in terms of the conversational aspects, that the event is a self-organizing entity and can be understood as such. We hypothesize the structure of the talk within each of the conference's three sections is ethnomethodically organizing, and our analysis will attempt to show this as the case.

Secondly, and perhaps more basic than the first, we assume that the conference has *utility* to begin with. Simply put, we assume that by creating such an event as the edX announcement conference those charged with the administration of edX attempt to wield this event as a means of attaining an objective, which we believe to be the attainment of credibility in order to announce both edX and the underlying partnership between both universities towards future institutional standing.

Finally, we make the assumption that there is a framing, which is manifest within the announcement conference. By this we refer to the notion that the edX panellists, charged with the edX initiative, enact a particular framing of this technology within the conference in order to manufacture a localized understanding of edX. We further assume that such measures are enacted to this end in hopes that the framework will be taken up by media members (and public) present within the discourse at the conference towards influencing subsequent news media, and public debate regarding edX (as well as online learning) as a whole.

1. THE ANNALS OF PRESS CONFERENCE RESEARCH

"…a presentation allows the cultural flow of commodity culture to fold back
on itself as an agency expresses 'in subjunctive mood' a series of suppositions,
hypotheses, desires and possibilities (rather than actual facts) enabling a client to
see a new way forward from its present 'indicative state'" (Turner, 1988, p. 25)

The diverse manifestations of the press conference pose issue when attempting to position this research in contemporary academic activity. With aims to clarify the intent of our study, it is important that this particular press conference in question is properly delimited from similar efforts by which an institution showcases both prior activities and future prospects within a public forum.

Within this study, we use (and have already used) variations of the descriptor the 'edX Announcement Conference'[9] to describe this event. The hybrid space present within the conference allows for the employment of the descriptor 'announcement conference', which is intended to further distinguish my analysis of this conference from previous studies. Manifestations of the 'hybridity' of the 'announcement conference' are rife throughout the discourse enlivened within this event, but also in more subtle ways, which will be uncovered within the analysis.

The Announcement Conference.

In the following, we will reference a range of conference studies, each of which addresses a particular iteration of the conference and provides a comparison to the direct event that is that edX announcement conference.

Certainly, the amount of audience (public) participation, or lack thereof, is a crucial benchmark by which conferences may initially be compared. Public participation in such institutional efforts is a scholarly concern often enacted in hopes of discovering how those controlling a particular conference attempt to harness audience responses towards achieving particular objectives. It has often

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[9] 'edX' is stylized throughout this paper in accordance with how members of MIT and Harvard have chosen to do so within the announcement conference and online resources.

been observed that the means by which a presentation is organized (i.e. turn–taking) often reflects the particular responses or audience input that is 'permitted' by the controlling bodies. Rowe, Marsh and Frewer (2004) provide a foundational text towards this end in their explication of a 'deliberative conference': one in which the outcome is heavily doctored by those charged with its occurrence (in our case, this would be the panellists of Harvard and MIT).

This harnessing of audience participation may range from the 'consensus conference' (otherwise known as a 'citizen's panel'), in which debate is purposefully enlivened to reach an agreement or understanding between professionals and a lay-audience (Guston 1999), to the highly constructed environments of presidential speeches and like institutional settings, as described by Sacks. (Sacks 1989) The Consensus Conference typically consists of ten to sixteen individuals, which are representative of the general public and a variety of experts and professionals who present demonstrations and lectures regarding a certain topic to be subsequently discussed throughout the remainder of the conference. (Rowe and Frewer 2000, 9) Consensus Conferences are perhaps most related to judicial conversation conventions utilised within the study of the Iran-Contra Scandal (Bogen and Lynch 1989) as well as studies such as D. Guston's inquiry into the impact of the consensus conference on 'Telecommunications and the Future of Democracy' and R. Hollander's research into conference's attributed to 'engineering' ethics—the latter two being explicit illustrations of this particular sort of conference. Although their use is certainly at angle with the edX conference, the consensus conference contains a number of similarities. For instance, the consensus conference, not unlike the conference central to our study, entails a two-part approach. As described above, this manifests in the didactic introduction followed by open discussion between both the panellists and the audience. Many of these conferences position their objects of research as something of, as Hollander puts it, "substantial public and professional concern", something which the panellists of edX certainly promote as well (Hollander 1983, 25)

Furthermore, and related to the consensus conference, are conferences explicitly created to further the public understanding of science. Such conferences may be structurally analogous to a consensus conference, however the 'consensus' that is reached here is one arrived at less democratically. This is primarily due to fact that these conferences are structured around a 'deficit model' of knowledge transfer (Locke, 2002; Michael, 2002; Irwin, 2006; Irwin and Horst, 2009). Thus, the experts (or simply those in possession of information) and the public (those allegedly deficient of this information) are demarcated as such and over the course of the conference knowledge is transferred from the former to latter. A number of these studies related to the 'deficit model' are attributed to science and technology policy, such as Kleinman, et al. (2009), Ellahi (1995), Aronoff

and Gunter (1994), Chipman et al. (1996), and Frewer et al. (1998). Although studies attributed to public participation often underscore the government-public relationship, many times these studies extend into corporate-public relationships as well.

Finally, and perhaps most readily comparable to this event are studies analyzing product launch events (Simakova 2010; Lampel 2001) and accompanying discussions related to corporate ideology towards the marketability of products presented within such events (Simakova and Neyland 2008). Pollock and Williams (2010) also provide a general discussion of these intricacies by which technology actors engage with the public towards enacting expectations towards particular technologies. It is within these events that the audience is given little flexibility in responses and are often 'allowed' questions only if deemed permissible to those who facilitate the event. Moreover, given that no tangible product is presented within the edX announcement conference, we sidestep the live demonstration of the product in Simakova (2010) wherein working models of demonstrable technologies are publicly actuated to secure trust, and subsequently, financial support.

Thus, varying degrees of public participation are possible in a public conference and the extent and form this takes characterizes the conference both in terms of its socio-political context as well as the sort of knowledge being transferred by whom and for which constituency. As the edX announcement conference does not appear to seek debate and panellists can be seen to mitigate audience inquiries if regarded as undermining to the proposed narrative (as shown below), sociological studies related to the edX announcement conference are somewhat limited to those which regard public participation as nothing more than a means of *persuasion*. However, numerous studies into press conferences of innumerable varieties remain pertinent to both contextualizing and analyzing this event. With this we transition to our theoretical considerations and framing applicable to this study.

1.1 The edX Initiative in 'Context'

"...the proper study of interaction is not the individual and his psychology,
but rather the syntactical relations among acts of different persons
mutually present to one another...not, then, men and their moments.
Rather, moments and their men (Goffman, 1967, 2).

Typically, studies pertaining to an object with clear temporal boundaries require discourse upon the context in which this entity exists. The item of concern within the research must be specified with relation to similar objects, the outlying context, and the socio-political realm, all of which have proven conducive to these entity's existence. However, before this can be accomplished, we must discuss an important distinction between the two types of context employed throughout this study. Thereafter, with this distinction in mind, the subsequent analysis and its orientation towards the *doing* of context within the event will be more easily distinguished from knowledge of context understood *a priori*.

Distinct Contexts.

The first aspect of context is the apparent socio-cultural landscape in which this announcement is positioned. This context can be denoted prior to analysis of the conference and illustrates the outlying arena in which this event is situated.

The non-profit enterprise known as edX was established through a $60-million joint investment in April 2012, divided evenly amongst founding universities: Harvard and the Massachusetts Institute of Technology (MIT), in an effort to provide a novel approach to university calibre online-learning (edX 2013). The initiative charges itself with the task of 'revolutionizing' the way university learning is conducted in the Internet age through modern technologies and pedagogy, and to greatly broaden the potential learning audience via the connective power of online networks. As we've alluded to in other sections of this study, the economic climate following the 2008 financial crisis has proven a fertile grounds for dissent against the enormous tuition fees demanded within the

highest echelons of university education. The two adjoining institutions of edX—Harvard and MIT—are consistently ranked in the highest positions amongst these premium universities worldwide.[10]

The second aspect of context emanates from conversation analysis relates to the context as manifest within the actual *doing* of the announcement conference. Utterances made within a particular setting may acknowledge the outlying context and thus build-up a version of this context to which other participants are able to relate. As Leudar et al. argue, the context as manifest through *in situ* interaction may attempt to actualize objective, independent notions of context, however the "performativity" of such utterances are as such that they are inflected through a will to accomplish an action. (Leudar et al. 2008, 894).

This aspect does not present itself strictly through observation, but must be teased out from discourse through techniques of analysis. Thus, this contextualisation of the event, which cannot be addressed prior to analysis, provides the means of deciphering *how* it is that the participants of the event situate themselves in the wider scheme.

The two foregoing uses of the term 'context' are critical to understanding what is brought to the edX announcement conference with the members, and that which is manifest during the *doing* of the conference.

1.2 Theoretical Considerations

"Before a technology exists, one can only appeal to arguments;
in such a case, expectations are powerful arguments in getting people involved."
(Godin 1997, 894)

The study of the edX announcement conference, with its forward thinking rhetoric, provides for the introduction of academic studies of the future in order to understand the modus by which a particular future is constructed within the present. The sociological interest in the future began in the early 20th century by Mead (1932) and Weber, both of whose early 20th century works discussed progress and the inherent compulsion of modernity, albeit to very different ends. Weber is a more appropriate starting point for us within this study, as it is he who saw future developments and future

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[10] For a sociological analysis of ranking in the public, see Espeland and Sauder (2007; 2009).

thinking as a means of understanding the social impetus to progress (Weber 1919: 137), whereas Mead discourses upon the philosophical ramifications of this orientation to a present populated by possible futures.

Following these pioneers, the last half-quarter century of science and technology studies have bore witness to a sustained assault on the theories of technological determinism: the dominant ideology by which sociology regarded the ascent of technological progress. We have since thrown off this unilateral notion and embraced the social constructive aspects of technological progression. However, we have proceeded further from concerning ourselves solely with the construction of technologies within the past and present and projected our concerns into the far future, which has since become increasingly commodifed by forwarding thinking corporate, governmental, and institutional actors. (Joly 2010: 202)

As the quote introducing this section declares, the forward thinking operations of business and higher education institutions must rely on argumentative stances to both maintain and defend the particular future they themselves envision. Although one might argue against the use of this quotation apropos edX, given that the technology employed by Harvard and MIT is already available, it is the expressed expectations of what this technology will do that is of particular concern to both the edX panellists and audience, and be extension to this analysis. Thus, the edX announcement conference seemingly held with the dual intension of catalyzing interest in the edX online learning platform and purposively focusing the public understanding of this technology through a certain optic provides a wholesome resource for a variety of dimensions of sociological inquiry.

Finally, as discussed above with respect to future envisioning, the moral implications of certain utterances have shown to be related to the societal context in which these utterances occur ((Douglas 1975 [in Shapin, 1995, 260]), and as such, the moral and ethical implications of future positioning are also important to the discussion of the edX conference (Adam 2004).

Among the scholarly work that falls adjacent to our primary concerns is the following. First, the analysis of the social construction of the technology (Winner et al. 1986; Pinch and Bijker 1984) and the politics of certain technologies (Pfaffenberger 1992), through both of which an analysis of educational technologies may be enacted, may provide a further approach to analyzing the construction of a given technology. This may be further reinforced by an understanding of what users are important to the organization charged with the creation of the technology (Oudshoorn and Pinch 2003), which often relates to the imaginations and understandings that permeate the rhetoric of those promoting the technology. As explicitly noted in the methodology section of this paper,

ethnomethodological respecification is such that it is the particular case itself, and not the analyst, that is the determining factor in deciding the relevancy of a particular theoretical notion. Thus, as this study focuses on the aesthetic production of the talk, we are unable to attribute our conclusions to any preordained "strategies, ideologies, beliefs, and assumptions," other than that which manifest through discourse (Godin 1997, 868.) Instead, only the talk itself may instantiate or expose a recognisable strategy.

This final source above may be the closest explication of the paradoxical issue of an 'institutionalized revolution', at once impelled and dealt with by the members of edX within the announcement conference. We find that analysts have often regarded paradoxes on the level of person-to-person interaction, especially in CA (Garfinkel 1967), however we believe the edX conference provides a paramount example for the illustration of an overarching paradox that transcends the limitations of localized discourse and alters the structure of the entire event. Further theoretical considerations important to this study are that of Joly (2010), as well as innumerable other studies explicating the burgeoning commerce of expectations in the present.[11]

Indexical Utterances and Attributed Concepts.

As discussed before, a number of distinct terms and concepts are also entwined with the indexical nature of discourse found within the edX announcement conference. 'Felicity conditions' and 'performatives' are critical to understanding the analysis of the introductory section and their introduction prior to the following 'in-text' analysis will serve to better facilitate understanding. Of course, the following analysis will appropriate these terms when deemed applicable to specific instances within the announcement conference discourse, and this section is only to be viewed as a motion towards clarity.

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[11] This final source notes a similar paradox within this construction of possible futures in that the greater research and forwarding thinking accomplished by organizations may serve to elucidate certain versions of the future, however such research in itself also creates more versions, therefore overwhelming clarity and focus and rendering favourable futures harder to argue for apropos unfavourable versions.

Performatives are illocutionary acts in which saying something is *tantamount* to doing something.[12] This sociological term denotes a basic assumption in our conversational analysis of the edX conference in that the performative is defined as an utterance wherein meaning, no matter to what degree, is attained in its use.

For example, the act of asking for an apple, "Can I have an apple?" may be reduced to its linguistic components: the five separate words making up the sentence. To be reductive in this way we devoid the sentence of its collective meaning: the meaning that is concurrent with the context in which it is used. Thus, the above question, "Can I have an apple?" when taken as a whole, provides a gestalt of communication, wherein a request is transmitted through a series of words in want of a response. As Leudar posits, without performative elements—that which renders the phrasing indexical—the locution as uttered is debased of its meaning and remains "just words". (Leudar et al. 2007, 867)

We must be careful to demarcate performatives from their underlying psychological foundations. In analysing performatives, or simply by denoting these utterances as such, we do not intend to elucidate the psychological basis (thoughts, desires or intentions) by which these utterances are formed and subsequently expressed. Our task is simply to understand the means by which dialogue within this setting (and arguably within any setting given the ubiquity of performatives) is by its observable nature performative, and thus directly influences the local and macro structures of language manifest therein. Acting through performatives, the 'felicity conditions' from which further performatives are given foundation are necessary to both local and macro continuity of dialogue and thus to the continuity of argumentation within such an event as the edX announcement conference.

As hinted to in the above sections, the trajectory of a series of performatives, which emanate from a localized 'first cause' or initial performative, are provided for by felicity conditions (Leudar et al. 2007, 864). Felicity conditions, in strictly linguistic terms, refer to the foundational work done by an actor in order to provide a foundation conducive to particular future utterances. Thus, felicity conditions transcend the local linguistic structure in which they occur, providing the 'first cause' expression to be utilized by subsequent utterances within a local event. For example, within the initial

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[12] Although Austin (1962) makes a distinction between the simple utterance of something (a locutionary act) and the *doing* of something through this utterance (an illocutionary act), this demarcation does not hold up to scrutiny, as *all* acts of utterance of acts of doing (Leudar 2007, 864).

stages of the edX announcement conference we find that Agarwal's introductory utterances provide the basis for Faust's subsequent announcement of the edX initiative.

Felicity conditions are especially visible when an utterance does not facilitate the action by which its initial usage had attempted to enact. For example, the simple confusion of formality, as in saying "Good morning ladies and gentlemen" to a classroom of kindergarten children may be seen as a 'misfire' in that the context in which this utterances is used typically aligns itself with a formal event (i.e. a conference) and not with a kindergarten classroom. Therefore, an appropriate response may be impossible to achieve in this case. (Austin 1962: 27) This will concept be clarified in its specific to the edX conference in our initial analysis below.

1.3 Historical Background

Despite rhetoric to the contrary, the emergence of online learning technologies is not synonymous with the emergence of edX. Nor in fact is this initiative the first born from the efforts of collaborative universities. Initiatives not unlike edX had gained crucial momentum only to miscarry well prior to market success. These efforts came at a time when the growing awareness of the Internet's potential for communicative learning would be drawn close to the entrepreneurial fever of the post dot-com implosion of the late-1990s. (Investopedia 2013) Columbia University's online venture 'Fathom' (2001-03), and the jointly conceived 'AllLearn' (2001-06)[13]—the latter emerging from the elite triumvirate of Oxford, Stanford, and Yale universities—are key examples of attempts to accrue unprecedented interest in online education only to be afflicted by financial difficulties and abandoned. (University Business 2013)

In much the same way Plein (1991) discussed the popularisation of biotechnology in the early 1990s, institutional efforts towards online education have been remedied from marginalized status to the frontrunner of activities in an increasingly virtualized education marketplace. However, this emergent use of 'e-learning' is not simply the product of increased attention by private ventures, but instead draws momentum from a unique moment in human history.

The near collapse of the world economy in 2008 presented an opportunity to revise perceptions regarding a vast number of previously taboo subjects, such as the utility of higher

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[13] The foregoing bracket numbers refer to the years both 'Fathom' and 'AllLearn' were maintained until collapse.

education and its position in modern society. The constant growth in tuition rates worldwide and the impact this is having among increasingly unemployed youth has also provided an impetus to the development of alternative means of attaining higher education. (Usher 2012; Chronicle of Higher Education 2012)

However, this novel means of education has not ascended from neglected niche to mainstream applicability solely as an antidote to the foregoing problems. The technology and inventiveness provided for by the Internet economy has provided a great stimulus to these efforts simply by providing the necessary medium for creating the platforms and websites that translate physical education into the virtual realm. One such example of this (alluded to the edX conference) is the Khan Academy, a free e-learning website that provides an ever-growing range of instructional videos on a vast range of subjects free of charge. (Khan Academy 2013)

The survival of these domains is also buttressed by the explosive increase in worldwide Internet use, thus providing unprecedented market access at a fraction of the cost of traditional corporate ventures. It is through this knowledge that the edX panellists claim the extent of its' potential students is conterminous with the extent of the Internet itself. As Harvard President Drew Faust points out, "anyone with an Internet connection, anywhere in the world can have access." (MITNewsOffice 2012) Thus, edX lays claim to the approximately 32.5% of the world's population to whom access to the Internet is assured as potential students in the predicted expansion of this initiative. (World Bank 2013) And it is within this number, and the diversity of the human condition contained within, that facilitates the spoken desire that the edX initiative will attempt to promote universal learning with the objective to "deliver these teachings from a faculty who reflect the diversity of its audience". (MITNewsOffice 2012)

The means by which edX will attempt to convince the public of these goals lies directly with what sociological inquiry has termed the 'narrative' and the 'master narrative', both of which are essential to understanding the edX announcement conference.

Narrative and Master Narrative.

As shown in the analysis below, the announcement conference is an important forum for public participation and implies a great deal about the socio-political context in which the conference is situated. As stated previously, it is not the explicit charge of this study to venture beyond the confines of the edX announcement conference, as the inquiry presented herein is tethered to the

actions observable within the event in question: that which manifests in the *doing* of the announcement conference. In this *doing* of the announcement conference we can observe the purposive imposition of 'will', manifest in the edX announcement conference as discourse upon the public, toward the objective of overcome opposing views: thus, towards *persuasion*.[14] Unrestrained by this process of overcoming opposition the 'will' becomes tyrannical, and an event intended for public engagement, such as our conference, becomes a vessel for dictation. Despite its democratic structure, the announcement conference is as an event favouring those who have initially called the conference to order: the team of academics and administrators—represented here by the five panellists and two moderators—of Harvard and MIT who wilfully proffers the edX initiative. As such, the desires and ideations for online education, pedagogical development, the future, etc. as proffered by members of edX meet resistance from the immediate public. It is here we encounter the construction of the narrative and master narrative within the edX announcement conference.

A 'narrative' has been identified in similar instances of launching a product (mainly, in the sense of marketing). A narrative in this case—as documented by Simakova and Neyland (2008)—is a particularly compelling story "which turns out to be sufficiently compelling to draw together and hold together constituencies of people and things focused around a new technology." (Simakova and Neyland 2008, 97) Furthermore, Simakova and Neyland suggest "that the stories do not *just* articulate a narrative which suggests a role for the audience, but also actively attempt to incorporate those identified as relevant audiences into a constituency of potential users, purchasers, journalists, or advocates of the product in focus." (Simakova and Neyland 2008; my emphasis) Thus, the marketer(s) of a given technology, which the panellists at edX become throughout this conference, are able to "assemble and dissociate constituencies providing for the building of a boundary between those who tell and those who listen to (interpret or come to terms with) compelling narratives." (Ibid) This last point is particularly important, as the announcement conference is an event presided over by the edX panellists who determine the course of the narrative to be impelled and promulgated throughout.

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[14] As Schopenhauer argues, the struggle of the will to overcome adversary furnishes the human experience with its suffering as well as its short-lived moments of pleasure. "Every true, genuine, immediate act of will is also, at once and immediately, a visible act of the body. And, corresponding to this, every impression upon the body is also, on the other hand, at once and immediately an impression upon the will. As such it is called pain when it is opposed to the will; gratification or pleasure when it is in accordance with it." (Schopenhauer 1969, 101).

Whereas narratives manifest locally and are attributable to minor aspects of a given event, the overarching master narrative provides a space for assembling a gestalt of various narrative constituents. According to Bogen and Lynch (1989): "'master narratives' subsume all partial and contingent narratives to a greater whole" (Bogen and Lynch 1989, 198). The foregoing authors use the master narrative to analyse the construction of a historical record, which emanates from a particular event. Likewise, within the edX announcement conference, the struggle for control of the particular shape of this event and the historical record can be observed through the dialogue enlivened therein.

Thus, the master narrative is a complex, interwoven stream of narratives, which when viewed as a whole present the primary sources by which one may understand *what happened* within a particular event. And as with the narrative, the master narrative becomes most apparent when disagreement shears against the progression of a disseminated argument. Once a particular group proffers a unique narrative, this story goes unchallenged until opposing understandings and perspectives are brought against this initial telling. At this time, the narrative may be reconstituted successfully—an 'achievement'—or the reconstitution may fail and alternative methods of proffering this particular narrative may be attempted.

Within the edX announcement, this transition from a unilateral 'narrative' aired unopposed by a single party (that being the edX panellists) to the maintenance and defense of a 'master narrative' occurs during the allowance of inquiries and responses from the audience in the 'question and answer' phase of the conference. To use Bogen and Lynch's (1989) assessment of the Iran-Contra Scandal, the complexities and contradictions embedded within the hearings are subsumed by the master narrative, which then becomes a historically relevant source for determining *what 'actually' happened*. Thus, the master narrative, once constructed, is disseminated as fact until proven otherwise, and our analysis of the edX announcement conference will attempt to track its increasing complexity as the event transpires.

1.4 Three Vocabularies

The following will distinguish the three separate classes of terms/concepts used within this analysis, thus aiding in the reader's understanding of the subsequent analysis by providing a point of reference to be used throughout. We do not necessarily flag this differentiation of terms within the analysis, however this section provides a categorical distinction that can be seamlessly extrapolated to subsequent terminology used within subsequent sections.

First, 'analytic vocabulary' is imperative to conversation analysis and allows for the distinct conventions within dialogue to be classified for subsequent analysis. This parsing of grammatical and linguistic form aids in understanding conversation as an achievement. (Schegloff 1986) This vocabulary aids in the expression of how actors communicate and allows for a descriptive approach to dissecting *in situ* conversation. "Adjacency pairs" and "preferential structures" are examples of these analytic terms.

Second, 'sociological vocabulary' is used in the analysis conducive to illuminating broad conceptualizations extracted from the text. These terms are used to impel understanding about sociologically specific concepts that are 'found' within the analyzed text. These are often overriding principals that are rendered visible only through the indexical analysis of constructions and their relation to surrounding dialogue. Examples of this is the concept of an 'institutionalized revolution,' as discussed in the first constituent of the following analysis.

Finally, 'lay vocabulary' is communicated both by actors within the conference and subsequently extracted from this discourse through analysis. These terms are ostensibly simple in their articulation as they are presented naturally through dialogue between actors, often without the need for explanation. However, the common sense and general knowledge entwined in their usage and modification for rhetorical purposes render this vocabulary the primary resource for analysis in uncovering how the conduct of an announcement conference is accomplished through ordinary language.

Before we begin to unravel the edX announcement, a potent metaphor will lend itself to understanding the structural elements critical to the 'conduct' observed within the edX announcement conference.

1.5 'Go' as Strategic Metaphor.

The oldest continuously played board game, Go, the 'encircling game', provides an excellent analogy for the strategic actions made visible within the announcement conference. (Shotwell, 134) This study does not require the reader to be formally acquainted with Go; however, knowledge of basic rules, as provided below, will be sufficient to see that this analogy benefits the reader.

By definition, analogy refers to the comparison with regards to structure. It is analogy that allows us to render structures in one space metaphorical towards comparisons with structures in others. With an adherence to formal logic, and characterized by simple, unadorned play—the placing of stones, black then white, in succession—the turn based strategy of Go is applicable to the strategic occurrences within the edX announcement conference. The entire progression of the edX conference, from introductory remarks to the Q&A section, presents observable defensive and offensive manoeuvrings in protection of the emergent edX in light of audience inquiry and various forms of antagonism.

Not unlike the formal rules of Go, the announcement conference *appears* to be governed by a set of rules. These obstructions to unrestrained discourse are both tacit and explicit, and both hinder and permit various utterances throughout the conference. In Go, each piece has four liberties, or spaces surrounding the piece that when occupied traps this piece and renders it unusable. Likewise, the will to restrict the liberty (or freedom) of opposing views within a conference are made actionable by allocating a considerable amount of time to defense against certain instances of opposition. This is not to say that instances of defense against opposition are given more time than opportunities to further one's agenda (offense). In fact, both often occur simultaneously in the form of realigning audience perception towards a varied understanding.

We can also understand the relative importance of a particular aspect of the edX platform by the means a particular inquiry is dealt with. This can either be, as we've suggested above, a measure of time allocated to a response, the number of respondents, the eliciting of outside sources, and the severity of diction employed, amongst others.

