

Articulating the Rhetorical Situation: The Terms of Technology Transfer

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Traditional definitions of technology transfer often assume a smooth shift of intellectual property from university or private research laboratories to private or publicly held companies that commercially develop the technology. The term itself suggests a seamless movement of new technologies from one place to another. But the practice is not that simple. As Seely explained (2003) technology transfer is a social process, defining it as “the processes and consequences of moving technological ideas, skills, processes, hardware, and systems across a variety of boundaries—national, geographic, social and cultural, or organizational and institutional” (p. 8). As an area of study, Seely (2003) noted its reach across multiple disciplines, including economics, business and management, the history of technology, public administration, education, and professional communication (p. 2). In practice, the transfer of new technologies involves a number of individuals from engineers and scientists to lawyers and business and marketing executives working on a wide range of problems from climate change to information security. Rather than a smooth shift, technology transfer is a series of negotiations in a complex network of people and organizations, operating within material and economic frameworks.

In the traditional model for technology transfer, the assumption was that universities would concentrate on the research part of the process and businesses on the commercialization. Increasingly, however, universities and business leaders are being asked to partner to spur innovation and economic growth. As Cohen (2006) explained, communities look to their local governments and universities for programs that will stimulate the local economy, particularly during economic downturns. *BusinessWeek* reiterated this view when it claimed that against the pessimism of America’s current economic crisis, “economists and business leaders across the political spectrum are slowly coming to an agreement: Innovation is the best—and maybe the only—way the U.S. can get out of its economic hole” (Mandel, 2008, p. 52). Smart ideas can generate jobs and growth. Mandel (2008) concluded that throwing money at the problem was simply not enough. Rather what had to change were the ways Americans conceptualized the R&D process, recommending among other strategies that university and business leaders step up their partnership efforts.

This article presents the results of a case study of a new technology transfer institute at a large land-grant university. Unlike the technology transfer offices that manage the transfer of intellectual property at universities, this institute’s focus was on creating a research space for business leaders to work alongside university faculty to research and develop new technologies to solve problems in areas as diverse as the medicine, agriculture, the financial services sector, aerospace, defense, and software services and products. The new Information Science and Technology Institute (ISTI) received a \$1 million grant from the state to develop partnerships with business leaders as a way to stimulate economic growth in the state.

But what is the benefit of these partnerships? What is its communicated purpose? In moving the ISTI concept from idea to reality, it had to answer those questions for several audiences: state and university

fundors, potential business partners, and university faculty who were asked to participate in the project. As Burke (1954) stated, “the mere fact that something is to a man’s [sic] interests is no guaranty that he will be interested in it” (p. 38). In practice, technology transfer is not so much about moving ideas as it is about connecting interests: “That is, at their core these processes involve individuals and groups negotiating their visions of technologies and applications, markets and users in what they all hope is a common enterprise” (Doheny-Farina, 1992, p. 4). As a highly rhetorical process, technology transfer is a process of continuous interpretation, negotiation, and re-negotiation by the many individuals and organizations involved. In most research in the professional communication field, *technology transfer* as rhetorical action has focused on the ways that documents mediate the use of specific technologies (computer software and hardware and military applications) by users. For example, McDaniel et al. (1991) did a case study of a corporation that made technical documentation the driving force in producing technologies and the principle product or deliverable. In these instances, technology transfer was analyzed through the lens of documentation practices. But, while such studies shed light on the role of documentation in the organization, little has been done to consider the rhetorical conditions of technology transfer as a tool of economic development that exists within a network of individuals and organizations, each having interests, motivations, and interpretations.

One of the key findings in this case study was an emphasis on economic development as its communicated purpose to its audiences. This emphasis represents a new justification for funding academic research, redefining the actors and actions in traditional models of technology transfer. In this article, I argue that economic development is a terministic screen that directs the attention and actions in the discourse. Burke (1966) defined terministic screens as follows:

“When I speak of ‘terministic screens,’ I have particularly in mind some photographs I once saw. They were *different* photographs of the *same* objects, the difference being that they were made with different color filters. Her something so ‘factual’ as a photograph revealed notable distinctions in texture, and even in form, depending on which color filter was used for the documentary description of the event being recorded” (p. 45)

In this sense, such terministic screens act as a template for filtering the actions and activities in a given situation. This is not to say that the screen determines the actions of the actor. Rather, the terminology embodies an understanding of the rhetorical situation, articulating one’s orientation within a set of relationships and positions, and amounts to a strategy for stabilizing the situation long enough so that work can get done.

