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THE LOGIC OF OPPORTUNITY: A FORMAL ANALYSIS OF THE UNIVERSITY OF CALIFORNIA'S OUTREACH AND DIVERSITY DISCOURSE *

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John W. Mohr
Department of Sociology
University of California, Santa Barbara

Michael Bourgeois
Department of Sociology
University of California, Santa Barbara

Vincent Duquenne
Centre National de la Recherche Scientifique (CNRS)
Paris, France

ABSTRACT

Since 1995, the University of California has been prohibited from employing affirmative action principles in student admissions. In response to this constraint, the UC has sought to pursue a number of other avenues for promoting the selection and retention of a diverse student body. In this paper we look at how officials and staff within the UC system have sought to develop an alternative rationale for managing the categorical problem of identifying types and classes of applicants along with strategies of action that stay within legally allowable frameworks. We argue that a new framework for organizational action has emerged (a cultural logic) which is made up of a dually ordered system of identity categories and institutional activity categories. We use Galois lattices as a way of unpacking the dynamic emergence of this new organizational logic.

In July 1995 the Regents of the University of California approved SP-1, a directive that suspended the use of affirmative action principles in the student admission process. The board followed the lead of Ward Connerly, a conservative African American

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businessman appointed to the Regents by the (Republican) state governor. The Regents also passed SP-2, prohibiting the use of affirmative action principles in other arenas of university life such as faculty employment, and a year later state voters approved Proposition 209, a public ballot initiative that transformed the regents' mandates into state law and applied these principles to all public universities, colleges, and state agencies. In 1998, the ban on affirmative action went into effect and fewer students of color were admitted into the nine campus University of California (UC) system. The percentage of African Americans in the incoming class dropped from 3.5% in 1997 to 2.8% in 1998, while Chicano/Latino admits dropped from 13.2% in 1997 to 11.9% in 1998. Some campuses were especially hard hit; the percentage of African Americans in the incoming class at UC Berkeley dropped from 6.8% (in 1997) to 2.4% (in 1998) as Chicano/Latino admits went from 15.4% (1997) to 7.6% (1998).

Anticipating these effects, as a part of the SP-1 initiative the Regents had directed the UC Office of the president (referred to as UCOP) to develop alternative mechanisms for preserving the ethnic, racial, and gender diversity of the student body. Drawing upon repertoires of organizational activities that were available and familiar, the Regents established a high profile commission — the UC Outreach Task Force — which was charged with the task of exploring how to shift the university's diversity efforts to a field of organizational activity known as Outreach.[1] These programs employ university personnel and resources to interact with and, hopefully, to influence K-12 public schools and students. The ultimate goal is to increase the probability that a diverse body of students will be able to successfully compete for admission to the UC. In the language of industry analysis, these are organizational activities directed toward managing the flow of upstream resources — raw materials for the production process.

The Final Report of the Outreach Task Force (released in July 1997) drew extensively on social scientific research to demonstrate the need for active intervention in the public school system. The recommendation was for a significant increase in resources to support the university's outreach efforts. UCOP responded enthusiastically; since 1998, nearly $350 million in state money has been used to fund UC outreach programs.[2]

This was not a new field of activity. Some form of outreach work has been a longstanding concern of the university. For decades, cadres of UC personnel have been charged with the task of encouraging the best applicants to apply to and enroll in this university rather than a competitor institution. More recently these programs have also been tasked with finding ways to nurture applicants who might not apply to any university but who fit a desirable profile and contribute to the diversity of the student body. This mandate has also come from other areas of the organizational field. The

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[1] "The Task Force is comprised of 35 members including representatives from the UC Board of Regents; faculty, staff, and student representatives from all UC campuses; representatives from business and industry; representatives from the state's major educational sectors, including K-12, California Community Colleges, and the California State University; and officials from state of California agencies, including the California Postsecondary Education Commission and the California Department of Education" (Outreach Task Force Report).

[2] In 1995-96, the combined UC and State of California contributions to UC outreach activities was $32.6 million. In 2000-01, this amount had increased by more than five times, to $176.1 million. This figure does not include the funding for UC outreach work by other sources (federal and private foundations) which added another $80 million to support these efforts, bringing the total to more than a quarter of a billion dollars in 2000-01 (UCOP Press Release, 2002).

federal government actively seeks to facilitate the educational opportunities of underrepresented students. The diversity requirements of federal grant-making agencies (often focused on turning undergraduate students into graduate students) have had an especially innovative and visible effect on campus outreach proclivities. Private foundations have also been quite active in this domain.

Still, the new initiatives have been important. The most far-reaching and perhaps the most radical recommendation of the Outreach Task Force was that each UC campus develop a set of intense working relationships with 4 or 5 public school districts in their vicinity. Schools were to be selected on the basis of their poor performance in sending students to the UC. These new relationships, dubbed the UC Partnership school program, were intended to double the number of UC eligible students in each school district by 2002.[3] This is an especially instructive program because it was established within the frameworks of the new classificatory guidelines and, indeed, was intended to serve as a model program for a post-affirmative action diversity policy.

The central dilemma in these programs is that racial, ethnic, and gender diversity continues to be fully embraced as a goal for student admissions. As the Task Force makes clear, the key distinction is between "ends and means…While rejecting racial, ethnic, and gender preferences in admissions as a means for achieving a diverse student body, SP-1 nevertheless upholds the general principle that the University should strive to be inclusive and to reflect the diversity of the state it serves" (OTFR). While noting the importance of economic inequality in determining the likelihood of achieving UC eligibility, the Task Force Report also emphasizes the inadequacy of social class alone to explain the differences in competitiveness among students of different racial and ethnic backgrounds. Here the general notion of "educational disadvantage" is introduced as a means of encompassing the broad range of factors that lead to differences in students' college competitiveness. The Task Force Report defines disadvantaged in this manner:

> the term "disadvantage" or the phrase "disadvantaged circumstances" is defined broadly to include not only economic forms of disadvantage such as low family income, but other forms of educational and social disadvantage as well, including but not limited to: attending a school with a limited college preparatory curriculum; being the first generation in one's family to attend college; residence in a community with low college-going rates; enrollment in a school with below-average SAT/ACT exam scores; and/or belonging to a group with below-average UC eligibility and enrollment rates. (UCOTF)

As any recent member of a UC admissions or fellowship committee can attest, the distinctions outlined here foreshadow a new and more complicated discursive situation for university personnel in a post-affirmative action era. The words and social situations

[3] The Task Force Report specifies that "each UC campus work to increase the number of UC-eligible graduates from partner high schools by 100% -- or the UC-eligibility rate in these schools by 4 percentage points, whichever is greater -- between 1997 and 2002… (and) each UC campus seek to increase the number of competitively eligible students (i.e., students eligible for admission at the most selective UC campuses) from partner schools by 50% -- or increase the competitive eligibility rate in these schools by 2 percentage points, whichever is greater – between 1997 and 2002."

used by the Task Force authors to designate who should be the recipient of these services are not just politically charged terms or categories of legal action, they are also discursive mechanisms that facilitate organizational behavior.

