

Hardening of the categories and other ailments

[I]n the minute world of subatomic particles the presence of an observer and his observing device is likely to alter the swing of things, but we are only beginning to recognize how in a world of sticks and stones and men and bones, point of view not only determines what is seen, but to some extent at least manipulates the very being of it. The field glasses literally affect the bird, as we immediately realize when we notice that the bird's true environment is not that little close-up of branches and twigs that the field glasses disclose but as well the field, the field glasses, and the breathing thing that looks through them. If the man carrying the field glasses carries also a shotgun, the nature of the bird's being is likely abruptly to change. But if that bird watcher does nothing more than take up space and continue breathing, in most subtle ways he changes the bird's world – because he has intruded into it. He is a pressure that was not there and now is. The bird, of course, also changes the man. A rapport is created, a dialogue of interests that cuts across the field and – at least from the man's point of view – modifies the world not only physically but psychologically. And ultimately again physically. A man sees a bird and responds to the sight. His feelings, his arousal, starts a whole progress of synaptic clickings; his blood chemistry modifies ever so slightly; his fingers tighten – and a bit more carbon dioxide is available to the grass, a fraction less oxygen to the bird. Mind is entangled in being and, observing well, observes that fact.

(Unterecker 1973: vii–viii)

I live in Ottawa, Canada's capital city, in a winter climate that ranks second to Ulan Bator, Mongolia's capital, for recorded low temperatures. Field research is a seasonal occupation at best unless you happen to be at my university, Carleton University, which connects buildings by an extensive underground network of tunnels navigated by electric 'golf-carts'. Students who live in campus residences are referred to as tunnel rats because they do not appear outdoors or above ground between November and March. We do not have a specialization in the social psychology of underground living but we probably should have.

Undeterred by climate, I have sent students in my social psychology research seminar out into those tunnels to observe and bring back stories of their fellow humans. I try to teach them that the investigative practices

they use are not 'neutral' tools but are themselves part of shaping their observations. To accomplish this I often use a study published in *Science* in 1976 by Jenni and Jenni. This study involves an observational analysis of book-carrying behaviour and its pedagogical utility lies in the remarkable contrast it provides between a seemingly simple behaviour and the realm of theoretical complexity required to interpret it.

The Jennis' study involves their categorization of book-carrying into two main types. They devised a coding scheme that divides the world of carrying books into Type I and Type II methods. Type I behaviour is coded as resting books on the hip or in front of the body, while Type II is coded as pinching the books from above or supporting them from below. Women more typically manifest Type I behaviours while men display Type II. The various possibilities are depicted in Figure 4.1.

In using this study, I first ask my students to go out into the tunnels and look at the world the way the Jennis do and when they come up out of the tunnels they are invariably convinced that the Jennis have distorted reality. They are convinced they have seen more variability out there and they come up with at least two or three additional categories for coding behaviour. This is quite possible; the Jennis do note several kinds of variation, among them age and regional differences. Also, we are, as I've mentioned, a winter location and you might expect that many of us have

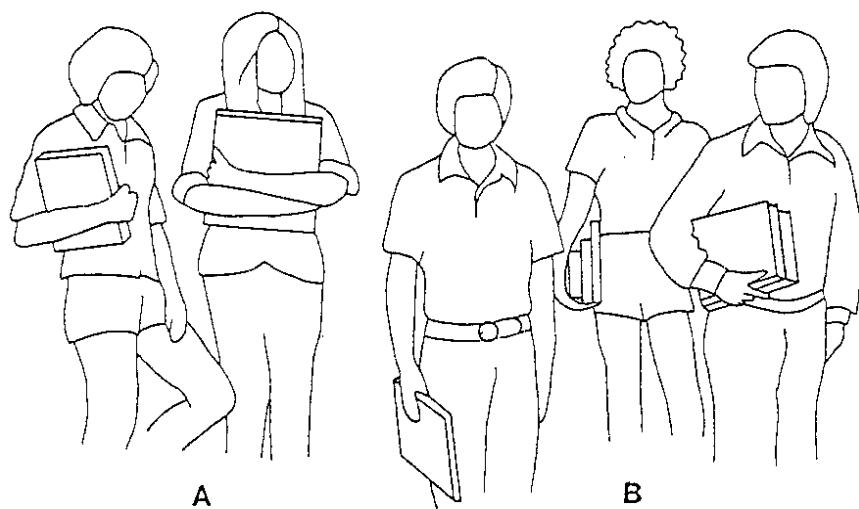


Figure 4.1 Methods of carrying books

Note: (A) In all Type I carrying methods, the short edges of the books rest on the hip or in front of the body. (B) In Type II methods, the books are either pinched from above or supported from below by the hand or the hand and arm.