This article extends research in technology transfer by analyzing the ways in which the ISTI understood the rhetorical situation—the exigences, constraints, and audiences in technology transfer. An analysis of the terms it used to define its mission and purpose can point to the cultural and historical issues currently at play in technology transfer. Although many have studied the documentation practices in technology transfer, no one has examined the ways in which key terms organize the actors and actions in a discourse. Following Burke’s ideas about terministic screens, such an analysis can point to the interests that ground the discourse in one way and not another. In this case study, the terms worked to recast the actors and actions traditionally associated with university research, suggesting that the terms that have been used to define technology transfer have become destabilized and contested. This kind of analysis is particularly useful for research in business communication because it provides a way to move beyond looking at specific document practices to the ways in which those documents function within larger social and economic networks of meaning.

Background

Defining the actors and activities in technology transfer are part of an extended conversation that dates prior to World War II. In general, around the turn of the 20th century, American research in the sciences and technology was relatively modest in scope. Outside of agricultural extension services, universities received virtually no federal funding for research (Atkinson & Blanpied, 2008, p. 35). As Mirowski and Sent (2002) pointed out, Americans were skeptical of funding an academic elite, regarding them as self-interested agents who could not be trusted to work on their behalf (p. 14–15). At this time, even with the extension services as an example, public funding for research was simply too radical of an idea.

Rather, the concentration of research resided in a few large corporations such as General Electric and American Telephone & Telegraph, which employed scientists and engineers mainly to protect the company's standing and investments. As Reich (1985) explained, teams of researchers, who had little freedom over scope and nature of the work, toiled in an atmosphere of "rules, regulations, and red tape" with the expectation of producing a steady stream of results (p. 8). As a result, research directors tended to favor low risk projects that promised applicable results in the short term. In this scenario, research was driven more by maintaining a company's market share than by groundbreaking discoveries.

Following World War II, however, the federal government took on a massive role in the funding and management of academic research. During the war, the U.S. saw the power of science and engineering R&D in advances such as "radar, sonar, the proximity fuse, early computers, synthetic rubber, penicillin, sulfa drugs and other important innovations that contributed to the nation's successful wartime effort" (Lane, 2008, p. 248). These wartime successes gave a cadre of academics the means to argue for further federal support of research projects aimed at discovery, not corporate interest. Vannevar Bush (United States, 1945), then director of the Office of Scientific Research and Development and advisor to Roosevelt and Truman, argued that given the importance of innovation to the successes of the wartime effort, federal funding of "basic" research was essential to the nation's security and well-being, recommending that the research be located in universities and federal labs. This move not only helped to establish scientific authority in the university, it also institutionalized "big science" and "big technology" as systems of practice underwritten as a public good for the benefit of society.

As many have argued, Bush's publication marked the beginning of an unwritten contract between academic researchers and the government; in exchange for government funds, academic researchers could develop research programs for the nation's peace and prosperity. In this conceptualization, researchers were recast as disinterested, unencumbered by bottom-line politics of the corporate world. In making his argument, Bush (United States, 1945) claimed researchers had to be left alone to "win the Cold War" and the "fight against disease." In other words, for peace and prosperity, researchers needed academic freedom to pursue research agendas defined by the academic community rather than by industry leaders. In effect, this interpretation helped to institutionalize authority in the academy, creating boundaries around what counted as research problems and who got to solve them.