Furthermore, a rule explicitly noted within Go and tacitly followed in the conference is what is known in the former as the 'Ko' rule. Not unlike argumentative dialogue, wherein a point can effectively be argued for an indefinite amount of time, the game of Go has ingeniously limited the number of times an identical move can be made, thus preventing what the rules call 'infinite loops.' This rule, when overlain upon the announcement conference, seems to be tacitly employed throughout

the conference as no one point of inquiry/argumentation is recycled beyond its initial usage. This is most apparently so in Agarwal's remark following a lively stretch of the 'question and answer' phase wherein two questions are aired regarding the financial structure of edX. In order to deter further questions to this end, as well as to signal the exhaustion of the edX panellists in their defense of this matter, Agarwal states:

AA   "So, just to make it clear, edX is a not-for-profit organization.

Aside from structural similarities, more literal analogies are employed with the addition of Go to this study. Upon analysis of the edX announcement conference we can observe a handicap purposively enacted in favour of the panellists during the initial phase of the announcement conference, wherein the panellists *unilaterally* illustrate the edX initiative. We might then observe that the introductory remarks made prior to the involvement of the public are done not simply to inform the public, but also serve to *limit* the scope of discourse made within the subsequent 'question and answer' phase of the conference. The deliberative limiting of scope in the edX announcement conference is analogous with a progressing game of Go where initial moves make it "less and less easy to play anywhere; (…thus,) as in the agonistic field, the results of earlier play transforms the set of future possible moves." (Latour and Woolgar, 1986)

It is for these reasons that the researcher finds that the edX announcement conference is a fertile grounds for strategic analogy, and a particularly potent instantiation of such is the game of Go. With that, we now begin the analysis of the edX announcement conference.

2. ANALYSIS

Of the thirty-seven consecutive minutes that comprise the edX announcement conference, the initial fifteen minutes are devoted to the introduction and announcement of the edX initiative and underlying partnership between Harvard and MIT. This introductory constituent is further divided into the introductory remarks by the head of edX, Anant Agarwal, and the actual announcement of the edX partnership, by the presidents of Harvard and MIT, Drew Faust and Susan Hockfield.

The section attributed to Agarwal's pronouncements—in provides the grounding, or "felicity conditions", for which later claims and assertions are made—will be analysed in the first section entitled 'Part One: The Rhetorical Preface.' (Austin, 1962, Lecture XI) Within this section, the promotional video embedded within Agarwal's introduction is also analysed.

This initial analysis is followed by the section entitled "Part Two: The Announcement as an Achievement", in which an analysis of Faust and Hockfield's announcement of the partnership is aired. This constitutes the second half of the introductory phase prior to the 'question and answer' phase, and our analysis within this section particularly focuses upon the maintenance of the narrative as conducted by members of the edX initiative in order to safeguard the development of edX against (possibly) divergent public ideations.

The second constituent of the announcement conference, the twenty-two minute 'question and answer' phase, follows the initial announcement phase of the conference and provides the opportunity for public inquiry into the motives and prospects of edX. This section will be analyzed in the subsection entitled "Part Three: Question and Answer" below.

Finally, throughout the analysis, discussion will occasionally illustrate not simply what *is* observable, but also what *is not* observed. This method is enacted in order to aid in clear differentiation between visible occurrences, and that which cannot be seen, thus strengthening the former. Prior to the analysis of discourse within the edX announcement conference, the spatial and temporal organization of this event will be analyzed in order to illustrate how these structures relate to the generation of credibility.

The dialogue 'permitted' by the edX panellists within the edX announcement conference is highly constricted, especially in terms of liberties provided to members of the press. We use the term 'permitted' in the sense that the edX announcement conference is a purposeful event, created at the

behest of the institutions present, and can be understood in structural terms as a planned series of actions. Of course, this is not to say that the edX announcement conference is predictable, which would propose to entirely negate spontaneity. On the contrary, we assert that the structure alone is purposeful, with our primary interest being the struggle for characterization of the conference wrought over during each exchange within this event.

Furthermore, despite this introduction of external inquiry, this final section of the announcement conference is not without its restrictions in the asking of and follow-up of these questions. Questions asked by an individual audience member cannot be followed-up by further comments or questions in an exchange of utterances consistent with normative dialogue (as will be illustrated below). Instead, as we will discuss in specific analytical questions below, inquiries must be constructed in a way that conforms to the tacit agreement of question structure, while simultaneously extracting the highest quality of response from the panellists (i.e. an adequate response). We can observe at least once within the analysis where responses to a given inquiry are observably inadequate and subsequent speakers must address these points in their own questions given that secondary questions cannot be aired by the same speaker who asked the initial question. This highly structured dialogue eludes the analytical grasp of a vast portion of Conversational Analysis with much of the research conducted in this field being based on 'free' exchange between participants.

This final constituent of the announcement conference does, however, lend itself most readily to post-analytical methodology in that the typical modes of analysis—i.e. conversation analysis, institutional talk (Bogen/Lynch 1996)—apply directly to the discourse observed herein. This methodology employs basic conventions of sequential analysis, which begin with a first utterance that calls for a second utterance. The normative occurrence of this concept (as discussed above) is known as adjacency pairs and refers to the recognition of an utterance as requiring a paired response towards the accomplishment of this first utterance. (Schegloff, Sacks 1973: 296)

For instance, an otherwise simple introductory exchange as in "Hello" is charged with a paired response by a second speaker to fulfill an obligation to the pairing, perhaps in saying "Hello" in reply. Deviant cases, on the other hand, occur when the obligation to this section pairing remains unfulfilled. In such a case, the initial utterance requires ancillary utterance(s) following the initial utterance to extract a response. In this case, where a response is not easily granted by the second speaker, we may be characterized this hesitancy as a 'refusal' of the proposed line of conversation (i.e. proposed 'structure'), whereas an agreement to the proffered structure can be observed as an 'acceptance'. These two concepts encompass what conversation analysts deem 'preference

structures'. (Schegloff and Sacks 1973, 298) In the 'question and answer' phase of this conference, the questions are the first constituent of the 'adjacency pair' and the second constituent being the (first) response by an edX panellist to this inquiry.[15]

Whereas the conference structure might have provided a forum conducive to debate and contentions to the scope of edX, inquiries are instead confined to single instance and are *never* followed-up by subsequent questions. In this way, the structure of the edX announcement conference, and tacit agreements as to audience etiquette, mitigates risk to the framework proffered by edX and provides a structure of dialogue conducive to lengthy periods of response, wherein the edX panellists, through active maintenance, may promote and retain credibility for their actions, both present and future.

Furthermore, not unlike utterances found within Agarwal's introduction, the impact of utterances found in localized instances do not simply imply control over adjacent utterances, but also confer influence over the remainder of the conversation, and thus, upon the 'master narrative' as well. (Ibid: 117)] As such, localized forfeiture of control by the edX panellists can result in loss of crucial support to the maintenance of credibility. *Thus, credibility is always in jeopardy and must be constantly upheld and defended throughout.*

Apart from the two online inquiries channelled through the event moderator Nate Nickerson, only six individual instances of live, audience-generated dialogue occurs within the entirety of the conference. The other primary moderator, Christine Heenan, selects these remaining six questions from the audience. As with the analysis of introductory remarks above, this section will balance both the chronological occurrence of these events with the grouping of like actions and usage. Prior to engaging directly with the conference, we will first illustrate the spatial and temporal organization of the announcement conference. We follow this with our analysis, making our way through the entirety of the conference.

2.1 Description of the Setting & Overall Structure of the Conference

The intent of this section is not to contextualize the edX announcement conference in the outlying socioeconomic climate, but instead to illustrate general observable facts about the conference

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[15] In the case of the edX announcement, initial responses are often supported by subsequent responses by fellow colleagues.

and describe the scope and limits of the online recording. The setting and overall structure of the edX conference is important to this analysis as its deliberative construction relates directly to the primary objective of our inquiry: that being how the members of edX establish and maintain credibility.

In terms of spatial organization, the following section provides a descriptive enumeration of the many physical features observable within the conference using frames captured of the conference recording. The temporal organization of the event will be discussed following this spatial analysis.

2.1.1 Spatial Organization

The edX announcement conference was held on May 2, 2012 at Hyatt Regency Cambridge in Cambridge, Massachusetts within a large conference venue. The conference venue contains an audience of indiscernible size populated in part by "…more than a dozen…" members of the press, as discussed by moderator Christine Heenan. (MITNewsOffice 2012) The extent of our view from a fixed camera allows for the first three rows of the seating area to be seen, from which we can see approximately twenty-five people. *Figure* 1 provides a single frame of this view provided for by this stationary camera.

FIGURE 1: PRESS CONFERENCE PANEL AND PANELLISTS. (MITNEWSOFFICE 2012)

Within *figure* 1., we are also able to observe the five panellists, as well as the two moderators to our left: our primary actors within the edX announcement conference. The two moderators in this image—charged with fielding questions throughout the 'question and answer' phase—stand behind lecterns, who moving from left to right are Nate Nickerson of MIT, and Christine Heenan of Harvard. Moving further along to the right we find where the primary members of the edX initiative from both Harvard and MIT are present. These are (including primary occupational position and current university affiliation in brackets) from left to right: Alan M. Garber (Provost, Harvard), Drew Faust (President, Harvard), Susan Hockfield (President, MIT), L. Rafael Reif (Provost, MIT), and Anant Agarwal (President, edX). The frame captured in *figure* 1. depicts the moment following Hockfield's response to the first question as aired during the 'question and answer' phase of the conference.

During initial introductions and responses from panellists, our view switches from this fixed angle to another, more detailed angle. This second angle provides a close-up of the speaker, and adjacent speakers, during the introductory phase of the talk—in which, as we shall see, the announcement of edX is performed—as well as when a response is being aired throughout the 'question and answer' phase of the conference. *Figure* 2. provides an example of this angle during the 'question and answer' phase.

FIGURE 2: MIT PRESIDENT SUSAN HOCKFIELD IN RESPONSE. (MITNEWSOFFICE 2012)

2.1.2 Temporal Organization

Whereas the foregoing section illustrates the spatial organization of the edX announcement conference, this section will touch upon the temporal structure of this event.

To reiterate the temporal structure of the talk (as previously alluded to above), the introductory section of the announcement conference (0:00-4:57) consists of the rhetorical preface, provide for by Anant Agarwal, with the aid of a promotional video. Secondly, the announcement of the edX conference (5:13-14:12), conducted by Drew Faust and Susan Hockfield, follows this introduction. The final phase of the announcement conference consists of the 'question and answer' phase of the talk facilitated by the two moderators, Nate Nickerson and Christine Heenan, as well as all members of the edX panel and select audience members (14:33-37:01).

In order to facilitate quick reference to where a particular section of the conference fits within the entire structure, a temporal indicator displaying the duration of the particular utterances within the thirty-seven minutes of the conference introduces each constituent of the conference. We believe that this addition provides the reader with a brief, constructive breakdown of the subsequent analysis for reference. In Appendix II, the reader can observe the structure of the announcement conference in its entirety as a further reference aid. An explanation of the particular discontinuity of time sections is provided therein, such as when breaks in dialogue confer elongated spaces where no significant activity occurs.

Prior to reading the analysis, it is recommended that the readers views the edX announcement conference video and make themselves familiar with the correlative sections of the transcript reprinted in Appendix I. This will facilitate an appreciation of the discourse as transcribed from the announcement conference and aid in understanding the sensitising concepts and their relation to the transcript prior to the analysis. Furthermore, line numbers are given with each excerpt, which corresponds to the position of this text within the full transcript included within the aforementioned Appendix.[16] Finally, the reader can refer to Appendix II for a reference list of conference participants and their initials, the latter of which we use to identify speakers in conference excerpts below.

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[16] Exact line numbers were only possible if the range of lines from which the text was extracted are given (as we have done so within the analysis). The continuity of our transcript made direct cut and past of excerpts impossible lest we bring along sections of bordering dialogue. Thus, in order to focus solely on the certain utterances, the method of indicating the range was chosen.

2.2 Part One: The Rhetorical Preface

0:00 — 2:09   -   Anant Agarwal: *Introduction of edX.*

2:10 — 4:30   -   edX promotional video.

        The initial fifteen minutes of the announcement conference are entirely conducted by three executive members of both Harvard and MIT—sequentially: Anant Agarwal, the president of edX (as well as director of MIT's computer science and artificial intelligence laboratory); Drew Faust, president of Harvard; and Susan Hockfield, president of MIT—with each presenting an address to the audience. Although both Faust and Hockfield refer to scripts laid upon lecterns, we are unable to discern whether Agarwal, who stands apart from the lecterns and without visible aids, conducts himself with the assistance of a teleprompter or speaks from memory. Our disclosure of this information is meant to depict what can be observed, and does not impact the analysis apart from providing further illustrative details to the reader.

        While Faust and Hockfield are charged with the actual announcement of edX, Agarwal provides the introductory framework, by way of rhetorical conventions, in order to preface this announcement and provide a contextual foundation conducive to persuasion. As Schegloff discusses, the 'opening' provides the base (which Schegloff denotes as the "anchor position") for the introduction of the "first topic", and in doing so *defines* this first topic as well as subsequent actions. (Schegloff 1986: 116)[17] Thus, Agarwal's introductory section, characterised by its grandiosity and salesmanship, can be understood in terms of its importance to laying this initial, supportive framework of the edX announcement conference.

Commencing the Event.

        Anant Agarwal appears between a pair of lecterns to his right and an elongated table to his left, behind which five chairs are positioned opposite table-mounted microphones. Above the

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[17] In accord with traditional wisdom, scientific research proves that 'first impressions' of an individual critically impact not only upon one's initial emotional response, but also memory formation and recall of this individual following this initial introduction. (Hamilton et al. 1980: 1061)

furnishings to his left and right, two identical projections of the edX logo—bordered by logos of both MIT and Harvard—are beamed throughout the length of the conference (See *Figure* 3).

FIGURE 3: AGARWAL BEGINS INTRODUCTORY REMARKS. (MITNEWSOFFICE 2012)

Agarwal, hands gesticulating to the grandiosity of his words, begins to address the crowd from his central position:

AA   "Good morning all, welcome. I am Anant Agarwal. I am the director of MIT's
          computer science and artificial intelligence laboratory. Today is a fantastic day.
          But, there is a revolution brewing, in Boston and beyond." *(Lines 1-3)*

What serves as introductory remarks expresses the interests of edX leadership by enlivening a very specific 'version' of what the announcement of edX entails (and to what extent), not simply for education, but greater society as well (i.e. a "revolution"). These rudiments of the framework through which edX is to be viewed provides the initial structure for the remaining discourse: both Agarwal's

own, and more importantly, subsequent speakers. To Schegloff, the opening is a crucial interval in which an actor may lay the organizational foundation of what can be talked about in subsequent dialogue, which he denotes as "talkables." (Schegloff 1986, 162) These 'talkables' provide the critical focus around certain subjects that narrow the field of conversation, and thus attempt to exclude other topics of conversation. This is similar to what Leuder discusses as the 'felicity conditions'—as previously discussed—which 'allow' for future utterances. (Leudar et al. 2007, 864) In sum, these talkables, constructed by performatives, and spoken by Agarwal during this introductory period, provide the 'felicity conditions' by which further utterances may be expressed and the trajectory of argumentation may continue. (Leudar et al. 2007, 864)

As opposed to a typical exchange between two parties, wherein utterances are consciously abridged to meet the pressures of conversation, the protracted introduction within the edX conference does not permit the simple introduction of conversational analysis theory and constructs. Instead, the establishment of 'talkables' and felicity conditions by Agarwal plots a possible conversational trajectory to which subsequent panellists may choose to follow for the remainder of the announcement conference. As we will see below, the elongated and purposive dialogue populating the introductory section serves to narrow and embolden the possible trajectories to be taken. With the idea of edX proposed, the panellists will further illustrate and embolden all points deemed relevant towards the illustration of the platform itself while defending its emergent form. Thus, the pre-emptive motion towards controlling the conversation between the present parties (i.e. the panel and the audience) is facilitated within these opening utterances. (Schegloff 1986: 117) Furthermore, these opening utterances, which conduct and restore influence upon future discourse, are not simply confined to the introductory constituent of the talk, but are also found in localized 'openings' that occur throughout the discussion, each pertaining to the micro and macro dynamics of the conference. We will present examples of these below.

However, we must investigate 'how' all of this is done within Agarwal opening utterances. In order to establish this framework, to be subsequently maintained throughout the remainder of the conference, Agarwal must address his own legitimacy to speak about this subject matter. The felicity conditions provided for by the particular setting in which the event occurs, as well as *in situ* utterances by the members populating this event, provide the grounds for the inception and maintenance of credibility to this end. Thus, Agarwal's entitlement to speak in terms of the subject matter (i.e. e-learning) must be asserted in such a way as to enact a communicative trust between the speaker, subsequent panellists, and the audience. Agarwal can be observed to voice such information within the first two lines in the excerpt quoted above. As Bogen and Lynch discuss, reference to title and

institutional affiliation not only serve to identify the speaker, but also exhibit the entitlement this individual has in discussing the subsequent topic. (Bogen, Lynch 1996: 202) The foregoing authors regard the basis of this entitlement as the *witnessing* of a particular event, most literally employed in the assessment of testimony in court (in which such an individual is aptly named 'the witness'). This term has also been employed to less literal ends within the work of Sacks, where being witness to an event permits the individual credibility to speak about the particulars of this event. (Sacks 1992) If Agarwal were to begin his introduction with the short assertion '*Today is a fantastic day. But…*', the audience would remain uncertain as to the speaker's relation to the following events. Thus, to make an assertion, and have this initial assertion be conducive to future assertions (thus becoming 'felicity conditions'), a speaker must express their position relative to the event in question: in this case the 'revolution' that edX embodies. As we can see in the excerpt quoted above, Agarwal wastes little time to this end in combining institutional affiliation with a preface to his following utterances.

Contravening the 'State of Affairs'.

The exclamatory conjunction *"But.!.."*, which follows the introductory utterances, delivers a disruptive point in contradiction with the present state of affairs (those existing in and beyond this conference). That is to say, today may be a fantastic day (aesthetically, ostensibly, etc.), yet there exists something latent/astir which will now be revealed. An interesting incongruity, as instead of illustrating today as fantastic by virtue of the edX announcement, Agarwal's rhetoric implies an event at angle with the apparent calm of today. It is here that we first encounter the rudiments of the paradox we refer to in our introduction as the 'institutionalized revolution.' Although we will discuss how this paradoxical assertion is dealt with throughout subsequent dialogue, this early statement, of a revolution at odds with the current state of affairs existing "in Boston and beyond", may be heard as an initial attempt by the institution to position themselves at the forefront of this revolution. (MITNewsOffice 2012) We can observe this in a number ways:

By attending to the general recognition that today is a "beautiful day" and by the subsequent act of challenging this notion by vocalizing a contravening point—i.e. that there *is* a revolution to speak about, and up to this point remains unknown to the citizenry—Agarwal positions himself, and his collective organization, in a superior position: one which implies a knowledge deficit between those of edX and the outlying public. This implication of a knowledge deficit gives Agarwal's subsequent dialogue a didactic stance, one that is exploited in favour of the emergent edX.

Furthermore, Agarwal's assertion that today is a "beautiful day" may be beyond argument: a point derived subjectively, which could be easily defended if questioned later in the conference. Thus, the argument may arise that contends that 'yes' today *is* a beautiful day—which agrees with Agarwal's initial assertion, and in terms of education roughly means 'everything works fine'— however this "But…" seems to infringes on such an agreement about it being a "beautiful" day. Agarwal, in such an instance, would simply need to suggest the utterance's subjectivity: that the contravening "but" expresses 'my own opinion…' and not that of my colleagues or the edX initiative.

Subjective v. Objective Defense of an Assertion.

Such an assertion of today being a beautiful day can thus be defended, if it were required, subjectively. Therefore, if an audience member felt strongly against this notion of today being 'beautiful', Agarwal would need only to qualify the statements as a personal opinion/observation and the contention might vanquish. The use of this statement by Agarwal, we might surmise, is employed to attain agreeability amongst all participants: a simple, irreproachable observation. We might further observe that this agreeability provides the foundation by which Agarwal's immediate about-face regarding this beautiful day (i.e. "But!") defies this observational statement, and channels this objective stance into a highly subjective disclosure. Thus, in a swift, continuous motion, Agarwal has channelled initial agreeability into the disclosure of edX, and in doing so, Agarwal places himself (and by extension, the edX panellists) in a position to determine the *meaning* of this particular alteration to the norm, that is, to what has been agreed upon (i.e. it being a beautiful day). By extension, the meaning of this revolution—and being able to designate this occurrence as revolutionary in the first place—can now be proclaimed as knowledge that only Agarwal and the remaining panellists possess.

This act of speaking on behalf of others as well as representing a larger structure (edX) is also sociologically relevant. In attempting to illuminate the complexities of the micro-macro phenomena in sociological study, Coulter describes certain instances of the macro constituent as being observable in everyday discourse. (Coulter 2001: 41) One such example of this relates directly to the edX announcement conference. As Coulter describes, when a statesman addresses a crowd as plenipotentiary to a greater entity, they are giving voice to this entity and are *a priori* vested with the power to speak on its behalf and that of its members. (Ibid) For instance, during a US presidential address to an audience wherein the President implies that the 'United States will…(perform a certain action)' finds the conceptualization of an immense entity (a nation in this case) transferred to a highly

localized usage. Thus, by way of linguistic convention, the president speaks for this entity. Although only implicitly the case in Agarwal's initial utterances, we can surmise that unless specified with subjective indicators (i.e. in my opinion…), Agarwal, along with subsequent panellists, speak on behalf of edX throughout this conference. As such, we must be consciously aware of confusing those utterances made on behalf of edX with personal utterances.

Contravening the Common Culture.

Agarwal subsequently illustrates the context of this revolution through purposive examples via his own 'documentary method of interpretation' (Garfinkel 1967, 77)[18]:

AA   "It does not have to do with Tea (joke). It does not have to do with the Boston Harbour. It does not have to do with guns, and it does not have to do with the sword." *(Lines 3-5)*

These examples seem to be given so that the term 'revolution' (and its adjectival derivative *revolutionary*) may be decontextualized from presuppositions of this term's usage. Thus, a balance is struck in which the term may simultaneously refer to and be differentiated from these presuppositions (i.e. "It does not have to do with…"). Simply, these utterances utilize common knowledge as a resource in an attempt to cast an opposing, or at the very least varied interpretation, of what this revolution is or is not.

Locality is employed within the first two terms: "Tea" referring to the Boston Tea party, the Boston Harbour perhaps attending to visions of the American Revolutionary War. Following this, the third and fourth terms more broadly encapsulate the definitive illustration of revolutionary by way of the 'tools' of revolution: "guns" and the "sword". (MITNewsOffice 2012) In citing these examples, Agarwal bears witness to "taken for granted knowledge"—or common sense knowledge as we've called it above. Such a socio-historic component provides the foundation by which members of the

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[18] See Garfinkel (1967) for an excellent description of the 'Documentary method of interpretation' and how this relates to 'common culture'.

audience are to grasp onto, and eventually absorb subsequent utterances formed from these localized 'felicity conditions' (Widmer 2002, 106). Thus, Agarwal can be seen working at demarcating the classical, historically situated definition of revolution with a novel variation of the term. These references to normative revolution stand as *'felicity conditions'* for latter utterances*, the basis by which the eventual realignment of revolution into the context of edX may be accomplished, and thus serve as the grounds for future 'performatives'. The first of which, as we will shortly observe, is to cast the edX initiative, and the act of revolution, in new light.

With the above enumerated examples (i.e. gun, sword, etc.), which display recognition of the public associations and ideations accompanying the terms "revolution" and "revolutionary", Agarwal positions the subsequent characterization of revolution as something *divergent from* this previous imagination: "Instead, this revolution has to do with the pen and the mouse." (MITNewsOffice 2012) Thus, by referencing the socially maintained definition of revolution in order to illuminate 'what is already known', thus inciting mutual understanding between Agarwal and his audience, Agarwal provides the grounds for enacting the foregoing alteration to this definition in order to suit the edX initiative. This allows Agarwal, along with subsequent speakers, to establish credibility towards the risky assertion that edX *is* itself revolutionary, albeit divergent. In other words, Agarwal's purposive disregard of these typical 'revolutionary' components (as with the topical Boston Tea Party example, a topical and contextually relevant [i.e. within Boston] entity referenced by way of a joke) is conducive to an expansion of 'revolutionary' characteristics to include technology conducive to edX's existence (i.e. "pen and mouse"). Further, this seems to communicate the limitations of audience experience required to describe the case of edX, and is therefore conducive to a novel iteration of revolution, in which Agarwal and the edX panellists position themselves as the vanguard of this novel approach.

A New Ideal of Revolution.

This shift in focus allows a varied trajectory to be employed and subsequently maintained throughout the conference. Agarwal's communication of his own awareness towards what is commonly known to be 'revolution(ary)' may be seen as an attempt to pre-emptively address the notion of fragility within the "master narrative". And with edX at angle from this preordained 'norm', the space allowing for the paradox of an 'institutionalized revolution' to be initially justified is brought about.

Defeasibility is inherent to any narrative (see Sacks 1992 *Lecture 15*) and throughout the edX announcement conference we can observe an enduring effort to propound and maintain a certain version of the narrative encapsulating the emergent edX. This is first articulated by the initial proposal of the narrative (within the introductory section of the conference) and in subsequent defense of this narrative against inquiries that challenge or obstruct its progression within the 'question and answer' phase of the conference. In this way, those presiding over the edX initiative attempt to adjust public perception on the matters of education associated with edX. Agarwal's assertion, "Online education, it is revolutionary. Online Education will change the world," and the soon following, "Online education is disruptive, it will change the world," provide foundation to the arguments that follows hereafter. Edits to what the edX panellists imagine are common understandings of revolution display how the panellists perceive the audience imagination of revolution, and subsequently how they might leverage these commonly held views to suit their interests. Thus, this particular instance may provide us with a another means of establishing credibility: by first giving examples easily attributable to revolution—as if to say, "yes, we know what a revolution is"—and subsequently providing a novel example of such—i.e. edX.

