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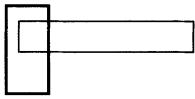
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Telling Identities: In Search of an Analytic Tool for Investigating Learning as a Culturally Shaped Activity

by Anna Sfard and Anna Prusak

In this article, the authors make an attempt to operationalize the notion of *identity* to justify the claim about its potential as an analytic tool for investigating learning. They define identity as a set of reifying, significant, endorsable stories about a person. These stories, even if individually told, are products of a collective storytelling. The authors' main claim is that learning may be thought of as closing the gap between *actual identity* and *designated identity*, two sets of reifying significant stories about the learner that are also endorsed by the learner. Empirical illustration comes from a study in which the mathematical learning practices of a group of 17-year-old immigrant students from the former Soviet Union, newly arrived in Israel, were compared with those of native Israelis.

These days, the term *identity* is prominent in both scholarly and public discourses. The time-honored notion is experiencing an obvious renaissance, with its comeback even more impressive than its original appearance. Once a part of specialized psychological vocabularies, it now enjoys the attention of researchers in a wide range of social and humanistic sciences, including sociology, cultural studies, anthropology, and history. Educational research is no exception. As aptly stated by Diane Hoffman, "Identity has become the bread and butter of our educational diet" (Hoffman, 1998, p. 324).

This article is devoted to reflections on the emerging educational discourse on identity. We focus on the reasons for its current popularity, on its present shortcomings, and on the conceptual work that has yet to be done before the notion of identity can fulfill its promise as an "analytic lens for educational research" (Gee, 2001). The decision to engage in this conceptual debate has been spurred by our own experience. While reflecting on the results of the recent empirical study in which the mathematical learning practices of a group of 17-year-old immigrant students from the former Soviet Union were compared with those of native Israelis (Prusak, 2003), we opted for speaking in terms of identity to make sense of salient differences between the two groups. And yet, after many hours spent in libraries and on the Web, we concluded that we would not be successful unless we came up with a definition of identity more operational than those to be found in the current literature. Lengthy deliberations

led us to the decision to *equate identities with stories about persons*. No, no mistake here: We did not say that identities were *finding their expression* in stories—we said they *were* stories.

In what follows, we precede the more detailed presentation of this definition and its subsequent justification with an analysis of the reasons for our dissatisfaction with other current approaches. Later, we argue that the narrative rendering of identity, while not as "reductionist" as it may sound, leads to immediate theoretical insights inspired by the burgeoning research on human communication. Finally, we use our own cross-cultural study on learning to demonstrate that equating identities with stories makes the notion well suited to its designated role as a tool for educational research.

While doing all of this, we do not aspire to say what has not been already said, or at least hinted at, by others. Rather, we wish to make things more explicit and fully operational, so as to be able to use the language of identity in a responsible way, while following the theoretical consequences of this use all way down. At present such action seems to be urgently needed. Far-reaching ramifications of the identity upheaval may easily be overlooked because our language tends to resist innovations. Because of their transparency, vocabularies and grammars refuse to lend themselves in a timely manner to our attempts to de-familiarize the familiar. To be able to address conceptual pitfalls that are likely to arise when new ideas are already under way but the old ones have not yet disappeared, we have to pause for a moment and turn our attention to the discourse itself.

Defining Identity as Narrative

Why Talk About Identity?

The new prominence of the old concept of identity raises many questions: Why this sudden revival of the long-standing interest? How is the notion of identity different from more traditional terms, such as *character*, *nature*, and *personality*, and how is it connected to other notions, such as *attitudes*, *conceptions*, and *beliefs*?

Why one needs identity depends on the researcher's questions, and these questions may not be the same for a sociologist, a cultural theorist, and an educational researcher. This said, all of these types of research have one overarching theme in common: The focus of the investigator's attention is on human beings in action and on the mechanisms underlying human action. More specifically, the leading queries are as follows: *Why do different individuals act differently in the same situations? And why, differences notwithstanding, do different individuals' actions often reveal a distinct family resemblance?*

It is reasonable to assume that the present tendency to answer the latter question in terms of identity is related to the general sociocultural turn in the human sciences. The notions of *personality*, *character*, and *nature*, being irrevocably tainted with connotations of natural givens and biological determinants, are ill suited to the sociocultural project. In contrast, *identity*, which is thought of as man-made and as constantly created and re-created in interactions between people (Holland & Lave, 2003; Bauman, 1996; Roth, 2004), seems perfect for the task. Together with the acceptance of identity as the pivotal notion of the new research discourse comes the declaration that human beings are active agents who play decisive roles in determining the dynamics of social life and in shaping individual activities.

Naturally, this emancipatory message does not come without a price: The freer we are to make decisions about ourselves and the worlds around us, the greater our responsibility. In sociology and in cultural theory, the notion of identity proves helpful in dealing with issues of power and of personal and collective responsibilities for individual lives. In particular, identity features prominently whenever one addresses the question of how collective discourses shape personal worlds and how individual voices combine into the voice of a community. In this context, the term *identifying* is to be understood as the activity in which one uses common resources to create a unique, individually tailored combination.