In technology transfer, the tacit acceptance of the Cold War model began to erode in the 1980s. With falling productivity and stagnant economic growth in a newly globalized competitive environment, many began to question the efficacy of funding university research. As Kozmetsky (1990) characterized the situation, the traditional paradigm—in which industry concentrates on production and universities on

basic research—failed to develop, commercialize, and diffuse technologies fast enough to sustain economic growth (p. 27). Gibbons et al. (1994) pointed to an educated public that demanded accountability of public funding in light of several techno-science failures. The need was for research that had value now, rather than somewhere down the road. In many ways, the value of research as a public good was held up for question.

Since then, the federal government passed legislation to facilitate the commercialization of intellectual property. For instance, the Bayh-Dole Act provided the legal framework for universities to patent and license federally-funded research. Since its passage in the 1980s, the idea has been to infuse the marketplace with academic innovations by removing the legal barriers and providing incentives for academics to transfer their work to the market. More recently, however, federal and state agencies have made money available for academics to work directly with business partners. But in practice such partnerships face resistance. Some have said the resistance to working with universities is that there is too much risk for the potential return on investment (Cohen, 2006). Others pointed to the perception that universities can't act fast enough (Spielman & von Grebmer, 2006), and still others identified differing incentive structures (Davis, 2005), problems associated with intellectual property rights (Grose, 2006), or lack of communication among the participants (Spielman & von Grebmer, 2006, p. 299) as reasons not to work with universities. Many are also critical of university/business partnerships, arguing that the net result is that the public pays twice for research, thereby undermining the public mission of the university. For instance, Lieberwitz (2007) reiterated a common viewpoint when she argued that the focus on the market as a valid or even superior destination for research results changes the view of the university as a public repository of knowledge (p. 61). Lieberwitz cautioned that the social cost of removing academic discoveries from the public domain are high and questioned whether private entities should own and profit from publicly funded research through patents and licenses.

The ISTI came about within this historical background and faced the same questions that have been a part of technology transfer since the early 20th century surrounding the relationships between the university and the corporate sector.

Theoretical Framework

The analysis of the organization's discourse draws on Kenneth Burke's theory of key terms and terministic screens. As Burke (1966) argued, our terminology directs, reflects, and selects reality. Terministic screens filter the ways in which we perceive, record, and interpret an event. As Burke (1966) pointed out, "we must use terministic screens, since we can't say anything without the use of terms; whatever terms we use, they necessarily constitute a corresponding kind of screen; and any such screen necessarily directs the attention to one field rather than another" (p. 50). The terms of a discourse act as a lens that frames a field of observation and directs an interpretation of reality. For Burke, reality is a result of our interpretive frameworks that tell us where to look, what to observe, and what counts.

But such an interpretation of language does not presume that language determines our actions or that humans have no agency. As Crusius (1999) said, Burke "is unwilling to part with the individual moral agent because that would mean parting with the rhetor. If language amounts to strategies for encompassing situations, there must be a strategist" (p. 85). As strategist, the rhetor negotiates a point of view, or what Burke (1954) called "orientation," a "bundle of judgments as to how things were, how they are, and how they may be" (p. 14). Our orientation is about our sense of relationships and the

expectations surrounding conduct and what is proper. Terministic screens, then, are a matter of appeal, of aligning and articulating one's interests and expectations in cogent terms and as part of a set of relationships.

The terminology in this case embodied a strategy for orienting a position in relation to other people and groups, stabilizing the discourse to invite participation from various audiences. Embedded in the terminology is an articulation of the rhetorical situation or as Bitzer (1968) said, the exigences, constraints, and audiences.

“In the best of all possible worlds, there would be communication perhaps, but no rhetoric—since exigences would not arise. In our real world, however, rhetorical exigences abound; the world really invites change—change conceived and effected by human agents who quite properly address a mediating audience” (p. 13).

In many ways, terministic screens function to stabilize the situation and the exigencies that abound by acting as a filter for the ways in which we see and understand the change and uncertainty in our world, revealing, as Burke (1966) would say, the “notable distinctions in texture, and even form” (p. 45). As a strategy, these terms are persuasive when that selection of reality invites cooperation from a mediating audience.

As a strategy, the terms in this case study had to appeal to several audiences at once. Although this case study is a localized example, the analysis of its terms point to the change and uncertainty in the ways in which technology transfer is currently defined and mediated by multiple audiences.