Source: Reproduced from Jenni and Jenni 1976: 859

backpacks permanently stitched into our outerwear. We are also a campus that is relatively hospitable to a person with impaired mobility. Modern wheelchairs are decked out with baskets and ledges for book-carrying, Type III carrying behaviour if you will. Then there's those people who carry their briefcases the 'male' way and their books the 'female' way. Is a lap-top computer to be coded as a book? What should be done with those souls who by outward appearance cannot be coded 'male=1' and 'female=2'? Are we going to let these 'differences' ruin a perfectly good study?

Leaving the 'noise' aside, we do manage to replicate the study with respect to its finding of a sex difference. It becomes my job to convince them that generality matters more than individuality, homogeneity more than variability. I rarely do a satisfactory job at this because I enjoy invention, novelty, difference and cultural variation. So, sometimes, to do my job, I have to resort to brute authority. After all, I tell them, I'm the professor and if they expect a grade, they should code two categories and either forget what else they saw or learn to call it error variance. Interrater reliability takes on a whole new dimension with this approach. Some of them rebel and complain of my hypocrisy. How can I ask them to observe for themselves and then insist on two categories of book-carrying behaviour?

'But you saw them both with your own eyes', I flash back.

'Not before you told us what to look for', one argues.

'And if I hadn't told you?' I ask.

'Who knows what we might have seen', says one.

There is always one student who wedges his or her voice into the ruckus and wants to know why we're arguing about this anyway. Aren't we all just people and what does it really matter how we carry our books? The voice comes from outside the parameters of the conversation; it could be a parent at the dinner table telling us to stop fighting or a meta-observer who seeks a broader meaning to our debate. Whoever it is, it is a voice that lets us know that we have been observed observing. I take it as my cue to switch to explanation and escape from the clutches of our inability to agree once and for all on what's out there and whether we 'see' in some clear and unambiguous way.

We strike a truce and agree that variability is 'interesting' but that generally a few categories take in most cases of book-carrying behaviour. How is this to be explained? Even more importantly, how are we to explain this earth-shattering sex difference? What follows is often a very personal discussion about how to account for this quite consistent difference between the sexes, a difference that the Jennis' report is at its peak in the adolescent years. The debate can be even more heated than usual because no important social policy, division of labour in the workplace or sense of inferiority or superiority hinges on the different ways in which

men and women carry books. Its seeming triviality acts as a projective test for social prejudice and ideological positions.

'Girls carry their books on their hip shelf because that's how they're going to carry their babies', says a woman with a primordial confidence that would do a sociobiologist proud.

'How can you believe that garbage?' asks another woman, angry at her society and the Academy for failing to liberate this young woman.

'Well, actually, it is probably biological and social', says a conciliatory man, not fully aware that the ground he stands on is hotly contested.

'It's more the way girls are socialized', says another fellow.

'Yeah, what do you know about being a teenage girl?' comes the challenge of the experiential.

'I look at girls. They get all embarrassed when they start to develop and their parents tell them to be modest and cover up', he says. 'Besides, I had sisters'.

'Big deal', says the challenger. 'I grew up female. Of course, we cover ourselves. It's so we don't have to put up with guys leering at us all the time. It's a form of social protest'.

Quickly, we have run from biology to politics. I listen to the students debate what they believe and confront each other's positions with little in the way of 'scientific evidence'.

The Jennis' research rarely fails to catalyse a debate about the social significance of infrequent events. It sets off arguments about what is to be included and what is to be excluded in our categorizations of the social world, our methods of gathering evidence (did anyone ever ask a book-carrier why s/he carries books that way?) and our interpretations. We are always scrapping over the particulars and studies like the Jennis' call forth a display of the deep commitments we have to positions that explain the most trivial of social behaviours. Yet, it is precisely because they use a 'particular' instance of our social behaviour that interconnects our physical, sociocultural and political worlds that the research has the capacity to evoke different points of view.