Organizational fields can be thought of as arenas of social life that are focused upon the enactment of particular kinds of institutional activities carried on through the conduct of a set of organizational actors. To implement these activities, organizational personnel within a field share communication with one another and with key organizational agents within their environment, construct systems of taken-for-granted understandings and standardized procedures for producing organizational action, evaluation, and resource allocation. As the new institutionalists have emphasized, the foundation of these institutional systems are repertoires of communicative activities that rely upon the use of empirically observable vocabularies of symbols employed in the service of generating mythical narratives (Meyer and Rowan, 1977). Scholars in this tradition have developed methods for tracking the rise and fall of symbolic activities within organizational fields and of showing the impact these communicative activities have upon organizational behavior (Meyer, Scott, and Deal, 1983; Dobbin, Edelman, Meyer, Scott, and Swidler, 1988; Dobbin, Sutton, Meyer, and Scott, 1993). Less attention has been paid to the discourse systems themselves — what they are, how they work, and what they mean.

Our goal is to take some measure of the discourse system that operates within the organizational field space of those UC agencies charged with conducting the activities of student outreach. Unlike much of the work in the new institutional tradition, our emphasis is on the structure of the meanings employed by personnel who are charged with doing this work. Where the institutionalists have sought to find the primary discursive similarities that link organizations in a field together, we want to know about the meaningful differences that occur within organizational discourse. What words do personnel use and how do they use them when they communicate with one another and with key agents in their field? We believe that this discourse system can be studied empirically by formally analyzing how these organizations talk to one another.

Discourse Analysis and the Institutional Logic of a Field

Organizational discourse systems are built upon classificatory logics that serve to facilitate organizational behavior. Following "practice theorists" such as Pierre Bourdieu (1977) and Anthony Giddens (1984), Friedland and Alford (1991) contend that organizational fields are constructed around "institutional logics" which allow organizational personnel to make sense of what goes on in the field and helps orient their activities in meaningful ways. They define an institutional logic as "a set of material practices and symbolic constructions" which are tacit, deep-level frameworks socially constructed and shared. Friedland and Alford argue that to understand the activities that go on within an institutional space it is necessary to understand the institutional logic that is operating there. We believe that outreach personnel are oriented toward an institutional logic which provides shared systems of understanding about what they are doing, who they are doing it to, and why. Following Friedland and Alford we focus on two inter-connected domains of meaning.

One component concerns the set of understandings that these organizational agents employ to manage the representational work of categorizing potential applicants to the University of California as recipients of outreach services. This is a classification system that is oriented to and draws upon broader institutional frameworks of social identity. It is with respect to this system of classifications that university employees are increasingly confronting the new discursive situation alluded to earlier. The politics of affirmative action have led to legal constraints on the use of specific social classifications—racial, ethnic, and gender categories—in certain types of organizational activity. Other designations (other social identities or types of administrative classifications) are needed to replace those that were lost. Given that the proscribed identity categories are still legitimate in specifying outcome measures for valued organizational goals, however, it seems unlikely that the distinctions will simply be erased from organizational memory.[4] Rather we might expect to see other more abstract, more generalized (some might say more euphemistic) designations increasingly brought into use. One way to frame the interpretative task of our work is to ask what identity categories will serve to fill these holes in the meaning structure?

The second system of meanings has to do with the set of activities that these organizations engage in — the things they do when they do things to the people classified by these social identities. We focus on a series of organizational practices or technologies that these organizations describe. These practice discourses are also structured according to a set of meaningful classificatory distinctions. Organizations do different kinds of things and these different kinds of things are generally understood to be of certain types. Organizational agents share talk with one another about what they do and our interest is in analyzing that talk so as to be able to find out what the meaningful distinctions are that operate in this discourse stream.

We have three further theoretical concerns about the analysis of institutional discourses—the level at which discourse occurs, the degree of its institutionalization, and the duality which links these classificatory systems together into a common logic.

First, it is important to specify what level of institutional discourse one is concerned with. Friedland and Alford (1991) focus on a deep structure of shared assumptions. Our focus is also at this level. We ask — what are the classificatory distinctions shared by agents within this field space that facilitate organizational behavior? Our concern is thus with the public discourse system, institutional talk that is openly shared. This is the discourse system that organizational agents use when they interact with other agents in defining mission statements, specifying resource allocation requests, making evaluations of legitimacy, and so on. There are other kinds of discourse systems in the field as well. There are, for example, discourse systems that are privately shared by individuals within the organizational structure who are charged with the task of actually carrying out organizational activities (cf. Lipksy, 1980). Another type of private discourse is employed by individuals who are subject to the actions taken by organizations within a

[4] It also seems unlikely that existing repertoires of understanding will simply disappear given the inherent inertia of collective representations, as well as the degree of overlap with other institutional domains in which these same categories continue to be both viable and in widespread use. There is also the question of disagreements within the organizational community. Many university members continue to be committed to the goals as well as the methods of affirmative action. For these members of the organizational community, the eradication of racial, ethnic, and gender classifications is likely to be especially complicated.

field (Scott, 1990). These various discourse systems are linked together in a mutually constitutive fashion (the coupling of these discourse systems varies—in some fields the connections are tight, in some they are loose). Our focus in this paper, however, is only on the public discourses that are tied into the deeper logics of the field.[5]

Second, it is important to note that the level of institutionalization of discourse systems will vary. Because our focus is on the set of deep classificatory distinctions that serve to organize organizational activity, we are looking for those meaningful distinctions that are relatively well understood and commonly shared across this institutional space. The extent to which any such discourse system is broadly shared will vary according to the level of structuration within the field (DiMaggio and Powell, 1983). Again, the new institutionalists have been adept at empirically demonstrating variations in the degree of institutionalization of a given discourse space. In any analysis of this kind, one must take into account the extent to which the object of investigation (the meaningful distinctions making up the deep structure which anchors the discourse system) is more or less well institutionalized and thus more or less evenly distributed across organizational sites.[6]

Third, Friedland and Alford (1991) define institutional logics as combinations of symbol systems and practice systems and they contend that neither can be understood in isolation from the other. Indeed, it is the duality of the two systems that is critical, the way that the one is implicated in the other. They describe, for example, how the buying and selling of commodities constitutes a set of practical activities which can only proceed by virtue of a set of shared symbolic constructions which includes the idea of private property. At the same time, the concept of private property would not be intelligible absent a commodified world where market behavior is regularly conducted. Elsewhere (Mohr and Duquenne, 1997; Duquenne, Mohr, and Le Pape, 1998) we have shown that the kind of duality that Friedland and Alford are describing is similar to the idea of structural duality originally described and analyzed by Ronald Breiger (1974).[7]

On the Formal Interpretation of Meaning

We have now used the concept of meaning several times without defining it. In our estimation, meanings have to do with systems of shared understanding that humans deploy and rely upon in social settings. Meanings facilitate the collective construction of social reality and provide for the very possibility of engaging in the sort of practical activities that constitute material existence. Language is critical to the construction and deployment of meaning because talk, which facilitates and enacts the sharing of meaning, is conducted through the medium of language. Language has also been the

[5] We are thus less concerned in this paper about the slippage between what organizations actually do and what they say that they do. It is in some sense better to have accurate data on what organizations say that they do (even if it is untrue) if one's goal is to understand the system of discourse that compels the organizational response to be untrue in the first place.
[6] Mohr and Duquenne (1997) show how variations in the level of institutionalization in a field can be demonstrated through an analysis of the structural coherence of an institutional logic.
[7] Breiger (2000) provides an informative discussion of the ways in which the concept of duality can be applied to these problems of analysis.

key site that social scientists have focused upon as they seek to understand how meaning operates.