The Case Study

In the fall of 2006, the Information Technology and Sciences Institute received a \$1 million state grant in start-up funds to develop an institute. Their proposal came in response to a research study funded by the state's Department of Economic Development, which identified collaboration between universities and industry as a key factor to stimulating the state's economy. As a result, the state made funds available for platform grants. The director of ISTI submitted a proposal outlining a vision for the new institute with four other IT-related university research directors signing on as co-principal investigators. In the proposal, the PIs outlined two goals: to make the university more competitive for large research grants from public and private sources and to increase IT-based economic growth in the state. They would meet those goals by collaborating and co-locating university and industry leaders in a single space.

The ISTI had an advisory board that included industry leaders from a handful of Fortune 500 companies as well as several entrepreneurial start-up companies. It was hoped that the corporations would eventually commit to research memberships, securing a space for its members to work alongside other industry and university leaders. But ISTI struggled to move this idea forward. During my study, there was much internal disagreement over the mission and purpose of the organization. In July 2010, the organization disbanded.

Methods

I conducted a case study analysis of ISTI as a bounded system with a set of problems and relationships that exemplified the many issues and concerns in the field of technology transfer. As defined by Stake (1994), a “case” is a set of practices that have boundaries and working parts. And although the parts may not always work well, they are part of an integrated system that we do not sufficiently understand. Yin (2009) furthered this definition by describing the “case” as a place to examine contemporary events within a real-life context when the investigator has little control over events (p. 2). As such, the purpose of this type of study is not to generalize the results beyond the case, but to develop an in-depth understanding of the complexities and issues that surround it, looking for common themes that may transcend the case and help to develop theories within a field of study (Creswell, 2007, p. 75 and Yin, 2009, p. 38).

My study was bounded by time and by a single case. Consistent with case study design, a variety of techniques were used to explore the ways in which those involved in ISTI made sense of and articulated their understanding of the organization. Data were collected through participant observations, interviews with the people who were associated with the organization, and the documents that were helping to will this organization into existence.

In the data analysis, key terms in the discourse were analyzed, following Burke’s method known as cluster analysis to uncover the motives or cultural principles that were grounding the organization. As Burke (1941) explained, cluster analysis reveals “what goes with what”—what kinds of acts and situations go with the terms of the discourse (p. 20). For Burke, this kind of analysis allows us to uncover the cultural principles that are shaping and shaped by the discourse. Cluster analysis of key terms opens up a way to examine the how people identify and articulate their position in a discourse.

In this study, these procedures for cluster criticism were followed:

- Formulated research questions about the rhetoric of technology transfer and selected a rhetorical artifact for analysis
- Identified key terms
- Charted the terms that clustered around the key terms
- Analyzed the clusters, looking for patterns and themes that helped to explain the case.

In suggesting methods for conducting cluster analysis, Foss (2004) outlined two ways to identify key terms: frequency and intensity. In my case, frequency had little to no bearing on my choice of terms. Although frequency is often a useful starting point in a grounded approach to understand the shape of the discourse, in this case, the selection of terms followed a theoretical approach to coding, drawing and building on theory when examining data. Therefore, I looked at the intensity of terms, words that were central to my research questions and informed by my theoretical frame. For instance, economic development has been widely used in the literature about technology transfer to justify the call for increased partnerships between university and industry leaders. I was interested in the ways that term was figured as a cultural principle, particularly in relation to ideas about the public good—a concept that has historically situated research practices. These terms allow us to examine the way the terms are negotiated in the discourse and the ideas that “clustered” with those terms.

Throughout my study, I read and reread the data, transcribing my own field notes and interviews, reviewing the transcriptions and other documents for emerging patterns and themes surrounding the use of key figures. As Miles and Huberman (1994) suggested, text segments can be read and analyzed on different levels. Descriptive codes identify predefined areas of interest, such as key terms or figures in the discourse. Interpretive codes add a layer of meaning—in this instance, charting the terms that surround the key terms. And, pattern codes consider how themes and concepts identified at the descriptive and interpretive level relate across the dataset. In my work, I looked at the rhetorical grounding of specific rhetorical figures as a way to theorize about the ways language constitutes technology transfer as a dialectical set of positions that is always being constituted by its participants.