The question of the mechanisms through which the collective and the common enter individual activities also lies at the center of educational research on *learning*. Cross-cultural and cross-situational investigations on what and how people know as a result of learning have furnished ample evidence for the existence of cultural differences (on mathematical learning, see, e.g., Lave, 1988; Saxe, 1991; Nunes, Schliemann, & Carracher, 1993; Beach, 1995; Cole, 1996; Stigler & Hiebert, 1999; Ma, 1999). According to John Ogbu (1992), “[w]hat the children bring to school—their communities’ cultural models of understanding of “social realities” and the educational strategies that they, their families, and their communities use or do not use in seeking education are as important as within-school factors” (p. 5). This said, educational research has yet a long way to go before it answers the question of *how* the cultural shaping of learning takes place. While speaking about “cultural production of educated person,” Levinson and Holland (1996) observed that in spite of the recent advances in the research on learning, cultural diversity, and equity, the “deeper, structural context of cultural production of school failure remained obscure and largely unaddressed” (p. 8). The same can be said about the production of success, which was the focus of Ann Prusak’s (2003) study. Her interest in the question of how the broadly conceived sociocultural context affects individual learning was occasioned by the recent massive immigration from the former Soviet Union to Israel.¹ More specifically, it was triggered by a spontaneous, yet-to-be-tested observation that a disproportionately large segment of this particular group of immigrants could pride itself on impressive results in mathematics, and not just in school but also in national and international mathematical competitions.² The researcher began asking herself whether there was anything unique about the immigrant students’ mathematics learning and if there was, how this uniqueness could be accounted for.

We believe that the notion of identity is a perfect candidate for the role of “the missing link” in the researchers’ story of the complex dialectic between learning and its sociocultural context. We thus concur with the increasingly popular idea of replacing the traditional discourse on schooling with the talk about “construction of identities” (Lave & Wenger, 1991, p. 53) or about the “longer-term agenda of *identity* building” (Lemke, 2000; cf. Nasir & Saxe, 2003). And yet we also believe that the notion of identity cannot become truly useful unless it is provided with an operational definition.

What Is Missing in the Current Educational Discourse on Identity?

As preparation for the critical analysis of the current discourse on identity, it may be useful to give thought to certain well-documented weaknesses of widely used motivational notions such as *beliefs* or *attitudes* which, on their face, can compete with *identity* for the role of conceptual bridge between learning and its cultural setting.

Fundamental objections to the notion of belief were raised by many writers, notably by Geertz (1973), who asserted the unacceptability of this concept when claiming that it “[married] extreme subjectivism to extreme formalism, with the expected result: an explosion of debate as to whether particular analyses . . . reflect what [people] “really” think” (p. 11). The issue at stake was that of the essentialist vision of beliefs, one that assumed their discourse-independent existence without specifying where and how one could get hold of them. A similar complaint seemed to underlie Herbert Blumer’s “critical assessment of the concept of attitude as a tool for study and analysis of human conduct” (Blumer, 1969, p. 90). According to Blumer, whatever one’s approach to the notion of attitude, that notion was not operational. That is, it regularly failed to meet the three necessary conditions for the concept’s applicability in research: The available descriptions did not specify what one should look at while trying to pinpoint attitudes, did not say what should *not* be considered as a member of the class, and did not enable accumulation of knowledge. The immediate reason for all these failings was, once again, a certain essentialist tenet, namely, “that the tendency to act [precedes and] determines that act” (p. 90). As in the case of belief, the assumption that an intention (or tendency) exists in some unspecified “pure” form independently of, and prior to, a human action was a dubious basis for any empirical study.

Returning to our theme, we now wish to claim that the notion of identity, although promising and potentially better suited to the role of a “tool for the study of human conduct,” cannot be declared free from similar weaknesses unless its definition is spelled out and proved operational. Such a definition has yet to be found. In the current literature the use of the word *identity* is rarely preceded by any explanations. In the absence of a definition, the reader is led to believe that identity is one of those self-evident notions that, whether reflectively or instinctively, arise from one’s firsthand, unmediated experience. The influential publications by Lave and by Wenger are representative in this respect. Although *identity* is one of these writers’ pivotal ideas, no conceptual preparations precede sentences such as “Learning . . . implies becoming a different person [and] involves the construction of identity” (Lave & Wenger, 1991, p. 53), or “The experience of identity in practice is a way of being in the world” (Wenger, 1998, p. 151).

A few defining attempts that can be found in the recent literature may be a promising beginning. For instance, Gee (2001) says: “Being recognized as a *certain ‘kind of person,’* in a given context, is what I mean . . . by ‘identity’” (p. 99, italics added). Later, the author offers a more elaborate description:

Discourses can give us one way to define what I called earlier a person’s “core identity.” Each person has had a unique trajectory through “Discursive space.” That is, he or she has, through time, in a certain order, had specific experiences within specific discourses (i.e., been recognized, at a time and place, one way and not another), some recurring and others not. This trajectory and the person’s own narrativization (Mishler, 2000) of it are what constitute his or her (never fully formed or always potentially changing) “core identity.” (p. 111)

The motif of a “person’s own narrativization” recurs in the description proposed by Holland, Lachicotte, Skinner, and Cain (1998), even if formulated in different terms:

People tell others who they are, but even more importantly, they tell themselves and they try to act as though they are who they say they are. These self-understandings, especially those with strong emotional resonance for the teller, are what we refer to as identities. (p. 3)

If we said that these are “promising beginnings” rather than fully satisfactory definitions, this is because of one feature common to them all: They rely on the expression “who one is” or its equivalents. Even Gee’s second offering cannot be understood without it: The words “being a certain kind of person” are used in the author’s explanation of the term *Discourse*, which is pivotal to his second definition.³ Unfortunately, neither Gee nor Holland and her colleagues make it clear how one can decide “who” or “what kind of person” a given individual is.