As a final point, the foundational status of this preface is self-reflectively clarified within the last lines of Agarwal's dialogue. Agarwal use of the future tense 'will', when hinting at the 'historic partnership' to be announced in subsequent discourse following the promotional video, clearly denotes his section as prefatory to the primary concern of this conference. More importantly, however, such a characterization provides support to the announcement by purposively aggrandizing the announcement to come. This provides an a priori characterization of the subsequent announcement (i.e. 'Historic'), attempting to rhetorically enact a particular optic by which this announcement should be viewed. This aggrandizement may seems to require credibility by way of Agarwal's status as an academic, professional, and leader of edX, which leveraged in order that Agarwal might infuse the proposition of a 'historic' announcement through his professional clout and knowledge of 'revolution'.

Making Defensible an Assertion.

The possible fallibility of Agarwal's newly positioned argument arises almost immediately following his assertion of the 'revolution' modern technologies inspire (i.e. the Internet, cloud computing, computing, machine learning. (MITNewsOffice 2012)) and what such an initiative will accomplish once overlain upon traditional higher education. A discontinuity persists within Agarwal's

commitment to the purported revolution within the rhetoric he employs. As quoted above, what is initially posited as the inevitable—"online education *will* change the world," (MITNewsOffice 2012)––finds its certitude markedly reduced only seconds later: "Online education *has the potential* to change the world." Thus, Agarwal has seemingly repositioned his former remark with respect to the ambiguity inherent to events predicted to occur in the future. The vulnerability of Agarwal's assertions to this end figures highly in his manipulation of time structures to make claims in the present, which may not occur in the future. With the grandiosity and rhetorical appeal lost from the degeneration of "will" to "has the potential", Agarwal exposes the problematic premise upon which the edX initiative is based, that which predicts online education as an implacable force of worldwide change: a "revolution". (MITNewsOffice 2012)

2.2.1 Promotional Video Analysis

Agarwal's introduction leads directly into the screening of a short, promotional video. This video showcases the edX platform and further develops many of the emergent notions found within Agarwal's foregoing utterances. The intent of this section is to uncover material within the video that further builds upon the arguments presented in the announcement conference thus far in regards to our primary academic concerns. We will find that much of arguments made by the edX panellists in favour of the initiative are initially aired within this video.

We must be made aware that this promotional video is a means of disseminating information that comparable but not identical to the live dissemination which occurs elsewhere within the edX announcement conference. Characterised by the use of music and polished aesthetics, the inclusion of certain individuals and testimonial witnesses not presented within the live conference, and the showcasing of key characteristics through the use of title cards, the promotional video provides a platform conducive to an 'advertisement' of edX. This is not to say that the points enlivened therein are necessarily subservient to those within the 'live' aspects of the conference, as this video also provides a resource for contentions formulated by media members within the subsequent 'question and answer' phase. However, the content found within this video, attributable to its pre-recorded status, may enact a disparity between claims of credibility made by the edX team within the conference. Thus far, Agarwal's rhetorical preface lends itself to the aggrandized assertions found within the promotional video, as we shall explore below.

Lastly, and perhaps most apparent given its pre-recorded status, the promotional video is static and cannot defend the narrative it seeks to uphold, and thus is *dependent* on the edX panel to promote or neglect its preordained narrative. Thus, we must be careful to demarcate material disseminated within the video from that of the spoken (i.e. live) constituents of the announcement conference and attend to how utterances discovered within this video *relate* to the arguments and contentions present within the rest of the conference, especially the latter sections wherein exchange between the panellists and the public is permitted.

The video begins with a statement by Rafael Reif, who expresses a characterization of the 'early stages of edX,' as something "novel", "new", "different", "exciting", "scary" and "potentially disruptive." (MITNewsOffice 2012) We are informed of name and institutional affiliation via labels affixed to the bottom of the video display (see *Figure 4*)

FIGURE 4: L. RAFAEL REIF (PROVOST, MIT) IN PROMOTIONAL VIDEO (MITNEWSOFFICE 2012)

We can observe from this succession of categorizing terms that the groundwork of a 'revolutionary' initiative, as initiated by Agarwal, is further supported here. Furthermore, how those governing edX are viewing this time of great technological change is markedly ambivalent. Reif discusses this mixed emotional response in which the traditional boundaries of education are being infringed upon (the categorization of "scary"), while simultaneously being viewed as a possible venture into a potentially new form of education (i.e. "exciting", "new", "novel") that is "potentially

disruptive." (Ibid.) This dichotomy with respect to what edX may mean in regard to the future of education figures highly in subsequent analysis.

On-Screen Titles.

The use of on-screen title cards play an important role in demonstrating the relative importance of certain primary features of the edX initiative. These title cards populate the video, in sync with utterances of edX members and various shots of on-campus academic activities, in order to isolate concepts and terms found within utterances through the video and bordering in-conference utterances. For example, *figure 4* implies the potential audience of the edX online platform.

FIGURE 5. TITLE CARD: EDX LOOKS TO EDUCATE 1,000,000,000 PEOPLE WORLDWIDE (MITNEWSOFFICE 2012)

The title cards also attempt to concretize the unification of the parent universities responsible for edX (title card: "2 universities") with the insistence of a single, unifying vision (title card: "1 vision"). Thus, both Harvard and MIT may at once express the potential instability of their newfound relationship with this succession of titles. We will find that this self-reflective defense in support of edX is not a misguided effort in that the emergent partnership between these two institutions is met with abundant suspicion within the 'question and answer' phase.

These foregoing titles are complimented by a range of other title cards that characterize and display key features of the edX initiative in accordance with supporting statements made by members of the edX team. These include "planet-scale", "technology-enabled", "access for all", "connected

learning", "shared platform", and "enriching campuses", all of which are shown in succession after Agarwal's statement of the edX goal. (MITNewsOffice 2012)

Discrepancies and Ambiguities in Attitudes.

As discussed above with regard to Rafael Reif's initial utterances within the promotional video, we can initially observe the lack of commitment to certain concepts within the remaining of the promotional video as well. In particular, we can delimit the various attitudes towards edX between the various individuals who populate the video and the possible purposes these distinct views might serve therein.

The most obvious of these discrepancies in utterances are between Agarwal and all other speakers. The grandiosity of Agarwal's introductory utterances are continued within the promotional video in that Agarwal unequivocally characterizes online education as both "the next big thing in education" as well as "the single biggest change in education since the printing press." (MITNewsOffice 2012) Furthermore, Agarwal is direct in his uttering of the edX goal—precisely spoken as "our" goal—as the education of a billion people around the world (see *Figure* 5. above). Before we compare these statements with other speakers who populate the video, a discussion upon the critical use of pronouns must be discussed.

As Sacks discusses in his analysis of the pronoun "we", the use of such a pronoun, which permits that a group may be considered together, greatly alters the meaning of a sentence. For example, when a speaker discusses an opinion that emerges from a group of which they are part (i.e. "we believe that…), then we are left to decide to what degree each member of the group might agree with this statement. Or perhaps more fundamentally, we are left to question who exactly this group consists of, as 'we' is inherently non-restrictive in whom it implies. (Sacks 1992, 149) Moreover, when gauging a possessive pronoun referring to a group to which the speaker is 'presumably' a part of (i.e. "our" as found in Agarwal's utterance), we find that subsequent utterances serve to delimit the group being referred, whom in this case we assume to be those presiding over the foundation of edX. Thus, this usage of 'we' and 'our' that at once embolden a given statement with the force of a collective and diffuse risk across these members, allows for a natural defense to possible dissension enacted within this event.

To return to the content of utterances within the video in comparison with Agarwal's statements, a general focus on practical aspects of the edX initiative pervades the video. These

utterances are attributable to both Michael D. Smith (Dean of the Faculty of Arts and Sciences, Harvard) and Alan M. Garber (Provost, Harvard). Smith seems to be charged with facilitating the institutional understanding of technological potential in education—"Harvard and MIT recognize the incredible…effect technology is having on education today"—as well as the possibility of this technology to improve education both on-campus and worldwide. (MITNewsOffice 2012) Simultaneously, Garber promotes the technology in its disruptive applications—"opening new vistas"—and is first to imply the on-campus utility of this technology. (Ibid.) Furthermore, Garber discusses the plan to allow access worldwide to "anyone who has an internet connection," and yet, within his concluding comments, critically positions the ends of this initiative as a means of transforming learning in the classroom "along with learning online." (Ibid.) This statement, providing the first reference to on-campus use for edX, will be greatly expanded upon in the presentations by Drew Faust and Susan Hockfield.

Utterances within this video are also suited to mitigating possible contentions with subsequent sections of the conference. Reif's prolepsis to arguments against the quality of the online environment vis-à-vis the on-campus lecture hall—"this is not to be construed as MIT lite and Harvard lite"— provide a placating utterance towards possibly adverse inquiries in the latter phases of the conference. This utterance marks the first instance of enacting a defensive stance against contravening remarks within the announcement conference, and not unlike Garber's explicit remark upon the on-campus utility of edX marks the beginning of a significant line of argumentation within the rest of the announcement conference.

Distinguishing between Institutional Members and Non-Members.

We are able to distinguish between institutional members and non-members (students) within the video not strictly on the basis of their utterances, but also through the lack of identifying labels, which are affixed to members of the edX team. For instance, two members of edX present found within the video L. Rafael Reif and Michael D. Smith, have superimposed titles of their affiliation during their individuals statements, respectively "Provost, MIT" and "Dean of the Faculty of Arts and Sciences, Harvard." However, other individuals are included within the video without superimposed titles. We are left to speculate who these individuals may be, as only two visual features permit insight into their background: the first being age, and the second being the inclusion of visible minorities.

These four individuals appear to be students as they are appropriately aged to embody what the edX team may feel is representative of the student base interested in edX (i.e. later teens, early 20s). Furthermore, each of the three visible students represents a unique ethnic background, which further emboldens the 'learning for everyone' objectives and provides additional credibility[19] in showcasing the attentiveness the edX team applies when attending to the sentiments of potential users.

S.1   So I see technology enabled education…

S.2   …to really democratize learning. *(Lines 49-50)*

Furthermore, as quote above, the first utterance by a student is not a complete statement (therefore, does not stand on its own) but requires a second student to finish the idea begun by the first. What's interesting is the incongruity of pronouns: wherein the first speaker uses a personal pronoun (i.e. "I"), the statement eventually encompassing two points of view.[20]

This is only the case for the first, 'collaborative' utterances, as the two subsequent utterances by 'students' are independent statements. Therefore, the viewer is left to decide, in this first case, whether those charged with edX view these individuals as having the same viewpoint, or that perhaps this viewpoint (of "democratized" learning) is a sentiment widely held amongst the younger, student populations. This may seem a trivial inquiry, but the means by which the video is formulated is highly contingent on the way its creator's frame edX for an external audience. By virtue of these short comments uttered by the four individuals described above, the promotional video manages to define a 'constituency' of users (i.e. students) which are supportive of their (the edX team's) particular envisage of the future of education. (Simakova and Neyland 2008, 95) This lends itself to the maintenance of credibility in the promotion of edX as the foremost vessel of online learning.

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[19] Utterances that illustrate knowledge of the audience (as Agarwal seemingly accomplished by enumerated examples of revolution) appear to be a crucial component of establishing and further maintaining credibility in promoting edX.

[20] Although we cannot observe the individual responsible for the second utterance of this 'collaborative' effort, we are able to clearly distinguish a disparity of speech pattern (mainly related to native accents) between the two speakers. This instance of collaboration is analogous to Sacks' illustration of collaborative sentences in ordinary speech. We can assume, however, that within this promotional video this collaborative dialogue is preordained. (Sacks 1992, 321)

A final important observation is the absence of both Drew Faust and Susan Hockfield (Harvard and MIT presidents, respectively) within the video. It may have been felt that the presence of these two individuals would direct unneeded attention to the institutions involved with edX, with their absence allowing for edX and its president Agarwal to garner the most attention. We are unable to provide anything more than speculation to this end, but the observation of this absence certainly illustrates the framework striven for by members of edX.

2.2.2 Transition between Agarwal and Faust/Hockfield

4:31 — 4:57   -   Anant Agarwal: *Introduction of University Presidents.*

Following the promotional video, Agarwal provides the transitional utterances to mark the end of his section and introduce the subsequent speakers, presidents Drew Faust and Susan Hockfield:

AA   I hope you enjoyed that little video, edX. Let me welcome our president Drew Faust, MIT president Susan Hockfield. Join me in welcoming them. (*Lines 62-63)*

Important to our analysis is the use of the diminutive 'little' and the impact of Agarwal's final utterance in the above and subsequent response it generates. The characterisation of the promotional video as "the *little* video" says much as to the hierarchical position the video attains during the conference. This diminutive adjective allows for the video to be relegated to a supportive position within the structure of the edX announcement conference and permits the edX panellists, in their vie for properly transmitting the edX narrative to the audience, possible deniability over the points aired therein. Thus, Agarwal demarcates the video from the remainder of the announcement conference with this utterance. The use of "enjoyed" in "I hope you *enjoy* that little video, edX" may also provide support to this demarcation of the video from outlying discourse. This is to say, the video was for enjoyment, a promotional video for entertaining purposes, but the remainder of the conference will attend to business.

Agarwal's final utterance commands the audience into action by 'joining him' in welcoming the new speakers through applause. Although not explicitly states (i.e. please join me in applauding them/their efforts…), Agarwal, by way of beginning to applaud following this statement, has made actionable his interest in generating applause. Unlike many studies which analyze the implicit attempts to enliven public applause (e.g. Heritage and Greatbach (1986), who enumerate the various rhetorical devices used in political speeches to generate applause) Agarwal does not implicitly attempt to generate applause by means of rhetorical conventions, and this applause is not directed at any points or arguments he himself has made. Instead, Agarwal pursues applause prior to the announcement phase of the conference, in a way that *primes* the audience for the subsequent announcement. In terms of 'doing' the announcement conference, in which the edX panellists may be seen to attempt to subsume divergent opinions of the audience, this method of proceeding from his introductory preface to the actual announcement by way of applause characterises the subsequent announcement as something *deserving of* such praise. Thus, before the explicit announcement is made, the prefatory expositions by Agarwal work to heighten the standing of this announcement right up to the moment before its airing.

2.3 Part Two: The Announcement as an Achievement

5:13 — 9:35   -   Drew Faust: *Harvard involvement in edX.*

9:38 — 14:12   -   Susan Hockfield: *MIT involvement in edX* .

As suggested above, the introductory section of the announcement conference serves the interests of edX representatives in that it provides an opportunity to urge forward and define a particular framework to be maintained through the remained of this event. From Agarwal's initial motion towards the universal appeal and applicability of edX, the presidents of both Harvard and MIT (Drew Faust and Susan Hockfield, respectively) are invited to take part in the remainder of the introductory section and represent the efforts of their institutions within this joint initiative. In doing so, Faust and Hockfield plot a course that realigns the grandiosity of Agarwal's rhetoric from its universal scope to the particular utility edX provides for each of the participating universities.

With Agarwal's opening remarks providing the foundation for subsequent utterances in support of an online initiative, the explicit announcement of the edX partnership and initiative is left to the aforementioned university presidents of the unifying institutions. However, as will be

elucidated in the following analysis, these explicit utterances heralding the emergent edX are heavily outweighed by consequent rationalization and the introduction of supporting evidence, which is enacted in order to protect the possible fragility of this announcement. In this way, the remainder of the conference prior to the 'question and answer' phase may be seen as a means of disclosing a particular vision of what the edX initiative *means* to the present institutions, as well as enacting pre-emptive defense against possible contentions within the subsequent 'question and answer' phase.

A number of sensitizing concepts are also required in relation to this analysis in order to facilitate the sociological understanding of the utterances found therein. Through the analysis of the announcement conference transcript, a number of key priorities were uncovered within both Faust and Hockfield's discourse. These will be the primary focus of the foregoing analysis and will serve to illustrate, as Schegloff would have it, the constituents of the edX initiative held as highest in value through the extent of their 'demonstrable relevance.' (Schegloff 1991, 46) Simply put, the favouring of a certain aspect of edX by the speaker (in terms of time spent in supportive arguments towards this point, or simply the choosing of strong descriptive words when characterizing this aspect) may provide the grounds to conclude this aspect bears more importance than another, and may therefore be more deeply connected to the achievement of credibility.

2.3.1 Drew Faust: Announcement, Imagination, and the Grounding of edX

With the following utterances, Drew Faust, incumbent president of Harvard, begins her address to the audience in which the explicit announcement of edX fulfills the foretold motion foreshadowed by Agarwal's introductory remarks, that being the announcement of edX:

DF Good morning, everyone. I am delighted to be here today with president Susan Hockfield to announce edX, a partnership between Harvard and MIT that will shape the future of learning and teaching on our campuses, and further extend our reach in the ever-expanding universe of digital education. *(Lines 66-69)*

This initial utterance accomplishes far more than simply continuing the line of argumentation begun by Agarwal. In fact, this section infringes deeply upon previously established claims uttered by

Agarwal in the introduction and proceeds to enact a paradoxical arrangement that pervades the remainder of the announcement conference.

As made explicit in the latter components of the above utterance, Faust provides a sharp realignment of the worldly scope of edX and relegates the focus of edX from the 'revolutionary' stature proffered by Agarwal to the traditional classroom environment within the campuses of both Harvard and MIT. (MITNewsOffice 2012) As discussed within the introductory subsection entitled 'Institutionalized Revolution,' Faust's initial utterance provides the incipient manifestation of this tenuous argument employed by edX panellists within the announcement conference towards an institutionally bound revolution. The paradox of Agarwal's grandiose insistence of the disruptive and revolutionary power of edX is not easily reconciled with the grounded, traditional, and classroom-based understanding provided for by Faust (and subsequently by Hockfield). This refocus by Faust seems to be done by way of a specific 'order of exposition'. Although Agarwal positions edX as an initiative aiming to provide education worldwide, Faust begins her oratory with an allusion to the partnership forged by way of this initiative, and the institutional objectives this initiative makes possible *prior to* her remarks upon the impact this initiative will have upon global learning. By rendering itself antagonistic to Agarwal's characterization of edX as an initiative with global focus, Faust renders edX as a primarily institutional initiative, hereby providing benefit to traditional structures of learning with wider systemic changes serving these on-campus objectives.

Therefore, we find that although the edX initiative will provide a globally accessible learning platform, interest to this end is *secondary* to the concerns of Harvard and MIT. The capacity of edX to initiate global learning, where anyone in the world with an Internet connection can "have access", no longer holds precedence. Instead, the objectives and rationale for the inception of edX are transformed through institutional purpose and directives, with Agarwal's rhetoric concerning the "brewing revolution" quickly overtaken by implications of what this entails for the institutions represented herein (MITNewsOffice 2012). The following section discusses this entanglement of the edX initiative's primary beneficiaries.

2.3.2 The Future of Learning for Whom?

As Shapin posits, in order to understand the inception of credibility towards a particular end we must define both who benefits from this credibility along with those who are "meant to believe" the claims made actionable through this credibility. (Shapin 1995, 261) As first discussed by Agarwal,

and subsequently reworked into institutional objectives, the effort towards 'collaboration' is a feature characteristic of the initially proposed version of a revolution in education. In the presentation, Faust realigns this experience of sharing, which according to Agarwal permeates student groups worldwide, to the nexus of Harvard and MIT ("sharing knowledge more broadly"; "sharing the remarkable capacities of our universities far beyond Cambridge". (MITNewsOffice 2012) Faust notes that the most significant benefits from this initiative will be the alterations made within the campuses of the foregoing universities, although the results of these alterations will consequently affect global education. As such, these institutions are cast as spearheads of this change, which is no longer deemed revolutionary, but more appropriately viewed as an act of reformation to the pre-existing system beginning at the nexus between these two universities. The locus of edX has thus been purposefully reclaimed from the world spanning virtual network into the brick and mortar institutions of Cambridge. The inquiry we must pose which most apparently stems from this realignment is: who is to benefit from this constructed future?

Although a number of STS scholars have focused on the imagination of users and the impact this has on the design and implications of technology,[21] our interest within the edX conference in this regard relates more specifically to whom the future of learning, as constructed by those charged with the edX initiative, is being constructed for. Although Faust promotes edX as a platform to be used by "anyone with an internet connection, anywhere in the world", this possibility for universal usage does not (as we have shown above) necessarily elevate these users as the focal population of the initiative, or more specifically, the users to which advantageous benefits from this initiative are to be directed. (MITNewsOffice 2012) This paradoxical stance seemingly adjusts prior utterances regarding the vast, unbound population of primary users existing everywhere to a small, prioritized number existing within the present institutions. Faust's subsequent utterances work to compound the paradox localized in her own monologue rather than providing recourse to this contradictory stance. A particular key utterances is found on lines 40-43 in which Faust states:

DF   Together, Harvard and MIT will be sharing knowledge more broadly. Sharing the remarkable capacities of our universities far beyond Cambridge. It is however what will happen on our campuses that will truly distinguish edX. *(Lines 74-77)*

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[21] For example, see Oudshoorn and Pinch's 2003 "How Users Matter: The Co-construction of Users and Technology."

Thus, Faust proffers an ideal of these institutions, adjoined via edX, as a focal point for distributing knowledge through this online medium. We are not made aware of what such "knowledge" or "capacities" entail, but we can plainly observe the relegation of global end users through the utterances of Faust, and the focus realigned upon those individuals attending traditional classrooms within specific institutions.

DF   Harvard and MIT are institutions devoted to research and discovery. Through this partnership, we will not only make knowledge more available, but we will learn more about learning. We will refine proven teaching methods, and develop new approaches that take full advantage of established and emerging technology, building on the insight we gain to enhance the educational experiences of students who study in our classrooms and laboratories. Ultimately, we will expand the scope of our efforts, collaborating with other universities to host a wide array of educational offerings on a single site. I'm excited about this partnership and the extraordinary opportunities it will create, for undergraduate, graduate and professional students at both of our institutions, as well as for learners worldwide. *(Lines 77-88)*

We see that Faust does not immediately mention these particular on-campus students who will benefit from the edX initiative, and by doing so initially retains the defensible stance that benefits consequent to the introduction of edX will benefit unspecified "classrooms," a setting whose users we are only able to assume. However, in eventually defining institutionally situated students as primary beneficiaries of in-class pedagogical improvements, to be theoretically provided by the edX initiative, Faust is quick to remark upon the eventual expansive nature of edX in providing these benefits to more learners through partnerships with other institutions. However, in defining this possible relationship between other institutions, which may emerge from the expansion of this initiative, the final categorization of beneficiaries as "learners worldwide" is ambiguous, as this may refer to possible world users inside or outside of institutionalized environments, two very different categorizations. (MITNewsOffice 2012)

This localized trouble posed by defining the 'primary' beneficiaries of the edX initiative is dealt with initially within Faust's foregoing utterances, however this problem is inextricably linked to

the wider paradox of an 'institutionalized revolution,' and therefore further problematizes the proposed framework of edX as manifest throughout the conference thus far.

2.3.3 Ratifying the Objectives of edX

As this section of the analysis will discuss, by expressing knowledge of a paradoxical 'institutionalized revolution', Faust uses a number of conventions to subsequently mitigate the possible damage these incongruent utterances will have upon the credibility of the edX panellists in promoting the edX initiative.

The fragility to the narrative is dealt with first by reference to the 'personal'[22] responsibility Faust has to "increase access to education, and strengthen teaching and learning." (Ibid.) Thus, Faust expresses her commitment to institutional imperatives as an intrinsic component of her status as institutional leader. Such moralizing utterances persist in engendering credibility with respect to precisely why this initiative was created in the first place. We will observe a more explicit version of these moral imperatives in Hockfield's presentation. This is further supported by her alignment of the audience to this end, as observed in lines 57-62:

DF   Many of us in this room can point to a teacher or a class that opened our minds in new and surprising ways, and awakened in us an interest or a passion that has shaped how we think, what we do, and how we see the world. Today's announcement brings that possibility for transformation through education to learners across the globe. *(Lines 91-96)*

Thus, the merits of edX are harmonized with the priorities of Drew Faust as Harvard President, and her inclusion of the audience to this end elucidates how she imagines her audience. By employing generalized notions of the impact of great teachers on our will to explore and experience the world, Faust attempts to develop a stable position of agreeability between the initiative and the audience—not unlike Agarwal assertion regarding today being a 'beautiful day'. As we can observe,

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[22] "Two of *my* most important commitments as Harvard president have been to increase access to education, and to strengthen teaching and learning." (Ibid.)

the disparity between future beneficiaries of edX, from Agarwal's utterances of worldly scope to the institutionally positioned students Faust explicitly notes, remains intact through Faust's dialogue. Attempts to mitigate this paradox certainly populate her presentation, but whether these attempts are successful can only be observed within the 'question and answer' phase later in this analysis.

Finally, Faust also provides felicity conditions of her own when characterizing the parent institutions of edX as being "devoted to research and discovery", and characterizing the process of this discovery in the case of edX as an attempt to "learn about learning." (MITNewsOffice 2012) These felicity conditions will be utilised by Hockfield who purposefully regards the edX initiative as an experimental entity. However, to focus again on future users, the benefits of this research and discovery are to be directed to the classroom, as Faust's subsequent utterances in lines 45-49 clearly suggest:

DF   We will refine proven teaching methods, and develop new approaches that take full advantage of established and emerging technology. Building on the insight we gain to enhance the educational experiences of students who study in our classrooms and laboratories. *(Lines 80-83)*

As such, we might surmise at this point that the announcement of the online learning platform edX, and any future developments and expansions to other schools of this initiative (as Faust explicitly mentions in lines 49-51), are unequivocally intended for the traditional classroom.