While a discussion of sex differences in book-carrying behaviour can raise the room temperature a few degrees, were I to substitute a discussion of sex differences in achievement or aggressivity, one would virtually see steam on the windows. Martha Mednick (1989) has nicely tackled the politics of many of our well-known psychological constructions for explaining sex differences - fear of success, androgyny, a different voice. I'll use the example of androgyny to go into greater depth on this matter of interpreting differences. Mednick writes:

The concept of androgyny was advanced in the mid-1970s as the answer to the puzzle of gender; it represented a new look at conceptions about measurement of masculinity and femininity. At that level, it was an

excellent critique. . . . It was the subject of considerable psychological research; at least three new scales were developed to measure it, and it spawned numerous dissertations. It was also widely discussed by feminist scholars in other social science disciplines and in the humanities. . . . Even more than the fear of success, it became a buzz word for the public and was personified in advertising, fashion, cosmetics for men and rock musicians such as Boy George, Michael Jackson and Prince. Although androgyny has not passed from the scene, it has not been very helpful, particularly in its popularized version, in solving the problem of gender.

(Mednick 1989: 1119)

Despite questions concerning its scientific merit, androgyny has retained its popularity. Androgyny was an appealing social critique that for the first time allowed feminist researchers to challenge the non-overlapping categories of masculine and feminine. While its politics have come to be seen as promoting self-contained individualism (Sampson 1977) and the conservative political agenda that focuses on personal rather than social change (Mednick 1989), it is a very useful historical example to work with if we're trying to understand how we categorize and explain the social world. As a construct, it was transitional between the rigidity of conceptualizing men and women as masculine or feminine and more recent notions of socially and politically constructed masculinity and femininity.

It is important to remember that Sandra Bem (1974, 1983), as researcher and parent, was confronting established developmental and personality theorists who maintained that gender-role consistency was equivalent to well-being, mental health and sexual adjustment. Take for example a quote from the *Handbook of Socialization Theory and Research* (Mussen 1969) as representative of prevailing views:

Parents have two major tasks in promoting their child's sex-typing. The first is tuition, i.e. teaching the child appropriate sex-typed responses through rewards and punishments, and guiding his behavior, directing it into the proper channels. The second is providing a model of the proper general attitudes and personality characteristics for the child to emulate. Fortunately, most parents can perform these tasks without great difficulty because they themselves have absorbed and incorporated sex-appropriate responses, characteristics and attitudes and they have clear conceptions of appropriate masculine and feminine behaviors.

(Mussen 1969: 728)

I had spent several years in the early 1970s thinking of ways to subvert sex-typing and to disinherit adult women and men from avoiding activities considered inappropriate for their gender. It occurred to me that

the process might have to take place at an earlier age and that I didn't know much about the process of becoming those sex-typed adults who were walking into my experimental social psychology laboratory. In graduate school I had devoted much time and effort to understanding adult women's achievement behaviour. I wanted to learn more about children's play environments. I began to collaborate with a developmental psychologist, Candace Schau, on a project that took us into the lives of pre-school children at play (Schau *et al.* 1980). Not unlike book-carrying behaviour, sex differences in play behaviour and toy preferences were seemingly well-established findings in the literature. However, many studies rested their case on forcing children to choose between cars and dolls and did not watch children playing without adult intervention.

In our study, we introduced what we called 'neutral' toys, that is, toys that were not clearly sex-typed. So, in the case of a manipulable toy, a large children's toy manufacturer had several varieties that we selected as masculine (e.g. a drill), feminine (e.g. a food mixer) and neutral (e.g. a movie camera). We had these three modes for a variety of play activities – puppets, building sets, read-along stories and figurine sets (e.g. farm animals, action heroes, etc.).

What I found most interesting in our research was not that children engaged in some degree of sex-typed behaviour with little or no formal pressure to do so. All of this seemed quite compatible with the mass-marketing strategies of toys on television and the sex-segregated shelves of large toy stores. That boys were more strongly sex-typed in their choices than girls was also quite consistent with previous research. What intrigued me was that the system was not perfect. Girls slipped through it at an alarming rate and this offered a subversive sort of hope for later life choices. Not only that, parents' expectations that their children would play with culturally defined sex-appropriate toys were, in general, inaccurate. Mothers were accurate in their predictions of their daughters' play with feminine toys. They were inaccurate regarding their daughters' play with masculine and neutral toys and inaccurate regarding their sons' play with feminine toys. Fathers' predictions were not accurate for either sons or daughters for any toy-gender type.