With closer examination, the talk about “being a certain kind of person” may be pushing us into precisely the trap that most of the authors who use the notion of identity want to escape: Through its very syntax, the expression implies that one’s present status is, in a sense, extra-discursive and independent of the one’s actions. Sentences built around the idea of “being a kind of person” sound timeless and agentless. As such, these sentences seem to be saying that there is a thing beyond one’s actions that stays the same when the actions occur, and also that there is a thing beyond discourse that remains unchanged, whoever is talking about it. Such an essentialist vision of identity is as untenable as it is harmful. It is untenable because it leaves us without a clue as to where we are supposed to look for this elusive “essence” that remains the same throughout person’s actions. It is potentially harmful because the reified version of one’s former actions that comes in the form of nouns or adjectives describing this person’s “identity” acts as a self-fulfilling prophecy. As agents of continuity and perpetuation, the descriptors that outlast action exclude and disable just as much as they enable and create (Ben-Yehuda, Lavy, Linchevski, & Sfard, 2003).⁴ Although contrary to the intentions of the authors quoted above, these interpretations cannot be barred as long as the words “being a kind of person” remain the centerpiece of the definition of identity. The question we are now facing is how to define identity so as to make the notion operational, immune to undesirable connotations, and in tune with

the claim about identities as man-made and collectively shaped rather than given.

How to Define Identity?

The definitions of identity set forth by Gee and Holland et al., although rather unlikely to pass Blumer’s test of admissibility, have an important insight to offer: By foregrounding the “person’s own narrativizations” and “telling who one is,” they link the notion of identity to the activity of communication, conceived broadly as including self-dialogue—that is, thinking. Together with many others (e.g. Hall 1996; Gee, 2001; Gonzales, 1999), we readily embrace the idea of identity-making as a communicational practice and thereby reject the notion of identities as extra-discursive entities that one merely “represents” or “describes” while talking.

Perhaps the most obvious identifying technique consists in replacing the talk about actions with talk about states or, more specifically, in replacing utterances about *doing* with reifying sentences about *being* or *having*.⁵ The reifying effect follows directly from the particular syntax of the “*is*-sentences,” such as

She *is* an able student (*has* a gift).

This brief proposition can be “unpacked” into the following sentence:

In the majority of school tests and activities so far, she has regularly *done well* and *attained* above-average scores.

In modern societies we have an unbounded array of institutional means for describing “who one is”: We do it with the help of grades, test results, certificates, passports, diagnoses, licenses, diplomas, titles, ranks—and this is just the beginning of the long list. In fact, almost any social situation seems to be a good opportunity for reifying.

Why this overpowering proclivity for “*is*-sentences”? Paradoxically, the reason may be exactly the same as the one that formerly evoked our concern: We cannot do without the *is*-sentences because of their reifying quality. Our relations with the world and with other people change continually, sensitive to our every action. Metaphorically speaking, identifying is an attempt to overcome the fluidity of change by collapsing a video clip into a snapshot. The use of *is*-sentences, which do the job of “freezing the picture” and turning properties of actions into properties of actors, is grounded in the experience-engendered expectation—indeed, hope—that despite the process of change, much of what we see now will repeat itself in a similar situation tomorrow. Based on this assumption, identity talk *makes us able to cope with new situations in terms of our past experience and gives us tools to plan for the future*.

In concert with the vision of identifying as a discursive activity, we suggest that identities may be defined as collections of stories about persons or, more specifically, as those narratives about individuals that are *reifying*, *endorsable*, and *significant*. The reifying quality comes with the use of verbs such as *be*, *have* or *can* rather than *do*, and with the adverbs *always*, *never*, *usually*, and so forth, that stress repetitiveness of actions. A story about a person counts as *endorsable* if the identity-builder, when asked, would say that it faithfully reflects the state of affairs in the world. A narrative is regarded as *significant* if any change in it is likely to

affect the storyteller's feelings about the identified person. The most significant stories are often those that imply one's memberships in, or exclusions from, various communities.

As a narrative, every identifying story may be represented by the triple ${}_B A_C$, where A is the identified person, B is the author, and C the recipient. Within this rendering it becomes clear that multiple identities exist for any person. Stories about a given individual may be quite different from one another, sometimes even contradictory. Although unified by a family resemblance, they depend both in their details and in their general purport on who is telling the story and for whom the story is intended. What a person endorses as true about herself may be not what others see enacted. To ensure that this last point would never disappear from our eyes, we distinguished between an individual's various identities authored by different people with the help of names that indicate the relation between the identified person, the storyteller, and the recipient.

