Social Constructionism and the Inner City

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Chapter 1: Constructionism

1.1 Shifting Paradigms

Technically speaking, the term "inner city" refers to the central section of a city, an area that is usually older and more densely populated. However, practically speaking, the term "inner city" has come to describe urban settings fraught with many troubling inequities and social afflictions, regardless of the location, population or age of the setting. The problems faced by those who live in the inner city have drawn an enormous amount of the public's attention, and so, there have been various efforts made at addressing these concerns. There are at least two types of approaches that can be taken when attempting to address the difficulties faced by those who live in the inner city. One focuses on what institutions and individuals outside of the inner city can do, while the other focuses on what can be done by those who are within that setting. It often seems that we lack theories and models which focus on internal development, and so the most common approach that is adopted concerns what outside forces can and should do to fix the inner city, rather than how the internal forces can make an impact. Yet, just as America's war on poverty has not completely succeeded at fixing the problems faced by the poor, neither have these approaches succeeded at their goals in the inner city, and I believe a developmental theory called constructionism can help us understand why.

Constructionism is usually thought of as an educational theory, rather than as a theory with broader social implications. But I believe that borrowing this paradigm from educational circles can offer fresh and insightful perspectives to issues involving urban social conditions. Borrowing ideas from one field to another can be an important avenue for breaking new ground on old problems. Stephen Jay Gould made this point when discussing the line of reasoning that made Darwin's theory of natural selection possible.

> In reading Schweber's detailed account of the moments preceding Darwin's formulation of natural selection, I was particularly struck by the absence of deciding influence from his own field of biology. The immediate precipitators were a social scientist, an economist, and a statistician. If genius has any common denominator, I would propose breadth of interest and the ability to construct fruitful analogies between fields. In fact, I believe that the theory of natural selection should be viewed as an extended analogy--whether conscious or unconscious on Darwin's part I do not know--to the laissez faire [sic] economics of Adam Smith. (Gould, 1982,

p. 66)

In certain cases such analogies lead to breakthroughs which open entirely new perspectives from which to study material that is very familiar and already thoroughly researched from the 'old school.' Thomas Kuhn calls this type of challenge to a field a paradigm shift (Kuhn, 1970, p. 104), and if acceptance to it grows, it can expand the reach and consequence of a particular field. In my work at the Media Laboratory at MIT, I have grown to believe that models and theories about learning and development that I have seen applied to educational settings have important ramifications in other social settings. I have found that there are relevant connections to be made between understanding the development of individuals and that of social groups, and indeed that a theory about individual childhood development is also useful when applied to the needs of complex social settings. In particular, I believe that there is a comparison to be drawn between that fact that children caught in certain passive educational models often lose developmental opportunities, while similarly, members of social settings can lose developmental opportunities when they are caught in passive roles in those settings.

This is not a novel idea. In my view, Marvin Minsky (1985,1986) put forth a much more challenging version of this proposition in his "Society of Mind." There he argued that a individual mind can be thought of as a society of many agents. Here, I simply state the inverse, which has been stated in many forms and contexts before this. A society of agents often act as if they are an individual mind. And certain theories that apply to the development of the individual also apply to the development of a larger society of agents. Constructionism is one such theory, and I have found this to be the case in an urban setting in which I live and on which I focus my research.

1.2 Constructivism and Constructionism

To understand the utility of constructionist theories in urban settings, it is important first to understand the usage and efficacy of the concept in its traditional applications. The academic usage of the word constructionism which I am appropriating expands on the concept known as constructivism. In social and developmental psychology, constructivist models view the subject as a builder of knowledge, not a passive receptor, but an active constructor. Through constructivism, theorists such as Jean Piaget attempt to describe how this building process takes place in order to better understand childhood learning and development (Piaget, 1954). In educational settings, this model goes against the idea of the student as a "tabula rasa" and the teacher as an authority that must force the student to learn by imposing knowledge on the student. Instead, constructivism argues that teachers should understand the active nature of the learning process in which students are already engaged, so that the teacher can enhance and facilitate that process, rather than impose unnatural learning experiences on the student:

> I take from Jean Piaget a model of children as builders of their own intellectual structures. Children seem to be innately gifted learners, acquiring long before they go to school a vast quantity of knowledge by a process I call "Piagetian learning," or "learning without being taught." For example, children learn to speak, learn the intuitive geometry needed to get around in space, and learn enough of logic and rhetorics to get around parents--all this without being "taught." (Papert, 1980, p. 7)

Constructivists believe that all children are engaged in creating a vast array of intellectual structures that give order to the world in which they live, and that these structures must support increasing levels of complexity as each child grows and develops. This view opens the door to understanding how consequential various childhood experiences are, whether they be in the area of early sensori-motor experiences that Piaget examines in The Construction of Reality in the Child (1986), or in the area of childhood play and fantasy as Winnicott examines in Playing & Reality (1989). These works along with others have helped to encourage

greater academic respect for and interest in childhood learning and developmental processes.

Constructionist thinking adds to the constructivist viewpoint. Where constructivism casts the subject as an active builder and argues against passive models of learning and development, constructionism places a critical emphasis on particular constructions of the subject which are external and shared.

> We understand "constructionism" as including, but going beyond, what Piaget would call "constructivism." The word with the v expresses the theory that knowledge is built by the learner, not supplied by the teacher. The word with the n expresses the further idea that this happens especially felicitously when the learner is engaged in the construction of something external or at least shareable ... a sand castle, a machine, a computer program, a book. This leads us to a model using a cycle of internalization of what is outside, then externalization of what is inside and so on. (Papert, 1990, p. 3)

By directing particular attention to the external constructions of the active learner, constructionism reveals that childhood development involves more than just creative action, but recreative reaction as well. This is to say that constructionism argues that the creative activity of the child can lead to an interplay between internalized and externalized experiences in such a way as to promote further creative activity. The "internalization of what is outside" and the "externalization of what is inside" represents a developmental cycle. Internal experiences are externalized through some shareable construction, which a child can then re-internalize by reinterpreting it in its external form. This process can even become a dialectic when the child's reexamination and reinterpretation of the internal and external forms produces a new synthesis of these distinctive expressions. The creative construction of a child is not an ends, but a means to further development activity, especially when it can be externalized. Needless to say, from a constructionist point of view, opportunities and materials for constructive activities which can be externalized are critical to educational settings.

> I like to formulate a major theoretical issue as "constructionism vs. instructionism." This does not suggest that instruction is bad or useless. Instruction is not bad but overrated as the locus for significant change in education. Better leaning will not come from finding better ways for the teacher to instruct but from giving the learner better opportunities to construct. And this conviction has driven our continuing quest for new building materials or new uses of old ones. (Papert, 1990, p. 3) [emphasis his]

Constructivist notions have provided breakthroughs in outlining some of the hidden mechanisms in individuals which produce creative, developmental experiences. Constructionist notions shed light on how internalized and externalized expressions of a subject's constructs interrelate and spur further development. Without a clear understanding of this interplay, it is often difficult to understand the ramifications that developmental activity has on a subject. A good example of how this can be fleshed out is found in the research of Lev Vygotsky.

1.3 Constructionism and Social Relations

Vygotsky pioneered a sociocultural approach to understanding cognitive processes in childhood development. Rather than focusing his research on uncovering the dynamics of mental activity in an individual in isolation, he sought to reveal how social and cultural interactions were critical to the genesis of cognitive functions. In fact, he believed that it is our need to interact and communicate in the sociocultural context that makes human cognitive development intellectual and distinct from animal cognition:

> Signs and words serve children first and foremost as a means of social contact with other people. The cognitive and communicative functions of language then become the basis of a

> new and superior form of activity in children, distinguishing them from animals. (Vygotsky, 1978, pp. 28-29)
>
> The internalization of socially rooted and historically developed activities is the distinguishing feature in human psychology, the basis of the qualitative leap from animal to human psychology. (Ibid, p. 57)

By highlighting the effects of social interactions on cognitive development, Vygotsky reveals a critical role that external activities play in sparking internal mental constructions. Understanding this interplay, as Papert indicated above, is at the heart of constructionism's paradigm. Although these internal and external dynamics are cyclic, Vygotsky clearly views the external component (the shared and communicated experiences) as being primary in many key instances, in that they initiate certain critical internal components through the process of internalization.