Our project draws upon the insights of the structuralist tradition in European social science (see Mohr, 1998). From Saussure (1916) forward one can trace a line of thought that is grounded in the idea that meanings are not intrinsic (inherent in the thing itself) but rather are constructed through systems of difference. To understand meaning one must attend to the way in which elements within a semiotic system are linked together in relations of similarity and difference. Lévi-Strauss was an early and classic interpreter of this lineage. Lévi-Strauss (1949) used his understanding of semiotic theory (drawing on Jakobson) to read the kinship systems operating in traditional societies. He studied how marriage functions as a system for weaving together interpretable systems of kinship relations. He focuses not on the substance of the role itself, but on the way that the role is constituted by its position within a patterned system of relations. Harrison White took up this problem early in his career, publishing a book on kinship algebras in 1963. This was an important connection because it is one of the places where it is most easy to observe a bridging between the two dominant styles of structuralism, i.e., the one that has grown up in American social science under the name of social network analysis and the relational semiotics of the French structuralist tradition (see Mohr, 2000).

Our work represents another kind of bridging effort. We borrow from the formal tradition of network analysis to study the kinds of discourse fields that have been analyzed by French semioticians and Durkheimian anthropologists. However, our path is not so straight and narrow. Our approach to French structuralism is through Bourdieu. That is, we believe that a fundamental failing of traditional semiotic theory was its tendency to treat semiotic discourse as self-contained relational systems. One problem with that approach is that interpretations are not anchored in anything outside the system itself. The semiotic analyses of Roland Barthes are thus susceptible to the very criticisms that Derrida and other post-structuralists have so effectively launched. How is your interpretation any more true than mine? Don't you arrive at your interpretation because you privilege this set of relations over others that could be identified? Deconstructionists have rushed into this gap and filled the air with readings, counter-readings, and anti-readings.

Without claiming to have transcended the inherent difficulties of positivist epistemologies, Bourdieu (1977, 1990) nonetheless argues that a better approach to interpretation can be obtained through a close reading of what people do when they deploy meanings. To understand what is meant, you must see what is done. Like Friedland and Alford who draw heavily on his framework, Bourdieu sees this as a dialectical relationship—neither domain is logically prior or foundational. The doing and the knowing are conjoined and mutually constitutive. You cannot have one without the other. You cannot have an institutionalized system of meanings that operates in isolation from the grounded activities of lived experience. Neither are lived experiences possible except insofar as they are lived in meaningful ways. This brings us back to the problem of structural duality. A key tenet of our argument is that the interpretation of organizational discourse requires attention to the mutually constitutive relationship which inheres between material practices and symbolic constructions. The way to read an

institution is to understand how meanings are deployed in action and actions are keyed to meaningful discursive differences.

Data

In this paper we provide an interpretation of a text containing public statements of 751 organizational agencies and programs scattered across the University of California system that are associated with outreach work. The text is a UCOP directory that was published online in 1995, after SP-1 was passed by the Regents. As such, the statements analyzed here are, in a sense, prior to the effects of SP-1 (which was not actively implemented until 1998). Most of what was published had already existed in public discourse forums which contained statements about what these organizations do and to whom they do it. However, because the directory was assembled after SP-1 (in large part in response to the new policy) we also cannot rule out that some of this discourse was produced quite explicitly with SP-1 in mind. The data might thus be considered to be transitional and we should expect to find evidence that the discourse system is less well institutionalized than it might have been before SP-1.

We take the text (which is about a paragraph in length for each organization —see appendix 1 for a sample), and code, for each organization, whether any of the following social identity categories are invoked—ASIAN, BLACK, LATINO, or IMMIGRANT. We use a content analysis program (written in SAS) to search for a complex set of text strings that we have identified as being representative of these category designations.[8] Table 1 shows a sampling of these text strings. In addition to these specific racial and ethnic designations we also trained our content analysis program to search for several other general identity classifications that were sometimes invoked by these organizations. We looked for text strings indicating that the organizations were designating people in terms of their class or income level (LOINCOME), their residence in an URBAN area, their ethnicity (other than those listed above, ETHNIC), their cultural background (CULTURE), or their use of a primary language other than English (ESL). We also searched for text strings indicating that these organizations were employing more abstract and generalized identity classifications. This included usage of a term indicating MINORITY status, diversity (DIVERSE) or under-representation (UNDERREP).

We also code these organizations in terms of what they do. Seventeen separate organizational technologies are identified (see table 2). These range from the specific and relatively labor intensive work of providing tutors to assist students in their homework to more general strategies such as providing informational meetings in high schools about UC admission requirements.

Following upon our earlier discussion, our interest is in providing an interpretation of these distinctions. We want to know what these categories mean when they are invoked in this context. Our contention is that we can offer a viable interpretation of the meaningful differences that characterize this discourse system by looking for the

[8] The program works by reading through the text in an iterative fashion, looking for successfully shorter strings of text. We use this method to squeeze as much of the linguistic ambigiuty out of the data as we can.

relational patterns of similarities and differences in practical usage. Table 3 shows the frequency with which these identity categories are paired with organizational practices. Reading from the upper left, four UC Outreach programs make public claims about providing students who are identified as "Asian" with mentoring programs. One mentor program makes this claim about services provided to African American students. Five programs describe themselves as providing tutoring services for Asian students. There are a total of 279 outreach organizations (out of the total 751) which both invoke one of these identity categories and employ one of these technology practices.[9] Row marginals refer to the total number of the 279 organizations which invoke a given identity category. Column marginals refer to the total number of the 279 which provide the designated technology. Table four is a binary representation of table 3. Any frequency greater than or equal to 1 is represented as 1 in table 4.

Analysis

Figure 1 presents the ordering of practices which is implied by the binary matrix in table 4. Four of the practices — Mentoring, Presentations, Hands-on Activities, and Study Strategy/Skill Development Programs — are applied to every identity category. These are very generalized outreach technologies that do not help us understand the differentiation among identity categories. Their location is indicated by the "1" at the top of the order and we will not consider them further.