${}_A A_C$ = an identifying story told by the identified person herself. This story we call A's *first-person* identity (1st P).

${}_B A_A$ = an identifying story told to the identified person. This story we call A's *second-person* identity (2nd P).

${}_B A_C$ = a story about A told by a third party to a third party. This story we call A's *third-person* identity (3rd P).

Among these, there is one special identity that comprises the reifying, endorsable, significant 1st P stories that the storyteller addresses to herself (${}_A A_A$). It is this last type of story that is usually intended when the word *identity* is used unassisted by additional specifications. Being a part of our ongoing conversation with ourselves, the first-person self-told identities are likely to have the most immediate impact on our actions.

What Are the Merits and Possible Pitfalls of the Narrative-Defined Identity?

With the narrative definition, human agency and the dynamic nature of identity are brought to the fore, and most of the disadvantages of traditional approaches seem to disappear. The focus of the researcher's attention is now on things said by identifiers, and no essentialist claims are made about narratives as mere "windows" to an intangible, indefinable entity. As stories, identities are human-made and not God-given, they have authors and recipients, they are collectively shaped even if individually told, and they can change according to the authors' and recipients' perceptions and needs. As discursive constructs, they are also reasonably accessible and investigable.

Despite these obvious advantages, one may claim that "reducing" identity to narratives undermines its potential as a sense-making tool. Story is but a text, the critic would say, and identity is predominantly an experience. Perhaps the most outspoken proponent of this position is Wenger (1998), who says that identity "is not, in its essence, discursive or reflective." And he adds: "We often think about our identities as self-images because we talk about ourselves and each other—and even think about ourselves and each other—in words. These words are important, no doubt, but they are not the full, lived experience of engagement in practice" (p. 151).

Although we agree that identities originate in daily activities and in the "experience of engagement," it would be a category mistake to claim that this fact disqualifies our narrative render-

ing of identity. Indeed, it is our *vision* of our own or other people's experiences, and not the experiences as such, that constitutes identities. Rather than viewing identities as entities residing in the world itself, our narrative definition presents them as *discursive counterparts* of one's lived experiences. (That said, it is important to stress that we do not claim that identities "faithfully recount" the identity-engendering experiences; together with Wittgenstein (1953), we consider the very idea of "conveying an experience" to be not only unworkable but also conceptually untenable.)

Furthermore, while we readily admit that some very real experiences prompt people to say that they have a "sense of identity," we also wish to reverse the causal relation implied by such a saying: We claim that the experience that one describes as a "sense of identity" is not the primary source of identifying storytelling but rather is that activity's natural outcome. The ubiquity and repetitiveness of identifying narratives one tells and hears about herself make them so familiar and self-evident to her that she eventually becomes able to endorse or reject new statements about her in a direct, nonreflective way. Such immediacy of decision, when no rationalization is necessary to make one certain of one's choices, is the general defining characteristic of the situations in which people say that they have "a sense of" something. In the case of decisions regarding physical activity, this immediacy results from the familiarity with the material objects on which the actions are performed. Thus, for example, one claims having "a good sense of a terrain" if he is able to find his way through a given physical space in an instant, "without thinking." The use of the expression "sense of" in conjunction with "identity" is an act of metaphorical projection into a discourse on experiences that cannot be accounted for by a reference to material objects. The phrase comes to this latter discourse together with all its objectifying entailments: The implied dichotomy between the "sense" and its object makes one believe in the existence of the entity called "identity" and in its primacy over the experience of immediacy, familiarity, and direct recognition that accompanies this person's identifying storytelling.

Another question to explore while assessing the proposed definition is whether our narrative-defined identity can be useful in research in spite of the fact that different identity-builders do not always tell the same story. Indeed, actors' self-referential remarks may be at odds with those made by an observer and may vary depending on the listener, sometimes contradicting a version presented by, or to, somebody else (adjusting one's story to listeners is not a sign of insincerity but rather stems from the need for solidarity and effective communication). Let us thus clarify that it is the activity of identifying rather than its end product that is of interest to the researcher. In studies that make use of the notion, the focus is not on identities as such but rather on the complex dialectic between identity-building and other human activities. Thus, while letting ourselves be guided by the narrative vision of identity, we are not afraid of missing anything that is "out there" or of not being able to pin down the "true referent" of the term "identity." Narratives that constitute one's identity, being an important factor in shaping this person's actions, will be useful in research even if they communicate one's experiences only as well as human words can tell.

Toward a Narrative Theory of Identity

Because questions about identity can now be translated into queries about the dynamics of narratives, and because the dynamics of narratives are amenable to empirical study, the narrative definition may be expected to catalyze a rich theory of identity. Much can now be said about identities simply by drawing on what is known about human communication and on how narratives interact one with another. In this section we present some initial, analytically derived thoughts on how identities come into being and develop.