Results

From the very beginning, the ISTI had to establish a rhetorical ground for its purpose—it had to explain why it was needed, who would be involved, and what would make it a success. The rhetorical grounds for its success were articulated early on in its proposal to the state for start-up funds. That proposal was firmly grounded in the language of economic development, which is no surprise given the needs and values expressed in the RFP. In the RFP, [the state] invited proposals from universities for infrastructure and platform projects to implement the recommendations from the [consulting firms] study. Core criteria to evaluate the potential of the proposals included:

- Creation of new [state] businesses or jobs based on [university] technologies
- Increased sales or profitability of [state] companies developed from [university] technologies
- New [university] technology licensed to [state] companies
- Increased research funding from non-state sources
- Clearly identifiable benchmarks

In interpreting these needs, the ISTI wrote a proposal outlining a potential solution to its funder. In that proposal, they outlined a version of the rhetorical situation, naming the problems, an audience, and the constraints. For instance, the start-up proposal framed the situation as a set of barriers that needed to be bridged, following a problem/needs/solution framework for describing the purpose of the new institute:

“Today there are substantial barriers to commercialization of research. Faculty are generally consumed with management and operation of their research enterprise and the process of securing funding to support those efforts. Industry is focused on profit through the sales of products and services—increasingly research and development investments are focused on opportunities that will generate profit in the near term. Start up companies in particular face a range of challenges from funding sources to accessing experienced business resources. The result is a chasm between research and application that is not easily crossed.”

In the above quote, the PIs identify two “barriers” or problems in technology transfer. First, faculty and industry leaders have different goals and interests—for the former, the focus is on managing and operating a research program and, for the latter, generating profits. The second problem has to do with access to resources—both the capital and know-how to take new ideas to market. The result is a “chasm” between research and application, suggesting that there is very little interplay between the activities taking place at the university level and those in industry. The stated problem in this quote is a lack of movement from one entity to the next or a lack of applied results.

Furthermore, in defining the rhetorical situation, the PIs characterized the exigencies or need for the new institute in relation in terms of economic development:

- “The primary conclusion of the [state’s report on economic growth] is that [the state’s] competitiveness in the increasingly IT-enable global economy is critically dependent on our ability to take better economic advantage of the research strength in our universities.”
- “We now have a unique opportunity to leverage these resources to dramatically enhance the effectiveness of our research and their impact on [the state’s] IT-based economy.”
- “[The university] has a tradition of fostering IT-based economic development spanning start-ups to long-term relationships with established regional industries.”
- “[The university] has had success as an engine of IT-related economic development. However the challenges we face in the coming decades as well as their potential economic impact, are increasingly complex in nature, spanning disciplinary and technical boundaries.”

In the above quotes, the PIs offered an interpretation of the situation and the needs of its potential funder. In doing so, they explicitly connected the value of research to the state’s need for economic growth, drawing on past successes with business relationships and expressing the need for collaborating across traditional disciplinary and institutional boundaries. In the proposal, the PIs summarized the solution as follows:

“In short, ISTI offers the bridge that is currently missing between academic IT research that is the engine of innovation and industry-led commercialization and entrepreneurial activity that is essential for successful IT-driven economic development in [the state]”

In this case, the solution was a “bridge” to close the gap between research and application. It would do so by providing the physical infrastructure for collaboration among university and business leaders with the idea that close proximity would create new connections and opportunities. As a physical and rhetorical ground, the new institute was justified in relation to the broader goal and interest in economic development.

This vision translated to the press, with news articles that emphasized the economic development aspect.