Below this level are three first order (primary) technologies —(e) Summer Programs, (p) Cultural Sensitivity Programs, and (b)Tutorial Programs. The three are discrete in the sense that each is applied to a different constellation of social identities and they are primary in the sense that (excepting the four generalized technologies just described) they are not a subset of any another practice. Below this level, other organizational technologies can be interpreted as variants of these three general programs in the sense that the lower order technologies are applied to subsets of the identity constellations associated with the first order programs. The provision of college courses (f) is below summer programs (e), meaning that all of the social identities who are associated with the provision of college courses are also associated with programs offering summer programs.

This can be confirmed by looking again at table 4 which shows that the provision of college courses as part of an outreach effort are associated with students who are identified by their ethnicity, their cultural background, their diversity, their class background, or their designation as members of a minority or an under-represented group. All of these groups are also associated with the provision of summer programs. In addition, summer programs are associated with categories of African Americans, Latinos, urban students and those for whom English is a second language.

[9] The other 472 organizations also provide outreach services. Some of these organizations are excluded from our analysis because they do not designate an identity category (e.g., they simply claim to provide college information workshops) or the identity category that they do reference is not one that we are interested in here. A large number of these programs, for example, invoke age-specific categories ("7th graders," "young children," etc.).

Figure 1 can help us to begin to understand the meaning of different outreach technologies. It shows us, for example, that programs that provide opportunities for students to develop their levels of cultural capital are rather selective and that students in these programs are also eligible for programs that provide opportunities to work as research apprentices, to take college courses, to participate in summer programs, to compete for special scholarships and awards, and to receive motivational inspiration and cultural sensitivity training.

Figure 2 shows the hierarchical pre-ordering of the identity categories. Class identity (LoIncome) is the most widely embraced identity category and the only category to be associated with every outreach practice. We have placed it at the top of the order diagram indicating that, in a sense, every other identity category is a subset of this generalized outreach identity. Below this are five first-order identity categories—diverse, urban, ESL, minority, and under-represented. Other identity categories (interestingly, these include all of the more specific ethnicity designations) are subsets of these. Some of these associations seem especially intriguing. The category of Latino implies the category of ESL. Ethnicity implies Culture. Culture implies under-representation and minority status. Other structural locations are more curious. Why is diversity set apart? Why are Latinos at a more primary level than other ethnic categories? Why is urban disconnected? The lattice should help us answer these questions.

A lattice provides a means for ordering patterns of information and for representing them in a line drawing (see figure 3). [10] Reading from the top down, the lattice contains the same structural order of practices as in figure 1 (e, p, and b are first-order technologies; f is below e, etc.). A Galois lattice, however, has the special property of representing two orders of information in the same structure such that every point contains information on both logical orders simultaneously. By reading from the bottom upwards, we can thus see the same ordering of identity categories that were visible in figure 2.[11]

Because both orders are projected onto this same lattice structure (the smallest possible lattice in which these two orders can be embedded), every point in the lattice represents the co-occurrence of the set of outreach practices which are above it and the set of identity categories that are below it. For clarity, the lattice is minimally labeled—a practice is labeled at its highest occurrence, an identity is labeled at its lowest occurrence. Hence, the point labeled **Diverse** is the lowest point to which that identity category applies. All points on the lines ascending from that point could also be labeled **Diverse**. Similarly, the point labeled **TUTORS** is the highest point in the lattice to which that organizational practice applies. All points that fall on lines descending from **TUTORS** could also be labeled **TUTORS** as well.

The lattice allows us to go beyond the simple structural analysis of partial order diagrams in two ways. Most simply, we can understand where the domain structure comes from. Figure 1 showed us that **COLGCOUR** is a subset of **SUMPROG**. By

[10] We employ the GLAD (General Lattice Analysis and Designs) software program in our analyses (written and distributed by Vincent Duquenne).

[11] The Identity x Practice 0/1-matrix is generating quite a small lattice with 47 elements as compared with the 2**12 potential elements. This indicates that there are a lot of synonymies between conjunctions of Identities (resp. Practices), which are embedded into the dual ordering of Identities x Practices through the Galois lattice.

referring back to table 4 we were able to see why. The lattice affords us the ability to read this information directly. The lines descending from **SUMPROG** connect to **Black, Latino, Urban**, and **ESL**. The lines descending from **COLGCOUR** do not.

More importantly, the lattice is analyzable in terms of formal structural properties that can be especially useful in rendering an interpretation of these relationships. The most prominent structural feature of this lattice is that it can be decomposed into three linearly ordered "regular intervals" (obtained by what is called an "ungluing decomposition" — see figure 2). The identities and practices within each of these three intervals are exchangeable with respect to the global structure of the lattice.[12] In a sense, these intervals represent a class of structurally equivalent elements that are likely to provide useful clues for understanding the institutional logic that we are seeking to interpret. We will look at each of the three in turn.

The upper interval is defined by a series of general outreach technologies (tutorial assistance, campus tours, summer visitation programs, programs intended to promote cultural awareness and to enhance students' motivations to attend the university) as well as by a set of specific racial and ethnic identities (blacks, as well as Asians and immigrants who share the identical profile). Another useful structural tool for reading the lattice are the "splits" that occur in practice/category pairs. Formally, whenever a pair *practice/category* (*p/c*) is such that both are "irreducible" and that *p* is the highest practice not above *c* while *c* is the lowest category not below *p* in the lattice, the pair *p/c* is said to be "perspective." The pair *Asian-Immi*/SUMPROG is an example of a perspective pair and it is fairly easy to see how it "splits" the lattice (it is easy to trace a line between these two points). The split calls our attention to an important distinction, namely that the identity category for Asians (and immigrants) is associated with all of the generalized outreach programs characterizing this interval, with the exception of Summer Programs. Here it is useful to reflect upon what this technology involves. Unlike the other technologies in this interval, summer programs may be relatively intensive organizational practices. Students are often transported from their homes and brought to the university where they live in residence halls while participating in various kinds of organized activities. What this split tells us is that no UC outreach program provides a summer program that explicitly targets Asian (or immigrant) students. This does not mean, of course, that no Asian students are included in UC summer programs. Hundreds of them do participate every summer. But none of these programs are explicitly identified or defined by their targeting of this category of potential UC applicant. That this is so is not very surprising because this is an identity category that is less likely to be perceived as being in need of such an exclusivity in this domain of organizational activity.

There is a second split in this interval between the technology of tutoring and the identity of African Americans. The logic behind this distinction seems less intuitively obvious. Why would tutoring programs be directed toward Asian Americans but not toward African Americans who, as a group, are surely just as likely to be in need of this category

[12] Formally, identities and practices falling in the same interval are exchangeable regarding the global structure with respect to both lattice operations, namely the sharing of Practices (up) and the sharing of Identities (down).

of assistance? We will withhold comment on this question for the moment because it seems that a better understanding of the overall institutional logic might be required.