Actual and Designated Identities

The reifying, significant narratives about a person can be split into two subsets: *actual identity*, consisting of stories about the actual state of affairs, and *designated identity*, consisting of narratives presenting a state of affairs which, for one reason or another, is *expected* to be the case, if not now then in the future. Actual identities usually are told in present tense and formulated as factual assertions. Statements such as “I am a good driver,” “I have an average IQ,” and “I am army officer” are representative examples. Designated identities are stories believed to have the potential to become a part of one’s actual identity. They can be recognized by their use of the future tense or of words that express wish, commitment, obligation, or necessity, such as *should*, *ought*, *have to*, *must*, *want*, *can*, *cannot*, and so forth. Narratives such as “I want to be a doctor” or “I have to be a better person” are typical of designated identities.

The scenarios that constitute designated identities are not necessarily desired but always are perceived as binding. One may expect to “become a certain type of person,” that is, to have some stories applicable to oneself, for various reasons: because the person thinks that what these stories are telling is good for her, because these are the kinds of stories that seem appropriate for a person of her sociocultural origins, or just because they present the kind of future that she is designated to have according to others, in particular according to people in the position of authority and power. More often than not, however, designated identities are not a matter of deliberate rational choice. A person may be led to endorse certain narratives about herself without realizing that these are “just stories” and that there are alternatives.

Designated identities give direction to one’s actions and influence one’s deeds to a great extent, sometimes in ways that escape any rationalization. For example, a person for whom being a Democrat is a part of her designated identity may refuse to join any activity initiated by Republicans, regardless of the nature or rationale of the activity. For every person, some kinds of stories have more impact than some others. *Critical* stories are those core elements that, if changed, would make one feel as if one’s whole identity had changed: The person’s “sense of identity” would be shaken and she would lose her ability to determine, in an immediate, decisive manner, which stories about her were endorsable and which were not. A perceived persistent gap between actual and designated identities, especially if it involves critical elements, is likely to generate a sense of unhappiness.

Where Do Designated Identities Come From? The Role of Significant Narrators

Because it is a narrative, the designated identity, although probably more inert and less context-dependent than actual identi-

ties, is neither inborn nor entirely immutable. Like any other story, it is created from narratives that are floating around. One individual cannot count as the sole author even of those stories that sound as if nobody has told them before.

To put it differently, identities are products of discursive diffusion—of our proclivity to recycle strips of things said by others even if we are unaware of these texts’ origins. Paraphrasing Mikhail Bakhtin, we may say that any narrative reveals to us stories of others.⁶ Identities coming from different narrators and being addressed to different audiences are in constant interaction and feed one into another. These stories would not be effective in their relation-shaping task if not for their power to contribute to the addressees’ own narratives about themselves and about others. Thus the people to whom our stories are told, as well as those who tell stories about us, may be tacit co-authors of our own designated identities. Either by animating other speakers or by converting their stories about us to the first person, we incorporate our second- and third-person identities into our self-addressed designated identities.

Another important sources of one’s own identity are stories about others. There are many possible reasons for turning them into first-person narratives and incorporating them into one’s own designated identity. Thus, for example, the identity-builder may be attracted either to the heroes of these narratives or to their authors. Another reason may be one’s conviction about being “made” in the image of a certain person (e.g., of socially deprived parents, an alcoholic father, or an academically successful mother) and “doomed” to a similar life. Whether a story told by somebody else does or does not make it into one’s own designated identity depends, among other things, on how significant the storyteller is in the eyes of the identified person. *Significant narrators*, the owners of the most influential voices, are carriers of those cultural messages that will have the greatest impact on one’s actions.

How Do Designated Identities Develop and Change? The Role of Narrative Diffusion

The fact that narratives authored by others are among the most important sources of our designated identities is perhaps the main reason for the relative inertness of these identities. Stories once told tend to acquire a life of their own and, while “changing hands,” stop being subject to either their author’s or their hero’s creative interventions. Changing designated identities that have been formed in childhood is a particularly difficult task.

Institutional “narratives” such as diagnoses, certificates, nominations, diplomas, and licenses (compare Gee’s concept of I-identity; Gee 2001) have a particular capacity to supplant stories that have been a part of one’s designated identity. In addition, although narrative osmosis goes mainly from designated to actual identities, one cannot exclude the possibility of influence that travels in the opposite direction. As implied by the common wisdom that “success begets success and failure begets failure,” stories of victories and losses have a particular tendency toward self-perpetuation. On their way into designated identities, tales of one’s repeated success are likely to reincarnate into stories of special “aptitude,” “gift,” or “talent,” whereas those of repeated failure evolve into motifs of “slowness,” “incapacity,” or even “permanent disability.”

Learning as Closing the Gap Between Actual and Designated Identities

It is now not unreasonable to conjecture that identities are crucial to learning. With their tendency to act as self-fulfilling prophecies, identities are likely to play a critical role in determining whether the process of learning will end with what counts as success or with what is regarded as failure.

And there is more. In these times of incessant change, when the pervasive fluidity of social memberships and of identities themselves is a constant source of fear and insecurity, the role of learning in shaping identities may be greater than ever. Unlike a few centuries ago, when people were born into “who they were,” everything now seems possible. Only insufficiencies of imagination may account for the down-to-earth nature of the majority of stories about “who one is supposed to be.”