- “These research projects will help the state reach its goal of creating high-wage, high-growth industries,” said [the university’s] vice president for research and economic development. “The projects also help [the university] achieve its vision of putting science and technology to work. One of the university’s priorities is to translate discoveries into economic impacts for the state and the world.”
- “The institute was launched with money from a state effort to boost economic development in information technology, the biosciences and advanced manufacturing. A study by an [outside consulting firm] recommended the state develop those industries with the help of university research”
- “Starting the ISTI has been a two-year process that began in response to a [consulting firm’s] study that suggested information solutions as one of three key industries [the state] should focus on for economic development. [Its director] said as a group of professors discussed how to

support the report's goals, they discovered that [the university] had a lot of strengths that spanned a wide variety of IT issues, but that its existing IT research centers weren't working together or engaging the business community as much as they could."

In each of these instances, the purpose of the new institute was tied to a broader goal of economic development in the state via university/business partnerships and collaboration across disciplines. Such a vision stands in stark contrast to the traditional model that emerged following World War II, a model that was built on the idea that academics needed to be left alone to do research for the security and health of the nation. Both justifications offer a rhetorical ground for action that defines who and what belongs in the field of competing interests. Both create a terministic screen that directs the attention one direction and not the other. While this proposal is a response to a grants program to develop economic development in the state, it is also marking a shift in the ways in which we talk about value of academic research. Defining the new institute in terms of economic development provides a new way to quantify and answer the question of who benefits. For instance, the proposal included the following metrics for measuring its success and value:

"After five years, the ISTI will have:

- Directly facilitated at least 6 new IT-focused startup companies in the state
- Established 3 new major research collaborations with established companies
- Increased IT research expenditures at [the university] by 40 percent compared to FY07
- Established research and commercialization relationships with [other state universities]
- Secured a major (multi-year, multi-million dollar) federally supported IT initiative"

Such metrics for success define the institute's value in tangible, concrete ways. In doing so, the barriers in technology transfer are defined in relation to productivity and commercialization rather than those of discovery and the advancement of knowledge. Each screen constitutes a strategy for positioning one's self and one's program.

In the interviews, I asked about the vision and what makes the ISTI different from other research centers and institutes that work with industry and corporate partners to extend and apply research results. The responses included the following:

- "We hope that it offers a new paradigm for the way we interact with industry.... The goal is to try to get to the point where we are helping and working with industry more closely on their problems and taking things a little farther than just the pure research stage. We tend to leave things. Once we're done with the research, we tend to walk away from it. Here the goal is to continue to extend that farther and into a more entrepreneurial type of mode" (Daniel).
- "The vision for the space was that it would be a place where big companies, faculty, graduate students, start-ups, all together, working in the same place, not necessarily together, but the sort of the water cooler talk [where] you find out what people are doing and it causes a synergy to happen" (John).
- "The thing is for companies to put problems forward to share because the world is so sophisticated they have to have a quick answer. ISTI brings players together. In the past, you would never share problems, but now they have to" (Kay).

As these three responses illustrate, the vision for the new institute was situated in relation to the bridging the gap between the big companies, the start-ups, faculty, and graduate students. This "new

paradigm” was different for two reasons. First, it shifted authority for who belongs in the academic research space to include company leaders. Second, it redefined the action within that space. As a strategy, it physically brought these new actors together for the purposes of working on problems that companies have. As John noted, the goal was to create “synergy” in which the combined, cooperative action would benefit generate research and economic growth.

But one of the problems and an unforeseen constraint to this mission was the need to define the value of working across disciplinary as well as university boundaries. They had to convince several faculty members involved in the project to move forward. In the interviews, I learned that several faculty members were not comfortable with this vision of the organization. My participants made the following comments in reference to this discomfort:

- “Not all faculty are comfortable with the economic development piece of the mission because they have had no experience with it. They have nowhere to have experience with it unless they have gone through it themselves. That makes it a little more difficult in some sense to pull the economic development piece off” (Daniel).
- “I think this whole economic development piece is something that most of these [vice presidents of research] aren’t necessarily comfortable with. They are VPs of research and they have to deal with economic development so they have to make the best of it” (Mark).

For the ISTI, one of the problems with this model of technology transfer was a lack of experience in working with “economic development”—many academics have followed the traditional road toward working on research projects and publications that would secure tenure. Moreover, the role of companies in setting the research agenda was questioned. As Kay noted, several faculty felt that industry members “should not drive the purpose or mission of the ISTI” (interview). Such reservations speak to the issues involved in this new justification for talking about the value of academic research.