Children, especially females, were at times remarkably more 'androgynous' than parents and researchers could see. The early work on androgyny throughout the 1970s was somewhat liberating for adult women's sex-typed behaviour – it legitimated assertiveness and achievement while honouring nurturance and expressiveness. It made us as parents and researchers more aware of our own 'androgyny' and it challenged Mussen's earlier dictum that most parents can teach their children sex-typed behaviour because 'they themselves have absorbed and incorporated sex-appropriate responses, characteristics, and attitudes'. While perhaps most parents can teach these roles, many did not want to.

What we see in the world and often give name to is in many ways what we think we should see. Our explanations, scientific or otherwise, guide the categories for coding data. If the researcher is ambivalent about the desirability of men and women taking on the same roles, it is likely that the categorization system will reflect this. Just as theories are neither 'value-free' nor 'neutral', so too our categories for coding the social world often reflect what we would like to see. Particularly when we are studying the world of infants and small children, it has recently been argued that our theories are more a reflection of the inner world of the researcher than the researched (Bradley 1989).

As I started watching children play, I started thinking that 'masculinity', 'femininity' and 'androgyny' were in fact ways of describing humanly constructed environments, not individual facets of persons. Our world of material objects – playtoys, activities, clothing – is constructed along gendered dimensions and inevitably becomes a powerful 'teacher' of young children. That world of objects is mediated by adults who can choose to deny dolls and pink shirts to boys, doctor's kits and trains to girls. I spent many hours watching children play with other children and with their parents and many more hours looking at the way pre-schools were designed to include and exclude one sex or the other in a particular activity.

In reviewing the literature on sex-typing, I came across a study in the developmental psychology literature by Lynn and De Palma Cross (1974), entitled 'Parent preference of preschool children'. It was assumed in this study that the process of sex-role socialization is dependent on identification with the same-sex parent. This identification follows upon a recognition by the child of him/herself as male or female (in cognitive-developmental terms) or a recognition by the child of him/herself as the same or different from the initial caretaker, usually the mother (in identification theory terms). In the case of social learning theory, the similarity between parent as model and child as observer is a mechanism for learning a particular sex role. The study was based on pre-school children in the late 1960s and was consistent with the ideology expressed in the passage quoted from the *Handbook of Socialization Theory and Research* (see above, p. 45).

I requested the raw data for this study from Lynn and De Palma Cross¹ because I had some new questions I thought I might be able to find answered. While the mechanism suggested for learning sex-typed behaviour has been chiefly same-sex parent identification, there is no overwhelming empirical evidence in support of this. Maccoby and Jacklin (1974) raised considerable doubt about the process of parent identification as the primary mechanism for sex-role socialization, given the wide variety of sources from which children can draw information. From my vantage point as a single parent, I too found it an oversimplification

of the way my own child seemed to be making use of the men and women available to him. On the other hand, the article by Lynn and De Palma Cross (1974) seemed to support same-sex parent identification. These authors stated the matter of sex-role learning as follows:

Very young boys, perceiving that they belong to a different sex category from the mother, are strongly motivated to avoid being feminine and to acquire masculine characteristics. This should be reflected in an overall tendency to prefer being with the father as a model of masculinity. At first, this preference for being with the father rather than the mother should be particularly strong, because, still being insecure in their sex role, boys would be particularly anxious not to remain identified with the mother. Thus, being in fact poorly identified with masculinity, he should strongly reject the mother and prefer being with the father. Girls, in contrast, being generally of the same sex as their initial caretaker (usually the mother), and requiring no sex-role shift, should experience no powerful motivation to be with the parent of the same sex.

(Lynn and De Palma Cross 1974: 556)

In fact, these authors reported that boys and girls, by age 4, chose same-sex parents as partners in their play activities to a greater extent than opposite-sex parents. I thought it worthwhile to look more closely at the findings of Lynn and De Palma Cross. While they had gathered their data in the late 1960s, my observations of pre-school children a decade later suggested far more variability. I was also influenced by the adult preferences of my own son that seemed largely based on availability and not gender in our cooperative living arrangement.

In the study by Lynn and De Palma Cross, children were provided with seven opportunities to choose either their mother or father as a play partner. The toys and activities chosen by the investigators were 'neutral' toys, e.g. Etch-a-sketch, blocks, stick-on-animals. They 'seemed not to be stereotyped for a parent of a given sex' (Lynn and De Palma Cross 1974: 557). It occurred to us that androgynous parent preference, that is, the choice of one parent being as good as another, would be maximal with a neutral toy where the expectations are that either parent could be expected to know how to play and where the child would be making socially desirable responses either way.