2.3.4 Envisioning the Future of Education

DF   Today's announcement brings that possibility for transformation through education to learners across the globe. And it provides our faculty and students on-campus with tools and techniques for creating and transmitting knowledge. As we gather here, I think about the students in Massachusetts and around the world, who will have access to a better education because of the partnership we launched today. *(Lines 94-99)*

The final, pertinent aspect of edX taken up by Faust's presentation encompasses a personal envisioning of the future as well as statements made to thank those who have allowed this particular vision to be possible. As can be observed in the above excerpt, there is a marked differentiation between the first two utterances and the third discussion pertaining to "better education". The observable disparity relates to the certainty of the mentioned prospects, in that the "transformation" and "tools and techniques for creating and transmitting knowledge" are positioned as objective claims, substantiated simply by their being stated. However, Faust positions the final statement regarding "access to a better education" under the auspices of personal opinion, that being "I think about…" This motion towards subjective appraisal, not unlike other explicitly subjective opinions throughout the announcement conference, seems to provide a basis for defensibility in that personal opinions do not necessarily (or, at least, cannot be proven to) coincide with institutional objectives. It seems in this case that although Faust will 'objectively' note the features of edX, which may seek to attain a heightened degree of credibility (i.e. lines 60-63), a 'valuation' of this initiative is to be uttered by way of explicit subjectivity. Thus, it seems that subjective utterances provide the foundation for defensibility, especially when compared to utterances of objective stature. We find that certain utterances enacting positions that may be untenable and therefore weaken the projected narrative are positioned as subjective utterances. We can discern this linguistically where "Today's announcement brings that *possibility* for transformation" is stated objectively while the statement "*I* think about the students in Massachusetts an around the world who *will* have access to better education' is tempered by subjective qualifiers (i.e. *I* think about…) (MITNewsOffice 2012). In this case, the latter statement, which implies certainty by use of "will", is qualified with obvious subjectivity, while the "possibility" of something occurring in the future remains objectively given.

Before we turn to the second phase of the announcement of edX with the utterances of Susan Hockfield, we will briefly discuss the modifications to arguments made by the two speakers thus far in the edX announcement conference.

Modifications to Arguments.

Another way of viewing this transition from the global extent of edX ushered forward by Agarwal, to generally less grandiose, more defensible utterances authored by Faust and Hockfield, may be discussed. This initial phase of the edX showcases that these introductory speakers pre-emptively anticipate disagreement from within the subsequent 'question and answer' phase, and thus

enact a quasi-unilateral agreement in anticipation of contravening arguments. This statement requires some clarification in its applicability to this constituent of the announcement conference.

As Wittgenstein convincingly argues, agreement is central not only to dialogical expressions of opinion and other subjective inferences, but implicitly defines the world which these speakers inhabit, or agreement in and about a "form of life" (Wittgenstein 2009, 241) Agreement is therefore crucial to the structuring of arguments that are meant to convince, as we believe the edX announcement conference was enacted to do. And as discussed above, agreement about certain points solidifies localized points of narrative, which subsequently builds and maintains the master narrative of a given event.

Lynch discusses two types of agreement, 'implicit' and 'explicit', with the former existing in the background of social interaction and the latter represented within the diction of utterances, thus able to be extracted from specific exchanges. (Lynch 1985, 185) Of course, the means by which agreement can be reached are innumerable, and yet the expressive forms of this agreement, in explicit terms, can be mined from dialogue. Therefore, we bypass the implicit agreements and instead look to the explicit agreements as they are produced within this event.

Agreement is typically discussed in terms of two parties whose divergent states of opinion require reconciliation. The edX introduction provides a case where disagreement is far subtler, although necessary, so that the *correct* narrative (that which the edX panellists wish to convince the audience of) is disseminated to the audience while not undermining the strength of previous utterances. The spectrum of descriptive words used to detail the spatial extent of edX showcases increasingly subtle forms of description at odds with the grandiosity of Agarwal's initial assertions, thus attempting to pre-empt and avoid disagreement. These subsequent utterances, which seek to qualify foregoing utterances, which may prove difficult to defend, seem to lessen the impact of these statements towards attaining future agreeability (a phenomena thoroughly analysed by Lynch 1985, 266). In terms of the edX conference, the continuum from qualification (i.e. tempering an utterance) to vigorous defense (which can only occur in the 'question and answer' phase) explicitly elucidates the degree to which certain utterances impact upon the master narrative and the credibility of the edX panellists.

2.4 Susan Hockfield: Fragile Partnership and a Novel Experiment

With the announcement having been made through Drew Faust's foregoing utterances, the president of MIT, Susan Hockfield, continues the progression of the 'announcement as an achievement' by mobilizing certain features of edX deemed relevant to its presentation.

SH   MIT is exceedingly excited to continue a very long history of collaboration by joining with Harvard in this new partnership: a shared expedition to explore the frontiers of digital education. *(Lines 112-115)*

The first aspect that Hockfield discusses relates directly to the collaboration by which the edX initiative is founded: the purported partnership between Harvard and MIT. Despite the announcement of the collaborative efforts by Faust, which had engendered the edX initiative, Hockfield displays her recognition of the weakness of this narrative point and illustrates the length of the collaboration (i.e. "very long) in order to negate possible contentions in this regard. As discussed by Sacks with regard to "fragile stories", the sustenance of a particular narrative regarding *what happened* may require the explicit use of evidence (or other supporting utterances) to support this claim. (Sacks 1992, Lecture 15) As the narrative may be disagreed upon when dialogue commences within the 'question and answer' phase, this supportive utterance further evidences the edX initiative and in doing so provides a bulwark of credibility to the announcement conference. However, Sacks also recognizes that a narrative fragility may also be related to the narrator also being the protagonist within their own utterances (Ibid.) Therefore, supporting statements from other members are crucial to corroborate prior claims in order that they do not easily fall to antagonism.

We also find within these evidential utterances the motion of arranging time structures to better suit the needs of the edX panellists. By making reference to a particular past, being that one in which both Harvard and MIT share collaborative efforts, Hockfield enacts a certain version of the past which promotes this continuation of these joint efforts into the future. Thus, when contending with the veracity of this 'novel' partnership, the audience members must also contend with this particular version of the past enacted by Hockfield.

It is also interesting to point out the position in Hockfield's monologue at which this utterance is aired. In alignment with Faust's initial utterances, which announce the partnership, Hockfield addresses the fragility of this partnership as the foremost point, immediately following the perfunctory greeting used by all previous speakers.

2.4.1 Taking a Position.

SH   Today, in higher education generally, you can choose to view this era as one of threatening change and unsettling volatility. Or, you can see it as a moment charged with the most exciting possibilities presented to educators in our lifetime. For the possibility of better understanding how we learn and of sharing the transformative power of education far beyond the bounds of any single campus. As MIT and Harvard come together in this ambitious online initiative, we also come together to say, with conviction, that online education is not an enemy of residential education, but rather a profoundly liberating and inspiring ally. *(Lines 118-126)*

As noted in the above section regarding the hybrid event that is the edX announcement conference, this conference must be understood in some respect as an event manifestly entwined with rhetorical device. The foregoing quote provides a single instance of the use of rhetoric within the event, which we will now analyze in its utility for maintaining credibility.

As has been previously discussed by Atkinson, and glossed by Heritage and Greatbach (1986) in their studies of rhetoric and response, certain rhetorical devices are enacted in speech towards inciting positive responses (i.e. applause) and characterise an enduring aspect of "charismatic" orators. (Atkinson 1984, 371) It is beyond the focus of this study to account for any achievement of 'charisma' by way of particular, observably effective rhetorical devices. However, the use of these devices towards influencing media agreement with the proposed framework (thus, attempting to shape the future in the present) is crucial to the study at hand.

As such, the excerpt of Hockfield's monologue above enacts an instance of "contrast" as well as "position taking," thus making this device a "combination" of different forms of rhetoric (Heritage and Greatbach 1986, 131). The foregoing authors believe that the doubling up of effective rhetorical practices increases the durability and acute response the rhetoric may arouse within an audience. In

the above utterances, we see that Hockfield relays a choice of response to the changes in higher education: a contrast between "threatening change and unsettling volatility" and "a moment charged with the most exciting possibilities…" (MITNewsOffice 2012) Such contrasting points, when illustrated through rhetorical device, often imply an obvious choice to be made between the two indicated options. Instead, following the illumination of these contradicting positions, Hockfield states (with "conviction") the belief shared by Harvard and MIT's in regard to the supportive capabilities of e-learning for in-class learning. Therefore, this subsuming of the potentially antagonistic version of education ('online learning') into the vision of edX simultaneously attempts to negate the potentially destructive elements of online learning, provide an utterance to once more advance the vision of edX, and finally, relative to this particular section, to produce an utterance which vies for approval from the audience (i.e. credibility).

Unlike political speech, wherein the foregoing utterances which 'take a position' often generate applause for its audacity, Hockfield's does not experience such overt approval. This lack of outward response (i.e. applause) may be contingent on the unique context of the edX announcement conference, wherein its hybridity and the uncertainty audience members and panellists alike have render proper modes of behaviour unclear. Therefore, any observable achievement of 'taking this position' may only be discussed in terms of feedback aired during the 'question and answer' phase and in subsequent media articles.

2.4.2 Achieving Credibility through 'Moral Imperative'

Following the use of the above rhetorical device, Hockfield demonstrates her recognition of the exposure to potential criticism edX may endure following such a critical utterance (i.e. the taking of a position on e-learning in relation to traditional learning). Hockfield seems to accomplish this by immediately providing an explanatory utterance to ratify the foregoing position, in what we feel to be a crucial utterance in the vie for credibility:

SH   We also come together to say that it is incumbent on research institutions like ours to find every way we can to share our knowledge and our teaching with the world that is hungry to learn. edX reflects both of these convictions at once. *(Lines 126-129)*

As analyzed in the previous section, we see that Hockfield promulgates the conviction shared by the adjoining institutions with regard to the possibly antagonistic nature of online learning. Although a firm stance is unequivocally enacted, Hockfield combines this initial illustration of the vision of edX with a moral imperative, thus leveraging her claims with defensive positioning. Hockfield does this by noting the incumbency towards discovery (in this case, to find better ways to share knowledge) on the present institutions, which enacts a moral imperative *conducive to* the genesis of the edX initiative. In this sense, it is also important to note that this moral imperative is self-reflectively implied and does not emanate from an outside source. As can be observed, it is Hockfield on behalf of the two institutions who outlines the moral necessities of their actions as a duty and/or responsibility, to which edX is the manifestation of this principled reflection. Therefore, in accordance with the final utterance of Hockfield in this section that notes the coalescence of these two convictions, we can surmise that these morally charged statements balance the potentially untenable convictions of the final position taking utterances. As such, Hockfield provides immediate defense to the credibility of the first utterance.

2.4.3 Evidence of an Experimental Initiative

With key convictions disclosed by Hockfield in foregoing utterances, two final elements of edX are presented for public consumption: the use of evidence and the experimental characterization of edX, both of which will be discussed in this section.

SH   Now, we fully realize that this initiative is genuinely an experiment, so we ourselves are prepared to learn. *(Lines 132-133)*

In his argument on the use of the 'laboratory' as a metaphor within sociological research, Guggenheim suggests that sociology suffers from ambiguity in its conceptualization of a "controlled area within an uncontrolled environment." (Guggenheim 2012, 2) By referring to the field of study in which sociological research takes place as a 'laboratory', we find that the extent of the field which is controlled and that which is not remains difficult to distinguish from the other. The spatial extent of the laboratory, and the experiments to which it is conducive, poses a conundrum in communicating what is considered to be within a given study, and what of negligible concern. This ambiguity

between the extent of the laboratory and the surrounding environment exists in many forms outside of scientific inquiry. However, in many cases an obfuscation of boundaries can be purposefully enacted to produce a desired effect, as is the case within the edX announcement conference.

The initial use of "prototype" in Agarwal's introductory remarks positions the ongoing edX initiative as something in the early phases of development, something which has yet to become complete. Echoing this early positioning, Hockfield's use of "experiment" and "prototype" towards the end of her presentation (in describing both edX itself and the first online course provided by edX, respectively) seems to accomplish two major objectives leading into the 'question and answer' phase.

First, these descriptors enact a repetitive rhetoric that subtly attunes the audience to a particular way of understanding the edX initiative. Those witnessing the conference are reminded of the experimental nature of edX, but in such a way that expresses self-reflection (i.e. those charged with edX are *aware of* this experimental status of their initiative) and thus attempts to negate any question in the subsequent 'question and answer' phase that might challenge the foundation of the edX initiative. In this way, we might understand the edX initiative to exist within or outside of a laboratory setting, this being contingent on which argument is currently aired.

As such, the second objective achieved by these utterances is related to the tenability of edX prior to the 'question and answer' phase. In order to maintain a defensible structure of argumentation in support of edX, while preventing the credibility of previous work completed within the conference from being undermined, the use of the terms "prototype" and "experiment" are applied, albeit sparingly. This limited usage holds particular importance as the balance attained between edX as both an experiment characterised by uncertainty and yet a highly articulated initiative (Hockfield's enumeration of evidence [Lines 101-119] along with nearly all utterances up to this point) provides for the maintenance of opposing objectives, each of which attend to the possible points of weakness in the narrative. Thus, it would to be of interest to the edX panellists to balance the maintenance of these terms through repetition without overwhelming (and, perhaps, undermining) prior achievements. We might therefore surmise why it is that Hockfield chooses the moments just prior to the beginning of the 'question and answer' phase to perform this utterance, as such an utterance prior to audience inquiries and contentions seeks to provide an essential defensive against possible antagonism.

Therefore, Hockfield's reiteration of the experimental nature of the initial edX course *provides a caveat to ensuing questions*, and in doing so, demonstrates an awareness of the potential criticisms against the initiative to follow, thus constricting any inquiry that attempts to exploit the structural fragility of the story.

2.5 Part Three: 'Question and Answer'

The following will explore the final constituent of the edX announcement conference: an arena for discourse wherein members of the public (media) are permitted to challenge the framework thus far through a ''question and answer'' phase. Prior to beginning our analysis, we have discussed the implications of a 'question and answer' phase for this conference, and by extension this study. Subsequently, we will enact these implications through our exploration of each segment of the 'question and answer' phase in succession. Where possible, specific topics brought to light by audience inquiries will be grouped or discussed collectively in order to make illustrative comparisons between these inquiries.

2.5.1 Initial Fragility

14:33 — 14:55 - Susan Hockfield: *Introduction to Q&A section.*

15:16 — 15:40 - Christine Heenan: *Structure of Q&A section/ Selection first question.*

15:41 — 16:05 - Katie: *First Question.*

16:12 — 16:44   - Susan Hockfield: *Response.*

16:55 — 17:05   - Drew Faust: *Response.*

17:06 — 17:45   - Alan Garber: *Response.*

Whereas Lynch discusses modifications made to accounts of objects, Shapin considers the credibility of making an initial claim (Lynch 1995, 202; Shapin 1995, 255). Similarly, Katie's inquiry upon the tenability of the arguments thus far proffered by edX panellists challenges the initial claim by Agarwal and the modifications made to this argument by Faust and Hockfield.

K   …sorry, MIT already has this prototype course. For the panellists from Harvard, were there any similar initiatives already taking place at Harvard that you looked to, or are still looking to, in deciding how to want to move forward with this? Thank you. *(Lines 180-183)*

The first question posed within the Q&A section of the announcement conference immediately illuminates a number of items salient to this analysis. Evident in the above inquiry is the wanting of additional information regarding Harvard's familiarity (experimental or otherwise) with online courses. However, even this may be more implied than explicit, as upon literal analysis one observes an interest in an otherwise closed question (i.e. yes/no). Thus, 'were there similar initiatives within Harvard?' to which the response might be some permutation of: 'Yes…(Harvard has familiarity)' or 'No…(i.e. this is new for us at Harvard)'. However, before a response is espoused for public consumption, entitlement (and thus credibility) to this response is to be clarified.

A presupposition made here by the media member (i.e. Katie) is that members of Harvard are entitled to answer this question. As Sacks (1970) discusses, those bearing witness to a particular event, which in this case is the particular happenings within Harvard, must illustrate how they are entitled to make comments upon these particulars. In this case, the question is explicitly directed to Harvard, thus providing the foundation for members of this institution to express themselves as 'proper' vessels for this knowledge, given that the event requires witnesses from within this institution. Therefore, they are deemed, by way of the question ("for the panellists at Harvard"), to be in a *morally defensible* position to possess the appropriate information for an informed response. However, following this question's airing, a verbal exchange between panel members, culminating in Reif's deference to Hockfield, both members of MIT, lends itself to a different conclusion.

Upon this question's airing, we see Faust (Harvard) nodding in a gesture of comprehension (and perhaps pre-emptive answering) of the question's line of reasoning, and subsequently turning to face Garber (Harvard), then Hockfield (MIT). Hockfield, positioned in the middle of the five panellists, turns to the colleagues to her right (sequentially, Faust and Garber) and begins to speak. Simultaneously, and interrupting Hockfield, Reif (MIT) begins: 'Well l...let me", while Agarwal (MIT) remains silent. Given that the question was directed to Harvard, and the entitlement to this knowledge clearly resting with the Harvard members, we might conclude that neither of these two (i.e. Hockfield or Reif) given the construction of the question, should be entitled to the information required to form a proper response, especially given the proximity to Harvard members available to answer these questions.

With the foregoing in mind Agarwal's silence alone seems the only plausible reaction. Agarwal is certainly the leader of the edX initiative, however his silence as an academic from MIT logically follows the question being directed towards the partner institution. Thus, the appropriate question becomes what entitlement does both Reif and Hockfield of MIT have to answer this inquiry.

SH   'I just want to say why MIT and Harvard.' *(Line 185)*

First, the use of 'just' demarcates this discourse as secondary ('just' = 'simply/only/no more than') or at the very least introductory to a more fitting, appropriate response to follow thereafter. Positioned as a subordinate utterance, Hockfield's response suggests that the issue of entitlement will not be disrupted in the subsequent discourse. If this is so, and entitlement and witnessing of the workings of Harvard are to be mentioned, Hockfield will be required to position this knowledge in a way that legitimises her entitlement to *knowing* this information.

SH   'I think one of the best-kept secrets of Cambridge and the entire higher education community is the profound richness of collaborations between MIT and Harvard. Um, this is just another step, actually a very big step though, in collaborating with these neighbourly institutions. And I think it really does underscore our commitment, not just to principles we've just articulated, but also to the region to making this region an even greater hub of education through collaboration.' *(Lines 185-191)*

As Hockfield's response illustrates, her intention is not to answer the question directly, but to reposition the question in order to illustrate an aspect of the question challenging the partnership between these two institutions. This seems to be done in order to address two important items, both which pertain to the authenticity of this emergent partnership.

Most apparently, Hockfield discusses the historically private collaborations between the two universities, and how this initiative ("a very big step") exposes this relationship to the public. (MITNewsOffice 2012) As Hockfield posits, the commitment Harvard and MIT have to each other and the region is manifest in this initiative, and this response then at once illustrates that this otherwise private partnership is only novel in terms of public exposure.

Consequently, Hockfield addresses the underlying 'structural fragility' to the framework this question illuminates. The comparative nature of the question, that being Harvard's involvement in an online initiative comparable to MIT, illustrates the possible asymmetry between the two institutions:

if MIT already has this course and the experience with online initiatives this entails, what does Harvard add to this initiative? Hockfield provides an initial response to this fragility by a reorientation towards higher goals (i.e. the regional growth as an hub education) as evidence of the collaboration's strength.

Faust in her follow up response, which also uses 'just' and 'brief' to incite a comment secondary to a definitive response, illustrates the "disparate strengths and weaknesses" of the two institutions which the collaboration seeks to overcome. Thus, the asymmetrical imbalance of experience and innovation in online education is purposefully reoriented as something of benefit to the initiative.

Thus, although this question explicitly addresses the representatives of Harvard (i.e. Faust, Garber), its implications question the foundation of the initiative positioned at the nexus between the two universities. Not only does this initial reply and subsequent addition address the fragility of the emergent partnership, but these utterances also create a buffer for the subsequent 'actual' address of the initial question by Alan Garber following these foregoing comments.

2.5.2 The Buffer and Preference Structures.

The structure of answering a question that challenges the respondents to address 'weak' or 'fragile' points of their narrative often requires a line of preface to each the 'buffer', explained below, and the actual answer. Such is the qualifying use of 'just' within the statements illustrated in the above analysis.

The "buffer" is a convention used throughout the announcement conference and serves a number of purposes specific to each use. Generally, the buffer may be defined as subordinate responses positioned prior to a primary response in order to address certain vulnerabilities rendered apparent by an inquiry. We will observe a number of such cases throughout this analysis. In short, the buffer provides stability as well as an expanse of time for preparation prior to the airing of an appropriate response. The use of the buffer in order to reduce fragility is critically dependent upon what conversation analysts identify as 'preferential structures'. As Garfinkel discusses: "Actions which are characteristically performed straightforwardly and without delay are termed 'preferred' actions, while those which are delayed, qualified and accounted for are termed 'dispreferred'." (Garfinkel 1984: 267). This is different from the choice for either "acceptance" or "refusal" of a foregoing inquiry. (Schegloff and Sacks 1975: 296) Instead 'preferred/dispreferred' relate to the

"highly generalized" and "institutionalized methods of speaking". (Garfinkel 1984: 267) Thus, outcome of this 'preference' impacts not only the single exchange between the questioner and respondent, but also the wider structure of the conversation.

However, as alluded to above, we must also address the fact that a buffer allows the primary respondent (i.e. the panellist who will actually *answer* the question) time to formulate an appropriate response to the initial question. In the event of a question posing a particular challenge to an eventual respondent, a buffer may be employed in order to provide reinforcement to the narrative heretofore far promoted and preface the subsequent answer with sensitizing information. Those who enact a buffer may do so without the conscious intention to allocate time for formulating a response, however, with the possible vulnerability of the narrative rendered visible, the defensive usage of a buffer provides a foundation to the subsequent definitive answer, and thus, whether consciously or otherwise, provides the respondent time to formulate an appropriate response.

For example, when asking a friend if they will join you for breakfast the following morning, the friend may answer with some permutation of "Yes, that sounds great…" or "No…I don't think I can…" The former, "yes" response, provides for continuity in the exchange in that the latter of conversational participants (the respondent) agrees to the terms enacted by the first (i.e. her/she also wants to meet for breakfast). Therefore, this "yes" upholds the discussion through mutual agreement, whereas the latter "no" response, illustrated above, negates the questioner's position in a number of ways. It is this negative preference where sociological interest is mainly focused as "no" answers work to generate resistance to the first speaker and consequently give rise to a different pattern of conversation.[23]

As Schegloff and Sacks argue, these two utterances (responses, in this case) communicate not only whether the second speaker agrees or disagrees with the first (and to what extent), but also facilitates understanding between the two speakers (Schegloff and Sacks 297, 298). Therefore, in the case of the initial question asked during this announcement conference (i.e. 'in light of MIT's success, what has Harvard been doing?'), the initial responses marshalled by Hockfield and Faust addresses the '*framework*' entailed by this question, although in a way that facilitates their own necessities as opposed to that of the asking party. Schegloff and Sacks call this action a 'preface', being that it signals an understanding of the question being asked, but calls into question its framing. (Ibid.) This

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[23] See Heritage (1984) chapter 7 for an unabridged consolidation of primary conventions in conversation analysis.

author has opted to use the term 'buffer' instead, which is not a substitute for the term 'preface', but rather that prefaces within the edX conference often appear as a "buffer".

The defensive posturing seen throughout the announcement conference signals to us that this event is an *inherently* unstable environment: one in which the panellists supporting edX must continuously support and uphold statements of belief espoused in the introductory phase of the conference through the entirety of consequent discourse. However, this is not to say that all inquiries are inherently antagonistic, as we must differentiate between critical questions, those that challenge the narrative, and supportive questions, those conducive to the narrative. The conference's defensive nature wholly correlates to the purposive structure of announcement conference, that by which a particular framing of the initiative is disseminated upon the audience and maintained within the 'question and answer' phase. As discussed in previous sections, the announcement conference provides a highly controlled forum wherein a question and subsequent answer form singular 'pairings' of dialogue, albeit temporally weighted towards the latter, in regard to a single line of inquiry.[24] Furthermore, our interest upon the structure of conducting the announcement conference allows us to observe the fielding of questions as an activity to controlling the questioning power of the audience.

AG   'Katie, to your question about whether Harvard had anything similar to what MIT has had in online education.' *(Lines 197-198)*

The first line of Garber's response illustrates the direct relatedness of subsequent utterances in answering Katie's inquiry. In prefacing this directness, the initial utterance also signals a break from the previous utterances of Hockfield and Faust and draws the question into a definitive statement on the matter. Furthermore, Garber's position *within* Harvard substantiates the conclusiveness of this

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[24] To dissuade the regeneration of topics addressed in previous answers a number of conventions are enacted, including the example to be explored in later chapters of Agarwal's 'solidifying' utterance in order to enact agreeability between all announcement conference members (see chapter 2.7.6).

response, thus providing the necessary validation of vocational standing required to suffice the initial inquiry[25].

However, this purported directness of response to the initial question does not simply overcome the exposed fragility thus far dealt with by previous speakers (Hockfield and Faust). Instead, this vulnerability requires a response that remains sensitive to the concerns inherent not only to the initial question, but also the issues of fragility raised by the buffer. Garber's initial utterance, quoted above, consciously acknowledges the requirements of his response in addressing the explicit inquiry.

As a final concern, Garber use of the past perfect 'has had' adjusts the temporality of the questioner's scope of inquiry to a 'completed' or 'transpired' period of time. Harvard's past experience in online education, which Garber characterizes as "extensive", is demarcated from the novel approach heralded by MIT to which Harvard will allocate future intellectual resources:

AG   'We haven't had a program analogous to MITx and one of the attractions of this is we believe that MIT is start on the development of an amazing platform to extend our efforts to this area.'
       (Lines 201-204)

This final utterance, given foundation by both the buffer and Garber's prior attestation to experience in online education, provides a conclusive response to the initial inquiry while safely minimising disturbance to the promoted framework by virtue of its grammatical construction and content. While previous statements of Harvard's experience are spoken with discernible breaks between individual ideas[26], the above quotation uses the conjunction "and" in order to couple Harvard's lack of experience in online education with speculation and belief in the development of the MIT platform (MITNewsOffice 2012). Such a construction allows the speaker to subsume negativity and weakness inherent to the response—in this case, the absence of an initiative similar to MITx—and provide a response conducive to the necessity of edX.