> We call the internal reconstruction of an external operation internalization. A good example of this process may be found in the development of pointing. Initially, this gesture is nothing more than an unsuccessful attempt to grasp something, a movement aimed at a certain object which designates forthcoming activity. The child attempts to grasp an object placed beyond his reach; his hands, stretched toward that object, remain poised in the air. His fingers make grasping movements. At this initial stage pointing is represented by the child's movement, which seems to be pointing to an object--that and nothing more.
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> When the mother comes to the child's aid and realizes his movement indicates something, the situation changes fundamentally. Pointing becomes a gesture for others. The child's unsuccessful attempt engenders a reaction not from the object he seeks but from another person. Consequently, the primary meaning of that unsuccessful grasping movement is established by others. Only later, when the child can link his unsuccessful grasping movement to the objective situation as a whole, does he begin to understand this movement as pointing. At this juncture there occurs a change in that movement's function: from an object-oriented movement it becomes a movement aimed at another person, a means of establishing relations. The grasping movement changes to the act of pointing. As a result of this change, the movement itself is then physically simplified, and what results is the form of pointing that we may call a true gesture. It becomes a true gesture only after it objectively manifests all the functions of pointing for others and is understood by others as a gesture. Its meaning and functions are created at first by an objective situation and then by people who surround the child. (Vygotsky, 1978, pp. 56-57) [emphasis his]

In this, Vygotsky gives us a picture of the early stages of the child's use of signs for representation and communication. The communicative use of a sign by the child requires some type of internalized intellectual order which can allow it to become meaningful and reusable to the child, and Vygotsky demonstrates that this internal order can be initiated by the external context of social relations. This primary role played by external relations suggests profound implications are involved in the effects that social and cultural settings have on individuals during developmental stages. In fact, Vygotsky goes so far as to claim that all higher mental functions evolve from social relations.

> Every function in the child's cultural development appears twice: first, on the social level, and later, on the individual level; first between people (interpsychological), and then inside the child (intrapsychological). This applies equally to voluntary attention, to logical memory, and to the formation of concepts. All the higher functions originate as actual relations between human individuals. (Ibid, p. 57) [emphasis his]

1.4 The Developmental Cycle: A Balancing Act

Vygotsky's emphasis on the priority of the social level in all higher mental functions has drawn considerable fire from constructivist critiques which argue that many internalized mental structures evolve before being exposed to the sociocultural milieu (Carey and Gelman, 1991; Bereiter 1994). However, it is essential not to let this important critique detract from the idea that the social and the individual areas of intellectual development are both critical planes to consider. Vygotsky's sociocultural focus and the more classical constructivist's individualized focus can find harmony, as Paul Cobb recently argued from a constructivist viewpoint when he stated, "Each of the two perspectives, the sociocultural and the constructivist, tells half of a good story, and each can be used to complement the other" (Cobb, 1994, p. 17). He developed this point further when comparing Barbara Rogoff's (1990) sociocultural viewpoint to Ernst von Glasersfeld's (1994) Piagetian perspective.

> In comparing Rogoff's and von Glasersfeld's work, it can be noted that Rogoff's view of learning as acculturation via guided participation implicitly assumes an actively constructing child. Conversely, von Glasersfeld's view of learning as cognitive self-organization implicitly assumes that the child is participating in cultural practices. In effect, active individual construction constitutes the background against which guided participation in cultural practices comes to the fore for Rogoff, and this participation is the background against which self-organization comes to the fore for von Glasersfeld. (p. 17)

From the viewpoint of urban social anthropology, Elizabeth Bott (1971) came to a similar conclusion. She argued that the sociological concept of internalization of sociocultural experiences needs to be balanced with the psychological concept of internal cognitive reorganization.