The middle interval is the smallest of the three. It stretches between the technology (SUMPROG) and the identity category for Culture. The primary characteristic of this interval would appear to be its role in differentiating between the upper and the lower intervals, where it functions as a structural pivot. The pivot is defined by two splits. The first is the split between Summer Programs and the Asian (and immigrant) identities that we have already described. The second is a split between the general identity category of culture and apprenticeship programs. Apprenticeship is another intensive organizational technology. These programs pair up potential applicants with faculty and graduate students at the university, allowing them to work in an ongoing way as research assistants, often in a lab setting. The goal of these programs is to reach out in an intensive and engaging way and to enable the student to experience the social world of the university on a first-hand basis.

The splits that define this middle interval seem to be critical markers of the system logic. Culture is a pivot point of the discourse system. What culture signifies is not the more generalized construct that sociologists often imply when they invoke the term, but rather the specificities of particular groups as embodied within discrete cultural identities. Thus with the notable exception of Latinos (who we will discuss shortly), no specific cultural identities are located below this pivot point. Instead, the discourse is organized around abstract generalities. At the same time this interval marks the boundary of a shift in the level of intensity of the practice system. Above this interval are general outreach programs, programs that are often provided on a large scale, over short duration, with relatively limited goals. The practices below this interval, on the other hand, are resource intensive programs that seek to effect a more radical transformation in the participants.

We have already specified the general character of the lower interval — the practices are more transformative and the identities are more abstract. It is in this sense the mirror image of the upper level. By looking for splits, we can develop a more precise reading. One important split runs all the way up the lattice between Diverse and TUTOR. This split cleaves the lattice diagonally in two. On the right (below TUTOR) are those practices which are focused on either academic concerns (tutoring and test preparation programs) or family work. To the left (above Diverse) are the rest of the practices that, from this perspective, appear to be largely focused on cultural and social activities. Moreover, when we consider this split within the local context of the lower interval, it also provides some help in understanding what the category of diversity is used for. Recall that this term is invoked in the following kinds of text strings: "diverse ethnic and racial backgrounds," "ethnically and linguistically diverse," "culturally diverse student populations," "multicultural populations." These are references to difference. This is in contrast to the other key abstract terms, under-represented and minority, both of which convey something more than difference -- they also convey disadvantage. Thus the technological split between social/cultural practices and educational/family practices maps onto an identity split between difference and disadvantage.

Another split to consider runs between identity of under-represented and the technology of family work. Working with families is one of the most intensive outreach modalities. It

is intensive in the sense that it requires a lot of resources, but it is also intensive because it is intrusive. These programs seek to educate parents in how to raise and educate their children. While they are probably some of the most effective outreach programs that the UC is involved with, the invasive character makes them somewhat paternalistic. The category of under-represented is used to designate disadvantaged groups who are worthy of special assistance, but the term is not associated with the most invasive and paternalistic practices. That the category of minority *is* subjected to these kinds of interventions suggests part of the conceptual gap between these two terms. The term minority is the oldest category in the domain of outreach. It is a term that harkens back to the roots of the civil rights era, to the race politics of the 1960s and 1970s; it is a term which is a bit dated and a bit clumsy in contemporary discourse. It may well be that part of the difference between these two categories has to do with the complexities of racial and identity politics that have emerged since those years. This legacy has left the more modern designation for disadvantage — under-represented— as a poor fit with these more paternalistic styles of transformational outreach work.

Our last comment on this has to do with the category of ESL. Our reading of the lattice has reinforced our initial perception that in the context of California's politics of race and ethnicity, the category of ESL is primarily used to designate those for whom the primary language is Spanish. The location of the ESL category in the lattice shows that like the category of Latino, there is a special commitment and level of intensity applied to students designated in this way.

Discussion

Our reading of the lattice has enabled us to discern several clear structural features of this discourse system. First, there is a vertical order which separates the logic into three regular intervals. There is a sub-logic (the highest interval) containing the most general technologies and the most specific racial and cultural identities. Another sub-logic (the bottom interval) contains the more focused, more intensive, more transformationally oriented outreach practices and the most abstract, generalized identity categories. Second, the lattice is cleaved diagonally, with more academic and family oriented work towards the right hand side and more social and cultural technologies toward the left. Moreover, the left side of the logic seems to connote a more generalized appreciation of difference, while the right side suggests the kind of disadvantage that makes categories of people worthy of extra assistance. Third, the bottom interval, the arena in which the most intensive, transformational practices are focused, seems to be further split between technologies of intervention that are more or less invasive, more or less paternalistic.

At this point we are better able to consider some of the questions raised earlier about the particularities of racial politics as it applies to this institutional system. Surely one of the most striking features of this discourse system has to do with the differential locations of the identity categories of African Americans and Latinos. Within the interpretative grid that we have just laid out, blacks are associated with less transformative technologies, while Latinos are associated with the most intensive, paternalistic organizational practices. Blacks are connected to the social/cultural side of the logic; Latinos are linked to educational and family work. Blacks are associated with difference, Latinos with worthiness and disadvantage. In this regard it may be significant that although Asians,

like Blacks, are in the less transformative segment of the system, they are nonetheless more like Latinos in the sense that they are also defined by worthiness rather than difference, and associated with education rather than social/cultural work.

In California today, the politics of race and identity are profound and complex. While embracing the virtues of equality and diversity, the passage of SP-1 and Proposition 209 has prevented officials at the University of California from considering the race, ethnicity, or gender of individuals in admissions, funding, or indeed, in any category of organizational service that is deemed to be conferring advantage. The contradiction between these two mandates produces complex and contradictory demands.

In this paper we have sought to bring the formal tools of social science to bear upon the interpretative task of understanding how organizational agents make and consume meaning within such an institutional space. The interpretation of discursive meaning is a critical task for organizational researchers because it is through the understanding of what is said, and what it means, that one can begin to analyze how resources come to be distributed, how organizations come to succeed or fail, and how they come to be founded or dismantled.

By drawing upon a theory of meaning taken from the European model of structuralist theory, and the formal analytic tools of relational analysis taken from social network theory, we have sought to show that institutions and their logics can be read and understood in the kind of precise, formal, replicable fashion that is amenable to the conventions and practices of empirical social science.