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[25] This relates to Garber being a part of Harvard, the institution to which the question was initially aimed.

[26] This refers to the natural pauses and breaks that occur in natural speech between separate ideas, which this researcher has delimited by full stops within the transcript and in-text excerpts.

We are left to speculate as to the intentions of Reif's response had he been able to follow through with his fragmented initial response, although his silence through the remainder of the question illustrates that either the bipartite buffer provided by Faust and Hockfield and/or Garber's definitive response rendered his own response redundant, or that his response following the other speakers was no longer relevant to the discussion due to the particular framing they enacted therein.

2.5.3 Applied Ambiguity through Online Inquiries I

17:49 — 17:57   -   Nate Nickerson: *Second Question; acquired from reporters online.*

17:58 — 19:42   -   Anant Agarwal: *Response.*

19:43 — 20:56   -   Alan Garber: *Response.*

20:57 — 21:26   -   Rafael Reif: *Response.*

NN   '…from reporters online we've gotten a couple about what kind of research you hope to do in online learning and teaching.' *(Lines 206-207)*

The consolidation of what appears to be a number of online inquiries into a 'topic of interest', rather than a single, direct question, enacts a question for the edX panellists that is considerably less antagonistic to the established framework than the previous question thus far aired in the announcement conference. The means by which Nickerson collectively submits these online questions into the conference are crucial to limiting the directness these question may contain. Nickerson does this in two ways:

First, by retaining ambiguity by referring to "a couple about" Nickerson achieves ambiguity as to exactly how many questions were posed to this end. This allows for the range of antagonism possibly present in these questions (i.e. the degree to which they are preferential and to what degree) to be wholly mitigated and subsumed through the filter of Nickerson's generalization.

Second, by positioning the questions gathered from cyberspace in terms of what the edX panellists 'hope' to accomplish through their research, not what 'will' be done, these questions attain a more exploratory tone. This allows the edX panellists to provide further additions to the previous

framework without having to carefully respond to a potentially antagonistic inquiry, that which may have posed hazard to the proposed framework and the credibility established towards its maintenance.

This second question posed to the audience, following the observably problematic first question, is answered with comparatively limited hesitancy on the part of the edX panellists. Agarwal begins immediately following the question's airing:

AA   "I'll take that. So, one of the key goals of the effort, of edX, is not just to develop the platform, but also to do research in two areas." *(Lines 208-209)*

Thus, we are able to observe the ease and immediacy by which Agarwal addresses this inquiry in comparison with the first question analyzed above. We can also observe the lack of buffers present in the performance of a response and all ancillary responses are done so to provide further information, as Garber and Reif provide in utterances following Agarwal's initial discourse.

As previously suggested, this response now becomes an opportunity to further embolden the narrative delivered so far. Agarwal proceeds to provide speculation about how the future of edX might develop, especially in the terms of the "collaborative" and "personalized" possibilities for edX, and the heightened ability to learn how people learn through novel research provided for by the initiative. Agarwal's adjustment to language is also important within this section. His use of probabilistic modal verbs, such as "might", allow him to posit futures for the edX initiative, and the impacts this will have on education in general, without inflicting damage to credibility. By way of this stance, Agarwal discloses two ways in which research will be applied to the edX initiative and the present institutions: the improvement of online learning, and a better understanding of how students learn. These separate objectives are then coalesced in another illustration of how research conducted by edX in the online environment will warrant vastly important observations for improving on-campus learning. The credibility, we are to assume, is implied through the inherent proximity to this research, and this proximity permits ideation regarding possible futures for edX. As such, we can readily equate the witnessing of events by Agarwal and his colleagues within this inquiry with that illuminated upon by the first inquiry, which looked to those of Harvard to comment on specifics of online-learning within their own institution.

Supporting responses, which follow Agarwal's initial response, are notably inclusive of both present universities, with both proffering support to the collective vision of their joint institutions through edX. Garber's realignment of research aims to the vision of edX is another such moment of maintaining the narrative of edX thus far committed upon. Garber emphasizes the unprecedented opportunity that edX presents for online learning, and in doing so once more provides a basis for the plausibility of certain outcomes of this research while not committing to one in particular. Thus, Garber further attains a stance of defendable utterances, or perhaps 'deniability', steeped in speculation in accordance with prior notions of the experimental nature of edX.

Finally, Reif's supportive response alludes to the technological developments that have given rise to the possibility of edX, which therefore supports not simply Garber's assertion of an unprecedented approach afforded by such technologies, but also Agarwal's initial response with respect to the speculative nature of edX.

What we can observe in this tripartite response is a development of further layers of support providing observable credibility to the initial response of Agarwal by way of reinforcing evidence, with each subsequent respondent referring to each other as the succession of answers progresses. The utterances populating each of the responses by these three edX panellists are evidence enough of their addition to the previous response, however the leaders also provide us with explicit indicators as to their intention:

AG   And as Anant says very clearly what kinds of research we can do, I just want to emphasize how fundamental this is to our vision for edX. *(Lines 231-232)*

RR   Let me just add one comment to Anant and Alan. *(Line 245)*

In the first example above, we also observe the use of 'just'—as previously detailed in foregoing sections—which renders subsequent statements secondary to prior statements. This 'just', as with other examples, also implies a hierarchy of response to the audience and edX members alike. This hierarchy is not simply two levels, as we can also observe Reif position his response as a direct follow-up of the previous speakers in the second quotation above with the diminutive 'just'. Therefore, response can theoretically continue past a second subordinate addition. As a final point of concern to this study is the remainder of Reif's utterances, which are quoted below:

RR I think an important point to realize is how technology has enabled all this today, so five years ago or ten years ago the technology we had would not allow us to do what we're doing right now. Uhh, and that will continue to occur, so as technology will continue to change we're going to have to figure out how to (indiscernible) that technology, and the research will tell us what components make more sense to integrate into a, this continuing evolving technology platform. *(Lines 245-251)*

These utterances imply much about the credibility of edX in predicting the future developments of their initiative as well as the extent to which these predictions can be made. As Reif discusses, the technology that provides the technical foundation conducive to edX is also conducive to the ever-evolving nature of edX. Therefore, strongly asserted as inevitable (i.e. "will…") is the interminable, autonomous evolution of this technology, which the members of edX must properly utilize within edX. In STS terms, this enlivens something of a technologically determinist ideation of the future, wherein the members of edX are not charged with the development of the technology per say, but must adapt features of this technology to properly support and maintain the edX initiative. Thus, by referencing technology as an ongoing process *outside* of the control of edX, Reif provides a conclusive statement in response to what sort of research can be done, while providing a defensible reason why predictions as to future research are difficult given the nature of the technology.

With the speculative research dealt with, the financial structure of edX provides the grounds for the following two questions, which we will analyze below.

2.5.4 Speculative Financial Structure and Implications

21:29 — 21:30 - Christine Heenan: *Selection of third question.*

21:31 — 21:57 - John Lauerman: *Third Question.*

21:59 — 23:37   - Anant Agarwal: *Response.*

23:38 — 24:18   - Rafael Reif: *Response.*

24:21 — 24:22 - Christine Heenan: *Selection of Fourth Question.*

24:22 — 24:39 - Monica Brady-Myerov: *Fourth Question.*

24:40 — 26:33   - Rafael Reif: *Response.*

26:34 — 28:03   - Alan Garber: *Response.*

Perhaps the most important topic of audience inquiry during the edX announcement conference relates to the proposed structure for financing the edX initiative. Until this point in the conference, the edX panellists have made clear that students accessing edX will not be charged for the services provided therein, and the first two questions by the media thus far analyzed have not challenged the topic of financing. However, despite what we may assume the audience to know about online-education, we imagine that a familiarity with business practices warrants that profitability, despite a not-for-profit status, is crucial to the sustenance of any initiative. This is especially critical to the edX initiative as it arises within the highly for-profit environments of university institutions. This topic is addressed in the second question in this section.

However, prior to this second inquiry we find a less direct response posed by a member of the audience in regard to what influences the edX announcement conference has (and continues to) draw upon in developing its platform. Particularly crucial to this inquiry is whether these influences are non-profit or for-profit initiatives. The following quotation has been analyzed using particular analytical conventions in order to illustrate the performative elements of this critical length of dialogue serving, as it were, as a nexus between the sustenance of the constructed narrative, the maintenance of credibility, and a primary point of manipulating time structures. We title this section 'a wolf in sheep's clothing' in regard to the biblical expression, which denotes the great hazard this inquiry poses for the edX panellists despite its innocuous delivery.

2.5.4.1 A Wolf in Sheep's Clothing

Addressing a previously inexplicit topic in the course of the announcement conference, John Lauerman inquires as to the financial structure of the edX initiative by way of the influences and observations the panellists have made upon outlying initiatives within online education:

JL[27]   So, online education has, it's been an area that's been sort of <u>dominated by for-profit</u> colleges up to this point. <u>Just curious</u> about whether you've been looking at what they've been doing,

RR   ((looks up at JL))

JL   how you view what they've been doing, how you intend to be different, have you learned anything from them, do you see anything that their maybe doing wrong that you'd like to do better, etcetera.

RR   ((turns to AA))

         (can you take that?)

AA   ((glances at R. Reif))

AA   So, I'm happy to uhh nyuh take that. (0.8) Uh, first of all, *in terms of* your question, (0.7) uhh: you mentioned for profits and online education. (0.3) It actually turns out, at least in ((raised hands indicate himself)) my mind, in my personal opinion, uhhp: the <u>number one</u> out there (.) is <u>actually a non-profit</u>, (0.3) is uhh is the Khan Academy. Uh y'know Sal *Khan was a student* of ((hands signal to wider audience)) many of us here in the in the audience, (0.5) and in

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[27] JL in this case refers to John Lauerman, the member of the audience who airs this particular question.

terms of technology and personalized learning, (0.4) and and and andh creativeness and and innovation, uhh: I think Sal *was* a leader. = *(Entire dialogue: Lines 253-265)*

As an initial point of analysis, this inquiry, perhaps more so than any other question posed within the conference, demonstrates the difficulty of airing questions that attempt to access information from the respondent on multiple fronts. Sacks discusses the use of multiple questions— i.e. asking a number of questions in one question—in terms of the tacit restrictions posed on those who pose inquiries during a announcement conference. (Sacks 1989, 286) In this setting, the audience seems to be restricted by the moderators in the number of responses they may have (i.e. one), and simply by time, which is imposed arbitrarily on possible questioners. Thus, those who pose questions with the aim of bringing forward specific responses from the panellists about a number of topics require protracted inquiries, such as the example included above. Here, the questioner, John Lauerman, manages to ask five separate questions in regard to how edX positions itself amongst the "dominate" for-profit colleges in online-learning "up to this point."

Lauerman's question is performed in such a way that the directness of the inquiry is rendered 'soft' or 'less impacting' by way of two conventions. First, Lauerman discusses online-education as being 'sort of' dominated by for-profit, an indirect means of blunting the pointed inquiry that would have been aired if he made the assertion without diminishing additions: 'Online-education *has been/is* dominated by for-profit…' (MITNewsOffice 2012) Secondly, Lauerman's choice to add "etc." after the five questions aired lends to the purposive ambiguity of his question in order to balance its altogether explicit nature. What is perhaps being said by this addition is that there are more questions to ask, which ask the same thing, but these foregoing inquiries suffice to garner an appropriate response upon his initial statement. This ambiguity subsumes the previous questions into a multi-faceted approach towards gaining a comment on the general topic of influences while making sure not all of these questions are answered individually. Therefore, the edX panellists are asked to address these influences upon their initiative and whom they are following *in their own way* while keeping in mind that Lauerman expresses the present dominance of 'for-profit' structures.

The eventual first respondent, Agarwal, along with his colleague Reif, can be observed performing a series of actions prior to the airing of a response. At the end of the enumerated questions aired by Lauerman, as analyzed above, Reif makes a gesture in the direction of Agarwal as if to say 'this seems to be your area of expertise/please take this question.' As this gesture is made, we can observe Agarwal connecting with Reif's vision for a moment. We may surmise, due to the outcome of

this exchange, that Agarwal seems to acknowledge the responsibility he bears for a response and at once accept Reif's allocation of this particular task. Furthermore, that the other three edX panellists turn heads, in unison, a short moment after Reif turns towards Agarwal gives us a number of indicators as to where certain responsibility lies within these representatives. The critical questions of finance are seemingly attributed to the gentlemen from MIT—Agarwal and Reif. Given either the difference of hierarchical status between the two men, or perhaps a prior discussion as to whom would answer questions of finance (such of speculation of which is not pertinent to this study), Reif, by virtue of this minute action of signalling for Agarwal to respond, proves in this case that certain topics are governed by certain individuals. Moreover, that these two members of the panel are critical to questions of finance is observable with Reif's follow-up on Agarwal first response and his (Reif's) initial response to the second, more direct question regarding finance, which we analyze below.

In responding to this question, Agarwal first provides a buffer to leverage his own eventual response. As we have already observed in prior questions, the implications of a buffer are numerous, and their precise usage must be attributed to the particular context in which they are utilized. However, and despite this contextual usage, the buffer provides general advantages which can be normatively observed, as with the inherent allowance of more time for subsequent speakers to furnish the question with a more appropriate response, or perhaps, more fundamentally, to form a response in the first place. This first question attending to the proposed financing structure of edX provides another usage of the buffer, wherein Agarwal, prior to his own response, provides a buffer in order to preface his own eventual response with utterances that progress a particular framing of the initiative.

As quoted above, we can observe that Agarwal signals that this is a preface, not the primary response to Lauerman's question, and thus at once signals that this remark serves an ulterior purpose, one conducive to the strategic framing of edX. He achieves this by using 'In terms of your question…' as opposed to signalling an answer to Lauerman's 'exact' scope of inquiry.[28] Following this initial positioning, Agarwal provides the audience with statements referencing the alignment edX has with non-profit organizations by way of a specific argumentative trajectory.

First, Agarwal provides a morally defensible ("in my personal opinion") statement regarding whom he believes is the prime example of online education: the Khan Academy. This poses an

[28] For comparison, see Garber eventual response to the first question raised in the 'question and answer' section, as analyzed in the foregoing section: "Katie, to your question…"

alignment with this non-profit education while contradicting Lauerman's point regarding the dominance of 'for-profits' in online education.

Following this, Agarwal displays how Khan was a product of this system (that of the institutions present) as he was a student "of many of us here", thus bringing the audience in line with his arguments for supportive purposes. With the foremost online-learning initiative (again, in his own opinion) essentially cast as a product of the system now engendering edX, Agarwal has managed to begin assimilating Khan (both the person and the initiative) into the edX framework. Agarwal goes on to show how Khan's ideas have been subsumed to this new project as the 'lingua franca,' employed in the course of researching and designing edX, which denotes Khan style videos (KSVs) as a normative template for online videos. Thus, we find subtle work being accomplished by Agarwal within these utterances, in that Sal Khan and his research has now been co-opted into the edX initiative, as a *product* of the same institutional system, and his work has been standardised in the course of developing edX.

However, this manipulation is perhaps the foremost of the work accomplished by Agarwal, as well as the subtlest, towards appointing edX the successor to Khan. The conclusive line in which Agarwal states, "I think Sal *was* a leader" which provides the audience with an overt temporal structure that defines Khan as heir to the past, wherein the future belongs to edX. (MITNewsOffice 2012) This manipulation of time seems, to mind of this researcher, the crux in establishing the appeal to a "revolution" via the nascent edX initiative. We find that Agarwal has achieved much by imposing a breach in temporality between the Khan academy (and further initiatives Agarwal enumerates [i.e. Lon Capa, for profits] for that matter) and the 'state-of-the-art' edX.

By illustrating knowledge of these contemporary initiatives, Agarwal also achieves credibility in furnishing his response with references to the environment surrounding edX. Thus, by using utterances charged with knowledge of outlying initiatives, Agarwal provides a situation conducive to his final, crucial comment in this regard, related to the bygone leadership of Khan. This enacts a precarious position for the edX panellists, as they have thus far striven to achieve a non-profit, *non-competitive* framing of edX, in which knowledge is shared with adjoining institutions and the world at large. These intrinsic time manipulations uncovered in Agarwal's utterances seem to relegate these sovereign initiatives to the newfound edX.

Perhaps recognizing the contradictory position this enacts, Agarwal, in addressing the 'exact' scope of the question aired by Lauerman following his self-prescribed buffer, specifically discusses this possible dilemma. Agarwal can be seen signalling that the actual question (that asked by

Lauerman) will be addressed in the following with the leading, reflective phrase "…the question was…":

AA   But that said, the question was you know have you looked at the others, how are you different? Umm, of course all of us are, you know, looking at each other, seeing what are the best practices and so on, and try to improve ourselves. But at the end of the day, the more online educators we have, I think the better off the whole world is, so it's just a very good thing. *(Lines 268-273)*

In his illustration of the two examples, Agarwal is careful to delimit the references to 'non-profit' initiatives (i.e. Khan; Lon Capa), which he explicitly notes as "open source" and "non-profit" structures, from the for-profit initiatives alluded to by Lauerman in his initial inquiry, which he shortly references as a means of understanding the reach this technology can provide. Therefore, the relative weight in regard to detailed knowledge and precision of references allocated to 'non-profits' showcases a rather apparent effort on the part of Agarwal to manipulate Lauerman's question into a response supportive of the edX initiative and the framework expounded by edX panellists herein.

Reif's follow up response succeeds in providing two further additions ("Let me *just* add to what Anant just said *very briefly*…" [my emphasis]) to Agarwal's primary response through qualifying conventions "just" and "very briefly" again used for the tempering quality. (MITNewsOffice 2012) Whilst referencing Agarwal's response, Reif once more propounds the belief held by edX panellists that the fact edX exists under the governance of two universities is the edX enacts a novel attempt at online learning intrinsically different from previous efforts. Furthermore, Reif propounds the "very strong" belief that the information generated from this initiative is under the governance of "a not-for-profit structure." (Ibid.) We find Reif somewhat complicates his framing of the edX initiative as a product of two universities, at once governed by these institutions, which are utilizing a 'non-profit' structure. It seem that Reif would have the audience believe that diffusion of responsibility for governance amongst more than one institution provides a situation conducive to a 'non-profit' initiative, thus differentiating this initiative from prior efforts by other institutions in that the data gained from the initiative is not confined to one institution: a morally defensible inference.

2.5.4.2 A Wolf Bare of Clothing[29]

Following this initial inquiry into the financial structure of edX, a second, considerably more direct question, is aired:

M   Hi I'm Monica (inaudible) WBUR. Uh two questions: I'm wondering if your planning to monetize this in any way, charge for premium content or uhh some sort of certificate or degree. And also whether you'll change the presentation or adapt the classes in someway for the online learners. *(Lines 292-295)*

RR   …th-the driving force as you will hear it from, in unison from Harvard and MIT personnel is not in the leadership, the driving is not to make money, the driving is to improve the learning that occurs on our campuses, and hopefully in campuses worldwide. Uhh having said that, we do intend to find a way to at least support those activities, they need to find a way to be self-supportive. *(Lines 296-301)*

Characterised by its concision as well as its formatting, this question follows directly from the first question on the topic of financing and purposively avoids all forms of ambiguity given its closed format.[30] By rendering her inquiry without indirect, qualifying statements (ex. 'just' as used by the previous questioner), Monica acknowledges the ambiguity of the former question and focuses directly upon features of edX left ambiguous by previous responses. Furthermore, this question, in its very asking, encompasses a number of critical aspects in regard to the fragility of the edX narrative thus far enacted.

First, the inquiring individual, Monica, makes clear that the responses to the previous question did not adequately address/convince the audience as to the intentions of edX with respect to financing. As explored in the foregoing section, the question previously aired by Lauerman

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[29] We will see that the nature of this section question, as opposed to the first, does not attempt to attain subtly by the airing of its inquiry. Instead, Monica is entirely explicit in the nature of her inquiry and in addressing that which have yet to be discussed by the edX panellists.

[30] By closed format, we refer to a format conducive to yes or no responses.

recognizes 'for-profit colleges' as the dominant force within online learning, and by way of its structural ambiguity (i.e. the asking of many questions open to interpretation) permitted an ambiguous response regarding the observations the edX panellists have made in regards to other online initiatives. [31] Monica's inquiry instead forgoes qualifying conventions and ambiguities in order to addresses two particular aspects not yet discussed by the panellists.

The inquiry posed by Monica challenges the work thus far accomplished by the panellists in their illustration of the primary endpoint of edX ambitions: improving the classroom *via* research garnered from this online initiative. Thus far the edX panellists have carefully discussed edX as a vessel for globally accessible learning, however the research dividends collected from access to big data, which edX will provide, are to be directed to improving the classroom, not vice-versa. This is not to say that edX has not illustrated their intention to better the online environment as edX progresses. In fact, Agarwal does this when answering the previous question by discussing improvements to be made to the online learning platform as the initiative progresses. However, when discussing this relationship between the online and the physical classroom, we have yet to witness statements regarding the influence the latter may have on the former. Monica observably notes this discrepancy by way of her inquiry. Therefore, these follow-up questions to Lauerman's initial financially minded inquiries render critical aspects of the prior work by the panellists vulnerable, which as of yet had been purposively unaddressed or rendered ambiguous.

Final points to make, hinted at above, are with regard to why we might expect that answers to closed questions (those which may possibly be answered by 'yes' or 'no' responses) will never be left at a simple one word response. The reason for this, as observed within the announcement conference, relates to 'normative' conduct whilst addressing and inquiry, as well as the particular framing and maintenance of the master narrative to which the edX panellists continuously direct their efforts:

To the first point, and for comparison, we might expect in a court of law that a witness asked a closed question might provide a sufficient response of 'yes' or 'no'. A question asked in the courtroom towards an individual denoted as a 'witness' to an event does not necessarily entail an elaborate response, and their power to characterize a yes/no response with further utterances is directly controlled by the individual asking the question. Within the edX announcement conference, we may presume that single answers might be construed as a vulgarity: a point of blunt concision,

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[31] Not unlike other utterances prior to Lauerman's inquiry, we find the inquiry contains the subordinate 'just'—in "just curious"—within the question, which renders the inquiry less antagonistic to the narrative thus far aired.

which may stall conventional dialogue and require the 'dealing with' of this answer before the dialogue may continue. Why, we might also speculate, such a terse response is rarely aired is directly related to the second point: a short, direct response, although possibly satisfactory in answering the question, excludes the possibility of providing a supportive statements to the narrative thus far impelled by the panellists, which allows for the answer given to the question to be qualified through these remarks and maintain the narrative.

The eventual response to these questions is characteristic of what has begun to be normatively observed as the 'dealing with a difficult question'. Reif, who provides the initial response to these questions, positions his answer as "a first stab": thus, a response heralding eventual supportive response(s) to his initial address. (MITNewsOffice 2012) Following this, Reif employs a buffer that encompasses a repetition of the question "…do we plan to monetize it…" as well as a repositioning of the initial question to a format more accommodating to the master narrative up to this point attained. (Ibid.) In a response that further delimits the edX initiative from for-profit online learning platforms, Reif positions the monetization of the initiative as a method of rendering the initiative 'self-supportive' and not a 'drag on the budgets of Harvard and MIT." (Ibid.) Reif carefully qualifies these remarks by arguing that any discussion of the eventual financial structure of edX is premature. He does this my implying that the initiative, and therefore the future focus of Monica's inquiry—"I'm wondering if your planning"—is wholly ambiguous by virtue of its future positioning and the uncertainty as to how edX will evolve going forward. (Ibid.) Thus, Reif not only nullifies this initial inquiry via the inherent uncertainty of future predictions, as he has done previously, but also employs a morally defensible illustration of the monetization of edX *solely* in relation to sustenance.

RR   One thing we've learned in the last few months is the power of creativity innovation, people that are, have been, have had access to the platform has come up with a tremendous number of ideas of how to do things. *(Lines 307-310)*

With the above utterance, Reif also provides evidence of the novel insights and ideas the panellists have been exposed to since beginning the initiative, once more illustrating the dynamic form of the edX initiative in this "very early stage." (MITNewsOffice 2012) This purposive characterization of the edX as a foundation for an uncertain future, and the edX panellists as a group of individuals sharing this novel experience, renders the panellists as uncertain as to how the initiative

will unfold as members of the audience, and thus can only restate the vision what they would like edX to accomplish. This once more provides an opportunity to restate that any research accomplished by the edX initiative will be directed—the "initial goal"—to in-class learning. (Ibid)

Following Reif's initial response, Garber once more renders Reif's clarity on the issue ambiguous in regard to which endpoint the accumulated research will be directed towards: online or in-class environment. Garber's shows awareness of the vulnerability of Reif's response for the narrative (thus far manifest) in his initial utterances, which requires a slight deviation from this narrative to respond to Monica's latter question. He accomplishes this by rebalancing the edX panellists' priorities in relation to online and in-class learning.

AG   One of the reasons that the two universities came together so readily is we do share a common vision for this area and we have a common set of values, and that is distinct from what you would doing if you not, if you were a for-profit organization. So, we're dedicated to improving learning throughout the world, we're dedicated to improving learning throughout our campuses, and we're dedicated to advancing research on education. These are our core values. In terms of the business model and the revenue model, we are, as Rafael said, at a very early stage. *(Lines 319-327)*

Generally, what Garber's seems to be accomplishing in these utterances is a demarcation of what is known (or 'can' be known) from what is unknown, which are respectively 'that which has already occurred' and 'that which has yet to occur'. By separating what is known to the edX panellists, that being their core values that have been unified in this initiative, Garber positions the financial structure of edX as something beyond the scope of edX thus far, and once more characterizes any illustrations of this financial structure as purely speculative. Thus, as was previously enacted in this conference, the morally charged substantiation of 'values' allows for a defensible position in light of direct inquiry.

Thus, Garber clarifies what is 'mentionable' from what is not, and this aligns with the time structures of what is known in the present, and what is speculative by way of its futurity. Aware that this infringes upon any speculative utterances made by the edX panellists, which have figured greatly thus far in illustration of the scope and potential for edX, Garber restates that the core values are

primary to this initiative and will persists indefinitely through a "dedication" to *both* education throughout the world, and on campus. (Ibid.)

