

# Identity in Informal Game-based Learning Environments

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**Abstract:** In the learning sciences some scholarship investigating game-based learning environments has focused on studying large-scale identity transformations rather than describing the ‘everyday’ social processes. This paper investigates the specifics of the latter, arguing that relational identity resources may have been increasingly important for understanding identity formation and learning with games.

## Introduction

‘Identity’ has become an increasingly important analytic construct in the learning sciences for understanding socio-technical learning practices. Learning is increasingly viewed as part a process of identity transformation— a change in the way a person recognizes herself relative to her mastery of a knowledgeable social practice (Wenger 1999).

In the learning sciences some scholarship has investigated the way that game-based learning environments help players take up new identities relative to a given knowledgeable practice (Barab et al., 2007). However, this scholarship has focused on studying large-scale identity transformations rather than describing the ‘everyday’ social processes that effect identity work. As part of a larger research project aimed at this end, this paper draws on methods from sociolinguistics to describe the micro-context of identity formation in game-based learning environments.

## Theoretical Framework

This study utilizes both *interactionist* (Mead, 1934) and *sociocultural* perspectives on identity (Holland et al., 1998) that have arisen after it. Interactionist scholarship understands a person’s identities and selves to develop primarily through interaction with and in the social world (Mead, 1934), and places import on how identity is negotiated through language. Sociocultural scholarship similarly emphasizes the dialogic and socially-enacted nature of identity, but distinguishes itself by emphasizing the importance of social resources in identity self-authorship (Holland et al., 1998).

## Research Context & Method

This investigation grows out of a larger research initiative on game-based learning environments called *CivWorld*. Situated at an after-school center for adolescent working-class youth, *CivWorld* was a four year long research project that was focused on helping young people learn about history and geography (see Squire et al., 2008) using researcher-modified versions of the *Civilization* historical strategy game series. Data took the form of some two-hundred hours of program sessions that were audiovideo recorded along with supplemental field notes.

This investigation adopts tools of inquiry from *ethnographic discourse analysis*, a sociolinguistic method for studying how social identities are enacted through language and action over time (Gee & Green, 1998). After a thematic analysis of general content in the data corpus, both theoretical and representative sampling methods were used to select data so that the analysis would illuminate some larger research question while reflecting everyday activity in the space. The verbal data, transcribed in Jeffersonian notation, is presented in stanza form.

## Results

Over the course of the analysis, it became evident that participants’ identities relative to the *CivWorld* space were mediated as much by the club’s structures for participation and relationships with other participants as they were by the game’s semiotic system. Participants’ trajectories of identity enactment in the space were very much dependent upon the social resources present during significant moments of identity work. These eras of interactions surrounding Salim one, a young newcomer who is the club illustrate this phenomena.

## Example Interaction: Salim and Social Resources

Salim is an eight-year-old whose brother, Malik, age twelve, is a frequent and enthusiastic participant in the *CivWorld* club. Although he has frequently watched game sessions, Salim, who has a genial and deferential demeanor, has only played the game once some six weeks prior because he was intimidated by the typically older. As such, Salim is a very young and novice player of a game that can take hundreds of hours to master.

Salim has chosen to play in a competitive multiplayer game session - his second time playing the game – when his brother will arrive to the club late. Two more experienced players, Leo, age eleven, and Matt, age twelve, have secretly agreed to ally against Salim. They sit at the two computers to his right. Daniel, an adult, sits to Salim's left to help him with game play. At the start of game play, another sympathetic player attempts to trade to Salim in-game technologies, which might help him defend himself:

Daniel: The Persians wanna trade with you.  
 Salim: [Again?  
 Leo [turning]: DON'T DO IT!] NO! don't do it! >>don't do it! don't do it!<<  
 [Matt and Leo physically pull Salim away from his computer and whisper in his ear]  
 Salim [grinning]: [B-b-butt <Aaa.aaa.aaah.>  
 Daniel [smiling]: No coercion (.) only by talk (.) no force.

During this exchange, Salim appears to relish the sudden attention and uninvited physical contact, rather than become upset by it. This attitude extended toward in-game play, where, with Daniel's constant advice and attention, Salim's non-aggressive civilization flourished despite the attempted in-game assaults by Leo and Matt. By the time his brother Malik arrives, Salim has by far the highest score in the game. Malik walks by Sami as he enters the room and greets a number of other participants, including Leo and Matt, with familiarity before turning to Sami's computer:

Malik: Who are you? You're GREECE? DAAAANG. See Salim? see? Good job  
 Salim! Good job!

Salim became a regular and active participant in the CivWorld club over the next four months, and continued to participate frequently over the next three years. While his new interest in the game-based learning club cannot be attributed solely to his experiences that day, it certainly seemed to be a primary motivating factor. Salim seemed to enjoy the attention of older youth, even if it was hostile, and appeared to take great pleasure in his older brother's praise.

## Discussion

Drawing on sociocultural research on identity (see Holland et al., 1998), Nasir & Cooks have recently argued that identity-linked social resources can be classified as *material*, *ideational* or *relational* – e.g. semiotic artifacts, cultural models or social relationships (2009). Learning sciences research has thus far placed primacy on the 'material' identity resources in game-based learning environments. By this I mean that researchers have emphasized the roles, values and dispositions for action that are 'designed into' the digital artifact for players to inhabit.

This analysis and evidence from other ongoing research suggests that the relational identity resources embedded in the social-discursive space of the game-based learning environment are important for understanding how identity formation takes place in these spaces. While the extent to which different types of social resources are leveraged in identity work is no doubt contextual, it seems that the relational identity resources may have been increasingly important for understanding identity in game-based learning environments.

## References

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