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Table 1
Text strings used to recognize identity discourses

ASIANS: Asian and Pacific Americans, Asian Pacific Americans, Asian, Filipino, Indochinese, Korean, Philipino, Vietnamese…

BLACK: African American, African, Africa, Black, Blacks …

CULTURE: cultural backgrounds, culturally diverse, different cultural, multicultural populations, different cultures, cultural heritage, cultural context , bicultural …

DIVERSE: diverse ethnic and racial backgrounds, ethnically and linguistically diverse, culturally diverse student populations, diverse cultural backgrounds, diverse, diversity, multicultural …

ESL: transitioning to literary studies in English, primary language is not English, ethnically and linguistically diverse, English as a second language, primary language is Spanish, non English background, limited English proficiency, language minority, limited English, English learning, bilingual, ESL …

ETHNIC: ethnic and racial backgrounds, ethnically and linguistically diverse, mixed ethnic, multi ethnic, ethnic minorities, ethnic community, Armenian …

IMMIGRANT: recently arrived, newly arrived, recently immigrated, recent immigrants, immigrant, immigrated, migrant, refugee …

LATINO: Mexican American, Latin American, Central America, Hispanic, Chicanas, Chicanos, Latinos, Latinas …

LOINCOME: in the local housing projects, low socioeconomic status, low income, low socioeconomic, lower socioeconomic, low income, lower income, working poor, farm worker, economically disadvantaged, urban poverty, poor, homeless, needy …

MINORITY: language minority, ethnic minority, underrepresented minority, minority, minorities …

UNDERREPRESENTED: underserved populations, traditionally underrepresented, historically underrepresented, underrepresented backgrounds, underrepresented groups, underserved, underrepresented …

URBAN: improving urban schools, inner city, barrio welfare, urban center, urban poverty, urban, gang …

Table 2
Text strings used to recognize practice discourses

a. MENTORS: big brothers and big sisters, role model, buddy, mentors, mentoring, mentorship …

b. TUTORS: academic tutoring, tutorial support, tutoring, tutorial, tutorials, tutor …

c. MOTIVATIONAL ACTIVITIES: motivational lectures, motivational workshops, motivational support, values clarification, motivational activities, motivational presentations, motivational student, motivating office work, further motivated, motivate …

d. APPRENTICESHIPS: engage them in research projects, assistants on faculty research projects, leadership of faculty members, collaborate in a research, research projects with professors, high school research project, with an active researcher, presentation of their work, knowledge to do research, provides research opportunities, student research projects, school research projects, original scientific research, conduct academic research, research interns …

e. SUMMER PROGRAMS: camps during the summer, biology summer course, summer day camp, summer enrichment program, summer science camp, summer residency program, summer camp, summer institute, residential program, summer sessions, residential …

f. COLLEGE COURSES: courses for a letter grade, receive a letter grade, earn university credit, biology summer course, receive college credit, sample college life, courses for credit, undergraduate courses, college setting, residential program, university credit …

g. TOURS: field trip, field excursions, laboratory tours, van tours, tours, tour, visit, visits, visiting …

h. ACADEMIC COUNSELING: academic career and personal counseling, academic and career advising, academic counseling, academic advising, counselor visits, advising …

i. PRESENTATIONS: visit classrooms to talk with students, give presentations, guest lecture, guest lectures, guest speaker, guest speakers, question and answer, presentation, presentations, demonstrations, lecture, lectures, speakers, questions, slide programs, slide shows, displays, exhibition, exhibitions, discussion, discussions, forums …

j. HANDS ON ACTIVITIES: make their own instruments, recreational and cultural activities, view and hold, hands on, rock climbing, ropes courses, tree plantings, activity, activities, kayaking …

Table 2 (continued)
Text strings used to recognize practice discourses

k. STRATEGY AND SKILL DEVELOPMENT: enhance learning skills, leadership development, improve the writing, analytical writing, teaching writing, writing project, homework counseling, homework center, problem solving, study skills, study habits, critical thinking, presentation skills, notetaking skills, time management, reasoning skills, networking opportunities, electronic field trips, world wide web, computer literacy, CD ROM, computing tools, electronic information, home pages, information superhighway, on line, phone lines, web pages, computer, computerized, electronic, electronically, internet, modem, multimedia, skills, strategy, strategies …

l. TESTPREP: test taking skills, test taking techniques, scholastic aptitude test, SAT workshops, ACT workshops, SAT preparation workshops, SAT preparation courses, test preparation …

m. CONTESTS AND AWARDS: annual poster contest, science fair judge, science fair, financial assistance, undergraduate fellowships, award, competition, contest, contests, scholarship, walk …

n. FAMILY WORK: parent support group, parent support groups, student parent conferences, parent education programs, families are encouraged, family can maximize, community family tribal, family members, parent conferences, oriented family …

o. CULTURAL CAPITAL: provides cultural and academic education, cultural social and recreational activities, recreation and cultural activities, cultural recreational activities, visits to the gallery, dance forms, including cultural, cultural subjects, cultural events, artistic cultural, cultural enrichment, gallery lessons, concert hall, major concerts, noon concerts, dance festival, arts festivals, art festivals, baroque festival …

p. CULTURAL SENSITIVITY: cross cultural language and academic development, different frameworks of cultural values, social cultural and economic issues, multicultural and linguistic diversity, racial and cultural tensions, culturally diverse student populations, cultural and academic education, language and culture, culturally compatible practices, cultural influences, culturally infused, sociocultural contexts, cultural awareness, cultural biases, cultural context, cultural studies, cultural sensitivity, cultural diversity, cross cultural, diversity cultural, acculturation process, multicultural classrooms, multicultural, multicultural literature, multicultural issues, multiculturalism, culture, cultures …

q. SPORTS: athletic recreational program, sport skills, physical education, basketball, camping, coach, coaching, gymnastics, soccer, sports, swimming, tennis …

Table 3
Co-occurrence of Identity Strings and Organizational Practice Discourse (Frequency)

	Mentor	Tutor	Motivatn	Apprentice	Supprogm	Colgcours	Tours	Acadcoun	Presentt	Active	Stratg	Testprep	Contest	Famlywk	Cultcap	Cultsen	Sports	TotFREQCY
ASIANS	4	5	1	0	0	0	4	0	1	2	5	0	0	0	0	4	0	11
BLACK	1	0	0	0	1	0	2	0	2	1	1	0	0	0	0	2	0	14
CULTURE	2	1	1	0	4	1	2	1	5	4	6	0	2	0	0	15	0	25
DIVERSE	2	0	2	1	7	1	2	0	9	8	8	0	3	0	1	18	2	44
ESL	2	4	2	0	7	0	5	3	14	18	23	1	5	2	0	18	2	82
ETHNIC	2	2	0	0	2	1	0	1	2	2	2	0	0	0	0	0	0	12
IMMIGRN	2	6	2	0	0	0	2	0	1	2	3	0	0	0	0	7	0	16
LATINO	5	1	1	0	2	0	3	2	2	3	5	1	0	1	0	1	0	32
LOINCOM	5	12	5	1	10	7	4	7	5	11	7	1	1	1	4	2	1	49
MINORIT	10	7	3	3	8	3	10	9	10	8	17	0	7	1	0	4	1	63
UNDERRE	9	6	5	1	11	4	5	8	8	12	8	2	4	0	2	1	0	46
URBAN	4	3	2	1	2	0	0	1	1	8	6	1	0	0	0	2	2	30
Tot FREQCY	29	33	16	7	33	13	23	20	42	51	56	5	16	4	6	40	6	279