As such, when discussing the possibility of various models of financing for edX initiative in subsequent utterances, Garber carefully makes reference to this scope of possibilities with language that renders this speculation entirely noncommittal:

AG   And for Harvard, we have a variety of online learning opportunities in the university now. Some of them are free, some of them are not. We don't imagine that there will be a single model for how we make our material available online, because we'd like to draw in as much of this resources, of the intellectual resources of our university, of each university as possible. And uhh, we imagine that what we're doing in terms of how we make the courses available, how they're organized, the uhh the content, how they're with classroom will look very different in five years from now, it'll look very different in three years. So, we intend to maintain flexibility and agility as we move forward. *(Lines 327-336)*

By citing currently working models of financial structuring, as well as the uncertainty three to five years of future progress will bring, Garber at once provides evidence of the experience his institution has in the realm of learning and supports the uncertainty of future developments, which must inevitably be attended to by those presiding over edX. This citation of Harvard's own initiatives is logical given Garber's position within the institution, and his 'witnessing' of internal, ongoing events therein. However, this citation of his institution's experience also serves another purpose, in that this once more addresses the possible vulnerability initially addressed by Katie in her questioning of the experience Harvard has regarding e-learning in comparison to MIT.

2.5.5 Applied Ambiguity through Online Inquiries II

28:05 — 28:13   -   Nate Nickerson: *Fifth Question: acquired from reporters online.*

28:15 — 29:26   -   Anant Agarwal: *Response*.

NN   So uhh we've gotten a couple of questions uhh uhh online about how certificates for courses on edX might work. *(Lines 337-338)*

A second illustration of Nickerson's collation of online questions into an easily approachable structure occurs with the second of such questions posed to the edX panellists. The preferred structure of this question can be observed simply by the immediacy of Agarwal's response to the question:

AA   So I can give you an example of what we are doing for the prototype course. But again, a lot of this is, the work in progress. So, just to make it clear, edX is a not–for–profit organization. *(Lines 339-341)*

Agarwal follows the initial acceptance of this question with a qualifying remark regarding the speculative nature of the subsequent response, given the dynamic form of the edX initiative, and tethering this response to the transient present. Such qualifying utterances are found through this event in that the panellists often enact proleptic utterances against potentially antagonistic inquires by the audience Furthermore, Agarwal's subsequent "So, just to make it clear…" utterance illustrates that the fragility uncovered by the previous questions related to the profit structure of edX has not been sufficiently concluded. This rather forceful utterance by Agarwal thus attempts to provide closure to this argument and make it so subsequent inquiries into the proposed financial structure must take into account this position during their formulation. Once more, as Garber has also achieved in his foregoing utterances, Agarwal qualifies his responses by what *is* known to the edX panellists:

AA   It will host a platform, it will host a web portal, a website, and offer courses from MIT under the MITx brand, from Harvard under Harvardx, and also from other universities who will collaborate with, under their brand, as an 'x' brand. How would certificates work? *(Lines 341-344)*

Following this brief reiteration of the primary features of the edX initiative, Agarwal leads into an illustration of how certificates 'would' work within edX—a modal verb usage that may illustrate potential, or possibility, as opposed to certainty. (Ibid) In his response, Agarwal can be once more observed to signal members of the audience in support witness to his utterances, thus establishing his discourse as credible:

AA   In the prototype course, students as they do their work get assessed, there's automatic assessment for all of their work. Uhh, they can look at the profile page and can see what, at any given point in time, they can see what grade they have. You know uhh, ((gestures to the crowd)), I can see our team out there that implemented it, and uhh, students can see follow at any given point in time what the grade in the class is, at the end of the class they get a grade. *(Lines 344-352)*

Agarwal's utterance to this end (i.e. involving the audience) plainly interrupts the progress of his illustration of certificates within edX, thus showcasing the importance Agarwal cedes to this remark. It would seem that Agarwal feels an illustration of these supportive witnesses adds credibility to his remarks, much like an in-text citation accomplishes within academic writing. This manoeuvre of pointing out the responsible party (which we will see once more amongst the final questions) for the edX assessment system also positions Agarwal as the individual vested with the representation of unseen members of edX. Thus, we see that the allocation of responsibility to unseen members of the audience seems to serve the dual purpose of inciting credibility while, by extension, mitigating the risk of contention to these utterances by gaining support from other members *beyond* the panellists charged with proving these responses.

2.5.6 Dealing with a Request to Elaborate

29:31 — 29:32 - Christine Heenan: *Selection of Sixth Question*.

29:32 — 30:08 - David Chandler: *Sixth Question*.

30:09 — 31:05   - Rafael Reif: *Response*.

31:06 — 31:55   - Anant Agarwal: *Response*.

Although the financial aspects of edX, as contended over within the above questions, have proven a difficult affair for the edX panellists, considerably less direct, more ambiguous forms of questions may be unintentionally antagonistic if the framework they imply is at angle to the framework so far enacted by the edX panellists:

DC   Uhh, Dick Chandler. You've talked about expanding this to include other institutions over time. Can you talk a little bit more; I guess there is two different models people can adopt, other institutions can adopt this platform and use it on their own. And uh, I sup–, I guess there's the possibility of other institutions joining edX itself. Can you talk a little bit about those two possibilities and if other institutions actually become part of edX does it continue to be run by MIT and Harvard or could it expand more broadly beyond that. How to do you see the evolution over time? *(Lines 358-365)*

Chandler's request for more information regarding the two means by which a collaborating institution may use the edX platform is aired with observable uncertainty. Conventions such as "I guess…" and "I sup–, I guess" limit the directness of his inquiry and allows for the edX panellists to edit or restate these points upon which Chandler bases his inquiry with relative resolve. However, if these points are to be edited—in the sense that Chandler's has mistaken in his reiteration of prior points, or that this reflection of prior utterances by edX panellists does not appropriately reflect the information they (the panellists) wish to convey—the panellists do not simply make alterations Chandler's own perspectives, but those of all audience members. Thus, the particular means by which the edX members deal with this request for further disclosure on future institutional participation within edX must be accomplished so that the possibility for further inquiries on this topic are minimized while simultaneously achieving the particular framing of interest to the panellists.

What is critical to Chandler's inquiry, upon further investigation, is the question of governance, a topic previously addressed within foregoing inquiries. Chandler's inquiry seems to utilize the panellists' previous utterances pertaining to the participation of other institutions as a basis for inquiring as to the possible forfeiture of leadership by Harvard and MIT when edX may (possibly) become decentralized in the future. Therefore, remarks upon the future evolution of edX, a purely speculative affair for the edX panellists, is the response Chandler attempts to generate from this inquiry.

During the reiteration of information (espoused via prior utterances from edX panellists) within the first question quoted above (i.e. "I guess there are two models people can adopt, other institutions can adopt this platform and use it on their own.") we can observe Agarwal nodding in agreement to this statement, thus legitimizing this basis for Chandler's subsequent inquiry. (Ibid.) We also see observable action on the edX panel following the utterance of this first question; in particular a small discussion between Reif, Hockfield and Faust at the center of panel while Agarwal takes notes. We can very clearly observe that the members of edX anticipate the eventual airing of a question and immediately begin to formulate a response and perhaps allocate an appropriate respondent (as was tacitly accomplished within a previous question).

RR   We'll, uhh, you may see us brainstorming on how to answer it. *(Line 366)*

        (laughter)

Reif's self-reflective, humorous utterance following this inquiry and subsequent inaudible discussion amongst the panel provides a buffer for the panellists prior to any direct response to Chandler's inquiry. We are initially left uncertain as to whom this buffer is for, however Reif's follow-up response, following laughter amongst the panel and audience, provides the answer. The indirect use of language and intrinsic hesitation that Reif enacts in his eventual response may be an illustration of the difficulty Reif has in elaborating upon this issue further than what has already been accomplished in foregoing responses and introductory monologues by the edX panellists. The first line of his response is highly illustrative of this hesitancy:

RR   Uhh, I think uhh, lets lets lets do, lets make one thing clear, what th–this is uh a joint effort we're announcing today with edX to develop the platform, the online learning environment. *(Lines 368-370)*

What Reif seems to accomplish in these opening utterances—in the same way as Chandler had in his articulation of what has been expounded in previous dialogue—is to restate prior utterances in a way that provides the basis to an eventual answer. This may be construed as a buffer, and yet primarily this utterance serves to orientate the question around a certain aspect of edX previously discussed within the conference. Reif regains his rhetorical composure in his following utterances:

RR   I think what we would like to see happen, and that's what we have offered, and that's what you heard president Faust and president Hockfield offering earlier is, for institutions that want to use this platform, this will be available to them. *(Lines 370-373)*

In this foregoing excerpt we can see that Reif, in order to stabilize his assertion as to what is being attempted by edX, inserts references to prior utterances within the conference that prove that the offer of this platform to other universities has been previously mentioned, and Reif's utterances at this point serve only to restate this belief. As Bogen and Lynch (1996) discuss, such as response displays awareness of the master narrative thus far produced and seeks to embolden specific points of this historical record going forward. However, Reif may have evaded the first constituent of the question (i.e. "can you talk more about…"), but has still failed to address the latter inquiry pertaining to how this initiative might evolve over time. We can observe that this unaddressed inquiry is critically absent thus far, and Reif must either address this question on Chandler's terms, or perhaps realign this question to the preferred framework, if the question is to be conducive to furthering the edX narrative thus far maintained. Reif can be seen to decisively motion towards the latter and introduces uncertainty in terms of the time period or exact method of uptake of the edX platform by external institutions. Reif relates this uncertainty to the "capacity of progress", an ambiguous term that nullifies the panellists' ability to command this progression of edX into outlying institutions. (Ibid) Instead, Reif positions the possible outcomes of edX as potential realities, and separates the 'responsibility' (again, a morally charged convention) edX has towards sharing this with the world's

institutions from the actual uptake of this platform by these aforementioned universities, of which those presiding over edX have limited control.

Agarwal follows Reif's response by enlivening his previous nods of agreement with utterances in support of Chandler's understanding:

AA   So if I'm just going to add to that, umm as you said there's two approaches, two models. Uhh, we are not-for-profit and open we will open source all our software to the world. *(Lines 379-381)*

Agarwal proceeds to once more illustrate points previously made by edX panellists in describing the edX initiative in terms of the two models of usage. This seems to provide a firm closing, and adjusts the focus back upon what 'is' or 'can be' known regarding edX up to this point.

2.5.7 Opening up Closings

31:59 — 31:01 - Christine Heenan: *Selection of Seventh Question.*

32:03 — 32:11 - John: *Seventh Question.*

32:11 — 33:17   - Alan Garber: *Response.*

32:18 — 32:20   - Rafael Reif: *Response.*

CH   "Any other questions? John?" *(Line 389)*

With the above utterance, the moderator Christine Heenan enacts a very important convention in the realm of Conversation Analysis; that being, as Schegloff and Sacks (1973) deemed it, the 'pre-closing.' (Schegloff and Sacks 1973, 292) In the course of dialogue between two parties, the eventual need for closing utterances facilitate the conclusion of a conversation. However, prior to the terminus found at the end of a particular conversation, a 'pre-closing' is enacted, which, as these foregoing offers posit, facilitates the 'opening-up' of a 'closing': thus, an attempt to indicate the beginning of the end. Heenan's utterance, unlike her previous selection of questions from the audience, implies a

negative in at once signalling 'I don't see any more questions' as well as 'we are moving towards the end.'

The proximity of this utterance to the end of the announcement conference also verifies the achievement that this utterance brings about, which seems to confirm Turner's (1976) maxim pertaining to the ability of a single utterance to hold influence far outside of its localised positioning.[32] However, this is not to say that the 'pre-closing' convention is implacable, as a conversation may continue further if another topic is brought forward—as is the case with the two questions following this utterance. Instead, the pre-closing is indicative of the *will to close* the conversation, and how this is dealt with, in terms of audience response, provides evidence as to whether this motion towards closing is taken up or neglected. (Schegloff and Sacks, 308)

Furthermore, evidence of these pre-closings, as with much academic interest in conversations, has been observed in localized exchanges between two participants. As such, within the 'question and answer' phase of the edX announcement conference wherein each localized exchange between the asker and the respondent(s) impinges upon both the micro and macro levels of discourse, we must gauge the use of the 'pre-closing' as a macro phenomenon. It is Heenan's 'pre-closing', which provides a universal indicator of this will to close the conversation and contrives proximity to the "terminal exchange": the final exchange by which the conversation is closed. (Schegloff and Sacks, 318) These authors illustrate how all participants display sensitivity to the progression of a conversation. This is achieved in order that the conversation is perpetually contextualized in regard to the occasion in which it occurs and "basic features " are attended to in order that the machinery of the conversation does not break down. (Schegloff and Sacks, 325; also, refer once more the quote of Sacks which opens the 'Methods and Theory' section)

2.5.7.1 Towards the 'Dénouement'

The eventual, rather ambiguous question aired following this Heenan's above utterance uses a particularly unique usage of the collective pronoun 'we', which we will shortly discuss, followed by an analysis of the relatively terse response by Garber.

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[32] "…an utterance can exercise control beyond a single slot…' (Turner 1976, 241) In this quote, the ' single slot' refers the exact next utterance by another participant in the conversation, meaning that an utterance may have a macro effect over the entire discourse, as a 'pre-closing' certainly attempts to enact.

J   Do we know umm what courses are going to be offered to the (inaudible) or anything like that? Do we have any kind of uhh… *(Lines 390-391)*

As we have illuminated in the detailed analysis thus far, a prime objective of the edX announcement conference is to espouse a particular narrative of the edX initiative thus far and to subsume audience inquiries into the master narrative as the conference progresses. With this in mind, we find an interesting use of the collective pronoun 'we' in that the speaker, John, seems to be asking this question on behalf of either all members of the audience (as if to say: 'have you told us this yet?) or perhaps all participants of the announcement conference, including the edX panel. If this latter were the case, we would see John's utterance as a motion towards converging the boundary between the panellists and the audience, wherein both collectives are looking towards the speculative future in unison. The successive utterances "do *we* know?" and "do *we* have?" with their collective inferences may therefore provide us with a substantiation of the achievement by the edX panellists towards aligning the audience within the proscribed narrative. It may also be the case that such an utterance as this may only be aired following Heenan's intimation of the closing down of the conversation, and thus the use of 'we' at once mitigates the risk for John, if a similar question has already been aired, and provides an utterance indicative of an awareness to the panellists' wish to close-down the conversation. The response to this question will be our sole evidence towards either of these aforementioned possibilities.

Garber's initial utterance, again using the term 'stab' in "take a stab at it" decisively suggests that this response is speculative. At angle with the previous use of this word in Reif's "let me take a *first* stab at it" analyzed above, we find no numerical indicator within Garber's utterances, and are thus able to conclude that Garber does not expect supportive statements from other panellists, or at least does not explicitly state this expectation. (MITNewsOffice 2012) From here Garber's repetition of the question provides a self-directed buffer before discussing a number of possibilities, 'expressions of willingness' to conduct courses for this online-platform, and two uses of a "number" in describing how many courses will be available: the latter an ambiguous utterance wielded in alignment with the speculative nature of this response. In keeping with the ambiguities up to this point presented, Garber provides a number of faculties from which courses may emerge for e-learning, although specifics are not given. However, Garber does suggest that plenty of examples of candidates

'can' be given, although he differentiates possible candidates from those actually selected, and in doing so provides deniability to the exact possibilities for the edX initiative in terms of course roster.

RR   That was such a good answer I don't intend to touch it. *(Line 408)*

Reif's follow up to this initial response, which strives for, and achieves, a humorous note amongst the conference participants accomplished much more than facilitating the introduction of comedy. By virtue of this utterance Reif accomplishes three important objectives. The first is that Reif provides unequivocal support to Gerber, which, as has observed through the foregoing responses to audience questions, lends credibility to a foregoing response, thus emboldening its standing were it to be questioned. Second, Reif concludes this line of questioning, renders more questioning on this subject irrelevant in light of the preceding response of Garber. Finally, Reif's use of humour in place of a full response also seem to signal a sensitivity to the less austere atmosphere following Heenan's 'pre-closing' utterance. Thus, Reif's utterance, along with Heenan's question, seems to transmit to the audience that all major lines of questioning have been aired, and that the conference is in its last final moments.

We move from here to the final 'question and answer' utterances, and thus the final utterances in general within the announcement conference.

2.5.8 Final Fragility and Closing Utterances

33:23 — 33:24 - Christine Heenan: *Selection of Eighth Question.*

33:27 — 34:07 - Lauren: *Eighth Question.*

34:08 — 35:46   - Anant Agarwal: *Response.*

35:47 — 36:44   - Susan Hockfield: *Response.*

36:48 — 37:01 - Christine Heenan: *Closing Remarks.*

In the final questioned aired during the edX announcement conference, we continue to bear witness to a sensitivity to the 'pre-closing' initiated by Heenan just prior to the foregoing question.

Lauren, who airs the audience's final question, begins with remarks suggesting that her question only looks to expand on previous utterances, and displays self-reflective knowledge of this in the question's formulation:

L   In terms of umm, I know that you said that this'll...the more online education obviously the better. And this will not, remove MIT open courseware by any means. Umm and I know obviously that through the 'x' platform, there's, you can get lessons for this umm or at least you can get certificates for this, which is kind of what differentiates this from open courseware. But how else will they compliment each other? *(Lines 410-415)*

Lauren's inquiry displays a number of obvious references to prior utterances made during the announcement conference, such as her qualifying remark "…I know you said this'll…", which attempts to diffuse any contentions illustrating her ignorance to prior utterances, while at once ratifying her inquiry with an alignment to the proposed narrative thus far agreed upon. (MITNewsOffice 2012) At this point we can observe, as with the foregoing inquiry of John, that the master narrative has concretized over the course of the announcement conference and contentions at this point in the conference (i.e. following the 'pre-closing' utterance) must contend with a great portion of this narrative structure thus far enacted. As such, Lauren's interruption of her inquiry to suggest that she understands what has been accomplished thus far and voices her agreement with the sentiment that 'the more online education *obviously* the better', as she utters no contention to this point.

Furthermore, and perhaps most importantly, by embedding this additional remark within her inquiry Lauren also removes the possibility of this point being reiterated by the edX panellists in their eventual response. Thus, the mentioning of this point limits the resources to previous utterances in which the panellists can mine for a possible response. The use of utterances analogous with 'the more online education the better' in response to Lauren must now qualify themselves with 'as you've already observed' or 'as you've mentioned', or something of the like, but still cannot rely on this reiteration alone to provide a conclusive response. Instead, the panellists must enact new dialogue towards addressing this inquiry.

Finally, this question poses a high degree of antagonism (despite its amiable tenor and late inclusion in the discussion) to the proffered framework, and seems to address the exact opposite of the

first inquiry. As such, where the first inquiry in the 'question and answer' phase was concerned with Harvard's experience and contributions to online-learning (aired by 'Katie'), Lauren's reference to the 'Open Courseware' initiative at MIT seem to implicitly ask whether this pre-existing system is not made redundant by the inception of edX, or perhaps, whether it is edX that may be the redundancy, with the latter of which entailing more severe repercussions within this conference.

Agarwal's immediate response to the question, "I'm happy to take that" would be insufficiently denoted as an acceptance, as his third inclusion of an external member of the edX team (i.e. not present on the panel) is alluded to—as with the two foregoing instances—towards a substantiation of proceeding utterances and the attainment of credibility. Beyond this early securing of credibility, Agarwal's assertion that 'Open Courseware' *also* started a revolution has great implications for the initial pronouncement of edX as a 'revolution' (i.e. perhaps by devaluing a 'revolution' if they are so numerous). However, the interpretation of this response by audience members is limited as this is the final question aired within the conference. We can observe Agarwal belief that Open Courseware must also be deemed revolutionary, but carefully demarcates this initiative from edX. This can be seen in his language use:

AA   …it offers a particular kind of service. Um edX and open courseware really live together and are very complimentary. *(Lines 425-426)*

Agarwal provides further evidence that Open Courseware provides a "stepping stone" to edX, and reiterates the complimentary nature these initiatives to each other on a number of individual instances. However, the trajectory of argumentation follows that Open Courseware provides a foundation modified and modernized by edX and introduced for purposes beyond that which Open Courseware can support. Thus, in defending Open Courseware from possible marginalization, given the announcement (at this very conference) of what now appears to be a far superior incarnation of this platform, Agarwal chooses to describe the edX predecessor as a platform that "…also started a revolution". (MITNewsOffice 2012) We see that although Agarwal initial insistence that edX is a revolution of the highest order, the use of revolution here seems to dilute these grandiose utterances (found in Agarwal's introductory remarks) and illustrates the non-uniqueness of this novel revolution in light of prior accomplishments heralding the term 'revolution'. It may be argued that this bolsters the claim of edX as a 'revolution' given that Agarwal expresses their familiarity with the conduct

required for these sort of revolutionary products, however the grandeur and majesty with which Agarwal initially introduces edX within introductory remarks is overtly diminished. We find that this question aired by Lauren poses antagonism beyond its explicit construction in that it challenges the base of credibility by which the edX platform is deemed revolutionary and also challenges the eventual respondent to mitigate redundancies between the two platforms through argumentative utterances.

Following this primary response, Hockfield enacts a final vie for credibility towards the event's closing.[33] We can see that Hockfield observes the fragility present in this inquiry and Agarwal's response in that she repeats the crucial characterisation of Open Courseware as revolutionary within her initial utterances:

SH   Um, open courseware really was revolutionary when it was launched 10 years ago, and continues to be revolutionary. *(Lines 443-444)*

This validation of Agarwal's claims, from the president of the school wherein Open Courseware is based, provides significant credibility to Agarwal's initial characterisation. However, as Agarwal was obliged to manage in his response, Hockfield must also be careful in her demarcation of each of these initiatives (i.e. Open Courseware and edX) in order that their individual utility is not made redundant:

SH   And many people have asked us how we imagine edX will impact the on-campus, residential learning community. And my simple answer is: look at open courseware… And, as Anant said, the mutuality, and the coexistence OCW and edX are um, to us, a natural synergy. *(Lines 444-447; 453-454)*

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[33] We are able to deem Agarwal's response as primary due to Hockfield initial utterance, "Can I just add to that," which elevates the first response to primary status. (MITNewsOffice 2012)

We are able to observe in the above that Hockfield follows a similar trajectory to Agarwal in articulating the relationship between Open Courseware and edX. The qualification of "my simply answer" provides a defensible position by which Hockfield believes edX can be explained through the impact of Open Courseware, however also implies that the complexity of this relationship is beyond the limited space of a short conversation (which attends to he previous motion towards closing the conference). Hockfield's further characterisation of the relationship between both platforms as a complimentary union further addresses the possible antagonism drawn forward by Lauren's inquiry. As such, by emboldening Agarwal's response with an illustration of her own, Hockfield achieves a credible foundation by which edX finds its rudiments in Open Courseware, and yet carefully portrays both platforms as complimentary and non-redundant.

Finally, Hockfield's final utterances serve to illustrate that the future developments of MITx[34] are unknown to the panellists, however the development of Open Courseware provides an excellent indicator as to the possibilities, which can be achieved by such a novel platform:

SH   And so I think that, we don't know exactly how MITx will evolve and will be used on our campuses, but I can tell you our experiences with open courseware has uh been absolutely mind-opening, in terms of how, learners today can access online materials. *(Lines 449-453)*

With this final point, Heenan's conditional "if there are no other question…" indicates the conclusion of the edX announcement conference by inviting participants to visit the edX website to find "answers to more questions," providing an excellent route towards continuing the discussion in a more easily defensible structure for 'question and answer'—virtual space where the confines of time, and the pressure this carries, are alleviated.

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[34] Interestingly, perhaps given her will to speak only in terms of the constituent of edX present within MIT, Hockfield only refers to her opinion about MITx at this particular instance.

3. DISCUSSION

With the analysis above illuminating the localized instances of sociological importance, the macro, overarching observations have yet to thoroughly explored. Thus, it will be the charge of this section that a number of overarching points will be illustrated that take into account a range of observations made over the course of this analysis. These points range from the collation of localized instances towards describing 'normative' behaviour to instances of sociological interest, which transcend such convenient, collative explanations.

Episodic Organization.

An initial observation is that individual lines of argumentation seem to take on an episodic nature. By this we means that certain lines of inquiry addressing particular aspects of the edX initiative, must be conscious that the edX members may close the opportunity to this line of inquiry. A particularly salient instance of this is the discussion surrounding the proposed financial structure of edX in questions three and four of the 'question and answer' phase (see section 2.7.5 above). We see here—as also discussed in our analogy of 'Go'—that the financial structure of edX is a point of no small fragility and requires considerable defensive positioning on part of the edX panellists towards mitigating possible damage to both credibility, and by extension, the narrative enacted by the panellists. Thus, the financial structure, as explicitly discussed, can be observed to spill over into other questions. As such, Agarwal's pointed remark at the beginning of his response to question five attempts (and succeeds) to delimit the extent to which this particular theme of financing can continue (see section 2.7.6 above). We find that within the hierarchical structures observable within the conference, these episodic divisions exist at a level just above the coupled exchanges of questions and answers during the latter section of the conference, and this foregoing example is but a single of these particular, episodic constituents. A second example would be the relative scarcity of experience at Harvard with online learning initiatives in comparison with MIT. These themes of vulnerability are not to be demarcated with an exact beginning and end point. In fact, many utterances found within the announcement conference (as with the Agarwal's referenced in the foregoing) display recognition for thematic similarities between various aspects of questions posed by the audience. For instance, the second example, Harvard's dubious e-learning experience, is certainly manifest in a few instances outside of its explicit questioning. The general implications of this will be discussed shortly.

Being Professional.

Another important aspect of the edX announcement conference, which we've implicitly alluded to through the analysis, is the particular, tacit behavioural guidelines to which the audience subscribe to throughout the talk. This relates directly to the symmetrical co-production and maintenance of the paradoxical "Institutionalized Revolution" over the course of the announcement conference, and what it means when we say "being professional" within such an event. Much of the sociological literature referenced throughout this study has discussed the *in situ* manifestations of particular social practices: how we can observe social structure through its achievement in the exact moment in which it is accomplished. That is to say, the *doing* is what interests us. One aspect of this, which upon reflection manifests throughout the entirety of the conference and is crucial to its continuation, is what we will call *doing 'being professional'*.