Learning is our primary means for making reality in the image of fantasies. The object of learning may be the craft of cooking, the art of appearing in media, or the skill of solving mathematical problems, depending on what counts as critical to one’s identity. Whatever the case, learning is often the only hope for those who wish to close a critical gap between their actual and designated identities.

Applying Identity as the “The Missing Link” Between Learning and Its Sociocultural Context

In the remainder of this article, we put the narrative-defined identity to work in an attempt to check whether it fulfills its promise as a tool for fathoming the mechanism through which the wider community, with its distinct cultural-discursive traditions, impinges on its members’ learning. This is done in the context of the study that involved native and immigrant Israeli mathematics students. In what follows, we present an “executive summary” of several highlights of this study (the full report can be found in Prusak, 2003).

The Study and Its Initial Findings

The research project focused on one 11th-grade class that followed an advanced mathematics program. Nine of the 19 students were “NewComers”—recent immigrants from big cities in the former Soviet Union, such as Moscow, Kiev, and Tbilisi. The rest were native Israelis, whom we call “OldTimers.” All of the students came from well-educated families. The second author, a one-time immigrant from the Soviet Union, served as the teacher. In the course of the entire 1998–1999 school year, all classroom processes were meticulously observed and documented. Numerous interviews with the students, their parents, and other teachers constituted additional data.

The salience of the differences between the learning processes of the two groups exceeded our expectations. We were also astonished by the striking across-tasks consistency of the intra-group homogeneity and of the inter-group disparities. For the sake of brevity, in the rest of this report we will draw on just two special cases that we regard as fully representative of the two groups: the cases of one OldTimer and one NewComer, whom we shall call Leah and Sonya, respectively.

Although, according to common measures, both girls could be deemed successful in their mathematical learning, they differed substantially in the way that they learned. Thus, for exam-

ple, while studying independently with the help of a textbook and a worksheet, Leah typically executed all the auxiliary tasks specified by the teacher and was careful to produce written evidence of this work. Sonya, in contrast, did not bother to leave any records of what she did. On the other hand, her self-reports revealed a much more complex process of learning, one that included repeated self-testing, self-correcting, and attempts at finding her own organization of the learned material. Clearly, whatever she did in the course of learning was done for herself, according to her own assessment of its importance. For Leah, the teacher seemed to be the ultimate addressee.

These and numerous similar observations led us to the conclusion that Leah’s learning was *ritualized*—that is, motivated mainly by a wish to adhere to the rules of the game with which, for social reasons, she felt obliged to comply. Her learning was thought of as an activity whose importance resided in its very performance. In contrast, Sonya strove toward *substantial learning*—learning whose effects would outlast classroom activities and could be gauged according to criteria independent of the tastes or personal opinions of a particular teacher. Sonya’s wish to attain lasting effects could be observed throughout our extensive study and was evidenced by her constant backtracking and self-examination, by her conspicuous preference for individual work, by her care for the appropriateness of her mathematical expression, and more generally, by her insistence on following all of the rules of communication that, according to her own assessment (as opposed to that of the teacher, for example), could count as genuinely “mathematical.”

Not surprisingly, there seemed to be a tight correspondence between the ways that the two students learned and the effectiveness of their learning. Thus, for example, on one unannounced test, Sonya was fully successful in reproducing the proof, which she had learned on her own a few days earlier. In contrast, Leah failed even to formulate the theorem (admittedly, this failure was an extreme event in her school career; her test performances were generally rather successful). Here, as almost everywhere else, the two girls were fully representative of their respective groups, both in the way that they learned and in the results that they attained.

Linking Learning to Identity

The striking dissimilarities between the OldTimers’ and NewComers’ learning called for explanation. Although we had a basis on which to claim the existence of certain systematic differences in the teaching practices in the former Soviet Union and in Israel,⁷ these differences did not seem to tell the whole story. A teaching approach might have been responsible for the NewComers’ acquaintance with certain techniques, but acquaintance, per se, did not account for the students’ *willingness* to use those techniques. We felt that, to complete the explanation, we needed to clarify why the participants in our study were among the students who took advantage of the learning opportunities created by their teachers.

Yet another obvious explanation for the effectiveness of the NewComers’ learning was that their immigrant status amplified their need for success.⁸ However, because being an immigrant is a part of one’s identity, this conjecture brought us back to the broader question of how our findings can be accounted for on the basis of the claim about learning as closing the gap between

actual and designated identities. This broader consideration was certainly necessary if we were to explain why school mathematics was singled out by the immigrant participants of our study as the medium through which to exercise their pursuit of excellence. Indeed, no other immigrant population in Israel—and Israel has always had many—displayed a comparable propensity for mathematics.

To map NewComers' and OldTimers' designated identities, we listened to their stories about themselves as told to their teacher on various occasions. True, what we really needed were *self-addressed* stories of the type A_{AA} rather than $A_{Teacher}$, because self-addressed stories are more likely to interact significantly with one's actions. This preference notwithstanding, we were confident that the teacher-addressed designated identities would prove informative, especially if they displayed diversity paralleling the observed differences in learning. In addition, we made certain deductions regarding what the NewComers and OldTimers expected of themselves, on the basis of their self-referential remarks, their comments about others (e.g., the teacher of fellow students), and our own observations of their behavior. For background we used interviews with the students' parents and with other teachers. What we found with the help of this multifarious evidence displayed intra-group uniformity and inter-group differences comparable in their salience to those observed previously in the context of the students' learning.