So what will become of this new justification for financing academic research? In my interview with a science reporter for the university, he speculated that the “economic development” piece may not go away, saying the following:

“Part of it is, if [the university] can be an engine of economic development, can convince state house leaders and the governor that it is an engine of economic development, then that can lead them to provide more support. You know graduating 10,000 undergrads every year may not do it anymore so you have to be, so we’re doing this other thing—building jobs, building industries—that wasn’t here before” (Mark).

As John noted in his interview, “We’ve got to be able to appeal to the bean counters.” As an appeal, the solution offered by John and the other PIs in the proposal was persuasive because it amounted to a cooperative interaction between [the state’s] need for economic development and a new way to fund research programs for academics. As this case study shows, the appeal to economic development worked to bring some audiences together, but failed to capture the interests of another key audience that in large part constituted the organization as a whole.

Discussion

The ISTI's proposal constituted an act of interpreting the rhetorical grounds for creating a new model for technology transfer. The preceding analysis isolated one aspect of that definitional moment: the use of the term economic development to outline the need and vision for the new institute. As a terministic screen, economic development represented a strategy for defining the problems and solutions in technology transfer and functioned as a way to encourage cooperative interaction from its audience. It also presented a new justification for research programs, marking a shift from a post-World War II public good model to one of economic development. This new terministic screen represents a new orientation for defining technology transfer and for organizing the actors and actions that constitute its practice.

In this case study, the terms surrounding economic development allowed the organization to quantify the benefits of academic research in concrete terms, allowing its leaders to appeal to the interests and needs of its funders. As a terministic screen, economic development was one strategy used to interpret and stabilize the exigences, constraints, and audiences involved in the discourse. But the terms surrounding economic development were also contested—several faculty members were uncomfortable with this definition of technology transfer and the vision for success that definition entailed. Although ISTI is one case, this study underscores technology transfer as a set of relationships that are always contested and negotiated. As Burke (1966) said, “In brief, much that we take as observations about ‘reality’ may be but the spinning out of possibilities implicit in our particular choice of terms” (Burke, p. 46). In technology transfer, the terminology is a selection, deflection, and reflection of reality in which key terms function to stabilize a vision of reality.

The terms that defined technology transfer as economic development functioned in this case to stabilize a vision for the kinds of relationships and actions involved. But as this case demonstrates, these terms are also destabilized and negotiated. As such, terministic screens are not deterministic, but are strategies for orienting a position and stabilizing a discourse in a field of competing positions and visions long enough for people to get work done.

Implications & Conclusion

In technology transfer, the relationships between university and business leaders represent a rhetorical space that is under constant revision and negotiation. As such, the terms used to describe that space represent strategies for stabilizing contested ground. This case demonstrates how economic development and the terms that cluster with it embody a strategy for defining value and success in technology transfer.

Such terministic screens are a critical consideration in business communication, particularly for university and business leaders who are asked to create partnerships as a way to stimulate economic growth. This case points to a key issue in technology transfer for universities, namely whether knowledge is always a commodity to be bought and sold. Questions surrounding the value and worth of knowledge production also raise questions about how well universities articulate and express their value to different audiences with different needs. Although this study reports the results from one case, it points to the ways in which that discourse is changing and destabilized.

In addition to the findings of this case, this study has implications for research in business communications and the inter-relationships of the university and outside partnerships. First, the increased pressure on universities to develop partnerships with business leaders provides a rich data source for looking at how varying interests are embodied and negotiated in terminologies. Such an analysis can allow us to take a critical look at how these partnerships are valued and by whom. Second, the pressure for university/business partnerships calls for more research that examines the ways in which universities articulate the value of its work, traditional and non-traditional, to various audiences. This study supports other research that looks at how language constitutes the value of technology transfer, acting as a cultural agent that both stabilizes and destabilizes the discourse because its terms are always under constant interpretation and negotiation. Finally, this research confirms the power of rhetorical analysis to uncover the implicit assumptions within a discourse and to examine the constant interpretation and negotiation of its terms.

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