In Lynn and De Palma Cross's study, children's choices were tabulated and if four or more choices out of seven were for the mother, the child was categorized as mother-preferring, and conversely for categorization as father-preferring. At age 4, these authors reported a significant chi-square, indicating that boys preferred fathers and girls preferred mothers as play partners ($\chi^2 = 5.6$, $df = 1$, $p = 0.05$).

My first interest was in re-analysing the data according to a different construction of parent preference. A large number of children were choosing mother or father three or four times out of seven. These children, to my way of categorizing them, were more equal-preferring than strongly same- or opposite-sex preferring. Let's examine the data more carefully for four-year-olds as an example. According to Lynn and De Palma Cross's breakdown, the twenty-nine four-year olds they studied appear same-sex preferring (see Table 4.1).

Table 4.1 Four-year-olds' preferences for mother or father

	<i>Proportion mother-preferring</i>	<i>Proportion father-preferring</i>
Boys	0.41 (n = 12)	0.59 (n = 17)
Girls	0.72 (n = 21)	0.28 (n = 8)
	($\chi^2 = 5.6$, $df = 1$, $p < 0.05$)	

Source: Adapted from Lynn and De Palma Cross, Table 1, Frequency distribution of mother-father preference by age and sex (1974)

However, if a three-way analysis is performed using the same children but dividing them into those who are mother- or father-preferring (5, 6 or 7 choices of that parent) and those who are equal-preferring (3 or 4 choices of that parent), the chi-square is no longer significant ($\chi^2 = 3.68$, $df = 2$, n.s.) and a larger percentage of the children appears equal-preferring than one-parent preferring (see Table 4.2).

Table 4.2 Re-analysis of four-year-olds' preferences for mother or father or both

	<i>Mother</i>	<i>Proportion preferring: Equal</i>	<i>Father</i>
Boys	0.24	0.41	0.34
Girls	0.38	0.48	0.14
	($\chi^2 = 3.68$, $df = 2$, n.s.)		

Fully 41 per cent of boys and 48 per cent of girls at age 4 were equal-preferring, an increase from ages 2 and 3. One could argue that by age 4, some of these boys and girls were beginning to increase their utilization of both parents in games and activities. This study was not a thorough longitudinal investigation of the actual balance struck by these parents as caretakers and active play partners, but it at least suggested, when re-analysed, that in an environment that provides gender neutral toys and activities, children have the capacity to interact with both parents and learn from each.

If children make their preferences of parents as play partners, taking into account the parent's gender and his or her expectations for sex-appropriate play, then the re-analysis of Lynn and De Palma Cross's data seems quite reasonable. If the toy is neutral, either parent will do, as was the case when the analysis was constructed according to a different criterion of mother and/or father preference.

One might further expect that mothers would be more often chosen for play if the toy is feminine sex-typed; fathers, if the toy is masculine sex-typed (Duncan 1980). A choice measure cannot tell us whether the child acts as s/he does out of competence (i.e. sex-role knowledge) or a motive to appear socially desirable by meeting parent expectations for sex-appropriate behavioural choices. However, such a pattern would show just how early young children can reproduce the gender-linked behaviours appropriate to given situations and how situationally dependent and easily modifiable their behaviour can be.

The sex-typing of toys in our society and the power of parents in eliciting appropriate behavioural choices cannot be underestimated. However, neutral toys in environments where adult pressures are absent may also show us another side of children – their capacity for both assertive and nurturant play. With respect to activities and tasks, there may also be greater variability than some might find in academic research. A few years after my research in preschools ended, I happened to be visiting a preschool in my neighbourhood while parents were arriving with their children. Once the parents had left and the day had begun, several of the children were eager to play dress-up, and I was treated to a splendid drag show, a regular event, according to the staff. How many parents would have called an emergency meeting if they had seen their sons and daughters cross-dressing and cross-behaving is difficult to estimate. Even more interesting is whether the children would have interrupted their activities if their parents had suddenly appeared on the scene. At 4, the gender role variability is still reasonably acceptable. At 7 and 8 there is more concern expressed and certainly our adult labour force continues to reflect an ambivalence about changing our beliefs that boys can do what girls do and vice-versa. What is of interest to me as a researcher and social psychologist is the complicated interplay among our beliefs as parents, researchers and activists in the way we shape, categorize and 'see' what is there to be seen.