Again, we will exemplify these findings with the representative cases of Leah and Sonya. Of necessity, we will follow with some generalizations. Because of the limitation of space, we will talk *about* what students said rather than reproducing their exact words. Aware of the limitations of such an approach, we urge the reader to remember that what follows is a *story about stories*: It is our story of the NewComers' and OldTimers' own narratives, and not authorless assertions about "who these students really were." In other words, ours are stories of the type $researchers[A_{Teacher}]_{readers}$ and $researchers[A_{AA}]_{readers}$ rather than of the type $researchers[A]_{readers}$.

Probably the most obvious critical element of Sonya's vision of herself in the future was her professional career. Her tendency to identify herself mainly by her designated profession of medical doctor stood in stark contrast to Leah's declarations of her need "to be happy" and her adamant refusal to specify any concrete plans for the future. The professions desired by Sonya and those mentioned by other NewComers (e.g., computer scientist, medical doctor, engineer) all were related to mathematics, and this fact appeared to account for these students' special mathematical proclivity. Yet there seemed to be more to these students' inclination for mathematics than just the wish to promote their professional prospects. According to the NewComers' frequent remarks, the special attraction of mathematics was in the fact that its rules could be seen as universal rather than specific to a particular place or culture. In explaining why she chose to learn advanced mathematics, Sonya, like the other NewComers, spoke about the knowledge of mathematics as a necessary condition for her becoming "a fully fledged human being." We thus have reason to claim that mathematical fluency as such, and not just the rewards that could be expected to come with it, constituted the critical element in Sonya's and other NewComers' first-person designated identities. In contrast Leah, in explaining her choice of an advanced mathematics course, stressed the fact that ma-

triculating in this subject with high grades would largely increase her chances for being accepted by a university. In other words, if Leah was attracted to mathematics, it was mainly, perhaps exclusively, because of its ability to open doors.

To summarize, the designated identities of Sonya and her fellow NewComers portrayed their heroes as exemplars of what the NewComers themselves described as "the complete humans." The term was assumed to have a timeless, universal, generally accepted meaning, which included mathematical fluency as indispensable to the completeness. In contrast, Leah and the other OldTimers expected to have their future life shaped by their own wishes and needs, which, at the time, they saw as fluid and unforeseeable. This contrast points, as well, to a distinct meta-level difference between the two groups: The NewComers saw their highly prescriptive designated identities as given and apparently immutable, precisely like the mathematics they wanted to master, whereas the OldTimers expected their first-person identities to evolve with the world in tandem.

In accord with our expectations, all of this seemed to account, at least in part, for our former findings about the difference between Leah's and Sonya's learning. Sonya, just like the other NewComers, needed mathematical fluency to close the critical gap between her actual and designated identities. For Leah and the other OldTimers, mathematical fluency was something to be shown upon request, like an entrance ticket that could be thrown away after use, having no value of its own. Because mathematical skills did not constitute a critical element of the OldTimers' designated identities, any absence or insufficiency in their mathematical skills did not create substantial learning-fuelling tension.

Linking Identity to the Sociocultural Context of Learning

Where does the disparity between NewComers' and OldTimers' designated identities come from? This was the last question that we had to address to complete our story of designated identity as a link between learning and its sociocultural setting. More specifically, we needed to account for the fact that mathematical fluency constituted the critical element of the NewComers' designated identities but did not seem to play that role in the identities of OldTimers.

The first thing to say in this context is that, given the NewComers' immigrant status, their being well versed in mathematics appeared to be of redemptive value: The universality of mathematical skills was likely to constitute an antidote to these students' sense of local exclusion. To state it in terms of identity, we conjecture that although NewComers were bound to identify themselves as outsiders in their local environment, mathematical prowess was one of those properties that compensated them with the more prestigious, place-independent status of "people of education and culture."⁹

Clearly, the idea that education at large, and mathematical fluency in particular, might counterbalance the less advantageous elements of their identity was not the young NewComers' original invention. In general, what the participants of our study expected for themselves was not unlike what their parents and grandparents wished for them. In both groups this link could be seen from the students' assertions about the full accord between their own and their parents' expectations, and from their remarks about their parents' impact on their choices. Nevertheless, there

was an important difference between our two populations. The OldTimers' parents, unlike those of the NewComers, were described as willingly limiting the area of their influence and leaving most decisions about the future in the young people's own hands. We also found it quite telling that parents were rarely mentioned in the OldTimers' autobiographical testimonies, whereas the NewComers' accounts were replete with statements about their elders' authority and with explicit and implicit assertions regarding the parents' all-important role in their children's education. Obviously, the OldTimers' parents' stories about their children's future were not as prescriptive as those of the NewComers, nor was the influence of the parents' stories equally significant.