During the 2012 US presidential election, a particularly heated exchange occurred between a news media reporter and Republican presidential candidate Mitt Romney during a small press conference held along Romney's campaign trail. (UrbanWarfareChannel 2012) The reporter, Glenn Johnson of Associated Press, interrupts Romney to directly challenge a point he had just made in regard to who was running his campaign. The rather severe tone of inquiry employed by Johnson entirely refutes Romney's claim and the progression of Romney's address is entirely disrupted, requiring the candidate to engage in a heated exchange between himself and Johnson. Following the short row, Romney and his Travelling Press Secretary, Eric Fehrnstrom, approaches Johnson in order to attempt to restore believability in Romney's points. The key moment, attributable to the study at hand, is when Fehrnstrom—following the failed attempt to deter further disagreement from latter— tells Johnson to: "save your opinions and *act professional*." (Ibid.; my emphasis)

Not unlike the tacit agreements of what can and cannot be aired during this conference, the insistence upon professional codes of conduct are manifest within the edX announcement conference with like austerity. Although we find the announcement of edX to be rife with paradoxical stances which challenge the very nature of the edX platform (for example, on basis of credibility, utility, and the extent to which it is to evolve in the future), we find that inquired aired towards challenging some of these vulnerable points within the edX narrative are only done so through preordained channels approved by the edX panellists: those questions selected and filtered by the moderators Nickerson and Heenan. Never once are the audience members seen to speak out of turn, air opinions beyond moderated inquiries, or challenge the edX panellists and their proffered platform in a means at angle

with formal inquiry. Therefore, the maintenance of the professional tenor by which the conference is conducted is a joint effort, and as such we *cannot* deem the sustenance the paradoxical 'institutionalized revolution' to be entirely asymmetrical, as both parties—the audience and the panel—are crucial to its longevity. Thus, 'being professional' may be understood as a motion towards observing the tacit guidelines for social conduct within a particular space, especially, as we have observed, that of the conference environment.

A Normative Defense of Credibility.

The final constituent of our discussion section will collate a number of observations and conventions discovered within the analysis towards a normative defense of credibility. As a prolepsis to dissention towards claims made in the following, it must be noted that by combining observations between various segments of the conference in order to find patterns of behaviour, these conclusions do not attempt to construct the rudiments of a novel, generalised theory of sociological import. These observations may only be reliably attributed to this particular instance, and as such, their range of utility can only be judged by comparison with other, like events under academic scrutiny.

One such observation we can make is the consistency with which a preface/buffer is employed when a questions does not further the proffered narrative. As discussed within the analysis, the preface provides a participant and their colleagues time to develop an answer to an audience member's question as well as a method by which a question may be reformatted and adapted to the narrative as to now enacted. Certainly, this convention is crucial to consistently progressing the narrative by countering audience inquiries, and the antagonism often implied in their asking, into a tempered espousal of what edX 'is now' and what it 'will be'.

Another item left relatively unaddressed within the analysis is the use of referencing external colleagues for purposes other than the explicit bolstering of a given argument. Although the analysis discusses Agarwal's three separate instances of explicitly referencing audience members to back-up and solidify his own utterances through attained credibility, Faust and Hockfield are observed to enumerate large lists of individuals at the end of their introductory presentations. The two presidents denote these individuals as those whom must be thanked for their efforts in developing edX. We might ask why this was done, but it would seem that the listing of colleagues—an act that significantly broadens the scope of edX in saying 'all of these people worked on this initiative'— provides a bulwark against possible inquiries into how long this initiative has been in development,

the extent of this development, and any like inquiries that may challenge the seriousness of the claims made within the conference. Thus, Agarwal's referencing of external members is not an isolated instance, as this convention seems to be understood and utilized as an important of establishing credibility throughout.

As alluded to above and critically utilized within our analysis, the edX announcement conference seems to be constructed of two interwoven layers of interaction: the explicit discourse and the implicit contentions emanating from this discourse. The explicit discourse and the *in situ* construction and maintenance of the edX announcement conference are plainly visible to the observer and have been thoroughly analysed within appropriate sections above. Furthermore, this analysis has taken up the challenge of understanding the implicit interactions, wherein subtle interactions weigh upon explicit utterances and the narrative espoused by the edX panellists is exposed to scrutiny. It is here where the vulnerability of arguments and assertions may be exposed by audience members (and sometimes between panellists themselves[35]) and dealt with by the edX panellists towards the continuance of the argument favouring edX. A thorough analysis of the complex overlap of these forms of interaction has been critical to the analysis above, and of considerable importance towards rendering the edX announcement conference observable beyond the obviousness of ordinary discourse: into the mechanistic realm of which Sacks first spoke. (Sacks 1985, 26)

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[35] See, for instance, the discrepancy between Agarwal and Faust/Hockfield in the analysis of the introductory section above.

4. CONCLUSION

Throughout this analysis of the edX announcement conference, we've explored the localized complexity of conversational exchanges and the impact these instances have on the greater structure of discourse. As has been made visible throughout this study, the vie for credibility is crucial to the inception and maintenance of a particular framework by which an entity is to be viewed: in this case, the edX initiative. Certainly, we've addressed the scope of our research questions in that the means of establishing credibility and the defensive work by the edx panellists in protecting the proffered framework are clearly elucidated through this study amongst other concerns.

In our introductory chapter, we narrowed the field of STS studies to specific aims and objectives along with the focussed questions we sought to address throughout this thesis. Subsequently, we investigated the methodologically pertinent 'Ethnomethodological Respecification' and 'Methodological Considerations of Credibility', critical to conducting the analysis, by way of a thorough exegesis. This was accomplished prior to our reflecting upon the specific focus and limitations of this study and the basic assumptions harboured from the outset.

The following chapter entitled 'The Annals of Press Conference Research' provided an important discourse upon prior 'press conference' research, the context of this event, and relevant theoretical considerations. Herein, the 'context' of the edX initiative was established in a number of ways. First, the context surrounding the edX initiative's creation by way of an initial investment of Harvard and MIT is discussed, along with the context that manifests during the progression of the announcement conference. This latter form of context is provided for *in situ* and thus emanates from the analysis in the proceeding chapters. From here, we investigated the theoretical considerations— with particular emphasis on the utterances aired within the conference—in order that a better understanding of the forward thinking vision of the conference participants and essential terms required when explicating such utterances. Subsequently, we return to context with a thorough discussion upon the historical background of online learning, adding considerable depth to our understanding of what led to edX announcement conference. We provide a key component of our thesis in this section with a discussion upon the employment of narratives and master narratives, both of which are essential to the arguments towards a particular understanding of history within the conference which the edX panellists intend to establish and maintain throughout the conference. The final two components of this chapter would aid the reader in categorizing the use of terms within the

analysis chapter and provide an illustrative analogy, respectively teasing apart the layers of sociological inquiry through the use of 'Go' as an analogy for the construction of verbal exchanges and the limits and possibilities of such.

Subsequently, the 'Analysis' chapter that follows constitutes the majority of our study. This chapter sought to provide a comprehensive explication of the numerous means employed by the edX panellists towards establishing and maintaining credibility towards a particular version of their emergent initiative. The first section provides an analysis of the spatial and temporal organization of the announcement conference. The spatial organization provides a series of observation upon the unique physical layout of the event and how this may be conducive to the maintenance of credibility, whereas the temporal section provides a concise breakdown of the conference into specific intervals and how this is facilitated by the work of moderators.

From here, the division of this chapter directly relates to the structures of discourse observed within the announcement conference itself, in which 'Part One', 'Part Two', and 'Part Three' constitute the largest division in this regard. Herein, the difficulties and antagonism faced by the edX panellists in their endeavour to persuade the audience of the merits and potentials of edX are analyzed. This '*doing*' of the edX announcement conference is the crucial field that permits an understanding of the unique complexity of exchanges within this event. 'Part One' of the analysis focuses on Agarwal's 'Rhetorical Preface' which provides an understanding in regard to the way the speaker establishes the edX announcement conference as revolutionary and how he attempts to instil credibility alongside this audacious claim. We especially provide extensive analysis into Agarwal's utterances seeking to contravene the established ideal of revolution and plot a new course, which promotes edX as a novel form of revolution, and how these utterances create difficulties for subsequent speakers. The promotional video aired within this section of the announcement conference is also analyzed for its preordained attempt to disseminate a particular vision of edX in light of the novel opportunities provided by the connected world.

The second part of the analysis sought to illustrate, above all else, the emergence of the 'institutionalized revolution' paradox and its impact on attempts to maintain credibility. We sought to categorize the two speakers within this section (i.e. Drew Faust and Susan Hockfield) by way of the observable division within their respective presentations. We found that Faust's emphasis on the proposed beneficiaries of edX and what edX means for education futures signalled a departure from Agarwal's preface. As such, we sought to analyse these claims not solely on their own merit but also how they coincide with the vision established by Agarwal, and what these incongruities (which

spawned the above paradox) would mean for the maintenance of credibility. Hockfield's discourse provided additional material to this end, as we analysed how the act of 'taking a position', the use of moral imperatives, and the self-reflection upon the initiative's experimental status, all of which were enacted as a defense against possible antagonism during the subsequent 'question and answer' phase and to further mitigate possible damage to credibility.

The third and final part of the analysis seeks to illustrate the introduction of audience participation into the conference as the critical interval in which the maintenance of credibility towards a particular version must be defended from the antagonism of audience inquiry. We have further divided this part into various sections, which illustrate particular conventions and stratagem used by the edX panellists in dealing with such inquiries. Our analysis displayed how overtly subjective assertions provide defensibility in pre-emption of possible antagonistic inquiries (as well as a means of post-inquiry defense), and how the use of a buffer enables latter responders within bi- or tripartite answers more time to construct an appropriate response. Each of these two conventions was found to be implicit in the maintenance of credibility. Furthermore, we observe and analyze how the use of moderators channels possibly antagonistic inquiries into open-ended questions, which provide instances conducive to furthering the established narrative. We also dealt with the especial, two part inquiry into the financial structure of edX. This section enabled the researcher to witness, above all else, the first hand the use of mitigating responses by edX panellists in attempts to narrow the scope of inquiry and reduce possible damage to the established narrative of a non-profit organization. This motion towards closing down possible inquires was also observed through a request to elaborate on a specific topic. Finally, the motion towards closing the announcement conference, and the dealing with audience inquiries following this motion, were analyzed by way of their impact upon the narrative thus far maintained within the conference and the means by which the fragility of maintained credibility is conclusively mitigated in anticipation of follow-up print media.

We concluded our study with a discussion section wherein overarching points not included in the localized focus of the analysis are explicated. Each of these sections provides sociologically relevant discourse into the episodic nature, professionalism, and normative defense of credibility observed within the edX announcement conference. This constituent of our study enables the macro issues embedded within the conference to explicated and constitutes a series of points comparable to instances of institutional discourse and behaviour external to the concerns of this study.

In conclusion, we have shown that throughout each of these above sections the establishing and maintaining of credibility is a multifaceted process that cannot be reduced to a single method. The

edX panellists display localized means of instilling credibility and dealing with the varieties of antagonism to this end. This researcher believes that the analysis also illustrates that the transition from a unilateral narrative (in this case, that which is propounded by the edX panellists) to a master narrative (struggled over by the panellists and the public) requires a number of strategic conventions, which may be normatively employed in such events. We have shown that although a rudimentary structure of the press conference may have been pre-conceived to the live event, the event is characterized by the local performance and the emergent structure as manifests therein.

The reflective structure of this study has been of great importance to its creation. The researcher has, through this analysis, made progressive steps away from the initial announcement of the edX initiative aired by Faust, and yet simultaneously reflected back on this first cause as the analysis continued. Therefore, relaying localized action back to that which is already accomplished is essential to this study. As such, the succession of events within the edX announcement conference can be seen to build on each other, and we are privy to this reflection found within the conference itself: in the utterances of self-reference enlivened within its discourse. We have shown that these utterances concerned with self-reference—not unlike Bogen and Lynch's analysis of the Iran-Contra Scandal— constitute the prime means of solidifying the master narrative within the announcement conference. Finally, and not unlike Bogen and Lynch (1996), we can enact specific theories when they are required as opposed to establish the theoretical framework of out analysis prior to engaging with the primary source.

Therefore, and perhaps most importantly, this study once more provides evidence that aggrandized sociological theories are not necessary for *a priori* understanding of a particular item of study, but instead can be *evaluated* within these instances. As such, the localised utterances and actions populating an event such as the edX announcement conference are the critical resource from which we may substantiate sociological theories and form an understanding of the everyday practices within our societies.

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Appendix I – Transcript

CAMBRIDGE, MASSACHUSETTES – HOTEL CONFERENCE ROOM

Anant Agarwal (Harvard), begins his introduction to a crowd in a lecture hall environment. Two large screens project the brand logo of edX bordered with equally represented logos of Harvard and Massachusetts Institute of Technology (MIT). Two lecterns are located in front of the projection to the left of our host while a rectangular conference table parallels the monitor to the right.

1	AA	Good morning all, welcome. I am Anant Agarwal. I am the director of
2		MIT's computer science and artificial intelligence laboratory. Today is a
3		fantastic day. But, there is a revolution brewing, in Boston and beyond. It
4		does not have to do with Tea (laughter). It does not have to do with the
5		Boston Harbor. It does not have to do with guns, and it does not have to do
6		with the sword. Instead, this revolution has to do with the pen and the
7		mouse. Online education, it is revolutionary. Online Education will change
8		the world. In a prototype course that we are offering as we speak, the
9		number of students around the world that are taking it is insane: 120,000
10		students around the world. Online education is disruptive; it will
11		completely change the world. Students from Tunisia, Pakistan, India, New
12		Zealand, Australia, Colombia, the USA, Canada, all working on learning,
13		all collaborating and working together. Students creating small groups in
14		Cairo, meeting in tea shops and discussing, guess what? Technology in
15		education, and learning, humanity, sciences; it is unbelievable. Online
16		education truly has the potential to change the world. Modern technology
17		such as the internet, cloud computing, computing, machine learning and so
18		on, are really coming together to make it possible for us to offer online
19		education at a massive scale around the world. We are really, really
20		excited. And today, I'm really excited, particularly, and pleased to
21		welcome you because today we will announce a historic partnership. But
22		before I jump ahead of myself, let me start by introducing a short video.
23		Enjoy

24	**Video Transcript (Lines 24-61)**	
25		
26	RR	These very early stages were something so novel, so new, so different,
27		these uhh for many faculty and students at MIT, very exciting, at the same
28		time very scary, it is something new, it's different, it's potentially
29		disruptive.
30	On-Screen Titles:	
31		1,000,000,000 people
32		2 universities
33		1 vision
34	MDS[1]	Harvard and MIT recognize the incredible…effect technology is having on
35		education today.
36	AG	It's opening new vistas in education, for the world, for our campuses.
37	AA	Online education for students around the world will be the next big thing
38		in education. This is the single biggest change in education since the
39		printing press.
40	AG	We plan to make available courses and educational materials to anyone
41		who has an internet connection.
42	MDS	Technology can strengthen education both for our on-campus students and
43		those around the world.
44	AA	Our goal is to educate a billion people around the world.
45	On-Screen Titles:	
46		planet-scale
47		technology-enabled
48		access for all
49		connected learning
50		shared platform
51		enriching campuses
52	S.1[2]	So I see technology enabled education…
53	S.2	…to really democratize learning.
54	S.3	It's really transforming the way that we see material, access material, and
55		really interact with the course.
56	S.4	It really tailors the experience, uhmm, personally, to whoever is trying to
57		be a part of it, which is huge I think.
58	RR	This is not to be construed as MIT lite or Harvard lite. The content is the
59		same content.
60	AG	This will make tremendous research courses available to people
61		everywhere. We expect to transform learning in the classroom along with
62		learning online.
63	RR	Combining forces from Harvard and MIT we can do amazing projects that
64		will further enrich how to develop online learning environment and how to
65		develop the content in the right way for delivery on campus and
66		worldwide.
67	AA	I hope you enjoyed that little video, edX. Let me welcome our president,
68		Drew Faust, MIT president Susan Hockfield. Join me in welcoming them.

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[1] Michael D. Smith (Dean of the Faculty of Arts and Sciences, Harvard)

[2] S.1-S.4: Student 1 - Student 4.

69		((Through applause, both Drew Faust (Harvard) and Susan Hockfield
70		(MIT) take positions behind lecterns.))
71	DF	Good morning, everyone. I am delighted to be here today with president
72		Susan Hockfield to announce edX, a partnership between Harvard and
73		MIT that will shape the future of learning and teaching on our campuses,
74		and further extend our reach in the ever-expanding universe of digital
75		education. Beginning this fall, an array of courses developed by faculty at
76		both of our institutions will be made available online through edX.
77		Anyone with an internet connection, anywhere in the world can have
78		access. Video lesson segments will be complimented by embedded
79		quizzes and online laboratories, as well as opportunities to engage with the
80		instructor and with classmates. Together, Harvard and MIT will be sharing
81		knowledge more broadly. Sharing the remarkable capacities of our
82		universities far beyond Cambridge. It is however what will happen on our
83		campuses that will truly distinguish edX. Harvard and MIT are institutions
84		devoted to research and discovery. Through this partnership, we will not
85		only make knowledge more available, but we will learn more about
86		learning. We will refine proven teaching methods, and develop new
87		approaches that take full advantage of established and emerging
88		technology, building on the insight we gain to enhance the educational
89		experiences of students who study in our classrooms and laboratories.
90		Ultimately, we will expand the scope of our efforts, collaborating with
91		other universities to host a wide array of educational offerings on a single
92		site. I'm excited about this partnership and the extraordinary opportunities
93		it will create, for undergraduate, graduate and professional students at both
94		of our institutions, as well as for learners worldwide. Two of my most
95		important commitments as Harvard president have been to increase access
96		to education, and to strengthen teaching and learning. EdX will enable us
97		to advance both of these purposes, in ways we could not have previously
98		imagined. Many of us in this room can point to a teacher or a class that
99		opened our minds in new and surprising ways, and awakened in us an
100		interest or a passion that has shaped how we think, what we do, and how
101		we see the world. Today's announcement brings that possibility for
102		transformation through education to learners across the globe. And it
103		provides our faculty and students on-campus with tools and techniques for
104		creating and transmitting knowledge. As we gather here, I think about the
105		students in Massachusetts and around the world, who will have access to a
106		better education because of the partnership we launched today. I want to
107		express my gratitude to members of the edX team from both Harvard and
108		MIT for working so diligently to see this initiative through. Susan and
109		Rafael, thank you for your unflagging support for the possibilities of
110		Harvard and MIT collaboration, on edX as on so much else. Christine
111		Heenan, Robert Giuliano, Katie Lap, and Marga Lease from Harvard, you
112		have been at once practical and visionary. And special thanks to provost
113		Alan Garber for leading the Harvard effort and Dean Michael Smith for all
114		you have done to make edX at reality. We are privileged to be here today
115		to mark the creation of a partnership between two of the world's great

116		universities. A partnership that will change our relationship to knowledge
117		and to teaching for the benefit of our students, and students and would be
118		students everywhere. Now let me turn to Susan Hockfield to tell you more
119		about edX.
120	SH	Thank you, Drew. Good morning everyone. MIT is exceedingly excited to
121		continue a very long history of collaboration by joining with Harvard in
122		this new partnership; a shared expedition to explore the frontiers of digital
123		education. What we will discover together will help us do what we do
124		better. To more effectively and more creatively increase the vitality of our
125		campuses, and at the same time to increase educational opportunities for
126		learners and teachers across the planet. Today, in higher education
127		generally, you can choose to view this era as one of threatening change
128		and unsettling volatility. Or, you can see it as a moment charged with the
129		most exciting possibilities presented to educators in our lifetime. For the
130		possibility of better understanding how we learn, and of sharing the
131		transformative power of education far beyond the bounds of any single
132		campus. As MIT and Harvard come together in this ambitious online
133		initiative, we also come together to say, with conviction, that online
134		education is not an enemy of residential education, but rather a profoundly
135		liberating and inspiring ally. We also come together to say that it is
136		incumbent on research institutions like ours to find every way we can to
137		share our knowledge and our teaching with the world that is hungry to
138		learn. Edx reflects both of these convictions at once. It will offer an array
139		of innovative digital tools for enhancing education on our own campuses,
140		while at the same time creating a new avenue for education for millions of
141		learners worldwide. Now, we fully realize that this initiative is genuinely
142		an experiment, so we ourselves are prepared to learn. To give a sense of
143		how edX will dramatically extend our educational boundaries, let me share
144		a few things that we learned this spring since we launched the prototype
145		course on circuits and electronics. We have been frankly a bit stunned to
146		learn just how many people around the world are eager to take on the
147		challenge of an MIT level class on circuits. As Anant said earlier, the
148		course received 120,000 registrations at its very start. Just for a sense of
149		scale with 120,000 registrations for this one class alone, that represents
150		just a small...a little bit fewer than all of MIT's living alumni. And these
151		online learners have amazed us by how fast they've deployed our digital
152		tools to create mutually encouraging online communities of their own.
153		Communities where they effectively tutor and coach one another. Already
154		we've gained inspiring and important insights about how people learn
155		online. And we've used these insights to make the technology, the
156		techniques, and the teaching technology more effective and more user
157		friendly. We've begun to get a sense of the power of edX to deliver top
158		quality education planet-wide, and we can only begin to imagine its future
159		impact, as Harvard and MIT welcome educational institutions to this open-
160		source platform, and to help us improve it. Fasten your seatbelts. Before I
161		close, I also want to thank everyone who paved the way to today's
162		announcement. First the entire edX team from both Harvard and MIT,

129

163		whose collegiality put the idea of this complex partnership into action. I
164		want to particularly thank professor Anant Agarwal, the first president of
165		edX, whose boundless energy, brilliant teaching and tireless team have
166		made the prototype course so successful. And finally I want to offer my
167		most enthusiastic thanks to MIT provost Rafael Reif who spearheaded the
168		work of the MIT faculty that over several years has led to the development
169		of this online learning initiative. His commitment and vision were central
170		to building the Harvard, MIT, edX partnership. edX is, in the very best
171		sense, a work in progress, but it is also an act of progress, and we are
172		delighted to join with Harvard in advancing the frontier of education.
173		((Applause, formal gestures (handshake, embrace)))
174	SH	I'm glad you're all as excited as we are. Now we're going to turn this
175		event over to Christine and Nate who will field the questions, and I want
176		to invite Anant and Rafael and Alan, our provost, to join us here as
177		panelists. So, come on up everybody, and Christine and Nate will manage
178		the mics...
179		((Academics and administration alike gather behind the conference table in
180		a panel formation. Christine and Nate take position behind the
181		aforementioned lectures.))
182	CH	Hi, I'm Christine Heenan from Harvard, this is my colleague Nate
183		Nickerson from MIT. We're now going to invite questions from members
184		of the media, and in keeping with the spirit of today's announcement, we
185		have more than a dozen media here in attendance but more than thirty
186		joining us online. So, we'll be taking questions both from us here and
187		those joining us virtually. Uhh, do we have a first question?
188		((signals with hand))
189		Katie.
190		((Katie begins to speak, inaudible at first. She receives a microphone.))
191	K	...sorry, MIT already has this prototype course, for the panelists from
192		Harvard, were there any similar initiatives already taking place at Harvard
193		that you looked to, or are still looking to in deciding how to want to move
194		forward with this? Thank you.
195		((A cacophony of inter-panel discussion.))
196	SH	I just want to say why MIT and Harvard. I think one of the best kept
197		secrets of Cambridge and the entire higher education community is the
198		profound richness of collaborations between MIT and Harvard. Um, this is
199		just another step, actually a very big step though, in collaborating with
200		these neighbourly institutions. And I think it really does underscore our
201		commitment, not just to principles we've just articulated, but also to the
202		region to making this region an even greater hub of education through
203		collaboration.
204	DF	I'd just add one, brief addition to that, which is when we look at our
205		strengths, we have many common strengths but we also have disparate
206		strengths, and so we each extend our reach and our capacity but working
207		together to take advantage of...of what we can stretch beyond our areas of
208		focus and confidence.