Table 4
Co-occurrence of Identity Strings and Organizational Practice Discourse (Binary)

	Mentor	Tutor	Motivatn	Apprentice	Sumprogm	Colgcours	Tours	Acadcoun	Present	Active	Strateg	Testprep	Contest	Famlywk	Cultcap	Cultsen	Sports
ASIANS	1	1	1	0	0	0	1	0	1	1	1	0	0	0	0	1	0
BLACK	1	0	0	0	1	0	1	0	1	1	1	0	0	0	0	1	0
CULTURE	1	1	1	0	1	1	1	1	1	1	1	0	1	0	0	1	0
DIVERSE	1	0	1	1	1	1	1	0	1	1	1	0	1	0	1	1	1
ESL	1	1	1	0	1	0	1	1	1	1	1	1	1	1	0	1	1
ETHNIC	1	1	0	0	1	1	0	1	1	1	1	0	0	0	0	0	0
IMMIGRN	1	1	1	0	0	0	1	0	1	1	1	0	0	0	0	1	0
LATINO	1	1	1	0	1	0	1	1	1	1	1	1	0	1	0	1	0
LOINCOM	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
MINORIT	1	1	1	1	1	1	1	1	1	1	1	0	1	1	0	1	1
UNDERRE	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	0
URBAN	1	1	1	1	1	0	0	1	1	1	1	1	0	0	0	1	1

Figure 1

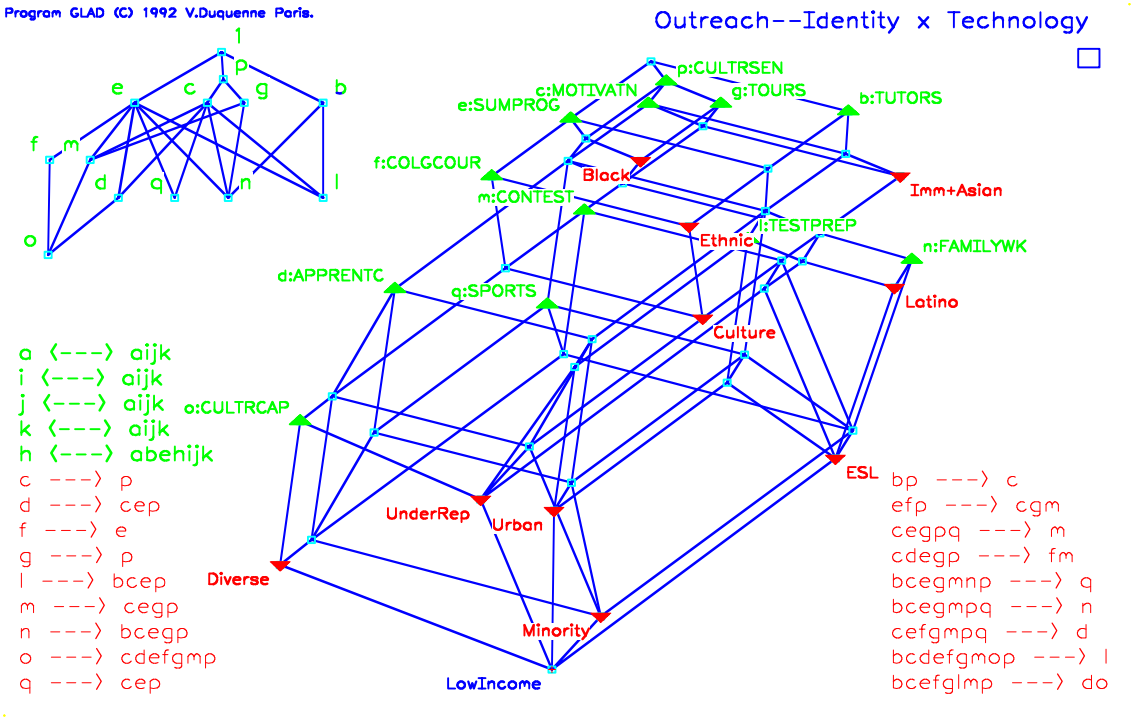


Figure 1. Top left: the preorder of practices. Middle: the dual ordering of Identities x Practices (Galois lattice). Bottom left/right: the canonical basis of implications summarizing all inferences on conjunctions of practices.

Figure 2

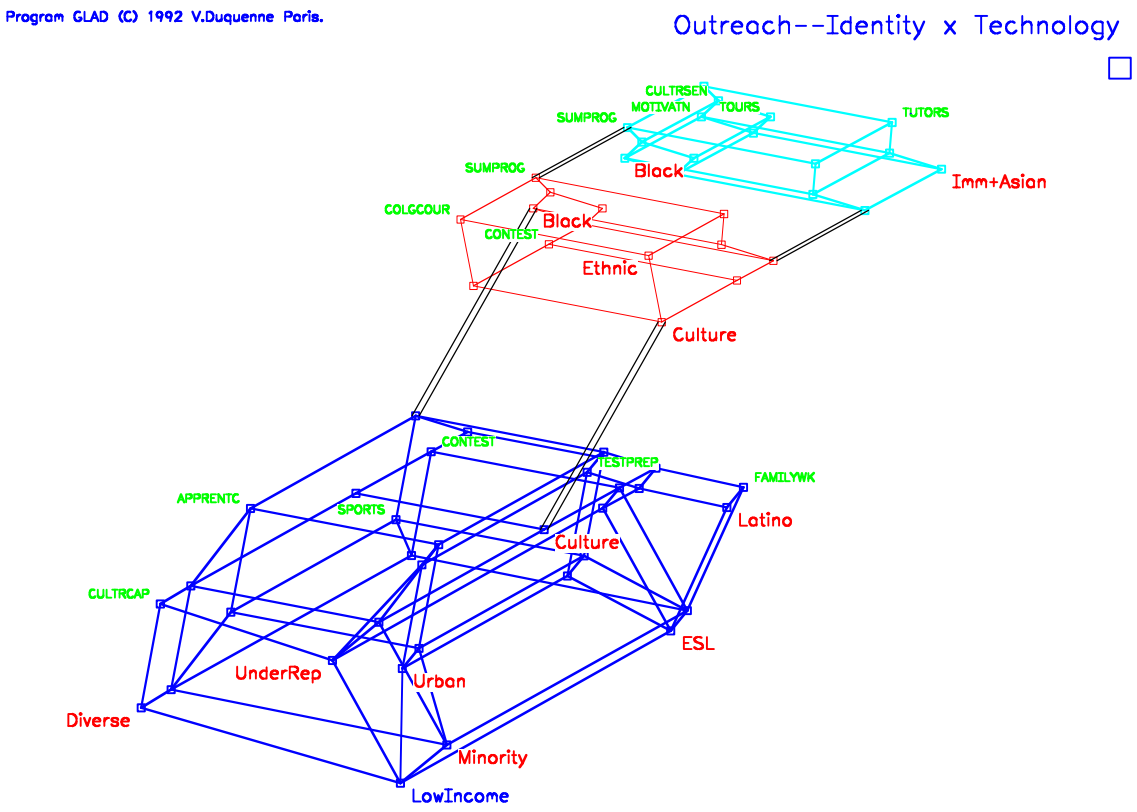


Figure 2. The Galois lattice is decomposed in three linearly ordered intervals, which are "regular" regarding the sharing of Practices and Identities. This macro scaling of the lattice is somehow generated by two splits between Identities/Practices, Imm+Asian/SUMPROG upwards, and Culture/APPRENTC downwards.