Narratives about education as a universal social lever and about knowledge of mathematics as one of the most important ingredients of education evidently constituted a vital part of the NewComers' cultural tradition. In their native countries, their families belonged to the Jewish minority. According to what we were told both by the students and by their parents, these families had typically identified themselves as locally excluded but globally "at home," thanks to their fine education. Their limited sense of attachment to the ambient community was likely the reason for the young people's relative closeness to their families. In the interviews, both the parents and the children sounded fully reconciled to their status of local outsiders. Proud of their cultural background and convinced about its universal value, they seemed to consider this kind of exclusion as the inevitable price for, and thus a sign of, the more prestigious, more global cultural membership. It seems, therefore, that the NewComers' identities as local outsiders who were destined to overcome their exclusion with the help of place-independent cultural assets such as mathematics were shaped by their parents' and grandparents' stories prior to the students' immigration to Israel.

Because significant narrators can count as voices of community, all of these findings corroborate the claim that designated identities are products of collective storytelling—of both deliberate molding by others and uncontrollable diffusion of narratives that run in families and communities. This assertion completes our empirical instantiation of the claim that designated identity is "a pivot between the social and the individual" aspects of learning (Wenger, 1998, p. 145).

Concluding Remarks: The Promise of the "Narrative Turn"

Summarizing her reflections on the delicate trade-off between the advantages and the imperfections of the notions of culture and identity, Norma Gonzales ventured this prediction: "If I were to engage in a prescient attempt to name the direction of future research in anthropology and education, my bet would be the theory and practice of language ideologies" (Gonzales, 1999, p. 433). One of her reasons for envisioning this particular development was the conviction that the discursive turn would increase the researchability of social phenomena: Questions about intrapersonal and interpersonal mechanisms would reincarnate into questions about the dynamics of discourses, which would be helpful, because "people's ideas about language use are readily accessible to researchers and practitioners" (p. 434). In this article, we hope to have started turning this prediction into reality.

The key move was to equate identity-building with storytelling. The difference between identity as a "thing in the world" and as a discursive construct is subtle. The kind of data that the narrative-minded researcher analyzes in her studies is the same as everybody else's: These are stories that people tell about themselves or about others to their friends, teachers, parents, children, and bosses, as well as to researchers. The only distinctive feature of the present narrative approach is that, rather than treat the stories as windows to another entity that stays unchanged when "the stories themselves" evolve, the adherent of the narrative perspective is interested in the stories as such, accepting them for what they appear to be: words that are taken seriously and that shape one's actions. This scholar—while analyzing the various narratives' incessant co-molding, their dialectic interaction with people's deeds, their flow from one generation to another, and their back-and-forth movement between the community and individual levels—is uniquely positioned to answer the time-honored questions presented in the beginning of this article: *Why do different individuals act differently in the same situations? And why, differences notwithstanding, do different individuals' actions often reveal a distinct family resemblance?*

NOTES

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¹ According to the leading Israeli newspaper *Haaretz*, "Approximately 200 thousand children immigrated to Israel in 11 years, most of them from the former Soviet Union; they constitute 15% of the Israeli youth" (August 31, 2001).

² This conjecture should not be misread as meaning that immigrants from the former Soviet Union are generally more successful in mathematics than the rest of the Israeli population. As reported in *Haaretz* (August 2, 1996), "There are [immigrant] children who arrive at the highest places in international competitions in mathematics and physics and thanks to them, Israel climbed from 24th to 13th place in the 1995 international championship."

³ A few pages earlier (p. 110), the author said: "Any combination that can get recognized as a certain 'kind of person' (e.g. a certain kind of African American, radical feminist, doctor, patient, skinhead) is what I call a 'Discourse' . . . with a capital 'd'. . . Discourses are ways of being 'certain kinds of people.'"

⁴ This concern is not unlike the one raised by Guttirez and Rogoff (2003), who make a case against speaking in terms of individual traits and propose that "individuals' and groups' experience in activities—their traits—becomes the focus" of research (p. 19).

⁵ Through the ways that we talk, we populate our worlds with entities supposedly outlasting our actions. With words we turn processes into objects, into the "permanent entities" to which our actions are applied or which result from these actions (Sfard, 1991, 1994); it is also with words that we reify the discursive subjects—the implementers of the actions.

⁶ Bakhtin (1999) spoke about utterances and words rather than stories.

⁷ The second author of this study—on the basis of sources such as her personal experience as a student and as a teacher in Belarus, her survey of Russian mathematics textbooks, and her interviews with immigrant mathematics teachers who were asked to compare the teaching and learning of mathematics in the former Soviet Union and Israel—claimed in

her dissertation that in the former Soviet Union, unlike in Israel, some learning techniques were the explicit object of instruction.

⁸ As observed by Ogbu (1992), the status of “minority” is a double-edged sword. As shown by empirical findings, belonging to a minority may, in some cases, motivate hard work and eventual success, whereas in other cases it may have the opposite effect. Immigrants, whom Ogbu calls “voluntary minorities,” are more likely to belong to the former group than are people whose minority status was imposed on them.

⁹ In colloquial Russian discourses, the word *culture* (*kultura*) is often used in an evaluative, normative way, rather than to signify a default element of the human condition.

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