209	AG	Katie, to your question about whether Harvard had anything similar to
210		what MIT has had in online education. Harvard has extensive involvement
211		in online educational efforts throughout the university. This ranges from
212		the activities of our extension school to individual courses, such as the one
213		taught by Michael Sandell which is achieved huge audiences worldwide.
214		We haven't had a program analogous to MITx and one of the attractions of
215		this is we believe that MIT is start on the development of an amazing
216		platform to extend our efforts in this area.
217		
218	NN	Okay, so umm, uhh from reporters online we've gotten a couple about
219		what kind of research you hope to do in online learning and teaching.
220	AA	I'll take that. So, one of the key goals of the effort, of edX, is not just to
221		develop the platform, but also to do research in two areas. One is research
222		in the technologies that will enable us to offer much better online
223		education. So, this could be technologies, for example, for allowing
224		students to collaborate in a much better manner. Uhh, technologies for
225		personalized learning so that students can much more of a personalized
226		experience as they learn. Another class of technology might be ideas and
227		ways in which to get people around the world to help with grading and
228		working together on free-form questions and so on. A second class of
229		research involves understanding how people learn, how are people
230		learning, what things work, why things do not work. So, as an example,
231		the rockstar team, the development team of edX in the platform that
232		they've been developing already has a lot of mechanisms for
233		understanding how students learn. There is a lot of instrumentation. So, for
234		example, if you gather huge amounts of data on how much time are
235		students spending on various videos and exercises, what do they go back
236		to and so on. So all this rich data, this is big data in its biggest form. So, all
237		of this data that we've available to researchers at MIT and Harvard and,
238		and uhh, other collaborators around the world to understand how people
239		really learn. And the we can help synthesize a better educational
240		experience. On the existing platform for example, we already have
241		mechanism for A B testing, where different students can get slightly
242		different experiences. And the numbers are large, so the results would be
243		very (inaudible) significant in a very short amount of time.
244	AG	And as Anant says very clearly what kinds of research we can do, I just
245		want to emphasize how fundamental this is to our vision for edX. We are
246		research universities. We believe in not only producing educational
247		courses online, but using this, literally an unprecedented opportunity, to
248		examine fundamental questions about how we learn. And this is not only
249		about how to design the best online courses, this is about how to use the
250		classroom more effectively. And Anant just pointed out the wide varieties
251		of information that we can collect that simply weren't possible in the past.
252		And its enabling us to ask very different questions than we've typically
253		asked before. For example, we need not only ask 'how will our students do
254		on an exam?', we can begin to ask questions about how well they acquire
255		and apply the information months after a course has ended. So, we'll be

256		learning about online education, we'll be learning about residential
257		education, and this is a platform that will enable us to do research that
258		simply hasn't been possible before.
259	RR	Let me just add one comment to Anant and Alan. I think an important
260		point to realize is how technology has enabled all this today, so five years
261		ago or ten years ago the technology we had would not allow us to do what
262		we're doing right now. Uhh, and that will continue to occur, so as
263		technology will continue to change we're going to have to figure out how
264		to (indiscernible) that technology, and the research will tell us what
265		components make more sense to integrate into a, this continuing evolving
266		technology platform.
267	CH	John Lauerman...
268	JL	So, online education has, its been an area that's been sort of dominated by
269		for-profit colleges up to this point. Just curious about whether you've been
270		looking at what you've been doing, how you view what they've been
271		doing, how you intend to be different, have you learned anything from
272		them, do you see anything that their maybe doing wrong that you'd like to
273		do better, etcetera.
274		((Discussion amongst the panel.))
275	AA	So, I'm uhh, happy to take that. First of all, in terms of your question, you
276		mentioned for profits and online education, it actually turns out, at least in
277		my mind, in my personal opinion, uhh the number one out there is actually
278		a non-profit, is uhh the Khan Academy. You know Sal Khan was a student
279		of many of us here in the audience, and in terms of technology and
280		personalized learning, and and creativeness and innovation, I think Sal
281		was a leader. A lot of the videos that he create and others create, and if
282		you call them, umm there is this term we all use, it's called 'Khan-style
283		videos'. KSVs. I think that's become a standard name, a term, in our, in
284		our, lingua franca. But that said, the question was you know have you
285		looked at the others, how are you different? Umm, of course all of us are,
286		you know, looking at each other, seeing what are the best practices and so
287		on, and try to improve ourselves. But at the end of the day, the more
288		online educators we have, I think the better off the whole world is, so it's
289		just a very good thing. Uhh, so there's many for-profits and non-profits
290		out there. We've clearly learned a lot from Khan. From Sal Khan; his style
291		of videos is one of the predominant means by which we create the videos.
292		Another non-profit 'Lon Capa', and they were the leaders in assessment
293		technologies and how to offer questions. Again, a open source technology,
294		how to do exercises better from them. We've also seen the work from
295		many of the other for profits, and uhh, and uhh the huge reach you can get
296		with this kind of technology. So I think we're all trying to do better and
297		learning from each other.
298	RR	Let me just add to what Anant just said very briefly...one fundamental
299		difference is that this particular online learning environment is actually
300		governed by a couple of universities at the moment, and that means that
301		the research that's going to be done is gonna to benefit how these
302		universities and many others will teach on campus. So that's uhh a very

303		fundamental difference. The other important point is that, as Anant said a
304		moment ago, a great deal of data being generated by this platform. And
305		uhh we believe very strongly that that data should be available for
306		research, and available and be under the governance of a not for profit
307		structure.
308	CH	Question?
309	M	Hi I'm Monica (inaudible) WBUR. Uh two questions: I'm wondering if
310		your planning to monetize this in any way, charge for premium content or
311		uhh some sort of certificate or degree. And also whether you'll change the
312		presentation or adapt the classes in someway for the online learners.
313	RR	Let me take a first stab at it. Uhh, do we plan to monetize it, th-the driving
314		force as you will hear it from, in unison from Harvard and MIT personnel
315		is not in the leadership, the driving is not to make money, the driving is to
316		improve the learning that occurs on our campuses, and hopefully in
317		campuses worldwide. Uhh having said that, we do intend to find a way to
318		at least support those activities, they need to find a way to be self-
319		supportive. And there are several approach which we are exploring, and I
320		think its a little premature to share that. Clearly, we want to make sure that
321		this does not become a drag on the budgets of Harvard and MIT. Uhh, so
322		in that sense we need to find a way to monetize that. Umm, and uhh, in
323		terms of adaptability to online, maybe the simplistic, it is very hard to
324		predict the uses this edX platform would have both at Harvard and MIT.
325		One thing we've learned in the last few months is the power of creativity
326		innovation, people that are, have been, have had access to the platform has
327		come up with a tremendous number of ideas of how to do things. But the
328		simplistic version, a way to think of it is we will have the MIT content and
329		the Harvard content and each institution will use it the best way they can.
330		And we will be able to compliment what we do in our classroom with the
331		x version, the online version of it. So that together becomes, perhaps in
332		many subjects, the future of courses being taught at universities. Umm,
333		uhh, clearly whatever we do in the online version is going to be such that
334		can be umm uhh easy to learn, and fun to learn by the learner. But the
335		whole initial goal is to strengthen and enrich what we do on our campus in
336		our classrooms.
337	AG	If I might add a few comments to what Rafael just said. One of the reasons
338		that the two universities came together so readily is we do share a common
339		vision for this area and we have a common set of values, and that is
340		distinct from what you would doing if you not, if you were a for-profit
341		organization. So, we're dedicated to improving learning throughout the
342		world, we're dedicated to improving learning throughout our campuses,
343		and we're dedicated to advancing research on education. These are our
344		core values. In terms of the business model and the revenue model, we are,
345		as Rafael said, at a very early stage. And for Harvard, we have a variety of
346		online learning opportunities in the university now. Some of them are free,
347		some of them are not. We don't imagine that there will be a single model
348		for how we make our material available online, because we'd like to draw
349		in as much of this resources, of the intellectual resources of our university,

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350		of each university as possible. And uhh, we imagine that what we're doing
351		in terms of how we make the courses available, how they're organized, the
352		uhh the content, how they're with classroom will look very different in
353		five years from now, it'll look very different in three years. So, we intend
354		to maintain flexibility and agility as we move forward.
355	NN	So uhh we've gotten a couple of questions uhh uhh online about how
356		certificates for courses on edX might work.
357	AA	So I can give you an example of what we are doing for the prototype
358		course. But again, a lot of this is, the work in progress. So, just to make it
359		clear, edX is a not–for–profit organization. It will host a platform, it will
360		host a web portal, a website, and offer courses from MIT under the MITx
361		brand, from Harvard under Harvardx, and also from other universities who
362		will collaborate with, under their brand, as an x brand. How would
363		certificates work? In the prototype course, students as they do their work
364		get assessed, there's automatic assessment for all of their work. Uhh, they
365		can look at the profile page and can see what, at any given point in time,
366		they can see what grade they have. You know uhh,
367		((gestures to the crowd))
368		I can see our team out there that implemented it, and uhh, students can see
369		follow at any given point in time what the grade in the class is, at the end
370		of the class they get a grade. Students who pass the class will get a
371		certificate. Uhh it will be a signed certificate from, if its a, in this
372		particular instance an honour code certificate for the prototype class they
373		will get a, if they pass the course, they will get a completion certificate,
374		they would also get a grade. For this prototype class the certificates are
375		also free.
376	CH	Question here.
377	DC	Uhh, Dick Chandler. You've talked about expanding this to include other
378		institutions over time. Can you talk a little bit more; I guess there is two
379		different models people can adopt, other institutions can adopt this
380		platform and use it on their own. And uh, I sup–, I guess there's the
381		possibility of other institutions joining edX itself. Can you talk a little bit
382		about those two possibilities and if other institutions actually become part
383		of edX does it continue to be run by MIT and Harvard or could it expand
384		more broadly beyond that. How to do you see the evolution over time?
385	RR	We'll, uhh, you may see us brainstorming on how to answer it.
386		(laughter)
387		Uhh, I think uhh, lets lets lets do, lets make one thing clear, what th–this is
388		uh a joint effort we're announcing today with edX to develop the platform,
389		the online learning environment. I think what we would like to see happen,
390		and that's what we have offered, and that's what you heard president Faust
391		and president Hockfield offering earlier is, for institutions that want to use
392		this platform, this will be available to them. Uhh the speed at which we
393		can do that depends on capacity of progress and so forth, but th–th–the
394		ideal situation is for other institutions to see that they can have this
395		platform available for them if they wish to put their courses on the subjects

396		online. So that's what we're making available, and the time in which that
397		will occur that that's still to be decided.
398	AA	So if I'm just going to add to that, umm as you said there's two
399		approaches, two models. Uhh, we are not-for-profit and open we will open
400		source all our software to the world. And that will happen in the uhh
401		sometime in the future, so that anybody else can take the platform and use
402		it in whatever way they want. That's one model. The second approach is
403		that umm edX, which is jointly governed by Harvard and MIT, will also
404		be able to offer courses from other universities on the same platform. So
405		uhh, edX, the edX team will provide production help, hosting help, and
406		operational help to other universities who want to offer their courses on
407		this platform. So there's two approaches.
408	CH	Any other questions? John?
409	J	Do we know umm what courses are going to be offered to the (inaudible)
410		or anything like that? Do we have any kind of uhh..
411	AG	Let me…
412	J	...how broad the range might be.
413	AG	Let me take a stab at answering that question, alright do we know which
414		courses will be offered at both institutions. There are a number of faculty
415		who have expressed their willingness to offer courses. We have a number
416		in the faculty of arts and sciences that Mike Smith has been organizing, as
417		well as a number of courses in other schools, such as the law school and
418		the school of public health. However, when we come together as a board,
419		for edX, we will make decisions about which courses will be offered and
420		the institutions themselves will be making decisions about that. So, I can
421		tell you it will occur across a range of fields, including uhh in the faculty
422		of arts and sciences at Harvard courses from the humanities, social
423		sciences, as well as the natural sciences. But we have a process that we'll
424		be going through at both institutions to the select courses. So, we're not at
425		a point today where we can tell you which courses. We can give you
426		plenty of examples of candidates, but we have not selected courses yet.
427	RR	That was such a good answer I don't intend to touch it.
428	CH	Lauren.
429	L	In terms of umm, I know that you said that this'll...the more online
430		education obviously the better. And this will not, remove MIT open
431		courseware by any means. Umm and I know obviously that through the x
432		platform, there's, you can get lessons for this umm or at least you can get
433		certificates for this, which is kind of what differentiates this from open
434		courseware. But how else will they compliment each other? It seems right
435		now, I mean, are you going to start encouraging more people: go through
436		edX in stead of open courseware? How is everything really going to work
437		together at the end of the day, cause right now it seems that what I've been
438		reading is more about MITx a little bit less about open courseware,
439		although still a great platform.
440	AA	I'm happy to take that, and I'll give a shout out to my colleague Sees
441		Olivera who heads up open courseware. Umm, open courseware, um you
442		know started a revolution, it did not involve tea either. Umm it was umm

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443		this open courseware started in uhh 2001 or thereabouts. Uhh it really
444		created a revolution where all of MIT contents was available on the web,
445		for people around the world. And uh it offers a particular kind of service.
446		Um edX and open courseware really live together and are very
447		complimentary. Uhh what open courseware did was treated a culture
448		among a huge generation of students growing up that, that were very
449		comfortable getting content and learning experiences from the web. So
450		many students that are coming, that have come onto our prototype course,
451		they got on there because they said: hey we've gotten used to looking at
452		open courseware and (inaudible) really excited to go and, uhh you know,
453		take a course with discussion forums and interactivity, and even get a
454		certificate from MITx. So, it almost became a stepping stone to the course.
455		Furthermore, a lot of students said: what exactly is this new course about.
456		And we just pointed them back to open courseware and said look this is
457		exactly the version of the MIT course offered as MITx. And to prove it
458		they could go and look at open courseware and see exactly the same
459		content. We have 3000 courses on open courseware, and students can go
460		and look at all of the courses, so as new courses are offered this old OCW
461		becomes a real resource. And Harvard, there are similar open resources
462		available, and I think the existing resources will compliment the edX
463		resources in a nice way.
464	SH	Can I just add to that. Um, open courseware really was revolutionary when
465		it was launched 10 years ago, and continues to be revolutionary. And
466		many people have asked us how we imagine edX will impact the on-
467		campus, residential learning community. And my simple answer is: look at
468		open courseware. So, MIT students, students on campuses all over the
469		world are using open courseware material to supplement what they're
470		learning, you know, through this more standard, residential learning
471		environment. And so I think that, we don't know exactly how MITx will
472		evolve and will be used on our campuses, but I can tell you our
473		experiences with open courseware has uh been absolutely mind-opening,
474		in terms of how, learners today can access online materials. And, as Anant
475		said, the mutuality, and the coexistence OCW and Edx are um, to us, a
476		natural synergy.
477	CH	Okay, if there are no other questions we invite you to go onto the now live
478		edXonline.org website for answers to more questions and we thank you all
479		for joining us for what we believe is a very exciting announcement today.
480		Thanks for coming.
481		(Applause.)

Appendix II: Temporal Structure & Conference Participants

The following provides a complete chronological breakdown of the edX announcement conference in its entirety followed by a list of all participants by initials within the announcement conference. This serves as a referential aid in order to provide a clear point of reference for the reader throughout this study.

This breakdown differentiates speakers within the large, bifurcated sections of the announcement conference, as discussed above, as well as the many subdivisions that populate the former sections (in the form of oratory) and the latter sections (in the form of questions, fielding of questions, and subsequent responses). Temporal gaps between the end of one section and the beginning of another signify a number of non-vocal actions, wherein members of edX enter stage in order to speak, or pauses between speakers persists for a discernable amount of time. These moments of non-vocal actions hold great importance in this analysis, however their inclusion in this following timeline would add needless complexity to vocal data:

Part One: The Rhetorical Introduction:

     0:00 — 2:09   - Anant Agarwal: *Introduction of edX.*

     2:10 — 4:30   - edX promotional video.

     4:31 — 4:57   - Anant Agarwal: *Introduction of University Presidents.*

Part Two: The Announcement as an Achievement:

     5:13 — 9:35   - Drew Faust: *Harvard involvement in edX.*

     9:38 — 14:12 - Susan Hockfield: *MIT involvement in edX.*

Part Three: 'Question and Answer':

     14:33 — 14:55 - Susan Hockfield: *Introduction to Q&A section.*

     15:16 — 15:40 - Christine Heenan: *Structure of Q&A section/ Selection first question.*

     15:41 — 16:05 - Katie: *First Question.*

16:12 — 16:44   - Susan Hockfield: *Response.*

16:55 — 17:05   - Drew Faust: *Response.*

17:06 — 17:45   - Alan Garber: *Response.*

17:49 — 17:57   - Nate Nickerson: *Second Question; acquired from reporters online.*

17:58 — 19:42   - Anant Agarwal: *Response.*

19:43 — 20:56   - Alan Garber: *Response.*

20:57 — 21:26   - Rafael Reif: *Response.*

21:29 — 21:30   - Christine Heenan: *Selection of third question.*

21:31 — 21:57   - John Lauerman: *Third Question.*

21:59 — 23:37   - Anant Agarwal: *Response.*

23:38 — 24:18   - Rafael Reif: *Response.*

24:21 — 24:22   - Christine Heenan: *Selection of Fourth Question.*

24:22 — 24:39   - Monica Brady-Myerov: *Fourth Question.*

24:40 — 26:33   - Rafael Reif: *Response.*

26:34 — 28:03   - Alan Garber: *Response.*

28:05 — 28:13   - Nate Nickerson: *Fifth Question: acquired from reporters online.*

28:15 — 29:26   - Anant Agarwal: *Response.*

29:31 — 29:32   - Christine Heenan: *Selection of Sixth Question.*

29:32 — 30:08   - David Chandler: *Sixth Question.*

30:09 — 31:05   - Rafael Reif: *Response.*

31:06 — 31:55   - Anant Agarwal: *Response.*

31:59 — 31:01   - Christine Heenan: *Selection of Seventh Question.*

32:03 — 32:11   - John: *Seventh Question.*

32:11 — 33:17   - Alan Garber: *Response.*

32:18 — 32:20   - Rafael Reif: *Response.*

33:23 — 33:24   - Christine Heenan: *Selection of Eighth Question.*

33:27 — 34:07   - Lauren: *Eighth Question.*

34:08 — 35:46   - Anant Agarwal: *Response.*

35:47 — 36:44   - Susan Hockfield: *Response.*

36:48 — 37:01   - Christine Heenan: *Closing Remarks.*

List of Conference Participants by Initials.

AA — Anant Agarwal

RR — Rafael Reif

MDS — Michael D. Smith

AG — Alan Garber

S.1-S.4 — Students 1-4

DF — Drew Faust

SH — Susan Hockfield

CH — Christine Heenan

K — Katie

NN — Nate Nickerson

JL — John Lauerman

M — Monica

DC — Dick Chandler

J — John

L — Lauren

Appendix III: Media Reverberations

If the trajectory of arguments aired within the edX announcement conference were carried forward beyond the limits of this event our analysis would come next to the uptake of these particular arguments and framework proffered by the edX panellists within a variety of print media. The particular question we would ask ourselves would attempt to impel an approximation of *if and how these particular media sources take up this framework*. Thus, we might be therefore able to provide a limited judgment upon the 'success' of the announcement conference, if again we take 'convince the audience of the initiative's viability' to be the primary objective of its construction. This section serves as a speculative exercise as to the possibilities of such a sociological investigation. Upon limited observation, a number of provisional recommendations can be made to this end:

First, those media sources existing within the confines of an institutional framework may seek to defend certain points aired during the conference. For instance, the MIT News article printed by David Chandler the same day as the conference provides a particularly relevant example to this end. (Chandler 2012) The same individual responsible for the airing the sixth question of the 'question and answer' phase, Chandler provides a descriptive piece illustrating the 'revolution in education' and the opening of MIT and Harvard's classrooms to the world that may signal acceptance of the framework proffered within the announcement conference. (Ibid.) A number of direct quotations alongside limited subjective opinions within the article seem to promote a non-antagonistic format. Such work by Chandler serves to embolden the ideal put forward by the edX panellists and simultaneously mitigates future antagonism through the repetition of defensive statements.[36] **Check Footnotes.

Second, utterances in support of edX aired during the conference may be retrospectively judged by supportive media (i.e. media in favour of Harvard/MIT) as insufficiently argued, therefore requiring repair discourse to facilitate a more appropriate response to certain antagonistic inquires. Perhaps certain topics were simply not framed in a manner conducive to audience approval (something which only retrospect would illuminate) and these items are redirected into print, which provides a means of defense against previous antagonism. An example of this Hana Rouse and Justin Worland's piece in 'The Crimson'[37], also printed on the same say as the conference, which seeks to

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[36] For instance, Chandler repeats Hockfield's utterances regarding the experimental nature of the edX initiative and the willingness members of edX have to learn themselves during this process.

[37] The Harvard University college newspaper.

mitigate possible antagonism regarding the possibility of online education overtaking the traditional classroom as the primary means of university education. (Hana and Worland 2012) The article possibly acknowledges that any motions towards online education being the future of university education undermine the dominance of 'brick and mortar' institutions in the realm of higher education–not least of which being edX's founders: Harvard and MIT. When discussing this element of the edX announcement, the author's also choose to identify educators as 'experts', thus emboldening the status of these individuals towards further credibility.

A comprehensive list of the possible ways such defensive accomplishments would be impractical given the innumerable means of mitigating antagonism just following the event. However, we can confidently state that possibilities may include the refutation of the basis for a question being asked in the conference, the impossibility of current knowledge being able to facilitate an appropriate response to a speculative question, or perhaps simply rendering antagonism as a misunderstanding; these amongst many other that would be uncovered through a detailed analysis of subsequent articles. We might also observe that the foregoing articles are both written on the day of the conference, and many other articles have been written since which challenge and defend the narrative in a multitude of ways. Thus, when the interval of time in which the researcher observes the construction of a master narrative is elongated, the complexity of this process of defending and instigating disagreement is simultaneously advanced.

Finally, the demarcation between institutional media—that being media emanating from institutions present within the announcement conference (i.e. the Harvard Crimson or MITNews)—from those of independent affiliation would be a critical step in comparing media representation of the studied event and uptake of the proffered framework. Certainly, if we were to analyze what exactly media independent of the institutions sitting on the panel at the announcement conference wrote in comparison with those charged with defending the emergent initiative, we may be exposed to a great expanse of contradictions, counter-assertions, and charges of dishonesty in the framing of the edX initiative. For a particularly stark example of this, Gregory Huang's article in 'Xconomy' provides an article airing doubts as to the viability of edX as well as current higher education in general. Herein, Huang calls into question the purported novelty of the edX initiative: "None of this is really new, of course," and questions the longevity of online learning in which face-to-face interactions are scarce: "…you won't be able to do without what is arguably the most important part of the educational process: daily interactions with your peers." (Huang 2012) Thus, a comparative analysis of the foregoing articles, as well as an eclectic sample of other media pieces, would allow us to clearly

explicate the means by which the framework was either taken up, and to what degree, or if it was neglected, the latter of which challenging the very utility of the edX announcement conference.

Appendix IV: Abstracts

English Abstract:

Online education has seen unprecedented growth during the last decade and its influence has spread far beyond the digital realm and into our brick-and-mortar universities. Perhaps the most apparent example of this is the founding of edX: a Harvard and MIT joint venture heralded by its creators as a 'revolution' not simply in online education but in education as a whole. This study charges itself with analyzing the conference held to announce the edX initiative on May 2nd, 2012 in Cambridge, Mass., which consisted of presentations by the edX founders followed by a question and answer session between audience members and panellists from these institutions. The field of Science–Technology–Society (STS) investigates the multifarious domains of science and the interaction this inspires with society, and the edX announcement conference provides excellent grounds for observations towards a more insightful understanding of this interaction. We initially illustrate the context of both the conference and the initiative itself, and position the subsequent analysis in relation to comparable studies of institutional talk. An ethnomethodological respecification conducted through techniques of Conversation Analysis, this study illuminates the generation and maintenance of credibility in constructing a tenable version of the edX initiative within the announcement conference. Furthermore, we investigate the concept of the 'narrative' and 'master narrative' as a means of exploring how the structure of the conference develops *in situ.* This allows us to investigate how the edX panellists first disseminate a particular version of the edX initiative (narrative) and how contravening views are co-opted into this initial narrative (master narrative). Conclusions drawn from this analysis illustrate the localized nature of credibility maintenance while further expanding sociological investigation into the normative structure of conversation.

German Abstract:

Online lernen ist über die letzten zehn Jahren zu einem wichtigen Phänomen geworden. Sein Einfluss reicht mittlerweile über die digitale Welt hinaus und in manche Universitäten hinein. Eines der deutlichsten Beispiele hierfür ist die Gründung von edX: ein gemeinsames Projekt der Harvard University und des MIT, welches von seinen Schöpfern als eine „Revolution" bezeichnet wird – nicht nur in Bezug auf Online lernen sondern auf Bildung ganz allgemein. Die vorliegende Studie präsentiert eine detaillierte Analyse der Pressekonferenz an welcher die edX Initiative in Cambridge, Massachusetts, am 2. Mai 2012 bekannt gegeben wurde. Diese Pressekonferenz bestand aus den Präsentationen der edX Gründer bzw. Vertreter, gefolgt von einer Frage-und-Antwort Runde zwischen den edX Podiumsteilnehmern und dem Publikum. Das Feld der Wissenschafts- und Technikforschung untersucht die vielfältigen Bereiche der Wissenschaft und deren Wechselwirkung mit der Gesellschaft. Diesbezüglich bietet die offizielle edX Ankündigung an der erwähnten Pressekonferenz eine ausgezeichnete Gelegenheit zur vertieften Analyse. In der vorliegenden Arbeit wird zunächst der Kontext der Pressekonferenz sowie jener der edX Initiative veranschaulicht. Anschliessend werden vergleichbare Studien zur Analyse von institutionellen Diskursen vorgestellt. Im Zentrum steht dann eine „ethnomethodologische Respezifizierung" mittels konversationsanalytischen Techniken. Deren Ziel ist die Beschreibung der lokalen Konstruktion und Aufrechterhaltung einer glaubwürdigen und haltbaren Version der edX Initiative im Rahmen der Pressekonferenz. Zudem wird untersucht, wie sich aus „Erzählung" und „Meta-Erzählung" (*master narrative*) die Struktur der Pressekonferenz *in situ* entwickelt. Diese Analyse ermöglicht es uns zu erläutern wie die edX Podiumsteilnehmer zunächst eine besondere Version der edX Initiative konstruieren (Erzählung), um anschliessend gegenläufige Ansichten in diese erste Erzählung einzugliedern (Meta-Erzählung). Die wichtigsten Schlussfolgerungen der Analyse betreffen einerseits die lokalisierte Natur der Konstruktion von Glaubwürdigkeit und ermöglichen andererseits weitere soziologische Untersuchungen zur normativen Struktur von Gesprächen.

Appendix V: Curriculum Vitae

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Ryan J. Crowder

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Personal Information
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Date of Birth: April 22, 1987

Place of Birth: Brockville ON, Canada

Email: ryanjcrowder@gmail.com

Education
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2011 – 2013	University of Vienna, Institute for the Social Studies of Science and Technology: Master's studies in Science, Technology and Society
2006 – 2010	University of Guelph, Faculty of Geography, Bachelor's studies in Geography, History
	Elementary and High Schools in Brockville, Ontario, Canada

Work Experience
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2013 – Present	International Atomic Energy Agency (IAEA) Internship – STS Related Work Experience
2012 – Present	Focus Languages – Specialized English Instructor
2012 – Present	Focus Languages – Advanced English Instructor

Conferences Attended
_____

2013	CTBTO Academic Forum – E-Learning Academic Research Representative.