Figure 3

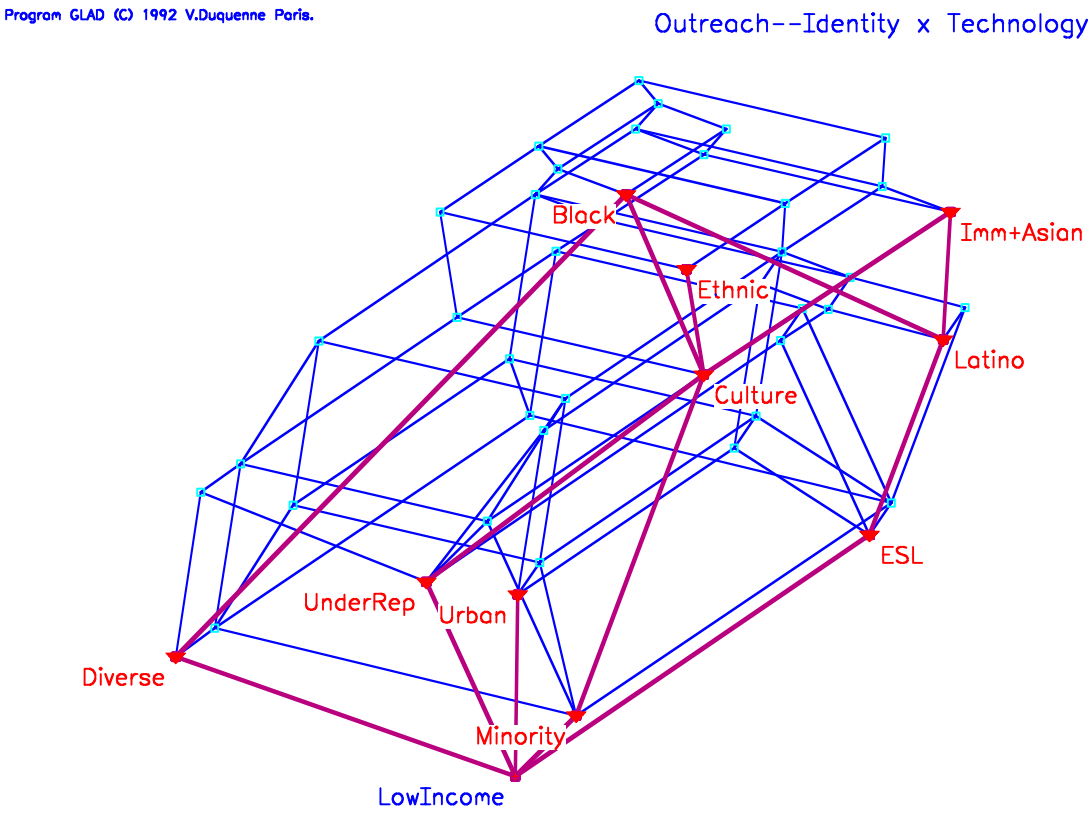
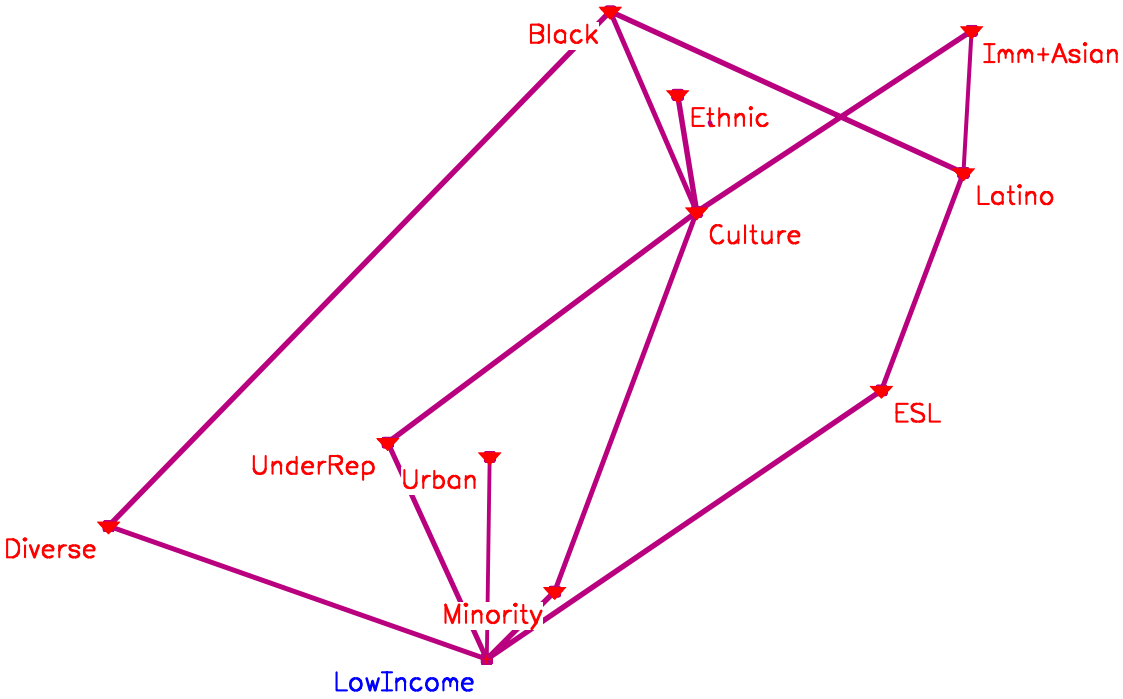

Program GLAD (C) 1992 V.Duquenne Paris.
Outreach--Identity x Technology
Black
Imm+Asian
Ethnic
Latino
Culture
ESL
UnderRep
Urban
Diverse
Minority
LowIncome

Figure 4



Figures 3 and **4**. The preorder of Identities is embedded in the lattice. The bottom shows that LowIncome receives all practices. Culture has a specific role, generating the central regular block [Culture, SUMPROG] together with Black and Ethnic, while the upper regular block is generated by Immigrant and Asian, which are confused. Downwards, the regular block is of higher dimension, since every identity receives a specific subset of practices.