> The basic argument of both chapters is that people do not acquire their ideology, norms, and values solely by internalizing them from outside. They also re-work the standards they have internalized, conceptualize them in a new form, and project them back on to the external situation. The more varied their social experience and the more unconnected the standards they internalize, the more internal rearrangement they must make. (Bott, 1971, p. 223)

> In brief, I had to give up the attempt to interpret norms and roles as social and entirely externally determined and role performance as internal and psychologically determined. Sociological and psychological concepts were now used simultaneously at every stage of the analysis. (Ibid, p. 229)

Constructionism offers an important bridge for the sociocultural and constructivist viewpoints by arguing that individual developmental cycles are enhanced by shared constructive activity in the social setting. Social constructionism adds further harmony to sociocultural and constructivist views by revealing that the social setting is also enhanced by the developmental activity of the individual. The duality of this interplay has important ramifications for urban social conditions. If the constructionist notion that shared constructions and social relations are key to individual development, then social settings that are marked by fractured and limited shared social activity and less cohesive social relations--as is the case in many urban settings--may present troubling developmental barriers. However, since the social setting is not immutable, introducing activities which are socially constructive may provide rectifying responses. Indeed, this possibility speaks to the need for better insight into the nature of the developmental processes involved in social settings. This insight is the goal of social constructionism's inquiry.

1.5 Social Constructionism and the Social Setting

If the constructionist notion that shared external constructions and social relations are key to individual development cycles, what effects do social settings have when they are marked by fractured, less cohesive social relations, as is the case in many urban settings? Indeed, this question speaks to the need for insight into the nature of social settings as they influence individual relations and shared constructions. Papert offers this type of insight when he addresses the subject's need for appropriate materials in the process of building shared constructions, and how sociocultural settings need to provide a source for these materials:

> All builders need materials to build with. Where I am at variance with Piaget is in the role I attribute to the surrounding cultures as a source of these materials. In some cases the culture supplies them in abundance, thus facilitating constructive Piagetian learning. For example, the fact that so many important things (knives and forks, mothers and fathers, shoes and socks) come in pairs is a "material" for the construction of an intuitive sense of number. But in many cases where Piaget would explain the slower development of a particular concept by its greater complexity or formality, I see the critical factor as the relative poverty of the culture in those materials that would make the concept simple and concrete. In yet other cases the culture may provide materials but block their use. (Papert, 1980. pp. 7-8)

By indicating that the cultural context plays an important role in individual development, Papert points us to the broader sociocultural component of the constructionist viewpoint that has some connections to fields like social anthropology. Theorists from such fields focus on broader sociocultural and corporate factors--rather than individual processes--that help to produce outcomes and artifacts in particular populations and groups. These outcomes and artifacts can be constructs in particular academic fields or they can be broader social and cultural constructs. To Thomas Kuhn, for example, the constructs produced by the community of researchers who focus on "normal science" can be described as "shared paradigms" (Kuhn, 1970, pp. 10-11). Similarly, Michael Cole looks at cultural traditions and norms among the Kpelle tribe in Liberia as constructs that serve as "functional cognitive systems" (Cole & Scribner, 1974, p. 194). In either case, the constructs are defined through the activities and characteristics of a particular social group which has functional objectives and needs.

Social constructionism takes constructionism out of the classroom and out of the realm of educational priorities. In so doing, it takes the constructivist viewpoint even further into sociocultural perspectives bringing with it the same insights concerning the cycle of internalization and externalization. Through this lens, a group of subjects serve as active agents in the construction of outcomes and artifacts that produce a developmental cycle in the social setting, and this view explicitly includes as social constructions the social relations and social activities embedded in the social setting. To social constructionism, the social setting itself is an evolving construction. When the members of a social setting develop external and shareable social constructs, they engage the setting in a cycle of development which is critical to determining its ultimate form.

Introduction
References